

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: 76740020095007 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (600) Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:05	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:18	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Alksniš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (462)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:49	08:13	07:09	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:21	08:22
	15:46	16:43	17:46	19:51	20:53	21:50	22:07	21:26	20:12	18:52	16:34	15:43
2	08:48	08:11	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:23	08:24
	15:48	16:46	17:48	19:53	20:55	21:52	22:06	21:24	20:09	18:49	16:32	15:42
3	08:48	08:09	07:04	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:06	21:22	20:07	18:46	16:30	15:41
4	08:48	08:07	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	21:00	21:54	22:05	21:20	20:04	18:44	16:28	15:41
5	08:47	08:05	06:58	06:36	05:22	04:30	04:32	05:22	06:23	07:23	07:29	08:29
	15:52	16:52	17:54	19:59	21:02	21:56	22:05	21:17	20:01	18:41	16:25	15:40
6	08:47	08:03	06:56	06:34	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:04	21:57	22:04	21:15	19:59	18:38	16:23	15:39
7	08:46	08:01	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:28	07:34	08:32
	15:54	16:57	17:59	20:03	21:06	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:51	06:28	05:15	04:27	04:35	05:27	06:29	07:30	07:36	08:33
	15:56	16:59	18:01	20:06	21:08	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:45	07:56	06:48	06:26	05:13	04:27	04:36	05:29	06:31	07:32	07:38	08:34
	15:58	17:01	18:03	20:08	21:10	22:00	22:01	21:09	19:51	18:31	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:34	07:40	08:36
	15:59	17:03	18:05	20:10	21:12	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:14	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:50	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:16	22:03	21:58	21:02	19:43	18:23	16:11	15:36
13	08:41	07:47	06:38	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:18	22:04	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:13	05:03	04:24	04:43	05:39	06:41	07:42	07:49	08:41
	16:06	17:12	18:13	20:18	21:20	22:04	21:56	20:57	19:37	18:18	16:08	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:51	08:42
	16:08	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:15	16:06	15:36
16	08:38	07:41	06:30	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:53	08:43
	16:10	17:17	18:18	20:22	21:23	22:06	21:53	20:52	19:32	18:12	16:04	15:36
17	08:37	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:52	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:07	21:50	20:47	19:27	18:07	16:01	15:36
19	08:34	07:33	06:22	06:00	04:53	04:23	04:51	05:49	06:51	07:53	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:36
20	08:33	07:31	06:19	05:57	04:52	04:23	04:52	05:51	06:53	07:55	08:01	08:46
	16:18	17:26	18:26	20:31	21:31	22:08	21:47	20:43	19:21	18:02	15:57	15:37
21	08:31	07:29	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:33	21:33	22:08	21:46	20:40	19:19	18:00	15:56	15:37
22	08:30	07:26	06:14	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:35	21:34	22:08	21:44	20:38	19:16	17:58	15:54	15:38
23	08:28	07:24	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:27	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:48
	16:26	17:35	18:34	20:39	21:38	22:08	21:41	20:33	19:10	17:53	15:51	15:39
25	08:25	07:19	06:06	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:40	22:08	21:39	20:30	19:08	17:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:39	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:22	07:14	06:00	05:40	04:40	04:26	05:04	06:05	07:07	08:09	08:15	08:49
	16:32	17:41	18:41	20:45	21:43	22:08	21:35	20:25	19:02	16:46	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:17	08:49
	16:35	17:43	18:43	20:47	21:44	22:08	21:34	20:22	19:00	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:19	08:49
	16:37		19:45	20:49	21:46	22:08	21:32	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:48	22:07	21:30	20:17	18:54	16:39	15:44	15:44
31	08:15		06:49		04:35		05:12	06:13		07:18		08:49
	16:41		19:49		21:49		21:28	20:15		16:36		15:45
Potential sun hours	235	266	366	426	508	528	529	469	384	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Apš u majas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (606)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:29 22:06	05:14 21:25	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:07	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:55	06:56 17:56	06:34 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:24 21:15	06:25 20:00	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:26 21:13	06:27 20:00	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:28 21:11	06:29 20:00	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	04:27 22:00	04:37 22:01	05:30 21:08	06:31 20:00	07:31 18:30	07:38 16:17	08:34 15:38
10	08:43 16:00	07:54 17:04	06:45 18:05	06:23 20:10	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 20:00	07:34 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 20:00	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:02	04:40 21:58	05:35 21:01	06:37 20:00	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:37 20:59	06:39 20:00	07:40 18:20	07:46 16:10	08:39 15:36
14	08:40 16:06	07:45 17:13	06:35 18:13	06:13 20:18	05:03 21:19	04:25 22:04	04:43 21:55	05:39 20:57	06:41 20:00	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:54	06:43 20:00	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:18	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 20:00	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 20:00	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 20:00	07:50 18:07	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:21 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:48	05:49 20:45	06:51 20:00	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:30	04:24 22:07	04:53 21:47	05:51 20:42	06:53 20:00	07:54 18:02	08:01 15:58	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 20:00	07:57 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 20:00	07:59 18:00	08:05 15:54	08:46 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	04:47 21:36	04:24 22:08	04:58 21:42	05:57 20:35	06:59 20:00	08:01 18:00	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:37	04:25 22:08	04:59 21:40	05:59 20:32	07:01 20:00	08:03 18:00	08:09 15:52	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 20:00	08:05 18:00	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 20:00	08:07 18:00	08:13 15:49	08:48 15:40
27	08:21 16:33	07:14 17:41	06:00 18:40	05:40 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:05 20:25	07:07 20:00	08:09 18:00	08:14 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	04:26 22:07	05:07 21:33	06:07 20:22	07:09 20:00	08:12 18:00	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 20:00	08:14 18:00	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:29	06:11 20:17	07:13 20:00	08:16 18:00	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14	07:18 20:00			08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Apšūpes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (478)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March		April	May	June	July	August	September		October		November	December	
1	08:48	08:12	07:09		06:47	05:30	04:34	04:28	05:14	06:15		07:15		18:03 (PrRR3)	07:20	08:22
	15:46	16:43	17:45		19:51	20:53	21:50	22:06	21:25	20:12		18:51	17	18:20 (PrRR3)	16:34	15:43
2	08:48	08:10	07:06		06:44	05:28	04:33	04:29	05:16	06:17		07:17		18:05 (PrRR3)	07:22	08:23
	15:47	16:45	17:48		19:53	20:55	21:51	22:06	21:23	20:09		18:49	14	18:19 (PrRR3)	16:32	15:42
3	08:48	08:08	07:03		06:41	05:26	04:32	04:30	05:17	06:19		07:19		18:07 (PrRR3)	07:25	08:25
	15:49	16:48	17:50		19:55	20:57	21:53	22:05	21:21	20:06		18:46	9	18:16 (PrRR3)	16:30	15:41
4	08:47	08:06	07:01		06:39	05:24	04:31	04:31	05:19	06:21		07:21			07:27	08:27
	15:50	16:50	17:52		19:57	20:59	21:54	22:05	21:19	20:04		18:43			16:27	15:40
5	08:47	08:04	06:58		06:36	05:21	04:30	04:32	05:21	06:23		07:23			07:29	08:28
	15:51	16:52	17:54		19:59	21:01	21:55	22:04	21:17	20:01		18:41			16:25	15:40
6	08:46	08:02	06:56		06:33	05:19	04:29	04:33	05:23	06:25		07:25			07:31	08:30
	15:53	16:54	17:56		20:01	21:03	21:57	22:03	21:15	19:59		18:38			16:23	15:39
7	08:46	08:00	06:53		06:31	05:17	04:28	04:34	05:25	06:27		07:27			07:33	08:31
	15:54	16:57	17:58		20:03	21:05	21:58	22:03	21:13	19:56		18:36			16:21	15:38
8	08:45	07:58	06:50		06:28	05:15	04:27	04:35	05:27	06:29		07:29			07:35	08:33
	15:56	16:59	18:00		20:05	21:07	21:59	22:02	21:11	19:53		18:33			16:19	15:38
9	08:44	07:56	06:48		06:25	05:13	04:27	04:36	05:29	06:31		07:31			07:38	08:34
	15:58	17:01	18:03		20:07	21:09	22:00	22:01	21:08	19:51		18:30			16:17	15:37
10	08:44	07:54	06:45		06:23	05:11	04:26	04:37	05:31	06:33		07:33			07:40	08:35
	15:59	17:03	18:05	6	17:37 (PrRR3)	20:09	21:11	22:01	22:00	21:06		19:48			16:15	15:37
11	08:43	07:52	06:43		06:20	05:09	04:25	04:39	05:33	06:35		07:36			07:42	08:37
	16:01	17:06	18:07	12	17:39 (PrRR3)	20:12	21:13	22:02	21:59	21:04		19:45			16:13	15:37
12	08:42	07:49	06:40		06:18	05:06	04:25	04:40	05:35	06:37		07:38			07:44	08:38
	16:03	17:08	18:09	15	17:40 (PrRR3)	20:14	21:15	22:03	21:58	21:01		19:43			16:11	15:36
13	08:41	07:47	06:37		06:15	05:04	04:24	04:41	05:37	06:39		07:40			07:46	08:39
	16:04	17:10	18:11	19	17:43 (PrRR3)	20:16	21:17	22:03	21:57	20:59		19:40			16:09	15:36
14	08:40	07:45	06:35		06:12	05:03	04:24	04:43	05:39	06:41		07:42			07:48	08:40
	16:06	17:12	18:13	22	17:44 (PrRR3)	20:18	21:19	22:04	21:55	20:57		19:37			16:07	15:36
15	08:39	07:43	06:32		06:10	05:01	04:24	04:44	05:41	06:43		07:44			07:50	08:41
	16:08	17:15	18:15	23	17:44 (PrRR3)	20:20	21:21	22:05	21:54	20:54		19:34			16:06	15:36
16	08:38	07:40	06:29		06:07	04:59	04:24	04:46	05:43	06:45		07:46			07:53	08:42
	16:10	17:17	18:17	24	17:45 (PrRR3)	20:22	21:23	22:05	21:53	20:52		19:32			16:04	15:36
17	08:36	07:38	06:27		06:05	04:57	04:23	04:47	05:45	06:47		07:48			07:55	08:43
	16:12	17:19	18:20	24	17:44 (PrRR3)	20:24	21:25	22:06	21:51	20:50		19:29			16:02	15:36
18	08:35	07:36	06:24		06:02	04:55	04:23	04:49	05:47	06:49		07:50			07:57	08:44
	16:14	17:21	18:22	24	17:44 (PrRR3)	20:26	21:27	22:06	21:50	20:47		19:26			16:00	15:36
19	08:34	07:33	06:21		06:00	04:53	04:23	04:51	05:49	06:51		07:52		18:12 (PrRR3)	07:59	08:45
	16:16	17:23	18:24	24	17:43 (PrRR3)	20:28	21:29	22:07	21:49	20:45		19:24	9	18:21 (PrRR3)	18:05	15:36
20	08:32	07:31	06:19		05:57	04:51	04:23	04:52	05:51	06:53		07:54		18:09 (PrRR3)	07:54	08:01
	16:18	17:26	18:26	23	17:43 (PrRR3)	20:30	21:30	22:07	21:47	20:42		19:21	15	18:24 (PrRR3)	18:02	15:37
21	08:31	07:28	06:16		05:55	04:50	04:23	04:54	05:53	06:55		07:57		18:07 (PrRR3)	07:57	08:03
	16:20	17:28	18:28	20	17:41 (PrRR3)	20:32	21:32	22:07	21:45	20:40		19:18	18	18:25 (PrRR3)	18:00	15:37
22	08:29	07:26	06:13		05:52	04:48	04:24	04:56	05:55	06:57		07:59		18:05 (PrRR3)	07:59	08:05
	16:22	17:30	18:30	19	17:40 (PrRR3)	20:34	21:34	22:08	21:44	20:37		19:16	21	18:26 (PrRR3)	17:57	15:38
23	08:28	07:24	06:11		05:50	04:46	04:24	04:57	05:57	06:59		08:01		18:04 (PrRR3)	08:01	08:07
	16:24	17:32	18:32	15	17:38 (PrRR3)	20:36	21:36	22:08	21:42	20:35		19:13	22	18:26 (PrRR3)	17:55	15:38
24	08:26	07:21	06:08		05:47	04:45	04:24	04:59	05:59	07:01		08:03		18:03 (PrRR3)	08:03	08:09
	16:26	17:34	18:34	10	17:35 (PrRR3)	20:39	21:38	22:08	21:40	20:32		19:10	23	18:26 (PrRR3)	17:53	15:39
25	08:25	07:19	06:05		05:45	04:43	04:25	05:01	06:01	07:03		08:03		18:03 (PrRR3)	07:05	08:11
	16:28	17:37	18:36		20:41	21:39	22:08	21:39	20:30	19:08		18:26 (PrRR3)	23	18:26 (PrRR3)	16:50	15:39
26	08:23	07:16	06:03		05:42	04:42	04:25	05:03	06:03	07:05		08:02		18:02 (PrRR3)	07:07	08:13
	16:30	17:39	18:38		20:43	21:41	22:08	21:37	20:27	19:05		18:26 (PrRR3)	24	18:26 (PrRR3)	16:48	15:40
27	08:21	07:14	06:00		05:40	04:40	04:25	05:04	06:05	07:07		08:02		18:02 (PrRR3)	07:09	08:15
	16:32	17:41	18:40		20:45	21:43	22:08	21:35	20:25	19:02		18:25 (PrRR3)	23	18:25 (PrRR3)	16:45	15:41
28	08:20	07:11	05:57		05:38	04:39	04:26	05:06	06:07	07:09		08:02		18:02 (PrRR3)	07:12	08:16
	16:34	17:43	18:42		20:47	21:44	22:07	21:33	20:22	18:59		18:25 (PrRR3)	23	18:25 (PrRR3)	16:43	15:42
29	08:18		06:55		05:35	04:38	04:27	05:08	06:09	07:11		18:02 (PrRR3)		18:02 (PrRR3)	07:14	08:18
	16:37		19:45		20:49	21:46	22:07	21:31	20:20	18:57		18:24 (PrRR3)	22	18:24 (PrRR3)	16:41	15:45
30	08:16		06:52		05:33	04:36	04:27	05:10	06:11	07:13		18:02 (PrRR3)		18:02 (PrRR3)	07:16	08:20
	16:39		19:47		20:51	21:47	22:07	21:29	20:17	18:54		18:23 (PrRR3)	21	18:23 (PrRR3)	16:38	15:44
31	08:14		06:49			04:35		05:12	06:13			07:18				08:48
	16:41		19:49			21:49		21:27	20:14			16:36				15:45
Potential sun hours	236	266	366		426	507	528	529	469	384		324			248	217
Total, worst case			280							244		40				
Sun reduction			0,39							0,43		0,29				
Oper. time red.			1,00							1,00		1,00				
Wind dir. red.			1,00							1,00		1,00				
Total reduction			0,39							0,43		0,29				
Total, real			110							105		12				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)		Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Atvasites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (553)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:15	06:17	07:17	07:22	08:23
	15:47	16:45	17:47	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:05	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:02	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:00	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:05	15:36
16	08:37	07:40	06:29	06:07	04:59	04:23	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:18	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Avenes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (567)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:29 22:06	05:14 21:25	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:06	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:55	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:24 21:15	06:25 20:01	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:02	05:26 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:28 21:11	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	04:27 22:00	04:37 22:01	05:29 21:08	06:31 19:51	07:31 18:30	07:38 16:17	08:34 15:38
10	08:43 15:59	07:54 17:04	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:02	04:40 21:58	05:35 21:01	06:37 19:43	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:13 20:18	05:03 21:19	04:25 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:54	06:43 19:35	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:18	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:21 18:24	06:00 20:28	04:53 21:29	04:24 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:30	04:24 22:07	04:53 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:07	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:58	08:05 15:54	08:46 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	04:47 21:36	04:24 22:08	04:58 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:37	04:25 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:08	08:05 16:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:33	07:14 17:41	06:00 18:40	05:40 20:45	04:41 21:42	04:26 22:07	05:05 21:35	06:05 20:25	07:07 19:02	08:09 16:46	08:14 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 19:00	08:12 16:43	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:45	04:27 22:07	05:08 21:31	06:09 20:20	07:11 18:57	08:14 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:39	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:48		05:12 21:27	06:13 20:14	07:18 16:36			08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Avenaji - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (605)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:46 24	10:02 (PrRR3) 10:26 (PrRR3) 16:43	08:13 17:46 07:09	06:47 17:46 19:51	05:31 20:53 21:50	04:34 21:50 22:07	04:28 21:26 22:07	05:14 21:26 21:26	06:15 20:12 18:52	07:15 18:52 16:34	07:20 18:52 16:34	08:22 15:43 19
2	08:48 15:48 24	10:02 (PrRR3) 10:26 (PrRR3) 16:46	08:11 17:48 07:06	06:44 17:48 19:53	05:28 20:55 21:52	04:33 21:52 22:06	04:29 21:24 22:06	05:16 21:24 20:09	06:17 18:49 16:32	07:17 18:49 16:32	07:23 18:49 16:32	08:24 15:42 20
3	08:48 15:49 23	10:03 (PrRR3) 10:26 (PrRR3) 16:48	08:09 17:50 07:04	06:41 17:50 19:55	05:26 20:57 21:53	04:32 21:53 22:06	04:30 21:22 22:06	05:18 21:22 20:07	06:19 18:46 16:30	07:19 18:46 16:30	07:25 18:46 16:30	08:25 15:41 21
4	08:48 15:50 23	10:03 (PrRR3) 10:26 (PrRR3) 16:50	08:07 17:52 07:01	06:39 17:52 19:57	05:24 20:59 21:54	04:31 21:54 22:05	04:31 21:19 22:05	05:20 21:19 20:04	06:21 18:44 16:27	07:21 18:44 16:27	07:27 18:44 16:27	08:27 15:41 22
5	08:47 15:52 23	10:03 (PrRR3) 10:26 (PrRR3) 16:52	08:05 17:54 07:01	06:36 17:54 19:59	05:22 21:01 21:56	04:30 21:56 22:04	04:32 21:17 22:04	05:21 21:17 20:01	06:23 18:41 16:25	07:23 18:41 16:25	07:29 18:41 16:25	08:29 15:40 22
6	08:47 15:53 22	10:05 (PrRR3) 10:27 (PrRR3) 16:54	08:03 17:56 07:01	06:33 17:56 20:01	05:19 21:04 21:57	04:29 21:57 22:04	04:33 21:15 22:04	05:23 21:15 19:59	06:25 18:38 16:23	07:25 18:38 16:23	07:31 18:38 16:23	08:30 15:39 22
7	08:46 15:54 22	10:05 (PrRR3) 10:27 (PrRR3) 16:57	08:01 17:58 07:01	06:31 17:58 20:03	05:17 21:06 21:58	04:28 21:58 22:03	04:34 21:13 22:03	05:25 21:13 19:56	06:27 18:36 16:21	07:27 18:36 16:21	07:33 18:36 16:21	08:32 15:38 23
8	08:45 15:56 21	10:06 (PrRR3) 10:27 (PrRR3) 16:59	07:58 18:01 07:01	06:28 18:01 20:05	05:15 21:08 21:59	04:27 21:59 22:02	04:35 21:11 22:02	05:27 21:11 19:53	06:29 18:33 16:19	07:30 18:33 16:19	07:36 18:33 16:19	08:33 15:38 23
9	08:45 15:58 20	10:07 (PrRR3) 10:27 (PrRR3) 17:01	07:56 18:03 07:01	06:26 18:03 20:08	05:13 21:10 22:00	04:27 22:00 22:01	04:36 21:09 22:01	05:29 21:09 19:51	06:31 18:30 16:17	07:32 18:30 16:17	07:38 18:30 16:17	08:34 15:37 24
10	08:44 15:59 20	10:08 (PrRR3) 10:28 (PrRR3) 17:03	07:54 18:05 07:01	06:23 18:05 20:10	05:11 21:12 22:01	04:26 22:01 22:00	04:38 21:06 22:00	05:31 21:06 19:48	06:33 18:28 16:15	07:34 18:28 16:15	07:40 18:28 16:15	08:36 15:37 24
11	08:43 16:01 19	10:08 (PrRR3) 10:27 (PrRR3) 17:06	07:52 18:07 07:01	06:20 18:07 20:12	05:09 21:14 22:02	04:26 22:02 22:01	04:39 21:04 21:59	05:33 21:04 19:45	06:35 18:25 16:13	07:36 18:25 16:13	07:42 18:25 16:13	08:37 15:37 24
12	08:42 16:03 17	10:09 (PrRR3) 10:26 (PrRR3) 17:08	07:50 18:09 07:01	06:18 18:09 20:14	05:07 21:16 22:03	04:25 22:03 22:01	04:40 21:02 21:58	05:35 21:02 19:43	06:37 18:23 16:11	07:38 18:23 16:11	07:44 18:23 16:11	08:38 15:36 24
13	08:41 16:04 16	10:10 (PrRR3) 10:26 (PrRR3) 17:10	07:47 18:11 07:01	06:15 18:11 20:16	05:05 21:17 22:04	04:25 22:04 22:01	04:42 21:59 21:57	05:37 21:59 19:40	06:39 18:20 16:09	07:40 18:20 16:09	07:46 18:20 16:09	08:39 15:36 24
14	08:40 16:06 14	10:12 (PrRR3) 10:26 (PrRR3) 17:12	07:45 18:13 07:01	06:13 18:13 20:18	05:03 21:19 22:04	04:24 22:04 22:01	04:43 21:56 21:56	05:39 21:56 19:37	06:41 18:18 16:07	07:42 18:18 16:07	07:49 18:18 16:07	08:40 15:36 29
15	08:39 16:08 11	10:13 (PrRR3) 10:24 (PrRR3) 17:15	07:43 18:15 07:01	06:10 18:15 20:20	05:01 21:21 22:05	04:24 22:05 22:01	04:44 21:54 21:54	05:41 21:54 19:35	06:43 18:15 16:06	07:44 18:15 16:06	07:51 18:15 16:06	08:41 15:36 32
16	08:38 16:10 7	10:16 (PrRR3) 10:23 (PrRR3) 17:17	07:40 18:18 07:01	06:07 18:18 20:22	04:59 21:23 22:06	04:24 22:06 22:01	04:46 21:53 21:53	05:43 21:53 19:32	06:45 18:12 16:04	07:46 18:12 16:04	07:53 18:12 16:04	08:42 15:36 33
17	08:37 16:12 18	10:17 (PrRR3) 10:26 (PrRR3) 17:19	07:38 18:20 07:01	06:05 18:20 20:24	04:57 21:25 22:06	04:23 22:06 22:01	04:47 21:52 21:52	05:45 21:52 19:29	06:47 18:10 16:02	07:48 18:10 16:02	07:55 18:10 16:02	08:43 15:36 34
18	08:35 16:14 19	10:18 (PrRR3) 10:26 (PrRR3) 17:21	07:36 18:22 07:01	06:02 18:22 20:26	04:55 21:27 22:07	04:23 22:07 22:01	04:49 21:50 21:50	05:47 21:47 19:27	06:49 18:07 16:01	07:50 18:07 16:01	07:57 18:07 16:01	08:44 15:36 35
19	08:34 16:16 20	10:19 (PrRR3) 10:26 (PrRR3) 17:22	07:33 18:24 07:01	06:00 18:24 20:28	04:53 21:29 22:07	04:23 22:07 22:01	04:51 21:49 21:49	05:49 21:45 19:24	06:51 18:05 16:01	07:52 18:05 16:01	07:59 18:05 16:01	08:45 15:36 36
20	08:33 16:18 21	10:20 (PrRR3) 10:26 (PrRR3) 17:23	07:31 18:26 07:01	05:57 18:26 20:30	04:52 21:31 22:07	04:23 22:07 22:01	04:52 21:47 21:47	05:51 21:43 19:21	06:53 18:02 15:57	07:55 18:02 15:57	08:01 18:02 15:57	08:46 15:37 35
21	08:31 16:20 22	10:21 (PrRR3) 10:26 (PrRR3) 17:24	07:29 18:28 07:01	05:55 18:28 20:33	04:50 21:33 22:08	04:23 22:08 22:01	04:54 21:46 21:46	05:53 21:46 19:18	06:55 18:00 15:56	07:57 18:00 15:56	08:03 18:00 15:56	08:46 15:37 36
22	08:30 16:22 23	10:22 (PrRR3) 10:26 (PrRR3) 17:25	07:26 18:30 07:01	05:52 18:30 20:35	04:48 21:34 22:08	04:24 22:08 22:01	04:56 21:44 21:44	05:55 21:44 19:16	06:57 17:58 15:54	07:59 17:58 15:54	08:05 17:58 15:54	08:47 15:38 36
23	08:28 16:24 24	10:23 (PrRR3) 10:26 (PrRR3) 17:26	07:24 18:32 07:01	05:50 21:36 20:37	04:46 21:36 22:08	04:24 22:08 22:01	04:57 21:42 21:42	05:57 21:42 19:13	06:59 17:55 15:53	08:01 17:55 15:53	08:07 17:55 15:53	08:47 15:38 36
24	08:27 16:26 25	10:24 (PrRR3) 10:26 (PrRR3) 17:27	07:21 18:34 07:01	05:47 21:38 20:39	04:45 21:38 22:08	04:24 22:08 22:01	04:59 21:41 21:41	05:59 21:41 19:10	07:01 17:53 15:51	08:03 17:53 15:51	08:09 17:53 15:51	08:48 15:39 35
25	08:25 16:28 26	10:25 (PrRR3) 10:26 (PrRR3) 17:28	07:19 18:36 07:01	05:45 21:41 21:39	04:43 21:39 22:08	04:25 22:08 22:01	05:01 21:39 21:39	06:01 21:39 19:08	07:03 16:50 15:50	07:05 16:50 15:50	08:11 16:50 15:50	08:48 15:39 35
26	08:23 16:30 27	10:26 (PrRR3) 10:26 (PrRR3) 17:29	07:16 18:38 07:01	05:42 21:41 22:08	04:42 21:41 22:08	04:25 22:08 22:01	05:03 21:37 21:37	06:03 21:37 19:05	07:05 16:48 15:49	07:07 16:48 15:49	08:13 16:48 15:49	08:48 15:40 35
27	08:22 16:32 28	10:27 (PrRR3) 10:26 (PrRR3) 17:30	07:14 18:41 07:01	05:40 21:43 22:08	04:40 21:43 22:08	04:26 22:08 22:01	05:04 21:35 21:35	06:05 21:35 19:02	07:07 16:46 15:48	07:10 16:46 15:48	08:15 16:46 15:48	08:49 15:41 33
28	08:20 16:35 29	10:28 (PrRR3) 10:26 (PrRR3) 17:31	07:11 18:43 07:01	05:37 21:44 22:08	04:39 21:44 22:08	04:26 22:08 22:01	05:06 21:33 21:33	06:07 21:33 19:00	07:09 16:43 15:46	07:12 16:43 15:46	08:17 16:43 15:46	08:49 15:42 32
29	08:18 16:37 30	10:29 (PrRR3) 10:26 (PrRR3) 17:32	07:09 18:45 07:01	05:35 21:46 22:07	04:38 21:46 22:07	04:27 22:07 22:01	05:08 21:32 21:32	06:09 21:32 18:57	07:11 16:41 15:45	07:14 16:41 15:45	08:18 16:41 15:45	08:49 15:43 30
30	08:16 16:39 31	10:30 (PrRR3) 10:26 (PrRR3) 17:33	07:07 18:47 07:01	05:33 21:47 22:07	04:36 21:47 22:07	04:27 22:07 22:01	05:10 21:30 21:30	06:11 21:30 18:54	07:13 16:39 15:44	07:16 16:39 15:44	08:20 16:39 15:44	08:49 15:44 24
Potential sun hours	235	266	366	426	508	528	529	469	384	324	248	216
Total, worst case	306										65	883
Sun reduction	0,13										0,08	0,08
Oper. time red.	1,00										1,00	1,00
Wind dir. red.	1,00										1,00	1,00
Total reduction	0,13										0,08	0,08
Total, real	41										5	75

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Avoti - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (490) Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:57	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:05	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:02	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:00	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Avotini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (412)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December	
1	08:48	08:12	07:09	06:47	05:31	04:35	04:29	05:14	06:16	07:15	07:20	15:51 (DD3)	08:22
2	15:47	16:44	17:46	19:51	20:53	21:50	22:06	21:26	20:12	18:52	16:35	16:01 (DD3)	15:44
3	08:48	08:11	07:06	06:44	05:29	04:34	04:30	05:16	06:18	07:17	07:23	15:53 (DD3)	08:23
4	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:58 (DD3)	15:43
5	08:48	08:09	07:04	06:42	05:27	04:33	04:31	05:18	06:20	07:19	07:25		08:25
6	15:50	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:07	18:47	16:30		15:42
7	08:47	08:07	07:01	06:39	05:24	04:32	04:32	05:20	06:22	07:22	07:27		08:27
8	15:51	16:51	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28		15:41
9	08:47	08:05	06:59	06:36	05:22	04:31	04:33	05:22	06:24	07:24	07:29		08:28
10	15:52	16:53	17:55	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:26		15:40
11	08:46	08:03	06:56	06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31		08:30
12	15:54	16:55	17:57	20:01	21:03	21:56	22:03	21:15	19:59	18:39	16:24		15:40
13	08:46	08:00	06:53	06:31	05:18	04:29	04:35	05:26	06:28	07:28	07:33		08:31
14	15:55	16:57	17:59	20:04	21:05	21:58	22:03	21:13	19:56	18:36	16:22		15:39
15	08:45	07:58	06:51	06:29	05:16	04:28	04:36	05:28	06:30	07:30	07:36		08:33
16	15:57	16:59	18:01	20:06	21:07	21:59	22:02	21:11	19:54	18:33	16:20		15:39
17	08:44	07:56	16:23 (DD3)	06:48	06:26	05:13	04:28	04:37	05:30	06:32	07:32		08:34
18	15:58	17:02	16:29 (DD3)	18:03	20:08	21:09	22:00	22:01	21:08	19:51	18:31		15:38
19	08:44	07:54	16:21 (DD3)	06:46	06:23	05:11	04:27	04:38	05:32	06:34	07:34		08:35
20	16:00	17:04	16:32 (DD3)	18:05	20:10	21:11	22:01	22:00	21:06	19:48	18:28		15:38
21	08:43	07:52	16:19 (DD3)	06:43	06:21	05:09	04:26	04:40	05:34	06:36	07:36		08:37
22	16:02	17:06	16:34 (DD3)	18:07	20:12	21:13	22:02	21:59	21:04	19:46	18:26		15:37
23	08:42	07:50	16:18 (DD3)	06:40	06:18	05:07	04:26	04:41	05:36	06:38	07:38		08:38
24	16:03	17:08	16:37 (DD3)	18:09	20:14	21:15	22:02	21:58	21:02	19:43	18:23		15:37
25	08:41	07:47	16:18 (DD3)	06:38	06:16	05:05	04:25	04:42	05:38	06:40	07:40		08:39
26	16:05	17:11	16:38 (DD3)	18:12	20:16	21:17	22:03	21:57	20:59	19:40	18:20		15:37
27	08:40	07:45	16:17 (DD3)	06:35	06:13	05:03	04:25	04:44	05:40	06:42	07:42		08:40
28	16:07	17:13	16:38 (DD3)	18:14	20:18	21:19	22:04	21:55	20:57	19:37	18:18		15:37
29	08:39	07:43	16:17 (DD3)	06:32	06:10	05:01	04:25	04:45	05:42	06:44	07:44		08:41
30	16:09	17:15	16:39 (DD3)	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:15		15:37
31	08:38	07:41	16:17 (DD3)	06:30	06:08	04:59	04:24	04:47	05:44	06:45	07:46		08:42
32	16:11	17:17	16:39 (DD3)	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:13		15:37
33	08:36	07:38	16:17 (DD3)	06:27	06:05	04:58	04:24	04:48	05:46	06:47	07:48		08:43
34	16:13	17:20	16:39 (DD3)	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10		15:37
35	08:35	07:36	16:17 (DD3)	06:24	06:03	04:56	04:24	04:50	05:48	06:49	07:50	16:58 (DD3)	08:44
36	16:14	17:22	16:38 (DD3)	18:22	20:26	21:27	22:06	21:50	20:47	19:27	18:08	16:59 (DD3)	15:37
37	08:34	07:33	16:18 (DD3)	06:22	06:00	04:54	04:24	04:51	05:50	06:51	07:53	16:53 (DD3)	08:45
38	16:16	17:24	16:38 (DD3)	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	17:04 (DD3)	15:37
39	08:32	07:31	16:18 (DD3)	06:19	05:58	04:52	04:24	04:53	05:52	06:53	07:55	16:51 (DD3)	08:45
40	16:18	17:26	16:37 (DD3)	18:26	20:30	21:31	22:07	21:47	20:43	19:21	18:03	17:06 (DD3)	15:38
41	08:31	07:29	16:19 (DD3)	06:16	05:55	04:50	04:24	04:55	05:54	06:55	07:57	16:49 (DD3)	08:46
42	16:20	17:28	16:36 (DD3)	18:28	20:33	21:32	22:07	21:45	20:40	19:19	18:00	17:07 (DD3)	15:38
43	08:30	07:26	16:20 (DD3)	06:14	05:53	04:49	04:25	04:56	05:56	06:57	07:59	16:48 (DD3)	08:47
44	16:22	17:31	16:34 (DD3)	18:30	20:35	21:34	22:08	21:44	20:38	19:16	17:58	17:07 (DD3)	15:38
45	08:28	07:24	16:23 (DD3)	06:11	05:50	04:47	04:25	04:58	05:58	06:59	08:01	16:48 (DD3)	08:47
46	16:25	17:33	16:32 (DD3)	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	17:09 (DD3)	15:39
47	08:26	07:21	06:08	05:48	04:46	04:25	05:00	06:00	07:01	08:03	16:47 (DD3)	08:09	08:47
48	16:27	17:35	18:35	20:39	21:38	22:08	21:40	20:33	19:11	17:53	22	17:09 (DD3)	15:39
49	08:25	07:19	06:06	05:45	04:44	04:25	05:02	06:02	07:03	07:05	15:46 (DD3)	08:11	08:48
50	16:29	17:37	18:37	20:41	21:39	22:08	21:39	20:30	19:08	16:51	22	16:08 (DD3)	15:51
51	08:23	07:16	06:03	05:43	04:43	04:26	05:03	06:04	07:05	07:07	15:47 (DD3)	08:13	08:48
52	16:31	17:39	18:39	20:43	21:41	22:08	21:37	20:27	19:05	16:48	22	16:09 (DD3)	15:49
53	08:22	07:14	06:00	05:41	04:41	04:26	05:05	06:06	07:07	07:10	15:47 (DD3)	08:15	08:48
54	16:33	17:42	18:41	20:45	21:42	22:08	21:35	20:25	19:03	16:46	21	16:08 (DD3)	15:48
55	08:20	07:11	05:58	05:38	04:40	04:27	05:07	06:08	07:09	07:12	15:47 (DD3)	08:16	08:48
56	16:35	17:44	18:43	20:47	21:44	22:07	21:33	20:22	19:00	16:44	21	16:08 (DD3)	15:47
57	08:18		06:55	05:36	04:38	04:28	05:09	06:10	07:11	07:14	21	15:48 (DD3)	08:18
58	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	20	16:08 (DD3)	15:46
59	08:16		06:52	05:33	04:37	04:28	05:11	06:12	07:13	07:16	18	15:48 (DD3)	08:20
60	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:55	16:39	18	16:06 (DD3)	15:45
61	08:14		06:50		04:36		05:13	06:14		07:18	15	15:49 (DD3)	08:48
62	16:42		19:49		21:49		21:28	20:15		16:37	14	16:03 (DD3)	15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248		217
Total, worst case		258								245	15		
Sun reduction		0,22								0,29	0,08		
Oper. time red.		1,00								1,00	1,00		
Wind dir. red.		1,00								1,00	1,00		
Total reduction		0,22								0,29	0,08		
Total, real		58								71	1		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Bajari - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (586)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:06	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:55	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:24 21:15	06:25 19:59	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:02	05:26 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:28 21:11	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	04:27 22:00	04:37 22:01	05:29 21:08	06:31 19:51	07:31 18:30	07:38 16:17	08:34 15:38
10	08:43 15:59	07:54 17:04	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 19:48	07:34 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:02	04:40 21:58	05:35 21:01	06:37 19:43	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:13 20:18	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:54	06:43 19:35	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:18	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:01	08:44 15:36
19	08:34 16:16	07:33 17:24	06:21 18:24	06:00 20:28	04:53 21:29	04:24 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:30	04:24 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:07	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:58	08:05 15:54	08:46 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	04:47 21:36	04:24 22:08	04:58 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:37	04:25 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:08	08:05 16:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:33	07:14 17:41	06:00 18:40	05:40 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:05 20:25	07:07 19:02	08:09 16:46	08:14 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 19:00	08:12 16:43	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 18:57	08:14 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:39	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:48		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Balož i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (547)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Betiški 1 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (576)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:27	15:41
5	08:47	08:04	06:58	06:36	05:22	04:30	04:32	05:22	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:55	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:39
8	08:45	07:58	06:50	06:28	05:15	04:28	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:26	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:38
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:08	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:45	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:24	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:01	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:37
20	08:32	07:31	06:19	05:57	04:52	04:24	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:35	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:41	04:26	05:05	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:35	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:37	04:28	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: BetiŠ ku kapseta - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (580)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:46	19:51	20:53	21:50	22:06	21:25	20:12	18:52	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:41
5	08:47	08:04	06:58	06:36	05:22	04:30	04:32	05:22	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:24	06:25	07:25	07:31	08:30
	15:53	16:55	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:55	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:39
8	08:45	07:58	06:50	06:28	05:15	04:28	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:26	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:38
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:43	18:23	16:11	15:37
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:05	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:13	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:08	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:45	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:24	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:01	15:36
19	08:34	07:33	06:21	06:00	04:53	04:24	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:37
20	08:32	07:31	06:19	05:57	04:52	04:24	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:24	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:35	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:52	15:39
25	08:25	07:19	06:05	05:45	04:44	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:40
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:41	04:26	05:05	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:46	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:35	17:43	18:42	20:47	21:44	22:07	21:33	20:22	19:00	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:37	04:28	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Brenčani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (501)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December		
1	08:48	08:12	07:09	06:47	05:31	04:34	20:56 (Pr3b)	04:28	20:58 (Pr3b)	05:14	06:15	07:15	07:20	08:22
2	15:46	16:43	17:45	19:51	20:53	21:50	21:12 (Pr3b)	22:06	21:22 (Pr3b)	21:25	20:12	18:51	16:34	15:43
3	08:48	08:10	07:06	06:44	05:28	04:33	20:55 (Pr3b)	04:29	20:58 (Pr3b)	05:16	06:17	07:17	07:22	08:23
4	15:48	16:46	17:48	19:53	20:55	21:51	21:12 (Pr3b)	22:06	21:21 (Pr3b)	21:23	20:09	18:49	16:32	15:42
5	08:48	08:08	07:03	06:41	05:26	04:32	20:54 (Pr3b)	04:30	20:58 (Pr3b)	05:18	06:19	07:19	07:25	08:25
6	15:49	16:48	17:50	19:55	20:57	21:53	21:13 (Pr3b)	22:05	21:22 (Pr3b)	21:21	20:06	18:46	16:30	15:41
7	08:47	08:06	07:01	06:39	05:24	04:31	20:55 (Pr3b)	04:31	20:59 (Pr3b)	05:20	06:21	07:21	07:27	08:27
8	15:50	16:50	17:52	19:57	20:59	21:54	21:15 (Pr3b)	22:05	21:22 (Pr3b)	21:19	20:04	18:44	16:27	15:41
9	08:47	08:04	06:58	06:36	05:22	04:30	20:54 (Pr3b)	04:32	20:59 (Pr3b)	05:21	06:23	07:23	07:29	08:28
10	15:52	16:52	17:54	19:59	21:01	21:55	21:15 (Pr3b)	22:04	21:22 (Pr3b)	21:17	20:01	18:41	16:25	15:40
11	08:46	08:02	06:56	06:33	05:19	04:29	20:54 (Pr3b)	04:33	21:00 (Pr3b)	05:23	06:25	07:25	07:31	08:30
12	15:53	16:54	17:56	20:01	21:03	21:56	21:15 (Pr3b)	22:03	21:22 (Pr3b)	21:15	19:59	18:38	16:23	15:39
13	08:46	08:00	06:53	06:31	05:17	04:28	20:54 (Pr3b)	04:34	21:00 (Pr3b)	05:25	06:27	07:27	07:33	08:31
14	15:55	16:57	17:58	20:03	21:05	21:58	21:16 (Pr3b)	22:03	21:21 (Pr3b)	21:13	19:56	18:36	16:21	15:39
15	08:45	07:58	06:50	06:28	05:15	04:27	20:54 (Pr3b)	04:35	21:01 (Pr3b)	05:27	06:29	07:29	07:35	08:33
16	15:56	16:59	18:01	20:05	21:07	21:59	21:16 (Pr3b)	22:02	21:21 (Pr3b)	21:11	19:53	18:33	16:19	15:38
17	08:44	07:56	06:48	06:25	05:13	04:27	20:53 (Pr3b)	04:36	21:01 (Pr3b)	05:29	06:31	07:31	07:38	08:34
18	15:58	17:01	18:03	20:07	21:09	22:00	21:16 (Pr3b)	22:01	21:21 (Pr3b)	21:08	19:51	18:30	16:17	15:37
19	08:44	07:54	06:45	06:23	05:11	04:26	20:54 (Pr3b)	04:38	21:02 (Pr3b)	05:31	06:33	07:33	07:40	08:35
20	15:59	17:03	18:05	20:09	21:11	22:01	21:17 (Pr3b)	22:00	21:20 (Pr3b)	21:06	19:48	18:28	16:15	15:37
21	08:43	07:52	06:43	06:20	05:09	04:26	20:54 (Pr3b)	04:39	21:04 (Pr3b)	05:33	06:35	07:36	07:42	08:37
22	16:01	17:06	18:07	20:12	21:13	22:02	21:18 (Pr3b)	21:59	21:20 (Pr3b)	21:04	19:45	18:25	16:13	15:37
23	08:42	07:49	06:40	06:18	05:07	04:25	20:53 (Pr3b)	04:40	21:04 (Pr3b)	05:35	06:37	07:38	07:44	08:38
24	16:03	17:08	18:09	20:14	21:15	22:03	21:18 (Pr3b)	21:58	21:19 (Pr3b)	21:01	19:43	18:23	16:11	15:36
25	08:41	07:47	06:37	06:15	05:05	04:25	20:54 (Pr3b)	04:42	21:05 (Pr3b)	05:37	06:39	07:40	07:46	08:39
26	16:04	17:10	18:11	20:16	21:17	22:03	21:18 (Pr3b)	21:57	21:18 (Pr3b)	21:09	19:40	18:20	16:09	15:36
27	08:40	07:45	06:35	06:12	05:03	04:24	20:54 (Pr3b)	04:43	21:06 (Pr3b)	05:39	06:41	07:42	07:48	08:40
28	16:06	17:12	18:13	20:18	21:19	22:04	21:19 (Pr3b)	21:55	21:17 (Pr3b)	21:07	19:37	18:17	16:07	15:36
29	08:39	07:43	06:32	06:10	05:01	04:24	20:54 (Pr3b)	04:44	21:09 (Pr3b)	05:41	06:43	07:44	07:50	08:41
30	16:08	17:15	18:15	20:20	21:21	22:05	21:19 (Pr3b)	21:54	21:16 (Pr3b)	21:04	19:34	18:15	16:06	15:36
31	08:37	07:40	06:29	06:07	04:59	04:24	20:54 (Pr3b)	04:46	21:05 (Pr3b)	05:43	06:45	07:46	07:52	08:42
32	16:10	17:17	18:17	20:22	21:23	22:05	21:19 (Pr3b)	21:53	21:17 (Pr3b)	21:07	19:32	18:12	16:04	15:36
33	08:36	07:38	06:27	06:05	04:57	04:24	20:54 (Pr3b)	04:48	21:05 (Pr3b)	05:45	06:47	07:48	07:55	08:43
34	16:12	17:19	18:20	20:24	21:25	22:06	21:19 (Pr3b)	21:51	21:16 (Pr3b)	21:04	19:29	18:10	16:02	15:36
35	08:35	07:36	06:24	06:02	04:55	04:23	20:54 (Pr3b)	04:49	21:06 (Pr3b)	05:47	06:49	07:50	07:57	08:44
36	16:14	17:21	18:22	20:26	21:27	22:06	21:19 (Pr3b)	21:50	21:17 (Pr3b)	21:06	19:26	18:07	16:01	15:36
37	08:34	07:33	06:21	06:00	04:53	04:23	20:54 (Pr3b)	04:51	21:07 (Pr3b)	05:49	06:51	07:52	07:59	08:45
38	16:16	17:24	18:24	20:28	21:29	22:07	21:19 (Pr3b)	21:48	21:18 (Pr3b)	21:08	19:24	18:05	15:59	15:37
39	08:32	07:31	06:19	05:57	04:52	04:23	20:55 (Pr3b)	04:52	21:08 (Pr3b)	05:51	06:53	07:54	08:01	08:45
40	16:18	17:26	18:26	20:30	21:30	22:07	21:21 (Pr3b)	21:47	21:19 (Pr3b)	21:09	19:21	18:02	15:57	15:37
41	08:31	07:28	06:16	05:55	04:50	04:24	20:55 (Pr3b)	04:54	21:09 (Pr3b)	05:53	06:55	07:57	08:03	08:46
42	16:20	17:28	18:28	20:32	21:32	22:07	21:21 (Pr3b)	21:45	21:20 (Pr3b)	21:10	19:18	18:00	15:56	15:37
43	08:29	07:26	06:13	05:52	04:48	04:24	20:55 (Pr3b)	04:56	21:10 (Pr3b)	05:55	06:57	07:59	08:05	08:46
44	16:22	17:30	18:30	20:34	21:34	22:08	21:21 (Pr3b)	21:44	21:21 (Pr3b)	21:11	19:16	17:57	15:54	15:38
45	08:28	07:24	06:11	05:50	04:47	04:24	20:55 (Pr3b)	04:57	21:11 (Pr3b)	05:57	06:59	08:01	08:07	08:47
46	16:24	17:32	18:32	20:36	21:36	22:08	21:21 (Pr3b)	21:42	21:22 (Pr3b)	21:12	19:13	17:55	15:53	15:38
47	08:26	07:21	06:08	05:47	04:45	04:24	20:56 (Pr3b)	04:59	21:12 (Pr3b)	05:59	07:01	08:03	08:09	08:47
48	16:26	17:35	18:34	20:39	21:37	22:08	21:21 (Pr3b)	21:40	21:23 (Pr3b)	21:13	19:10	17:53	15:51	15:39
49	08:25	07:19	06:05	05:45	04:43	04:25	20:56 (Pr3b)	05:01	21:13 (Pr3b)	06:01	07:03	07:05	08:11	08:48
50	16:28	17:37	18:36	20:41	21:39	22:08	21:21 (Pr3b)	21:39	21:24 (Pr3b)	21:14	19:08	16:50	15:50	15:39
51	08:23	07:16	06:03	05:42	04:42	04:25	20:57 (Pr3b)	05:03	21:14 (Pr3b)	06:03	07:05	07:07	08:13	08:48
52	16:30	17:39	18:38	20:43	21:41	22:08	21:22 (Pr3b)	21:37	21:25 (Pr3b)	21:15	19:05	16:48	15:49	15:40
53	08:21	07:14	06:00	05:40	04:40	04:26	20:56 (Pr3b)	05:04	21:15 (Pr3b)	06:05	07:07	07:09	08:14	08:48
54	16:32	17:41	18:40	20:45	21:42	22:08	21:21 (Pr3b)	21:35	21:26 (Pr3b)	21:16	19:02	16:45	15:48	15:41
55	08:20	07:11	05:57	05:38	04:39	04:26	20:57 (Pr3b)	05:06	21:16 (Pr3b)	06:07	07:09	07:12	08:16	08:48
56	16:35	17:43	18:42	20:47	21:44	22:07	21:22 (Pr3b)	21:33	21:27 (Pr3b)	21:17	19:04	16:43	15:46	15:42
57	08:18	06:55	05:35	04:38	03:40	04:27	20:57 (Pr3b)	05:08	21:17 (Pr3b)	06:09	07:11	07:14	08:18	08:48
58	16:37	17:45	18:44	20:49	21:46	22:07	21:21 (Pr3b)	21:31	21:28 (Pr3b)	21:18	18:57	16:41	15:45	15:43
59	08:16	06:52	05:33	04:36	03:42	04:28	20:58 (Pr3b)	05:10	21:18 (Pr3b)	06:11	07:13	07:16	08:20	08:48
60	16:39	17:47	18:46	20:51	21:47	22:07	21:22 (Pr3b)	21:29	21:29 (Pr3b)	21:19	18:54	16:39	15:44	15:44
61	08:14	06:49	05:30	04:35	03:45	04:30	20:56 (Pr3b)	05:12	21:19 (Pr3b)	06:13	07:15	07:18	08:22	08:48
62	16:41	17:49	18:48	20:53	21:49	22:07	21:10 (Pr3b)	21:27	21:27 (Pr3b)	21:17	18:56	16:36	15:41	15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217		
Total, worst case					38	704	280							
Sun reduction					0,56	0,57	0,47							
Oper. time red.					1,00	1,00	1,00							
Wind dir. red.					1,00	1,00	1,00							
Total reduction					0,56	0,57	0,47							
Total, real					21	400	132							

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Brieži - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (476)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:07	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:06	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:57	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:02	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:38	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:53	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:31	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:08	21:45	20:40	19:18	18:00	15:56	15:37
22	08:30	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:24	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:48
	16:26	17:34	18:34	20:39	21:38	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:15	08:48
	16:32	17:41	18:40	20:45	21:43	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:08	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:49
	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Briež udarzs - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (423)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January			February			March			April			May			June		
1	08:48		11:18 (DD3)	08:13		13:49 (DD1)	07:09		15:03 (O3)	06:47		17:25 (O2)	05:31		04:35			
	15:47	114	14:58 (O1.b)	16:44	63	15:44 (O4)	17:46	41	15:44 (O3)	19:51	51	18:16 (O2)	20:53		21:50			
2	08:48		11:19 (DD3)	08:11		13:50 (DD1)	07:06		15:04 (O3)	06:45		17:26 (O2)	05:29		04:34			
	15:48	111	14:59 (O1.b)	16:46	63	15:44 (O4)	17:48	38	15:42 (O3)	19:53	50	18:16 (O2)	20:55		21:52			
3	08:48		11:20 (DD3)	08:09		13:53 (DD1)	07:04		15:06 (O3)	06:42		17:26 (O2)	05:27		04:33			
	15:50	110	15:00 (O1.b)	16:48	60	15:44 (O4)	17:50	35	15:41 (O3)	19:55	49	18:15 (O2)	20:57		21:53			
4	08:47		11:21 (DD3)	08:07		13:55 (DD1)	07:01		15:08 (O3)	06:39		17:26 (O2)	05:24		04:32			
	15:51	107	15:01 (O1.b)	16:51	58	15:45 (O4)	17:53	30	15:38 (O3)	19:57	47	18:13 (O2)	20:59		21:54			
5	08:47		11:21 (DD3)	08:05		13:58 (DD1)	06:59		15:11 (O3)	06:37		17:28 (O2)	05:22		04:31			
	15:52	105	15:01 (O1.b)	16:53	52	15:44 (O4)	17:55	25	15:36 (O3)	19:59	45	18:13 (O2)	21:02		21:55			
6	08:46		11:22 (DD3)	08:03		15:04 (O3)	06:56		15:14 (O3)	06:34		17:28 (O2)	05:20		04:30			
	15:54	99	15:02 (O1.b)	16:55	40	15:44 (O4)	17:57	18	15:32 (O3)	20:02	43	18:11 (O2)	21:04		21:57			
7	08:46		11:22 (DD3)	08:01		15:03 (O3)	06:54		15:20 (O3)	06:31		17:30 (O2)	05:18		04:29			
	15:55	99	15:02 (O1.b)	16:57	42	15:45 (O3)	17:59	5	15:25 (O3)	20:04	40	18:10 (O2)	21:06		21:58			
8	08:45		11:23 (DD3)	07:58		15:02 (O3)	06:51			06:29		17:31 (O2)	05:16		04:28			
	15:57	99	15:02 (O1.b)	17:00	44	15:46 (O3)	18:01			20:06	37	18:08 (O2)	21:08		21:59			
9	08:44		11:24 (DD3)	07:56		15:01 (O3)	06:48			06:26		17:32 (O2)	05:14		04:28			
	15:58	99	15:03 (O1.b)	17:02	45	15:46 (O3)	18:03			20:08	34	18:06 (O2)	21:10		22:00			
10	08:44		11:25 (DD3)	07:54		15:01 (O3)	06:46		16:48 (O2)	06:23		17:34 (O2)	05:11		04:27			
	16:00	99	15:04 (O1.b)	17:04	46	15:47 (O3)	18:05	17	17:05 (O2)	20:10	30	18:04 (O2)	21:12		22:01			
11	08:43		11:26 (DD3)	07:52		14:59 (O3)	06:43		16:44 (O2)	06:21		17:36 (O2)	05:09		04:26			
	16:02	98	15:04 (O1.b)	17:06	48	15:47 (O3)	18:07	24	17:08 (O2)	20:12	25	18:01 (O2)	21:14		22:02			
12	08:42		11:27 (DD3)	07:50		14:59 (O3)	06:40		16:41 (O2)	06:18		17:40 (O2)	05:07		04:26			
	16:03	98	15:05 (O1.b)	17:09	49	15:48 (O3)	18:10	31	17:12 (O2)	20:14	18	17:58 (O2)	21:16		22:03			
13	08:41		11:28 (DD3)	07:48		14:59 (O3)	06:38		16:39 (O2)	06:16			05:05		04:25			
	16:05	95	15:05 (O1.b)	17:11	50	15:49 (O3)	18:12	34	17:13 (O2)	20:16			21:17		22:03			
14	08:40		11:28 (DD3)	07:45		14:58 (O3)	06:35		16:36 (O2)	06:13			05:03		04:25			
	16:07	96	15:05 (O1.b)	17:13	51	15:49 (O3)	18:14	38	17:14 (O2)	20:18			21:19		22:04			
15	08:39		11:30 (DD3)	07:43		14:58 (O3)	06:33		16:35 (O2)	06:11			05:01		04:25			
	16:09	94	15:06 (O1.b)	17:15	52	15:50 (O3)	18:16	41	17:16 (O2)	20:20			21:21		22:05			
16	08:38		11:32 (DD3)	07:41		14:58 (O3)	06:30		16:33 (O2)	06:08			05:00		04:25			
	16:11	91	15:06 (O1.b)	17:17	52	15:50 (O3)	18:18	44	17:17 (O2)	20:22			21:23		22:05			
17	08:36		11:33 (DD3)	07:38		14:58 (O3)	06:27		16:31 (O2)	06:05			04:58		04:24			
	16:13	88	15:06 (O1.b)	17:20	52	15:50 (O3)	18:20	47	17:18 (O2)	20:24			21:25		22:06			
18	08:35		11:36 (DD3)	07:36		14:57 (O3)	06:25		16:31 (O2)	06:03			04:56		04:24			
	16:15	90	15:29 (O4)	17:22	53	15:50 (O3)	18:22	48	17:19 (O2)	20:26			21:27		22:06			
19	08:34		11:38 (DD3)	07:34		14:58 (O3)	06:22		16:29 (O2)	06:00			04:54		04:24			
	16:17	90	15:32 (O4)	17:24	52	15:50 (O3)	18:24	50	17:19 (O2)	20:28			21:29		22:07			
20	08:33		11:43 (DD3)	07:31		14:57 (O3)	06:19		16:28 (O2)	05:58			04:52		04:24			
	16:19	84	15:34 (O4)	17:26	53	15:50 (O3)	18:26	51	17:19 (O2)	20:31			21:31		22:07			
21	08:31		13:40 (DD1)	07:29		14:58 (O3)	06:17		16:28 (O2)	05:55			04:51		04:24			
	16:21	82	15:36 (O4)	17:29	52	15:50 (O3)	18:28	52	17:20 (O2)	20:33			21:32		22:07			
22	08:30		13:40 (DD1)	07:26		14:58 (O3)	06:14		16:27 (O2)	05:53			04:49		04:25			
	16:23	82	15:37 (O4)	17:31	51	15:49 (O3)	18:30	53	17:20 (O2)	20:35			21:34		22:08			
23	08:28		13:40 (DD1)	07:24		14:59 (O3)	06:11		16:26 (O2)	05:50			04:47		04:25			
	16:25	82	15:38 (O4)	17:33	50	15:49 (O3)	18:33	54	17:20 (O2)	20:37			21:36		22:08			
24	08:27		13:41 (DD1)	07:21		14:59 (O3)	06:09		16:26 (O2)	05:48			04:46		04:25			
	16:27	81	15:39 (O4)	17:35	49	15:48 (O3)	18:35	55	17:21 (O2)	20:39			21:38		22:08			
25	08:25		13:41 (DD1)	07:19		15:00 (O3)	06:06		16:25 (O2)	05:45			04:44		04:26			
	16:29	78	15:40 (O4)	17:37	48	15:48 (O3)	18:37	55	17:20 (O2)	20:41			21:39		22:08			
26	08:23		13:42 (DD1)	07:16		15:00 (O3)	06:03		16:25 (O2)	05:43			04:43		04:26			
	16:31	71	15:41 (O4)	17:39	47	15:47 (O3)	18:39	55	17:20 (O2)	20:43			21:41		22:08			
27	08:22		13:43 (DD1)	07:14		15:01 (O3)	06:01		16:24 (O2)	05:41			04:41		04:26			
	16:33	67	15:41 (O4)	17:42	45	15:46 (O3)	18:41	55	17:19 (O2)	20:45			21:43		22:08			
28	08:20		13:44 (DD1)	07:11		15:02 (O3)	05:58		16:25 (O2)	05:38			04:40		04:27			
	16:35	66	15:42 (O4)	17:44	43	15:45 (O3)	18:43	54	17:19 (O2)	20:47			21:44		22:08			
29	08:18		13:45 (DD1)				06:55		17:24 (O2)	05:36			04:39		04:28			
	16:37	66	15:43 (O4)				19:45	54	18:18 (O2)	20:49			21:46		22:07			
30	08:16		13:46 (DD1)				06:53		17:24 (O2)	05:34			04:37		04:28			
	16:40	64	15:43 (O4)				19:47	53	18:17 (O2)	20:51			21:47		22:07			
31	08:14		13:47 (DD1)				06:50		17:25 (O2)				04:36					
	16:42	64	15:44 (O4)				19:49	52	18:17 (O2)				21:49					
Potential sun hours	236			266			366			426			507			528		
Total, worst case	2769			1410			1209			469								
Sun reduction	0,13			0,22			0,39			0,44								
Oper. time red.	1,00			1,00			1,00			1,00								
Wind dir. red.	1,00			1,00			1,00			1,00								
Total reduction	0,13			0,22			0,39			0,44								
Total, real	371			317			473			207								

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Briež udarzs - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (423)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December			
1	04:29 22:07	05:15 21:26	06:16 20:12	17:35 (O2) 18:00 (O2)	07:16 17:51 (O2)	17:19 (O2) 16:35 47	14:30 (O3) 15:17 (O3)	08:22 15:44 98	11:08 (DD3) 14:46 (O1.b)
2	04:30 22:06	05:16 21:24	06:18 20:09	17:32 (O2) 18:02 (O2)	07:18 18:49 (O2)	17:21 (O2) 16:32 45	14:31 (O3) 15:16 (O3)	08:24 15:43 98	11:08 (DD3) 14:47 (O1.b)
3	04:31 22:06	05:18 21:22	06:20 20:07	17:30 (O2) 18:04 (O2)	07:20 18:47 (O2)	17:24 (O2) 16:30 44	14:32 (O3) 15:16 (O3)	08:25 15:42 99	11:08 (DD3) 14:47 (O1.b)
4	04:32 22:05	05:20 21:19	06:22 20:04	17:28 (O2) 18:05 (O2)	07:22 18:44 (O2)	17:29 (O2) 16:28 41	14:33 (O3) 15:14 (O3)	08:27 15:41 100	11:08 (DD3) 14:48 (O1.b)
5	04:33 22:04	05:22 21:17	06:24 20:02	17:26 (O2) 18:06 (O2)	07:24 18:41 (O2)	07:29 16:26 40	14:33 (O3) 15:13 (O4)	08:28 15:41 100	11:07 (DD3) 14:47 (O1.b)
6	04:34 22:04	05:24 21:15	06:26 19:59	17:24 (O2) 18:07 (O2)	07:26 18:39 (O2)	07:31 16:24 53	13:28 (DD1) 15:14 (O4)	08:30 15:40 99	11:08 (DD3) 14:48 (O1.b)
7	04:35 22:03	05:26 21:13	06:28 19:56	17:23 (O2) 18:08 (O2)	07:28 18:36 (O2)	07:34 16:22 57	13:25 (DD1) 15:14 (O4)	08:31 15:39 105	11:08 (DD3) 14:48 (O1.b)
8	04:36 22:02	05:28 21:11	06:30 19:54	17:21 (O2) 18:08 (O2)	07:30 18:34 (O2)	07:36 16:20 61	13:22 (DD1) 15:14 (O4)	08:33 15:39 107	11:08 (DD3) 14:48 (O1.b)
9	04:37 22:01	05:30 21:09	06:32 19:51	17:20 (O2) 18:09 (O2)	07:32 18:31 (O2)	07:38 16:18 63	13:21 (DD1) 15:15 (O4)	08:34 15:38 110	11:09 (DD3) 14:49 (O1.b)
10	04:38 22:00	05:32 21:06	06:34 19:48	17:19 (O2) 18:09 (O2)	07:34 18:28 (O2)	07:40 16:16 64	13:19 (DD1) 15:15 (O4)	08:36 15:38 111	11:08 (DD3) 14:48 (O1.b)
11	04:40 21:59	05:34 21:04	06:36 19:46	17:17 (O2) 18:09 (O2)	07:36 18:26 (O2)	07:42 16:15 63	13:19 (DD1) 15:15 (O4)	08:37 15:37 113	11:09 (DD3) 14:49 (O1.b)
12	04:41 21:58	05:36 21:02	06:38 19:43	17:16 (O2) 18:09 (O2)	07:38 18:23 (O2)	07:44 16:12 64	13:18 (DD1) 15:15 (O4)	08:38 15:37 113	11:09 (DD3) 14:49 (O1.b)
13	04:42 21:57	05:38 20:59	06:40 19:40	17:15 (O2) 18:09 (O2)	07:40 18:21 (O2)	07:46 16:10 67	13:16 (DD1) 15:15 (O4)	08:39 15:37 114	11:10 (DD3) 14:49 (O1.b)
14	04:44 21:55	05:40 20:57	06:42 19:38	17:15 (O2) 18:09 (O2)	07:42 18:18 (O2)	07:49 16:08 66	13:17 (DD1) 15:15 (O4)	08:40 15:37 114	11:10 (DD3) 14:49 (O1.b)
15	04:45 21:54	05:42 20:55	06:44 19:35	17:14 (O2) 18:09 (O2)	07:44 18:15 (O2)	07:51 16:06 67	13:16 (DD1) 15:14 (O4)	08:41 15:37 115	11:10 (DD3) 14:50 (O1.b)
16	04:47 21:53	05:44 20:52	06:46 19:32	17:14 (O2) 18:08 (O2)	07:46 18:13 (O2)	07:53 16:05 71	13:15 (DD1) 15:14 (O4)	08:42 15:37 116	11:10 (DD3) 14:50 (O1.b)
17	04:48 21:52	05:46 20:50	06:48 19:30	17:13 (O2) 18:08 (O2)	07:48 18:10 (O2)	07:55 16:03 78	13:15 (DD1) 15:14 (O4)	08:43 15:37 114	11:11 (DD3) 14:50 (O1.b)
18	04:50 21:50	05:48 20:48	06:50 19:27	17:13 (O2) 18:08 (O2)	07:51 18:08 (O2)	07:57 16:01 81	13:15 (DD1) 15:13 (O4)	08:44 15:37 115	11:12 (DD3) 14:51 (O1.b)
19	04:51 21:49	05:50 20:45	06:52 19:24	17:13 (O2) 18:07 (O2)	07:53 18:05 (O2)	07:59 16:00 82	13:14 (DD1) 15:12 (O4)	08:45 15:37 114	11:12 (DD3) 14:51 (O1.b)
20	04:53 21:47	05:52 20:43	06:54 19:21	17:13 (O2) 18:07 (O2)	07:55 18:03 (O2)	08:01 15:58 82	13:15 (DD1) 15:12 (O4)	08:45 15:38 114	11:12 (DD3) 14:51 (O1.b)
21	04:55 21:46	05:54 20:40	06:56 19:19	17:12 (O2) 18:06 (O2)	07:57 18:00 (O2)	08:03 15:57 82	13:15 (DD1) 15:11 (O4)	08:46 15:38 114	11:13 (DD3) 14:52 (O1.b)
22	04:56 21:44	05:56 20:38	06:58 19:16	17:13 (O2) 18:05 (O2)	07:59 17:58 (O2)	08:05 15:55 83	11:19 (DD3) 15:10 (O4)	08:47 15:38 114	11:14 (DD3) 14:53 (O1.b)
23	04:58 21:42	05:58 20:35	06:59 19:13	17:13 (O2) 18:04 (O2)	08:01 17:56 (O2)	08:07 15:54 90	11:15 (DD3) 15:09 (O4)	08:47 15:39 114	11:14 (DD3) 14:53 (O1.b)
24	05:00 21:41	06:00 20:33	07:01 19:11	17:13 (O2) 18:03 (O2)	08:03 17:53 (O2)	08:09 15:52 91	11:13 (DD3) 15:07 (O4)	08:48 15:40 114	11:14 (DD3) 14:53 (O1.b)
25	05:02 21:39	06:02 20:30	07:03 19:08	17:13 (O2) 18:02 (O2)	07:05 16:51 (O2)	08:11 15:51 88	11:11 (DD3) 14:44 (O1.b)	08:48 15:40 115	11:14 (DD3) 14:54 (O1.b)
26	05:03 21:37	06:04 20:28	07:05 19:05	17:14 (O2) 18:01 (O2)	07:08 16:48 (O2)	08:13 15:50 91	11:10 (DD3) 14:44 (O1.b)	08:48 15:41 113	11:16 (DD3) 14:55 (O1.b)
27	05:05 21:35	06:06 20:25	07:07 19:03	17:15 (O2) 17:59 (O2)	07:10 16:46 (O2)	08:15 15:48 94	11:09 (DD3) 14:45 (O1.b)	08:48 15:42 115	11:16 (DD3) 14:56 (O1.b)
28	05:07 21:33	06:08 20:22	07:09 19:00	17:15 (O2) 17:58 (O2)	07:12 16:44 (O2)	08:17 15:47 94	11:09 (DD3) 14:45 (O1.b)	08:49 15:43 114	11:17 (DD3) 14:56 (O1.b)
29	05:09 21:32	06:10 20:20	07:12 18:57	17:16 (O2) 17:56 (O2)	07:14 16:41 (O2)	08:18 15:46 96	11:08 (DD3) 14:46 (O1.b)	08:49 15:44 114	11:16 (DD3) 14:56 (O1.b)
30	05:11 21:30	06:12 20:17	07:14 18:55	17:18 (O2) 17:54 (O2)	07:16 16:39 (O2)	08:20 15:45 98	11:08 (DD3) 14:46 (O1.b)	08:49 15:45 114	11:17 (DD3) 14:57 (O1.b)
31	05:13 21:28	06:14 20:15	17:39 (O2) 17:57 (O2)		07:18 16:37 48	14:29 (O3) 15:17 (O3)		08:49 15:46 114	11:18 (DD3) 14:58 (O1.b)
Potential sun hours	528	469	384		324	248		217	
Total, worst case		21	1406		1205	2143		3424	
Sun reduction		0,52	0,43		0,29	0,08		0,08	
Oper. time red.		1,00	1,00		1,00	1,00		1,00	
Wind dir. red.		1,00	1,00		1,00	1,00		1,00	
Total reduction		0,52	0,43		0,29	0,08		0,08	
Total, real		11	607		349	161		289	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Bruveri - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (434)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:13	07:09	06:47	05:31	04:35	04:29	05:14	06:16	07:15	07:21	08:22
	15:47	16:44	17:46	19:51	20:53	21:50	22:07	21:26	20:12	18:52	16:35	15:44
2	08:48	08:11	07:06	06:44	05:29	04:34	04:30	05:16	06:18	07:18	07:23	08:24
	15:48	16:46	17:48	19:53	20:55	21:52	22:06	21:24	20:09	18:49	16:32	15:43
3	08:48	08:09	07:04	06:42	05:27	04:33	04:31	05:18	06:20	07:20	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:06	21:22	20:07	18:47	16:30	15:42
4	08:47	08:07	07:01	06:39	05:24	04:32	04:32	05:20	06:22	07:22	07:27	08:27
	15:51	16:51	17:52	19:57	20:59	21:54	22:05	21:20	20:04	18:44	16:28	15:41
5	08:47	08:05	06:59	06:36	05:22	04:31	04:33	05:22	06:24	07:24	07:29	08:28
	15:52	16:53	17:55	19:59	21:02	21:55	22:04	21:17	20:02	18:41	16:26	15:40
6	08:47	08:03	06:56	06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31	08:30
	15:54	16:55	17:57	20:02	21:04	21:57	22:04	21:15	19:59	18:39	16:24	15:40
7	08:46	08:01	06:53	06:31	05:18	04:29	04:35	05:26	06:28	07:28	07:34	08:31
	15:55	16:57	17:59	20:04	21:06	21:58	22:03	21:13	19:56	18:36	16:22	15:39
8	08:45	07:58	06:51	06:29	05:16	04:28	04:36	05:28	06:30	07:30	07:36	08:33
	15:57	16:59	18:01	20:06	21:08	21:59	22:02	21:11	19:54	18:33	16:20	15:39
9	08:45	07:56	06:48	06:26	05:13	04:27	04:37	05:30	06:32	07:32	07:38	08:34
	15:58	17:02	18:03	20:08	21:10	22:00	22:01	21:09	19:51	18:31	16:18	15:38
10	08:44	07:54	06:46	06:23	05:11	04:27	04:38	05:32	06:34	07:34	07:40	08:36
	16:00	17:04	18:05	20:10	21:12	22:01	22:00	21:06	19:48	18:28	16:16	15:38
11	08:43	07:52	06:43	06:21	05:09	04:26	04:40	05:34	06:36	07:36	07:42	08:37
	16:02	17:06	18:07	20:12	21:14	22:02	21:59	21:04	19:46	18:26	16:14	15:37
12	08:42	07:50	06:40	06:18	05:07	04:26	04:41	05:36	06:38	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:16	22:03	21:58	21:02	19:43	18:23	16:12	15:37
13	08:41	07:48	06:38	06:16	05:05	04:25	04:42	05:38	06:40	07:40	07:46	08:39
	16:05	17:11	18:12	20:16	21:18	22:04	21:57	20:59	19:40	18:20	16:10	15:37
14	08:40	07:45	06:35	06:13	05:03	04:25	04:44	05:40	06:42	07:42	07:49	08:40
	16:07	17:13	18:14	20:18	21:19	22:04	21:56	20:57	19:38	18:18	16:08	15:37
15	08:39	07:43	06:32	06:10	05:01	04:25	04:45	05:42	06:44	07:44	07:51	08:41
	16:09	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:15	16:06	15:37
16	08:38	07:41	06:30	06:08	04:59	04:24	04:47	05:44	06:46	07:46	07:53	08:42
	16:11	17:17	18:18	20:22	21:23	22:06	21:53	20:52	19:32	18:13	16:04	15:37
17	08:37	07:38	06:27	06:05	04:57	04:24	04:48	05:46	06:48	07:48	07:55	08:43
	16:12	17:20	18:20	20:24	21:25	22:06	21:52	20:50	19:29	18:10	16:03	15:37
18	08:35	07:36	06:24	06:03	04:56	04:24	04:50	05:48	06:49	07:51	07:57	08:44
	16:14	17:22	18:22	20:26	21:27	22:07	21:50	20:48	19:27	18:08	16:01	15:37
19	08:34	07:34	06:22	06:00	04:54	04:24	04:51	05:50	06:51	07:53	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:37
20	08:33	07:31	06:19	05:58	04:52	04:24	04:53	05:52	06:53	07:55	08:01	08:46
	16:18	17:26	18:26	20:31	21:31	22:07	21:47	20:43	19:21	18:03	15:58	15:37
21	08:31	07:29	06:16	05:55	04:50	04:24	04:55	05:54	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:33	21:32	22:08	21:46	20:40	19:19	18:00	15:56	15:38
22	08:30	07:26	06:14	05:53	04:49	04:24	04:56	05:56	06:57	07:59	08:05	08:47
	16:22	17:31	18:30	20:35	21:34	22:08	21:44	20:38	19:16	17:58	15:55	15:38
23	08:28	07:24	06:11	05:50	04:47	04:25	04:58	05:58	06:59	08:01	08:07	08:47
	16:25	17:33	18:33	20:37	21:36	22:08	21:42	20:35	19:13	17:56	15:53	15:39
24	08:27	07:21	06:08	05:48	04:46	04:25	05:00	06:00	07:01	08:03	08:09	08:48
	16:27	17:35	18:35	20:39	21:38	22:08	21:41	20:33	19:11	17:53	15:52	15:39
25	08:25	07:19	06:06	05:45	04:44	04:25	05:01	06:02	07:03	08:05	08:11	08:48
	16:29	17:37	18:37	20:41	21:39	22:08	21:39	20:30	19:08	16:51	15:51	15:40
26	08:23	07:16	06:03	05:43	04:43	04:26	05:03	06:04	07:05	08:08	08:13	08:48
	16:31	17:39	18:39	20:43	21:41	22:08	21:37	20:28	19:05	16:48	15:49	15:41
27	08:22	07:14	06:00	05:41	04:41	04:26	05:05	06:06	07:07	08:10	08:15	08:48
	16:33	17:42	18:41	20:45	21:43	22:08	21:35	20:25	19:03	16:46	15:48	15:42
28	08:20	07:11	05:58	05:38	04:40	04:27	05:07	06:08	07:09	08:12	08:17	08:49
	16:35	17:44	18:43	20:47	21:44	22:08	21:33	20:22	19:00	16:44	15:47	15:42
29	08:18		06:55	05:36	04:38	04:27	05:09	06:10	07:11	08:14	08:18	08:49
	16:37		19:45	20:49	21:46	22:07	21:32	20:20	18:57	16:41	15:46	15:43
30	08:16		06:52	05:33	04:37	04:28	05:11	06:12	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:47	22:07	21:30	20:17	18:55	16:39	15:45	15:44
31	08:15		06:50		04:36		05:12	06:14		07:18		08:49
	16:42		19:49		21:49		21:28	20:15		16:37		15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Bucinieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (573)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:09 16:48	07:04 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:07	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:07 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:55	06:56 17:56	06:34 20:01	05:19 21:03	04:29 21:57	04:33 22:03	05:24 21:15	06:25 20:01	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:26 21:13	06:27 20:01	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:28 21:11	06:29 20:01	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	04:27 22:00	04:37 22:01	05:29 21:08	06:31 20:01	07:32 18:30	07:38 16:17	08:34 15:38
10	08:44 15:59	07:54 17:04	06:45 18:05	06:23 20:10	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 20:01	07:34 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 20:01	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:03	04:40 21:58	05:35 21:02	06:37 20:01	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:57	05:37 20:59	06:39 20:01	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:13	06:35 18:13	06:13 20:18	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 20:01	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:55	06:43 20:01	07:44 18:15	07:50 16:06	08:41 15:36
16	08:38 16:10	07:40 17:17	06:30 18:18	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 20:01	07:46 18:12	07:53 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 20:01	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 20:01	07:50 18:07	07:57 16:01	08:44 15:36
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:53 21:29	04:24 22:07	04:51 21:49	05:49 20:45	06:51 20:01	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:31	04:24 22:07	04:52 21:47	05:51 20:42	06:53 20:01	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 20:01	07:57 18:00	08:03 15:56	08:46 15:37
22	08:30 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 20:01	07:59 17:58	08:05 15:54	08:47 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:37	04:47 21:36	04:24 22:08	04:58 21:42	05:57 20:35	06:59 20:01	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:38	04:24 22:08	04:59 21:40	05:59 20:32	07:01 20:01	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 20:01	08:05 17:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 20:01	08:07 17:48	08:13 15:49	08:48 15:40
27	08:21 16:33	07:14 17:41	06:00 18:41	05:40 20:45	04:41 21:43	04:26 22:08	05:05 21:35	06:05 20:25	07:07 20:01	08:09 17:46	08:15 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 20:01	08:12 17:43	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 20:01	08:14 17:41	08:18 15:45	08:49 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:29	06:11 20:17	07:13 20:01	08:16 17:39	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 17:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Burtnieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (566)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:07	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:55	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:24 21:15	06:25 19:59	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:26 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	04:27 22:00	04:37 22:01	05:29 21:08	06:31 19:51	07:31 18:30	07:38 16:17	08:34 15:38
10	08:43 15:59	07:54 17:04	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 19:48	07:34 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:02	04:40 21:58	05:35 21:01	06:37 19:43	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:13 20:18	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:54	06:43 19:35	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:18	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:01	08:44 15:36
19	08:34 16:16	07:33 17:24	06:21 18:24	06:00 20:28	04:53 21:29	04:24 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:30	04:24 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:58	08:05 15:54	08:46 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	04:47 21:36	04:24 22:08	04:58 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:08	08:05 16:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:33	07:14 17:41	06:00 18:40	05:40 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:05 20:25	07:07 19:02	08:09 16:46	08:14 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 19:00	08:12 16:43	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 18:57	08:14 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:39	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Berzainites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (591)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running
 with worst case wind direction.

	January			February			March			April			May			June		
1	08:48		12:51 (DD3)	08:13		12:49 (DD3)	07:09		16:08 (DD1)	06:47		18:33 (O3)	05:31		19:31 (O2)	04:35		19:45 (O2)
2	15:47	65	14:40 (JV1)	16:44	101	15:15 (O5)	17:46	57	17:12 (O4)	19:51	30	19:03 (O3)	20:53	34	20:05 (O2)	21:50	9	19:54 (O2)
3	08:48		12:52 (DD3)	08:11		12:49 (DD3)	07:06		16:06 (DD1)	06:45		18:31 (O3)	05:29		19:31 (O2)	04:34		
4	15:48	65	14:41 (JV1)	16:46	102	15:15 (O5)	17:48	64	17:13 (O4)	19:53	34	19:05 (O3)	20:55	35	20:06 (O2)	21:51		
5	08:48		12:51 (DD3)	08:09		12:50 (DD3)	07:04		16:06 (DD1)	06:42		18:29 (O3)	05:27		19:30 (O2)	04:33		
6	15:50	67	14:41 (JV1)	16:48	100	15:15 (O5)	17:50	68	17:15 (O4)	19:55	36	19:05 (O3)	20:57	36	20:06 (O2)	21:53		
7	08:47		12:52 (DD3)	08:07		12:50 (DD3)	07:01		16:05 (DD1)	06:39		18:28 (O3)	05:24		19:30 (O2)	04:32		
8	15:51	70	14:50 (O5)	16:51	99	15:15 (O5)	17:52	71	17:16 (O4)	19:57	38	19:06 (O3)	20:59	37	20:07 (O2)	21:54		
9	08:47		12:52 (DD3)	08:05		12:50 (DD3)	06:59		16:03 (DD1)	06:37		18:27 (O3)	05:22		19:29 (O2)	04:31		
10	15:52	76	14:53 (O5)	16:53	97	15:14 (O5)	17:55	73	17:16 (O4)	19:59	40	19:07 (O3)	21:01	38	20:07 (O2)	21:55		
11	08:46		12:51 (DD3)	08:03		12:50 (DD3)	06:56		16:03 (DD1)	06:34		18:25 (O3)	05:20		19:28 (O2)	04:30		
12	15:54	82	14:55 (O5)	16:55	100	16:20 (O1.b)	17:57	74	17:17 (O4)	20:02	42	19:07 (O3)	21:04	38	20:06 (O2)	21:57		
13	08:46		12:51 (DD3)	08:01		12:51 (DD3)	06:53		16:03 (DD1)	06:31		18:24 (O3)	05:18		19:28 (O2)	04:29		
14	15:55	85	14:57 (O5)	16:57	104	16:24 (O1.b)	17:59	74	17:17 (O4)	20:04	43	19:07 (O3)	21:06	39	20:07 (O2)	21:58		
15	08:45		12:51 (DD3)	07:58		12:51 (DD3)	06:51		16:03 (DD1)	06:29		18:24 (O3)	05:16		19:28 (O2)	04:28		
16	15:57	88	14:59 (O5)	17:00	104	16:25 (O1.b)	18:01	75	17:18 (O4)	20:06	44	19:08 (O3)	21:08	40	20:08 (O2)	21:59		
17	08:44		12:51 (DD3)	07:56		12:52 (DD3)	06:48		16:02 (DD1)	06:26		18:23 (O3)	05:14		19:28 (O2)	04:28		
18	15:58	89	15:00 (O5)	17:02	103	16:27 (O1.b)	18:03	75	17:17 (O4)	20:08	45	19:08 (O3)	21:10	40	20:08 (O2)	22:00		
19	08:44		12:51 (DD3)	07:54		12:52 (DD3)	06:46		16:01 (DD1)	06:23		18:23 (O3)	05:11		19:28 (O2)	04:27		
20	16:00	91	15:02 (O5)	17:04	101	16:29 (O1.b)	18:05	75	17:16 (O4)	20:10	45	19:08 (O3)	21:12	39	20:07 (O2)	22:01		
21	08:43		12:51 (DD3)	07:52		12:52 (DD3)	06:43		16:01 (DD1)	06:21		18:22 (O3)	05:09		19:28 (O2)	04:26		
22	16:02	92	15:03 (O5)	17:06	92	16:29 (O1.b)	18:07	75	17:16 (O4)	20:12	46	19:08 (O3)	21:14	39	20:07 (O2)	22:02		
23	08:42		12:51 (DD3)	07:50		12:54 (DD3)	06:40		16:02 (DD1)	06:18		18:22 (O3)	05:07		19:28 (O2)	04:26		
24	16:03	93	15:04 (O5)	17:09	84	16:30 (O1.b)	18:10	73	17:15 (O4)	20:14	46	19:08 (O3)	21:15	39	20:07 (O2)	22:03		
25	08:41		12:51 (DD3)	07:47		12:55 (DD3)	06:38		16:01 (DD1)	06:16		18:21 (O3)	05:05		19:28 (O2)	04:26		
26	16:05	95	15:06 (O5)	17:11	83	16:31 (O1.b)	18:12	73	17:14 (O4)	20:16	46	19:07 (O3)	21:17	39	20:07 (O2)	22:03		
27	08:40		12:50 (DD3)	07:45		12:55 (DD3)	06:35		16:01 (DD1)	06:13		18:22 (O3)	05:03		19:28 (O2)	04:25		
28	16:07	96	15:06 (O5)	17:13	83	16:31 (O1.b)	18:14	72	17:13 (O4)	20:18	45	19:07 (O3)	21:19	38	20:06 (O2)	22:04		
29	08:39		12:50 (DD3)	07:43		12:56 (DD3)	06:32		16:02 (DD1)	06:10		18:21 (O3)	05:01		19:29 (O2)	04:25		
30	16:09	97	15:08 (O5)	17:15	82	16:31 (O1.b)	18:16	70	17:12 (O4)	20:20	46	19:07 (O3)	21:21	38	20:07 (O2)	22:05		
31	08:38		12:50 (DD3)	07:41		12:57 (DD3)	06:30		16:02 (DD1)	06:08		18:22 (O3)	05:00		19:29 (O2)	04:25		
32	16:11	98	15:09 (O5)	17:17	79	16:31 (O1.b)	18:18	65	17:10 (O4)	20:22	45	19:07 (O3)	21:23	37	20:06 (O2)	22:05		
33	08:36		12:50 (DD3)	07:38		12:59 (DD3)	06:27		16:02 (DD1)	06:05		18:21 (O3)	04:58		19:29 (O2)	04:24		
34	16:13	97	15:09 (O5)	17:20	76	16:31 (O1.b)	18:20	60	17:07 (O4)	20:24	44	19:05 (O3)	21:25	36	20:05 (O2)	22:06		
35	08:35		12:49 (DD3)	07:36		13:00 (DD3)	06:25		16:04 (DD1)	06:03		18:22 (O3)	04:56		19:30 (O2)	04:24		
36	16:15	97	15:10 (O5)	17:22	72	16:30 (O1.b)	18:22	48	17:03 (O4)	20:26	43	19:05 (O3)	21:27	35	20:05 (O2)	22:06		
37	08:34		12:50 (DD3)	07:34		13:02 (DD3)	06:22		16:04 (DD1)	06:00		18:22 (O3)	04:54		19:30 (O2)	04:24		
38	16:17	92	15:11 (O5)	17:24	68	16:30 (O1.b)	18:24	41	16:45 (DD1)	20:28	42	19:04 (O3)	21:29	35	20:05 (O2)	22:07		
39	08:33		12:49 (DD3)	07:31		13:03 (DD3)	06:19		16:05 (DD1)	05:58		18:23 (O3)	04:52		19:31 (O2)	04:24		
40	16:19	95	15:12 (O5)	17:26	62	16:28 (O1.b)	18:26	38	16:43 (DD1)	20:31	40	19:03 (O3)	21:31	34	20:05 (O2)	22:07		
41	08:31		12:50 (DD3)	07:29		13:06 (DD3)	06:17		16:07 (DD1)	05:55		18:24 (O3)	04:51		19:31 (O2)	04:24		
42	16:21	96	15:13 (O5)	17:29	56	16:28 (O1.b)	18:28	35	16:42 (DD1)	20:33	39	19:03 (O3)	21:32	33	20:04 (O2)	22:07		
43	08:30		12:49 (DD3)	07:26		13:09 (DD3)	06:14		16:08 (DD1)	05:53		18:24 (O3)	04:49		19:32 (O2)	04:25		
44	16:23	97	15:13 (O5)	17:31	47	16:26 (O1.b)	18:30	32	16:40 (DD1)	20:35	37	19:01 (O3)	21:34	32	20:04 (O2)	22:08		
45	08:28		12:49 (DD3)	07:24		13:14 (DD3)	06:11		16:10 (DD1)	05:50		18:25 (O3)	04:47		19:33 (O2)	04:25		
46	16:25	100	15:14 (O5)	17:33	46	16:37 (DD1)	18:33	27	16:37 (DD1)	20:37	35	19:00 (O3)	21:36	29	20:02 (O2)	22:08		
47	08:27		12:49 (DD3)	07:21		13:22 (DD3)	06:09		16:12 (DD1)	05:48		18:27 (O3)	04:46		19:34 (O2)	04:25		
48	16:27	100	15:14 (O5)	17:35	28	16:40 (DD1)	18:35	22	16:34 (DD1)	20:39	37	19:52 (O2)	21:38	28	20:02 (O2)	22:08		
49	08:25		12:49 (DD3)	07:19		16:15 (DD1)	06:06		16:17 (DD1)	05:45		18:27 (O3)	04:44		19:35 (O2)	04:26		
50	16:29	100	15:14 (O5)	17:37	28	16:43 (DD1)	18:37	13	16:30 (DD1)	20:41	45	19:56 (O2)	21:39	27	20:02 (O2)	22:08		
51	08:23		12:49 (DD3)	07:16		16:13 (DD1)	06:03			05:43		18:29 (O3)	04:43		19:35 (O2)	04:26		
52	16:31	102	15:15 (O5)	17:39	32	16:45 (DD1)	18:39			05:41		19:59 (O2)	21:41	25	20:00 (O2)	22:08		
53	08:22		12:49 (DD3)	07:14		16:11 (DD1)	06:00			05:41		18:32 (O3)	04:41		19:37 (O2)	04:26		
54	16:33	102	15:15 (O5)	17:42	35	16:46 (DD1)	18:41			05:45		20:01 (O2)	21:43	23	20:00 (O2)	22:08		
55	08:20		12:49 (DD3)	07:11		16:10 (DD1)	05:58			05:38		18:34 (O3)	04:40		19:38 (O2)	04:27		
56	16:35	102	15:15 (O5)	17:44	50	17:10 (O4)	18:43			05:38		20:02 (O2)	21:44	21	19:59 (O2)	22:07		
57	08:18		12:49 (DD3)				06:55			05:36		18:39 (O3)	04:39		19:39 (O2)	04:28		
58	16:37	102	15:15 (O5)				19:45	11	18:54 (O3)	20:49	35	20:03 (O2)	21:46	19	19:58 (O2)	22:07		
59	08:16		12:49 (DD3)				06:52			05:34		19:32 (O2)	04:37		19:41 (O2)	04:28		
60	16:40	103	15:15 (O5)				19:47	20	18:58 (O3)	20:51	32	20:04 (O2)	21:47	16	19:57 (O2)	22:07		
61	08:14		12:49 (DD3)				06:50			05:33			04:36		19:43 (O2)			
62	16:42	102	15:15 (O5)				19:49	25	19:01 (O3)				21:49	13	19:56 (O2)			
Potential sun hours		236		266			366		426		507				528			
Total, worst case		2836		2114			1506		1234		1012				9			
Sun reduction		0,13		0,22			0,39		0,44		0,56				0,57			
Oper. time red.		1,00		1,00			1,00		1,00		1,00				1,00			
Wind dir. red.		1,00		1,00			1,00		1,00		1,00				1,00			
Total reduction		0,13		0,22			0,39		0,44		0,56				0,57			
Total, real		380		476			590		545		570				5			

Table layout: For each day in each month the following matrix apply

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Berzainites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (591)
Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July		August		September		October		November		December		
1	04:29		05:15	19:38 (O2)	06:16	18:21 (O3)	07:16	16:41 (DD1)	07:21	12:22 (DD3)	08:22	12:33 (DD3)	
2	22:06		21:26	39 19:38 (O2)	20:12	19:07 (O3)	18:52	73 17:54 (O4)	16:35	15:58 (O1.b)	15:44	92 14:45 (O5)	
3	04:30		05:16	19:38 (O2)	06:18	18:21 (O3)	07:18	16:40 (DD1)	07:23	12:21 (DD3)	08:24	12:34 (DD3)	
4	22:06		21:24	40 20:18 (O2)	20:09	19:06 (O3)	18:49	74 17:54 (O4)	16:32	15:57 (O1.b)	15:43	91 14:45 (O5)	
5	04:31		05:18	19:38 (O2)	06:20	18:21 (O3)	07:20	16:39 (DD1)	07:25	12:20 (DD3)	08:25	12:35 (DD3)	
6	22:05		21:22	40 20:18 (O2)	20:07	19:06 (O3)	18:47	75 17:54 (O4)	16:30	15:55 (O1.b)	15:42	89 14:44 (O5)	
7	04:32		05:20	19:37 (O2)	06:22	18:21 (O3)	07:22	16:39 (DD1)	07:27	12:21 (DD3)	08:27	12:36 (DD3)	
8	22:05		21:19	40 20:17 (O2)	20:04	19:05 (O3)	18:44	75 17:54 (O4)	16:28	15:53 (O1.b)	15:41	87 14:44 (O5)	
9	04:33		05:22	19:38 (O2)	06:24	18:21 (O3)	07:24	16:39 (DD1)	07:29	12:20 (DD3)	08:28	12:36 (DD3)	
10	22:04		21:17	39 20:17 (O2)	20:02	19:04 (O3)	18:41	75 17:54 (O4)	16:26	15:49 (O1.b)	15:41	85 14:42 (O5)	
11	04:34		05:24	19:38 (O2)	06:26	18:21 (O3)	07:26	16:39 (DD1)	07:31	12:20 (DD3)	08:30	12:37 (DD3)	
12	22:03		21:15	39 20:17 (O2)	19:59	19:03 (O3)	18:39	74 17:53 (O4)	16:24	14:44 (O5)	15:40	82 14:42 (O5)	
13	04:35		05:26	19:38 (O2)	06:28	18:22 (O3)	07:28	16:38 (DD1)	07:34	12:20 (DD3)	08:31	12:39 (DD3)	
14	22:03		21:13	39 20:17 (O2)	19:56	19:02 (O3)	18:36	74 17:52 (O4)	16:22	14:45 (O5)	15:39	78 14:41 (O5)	
15	04:36		05:28	19:39 (O2)	06:30	18:23 (O3)	07:30	16:39 (DD1)	07:36	12:20 (DD3)	08:33	12:39 (DD3)	
16	22:02		21:11	37 20:16 (O2)	19:54	19:01 (O3)	18:34	74 17:53 (O4)	16:20	14:45 (O5)	15:39	72 14:38 (O5)	
17	04:37		05:30	19:38 (O2)	06:32	18:23 (O3)	07:32	16:40 (DD1)	07:38	12:20 (DD3)	08:34	12:40 (DD3)	
18	22:01		21:09	37 20:15 (O2)	19:51	19:00 (O3)	18:31	71 17:51 (O4)	16:18	14:46 (O5)	15:38	67 14:30 (JV1)	
19	04:38		05:32	19:39 (O2)	06:34	18:25 (O3)	07:34	16:40 (DD1)	07:40	12:20 (DD3)	08:36	12:41 (DD3)	
20	22:00		21:06	36 20:15 (O2)	19:48	18:58 (O3)	18:28	70 17:50 (O4)	16:16	14:46 (O5)	15:38	65 14:30 (JV1)	
21	04:40		05:34	19:39 (O2)	06:36	18:25 (O3)	07:36	16:40 (DD1)	07:42	12:21 (DD3)	08:37	12:42 (DD3)	
22	21:59	6	20:00 (O2)	21:04	35 20:14 (O2)	19:46	30 18:55 (O3)	18:26	67 17:49 (O4)	16:14	14:47 (O5)	15:38	65 14:31 (JV1)
23	04:41		19:52 (O2)	05:36	19:40 (O2)	06:38	18:27 (O3)	07:38	16:41 (DD1)	07:44	12:21 (DD3)	08:38	12:43 (DD3)
24	21:58	11	20:03 (O2)	21:02	33 20:13 (O2)	19:43	26 18:53 (O3)	18:23	61 17:47 (O4)	16:12	14:47 (O5)	15:37	65 14:32 (JV1)
25	04:42		19:50 (O2)	05:38	19:41 (O2)	06:40	18:29 (O3)	07:40	16:41 (DD1)	07:46	12:20 (DD3)	08:39	12:44 (DD3)
26	21:57	15	20:05 (O2)	20:59	31 20:12 (O2)	19:40	21 18:50 (O3)	18:21	55 17:44 (O4)	16:10	14:47 (O5)	15:37	64 14:32 (JV1)
27	04:44		19:49 (O2)	05:40	18:46 (O3)	06:42	18:32 (O3)	07:42	16:42 (DD1)	07:49	12:21 (DD3)	08:40	12:44 (DD3)
28	21:55	17	20:06 (O2)	20:57	38 20:11 (O2)	19:38	14 18:46 (O3)	18:18	45 17:40 (O4)	16:08	14:48 (O5)	15:37	63 14:32 (JV1)
29	04:45		19:47 (O2)	05:42	18:40 (O3)	06:44	18:46 (O3)	07:44	16:44 (DD1)	07:51	12:21 (DD3)	08:41	12:45 (DD3)
30	21:54	20	20:07 (O2)	20:55	45 20:09 (O2)	19:35	18:15	34 17:18 (DD1)	16:06	14:48 (O5)	15:37	62 14:33 (JV1)	
31	04:47		19:47 (O2)	05:44	18:38 (O3)	06:46	18:15	34 17:18 (DD1)	16:06	14:48 (O5)	15:37	62 14:33 (JV1)	
32	21:53	22	20:09 (O2)	20:52	45 20:07 (O2)	19:32	18:13	30 17:16 (DD1)	16:05	14:48 (O5)	15:37	62 14:33 (JV1)	
33	04:48		19:45 (O2)	05:46	18:35 (O3)	06:48	18:13	30 17:16 (DD1)	16:05	14:48 (O5)	15:37	62 14:33 (JV1)	
34	21:51	25	20:10 (O2)	20:50	46 20:05 (O2)	19:30	18:10	27 17:14 (DD1)	16:03	14:48 (O5)	15:37	61 14:34 (JV1)	
35	04:50		19:45 (O2)	05:48	18:34 (O3)	06:50	17:05 (DD1)	07:51	13:48 (DD3)	07:57	12:23 (DD3)	08:44	12:48 (DD3)
36	21:50	26	20:11 (O2)	20:47	43 20:02 (O2)	19:27	12 17:17 (DD1)	18:08	39 17:10 (DD1)	16:01	14:48 (O5)	15:37	60 14:34 (JV1)
37	04:51		19:44 (O2)	05:50	18:32 (O3)	06:52	17:00 (DD1)	07:53	13:43 (DD3)	07:59	12:23 (DD3)	08:45	12:48 (DD3)
38	21:49	27	20:11 (O2)	20:45	33 19:05 (O3)	19:24	21 17:21 (DD1)	18:05	50 17:07 (DD1)	16:00	14:48 (O5)	15:37	61 14:35 (JV1)
39	04:53		19:44 (O2)	05:52	18:31 (O3)	06:54	16:57 (DD1)	07:55	13:39 (DD3)	08:01	12:24 (DD3)	08:45	12:48 (DD3)
40	21:47	29	20:13 (O2)	20:43	35 19:06 (O3)	19:21	26 17:23 (DD1)	18:03	50 16:58 (O1.b)	15:58	14:48 (O5)	15:38	61 14:35 (JV1)
41	04:55		19:43 (O2)	05:54	18:29 (O3)	06:55	16:54 (DD1)	07:57	13:36 (DD3)	08:03	12:25 (DD3)	08:46	12:49 (DD3)
42	21:46	30	20:13 (O2)	20:40	38 19:07 (O3)	19:19	31 17:25 (DD1)	18:00	57 16:58 (O1.b)	15:57	14:48 (O5)	15:38	60 14:36 (JV1)
43	04:56		19:42 (O2)	05:56	18:27 (O3)	06:57	16:52 (DD1)	07:59	13:33 (DD3)	08:05	12:25 (DD3)	08:47	12:49 (DD3)
44	21:44	32	20:14 (O2)	20:38	40 19:07 (O3)	19:16	34 17:26 (DD1)	17:58	64 16:59 (O1.b)	15:55	14:48 (O5)	15:38	60 14:36 (JV1)
45	04:58		19:41 (O2)	05:58	18:26 (O3)	06:59	16:50 (DD1)	08:01	13:32 (DD3)	08:07	12:26 (DD3)	08:47	12:50 (DD3)
46	21:42	33	20:14 (O2)	20:35	41 19:07 (O3)	19:13	37 17:27 (DD1)	17:56	69 17:00 (O1.b)	15:54	14:47 (O5)	15:39	60 14:37 (JV1)
47	05:00		19:41 (O2)	06:00	18:25 (O3)	07:01	16:48 (DD1)	08:03	13:30 (DD3)	08:09	12:27 (DD3)	08:48	12:50 (DD3)
48	21:41	34	20:15 (O2)	20:33	43 19:08 (O3)	19:11	40 17:28 (DD1)	17:53	72 17:00 (O1.b)	15:52	14:48 (O5)	15:40	61 14:37 (JV1)
49	05:02		19:40 (O2)	06:02	18:25 (O3)	07:03	16:47 (DD1)	07:05	12:28 (DD3)	08:11	12:28 (DD3)	08:48	12:50 (DD3)
50	21:39	35	20:15 (O2)	20:30	43 19:08 (O3)	19:08	42 17:29 (DD1)	16:51	76 16:00 (O1.b)	15:51	14:48 (O5)	15:40	61 14:37 (JV1)
51	05:03		19:40 (O2)	06:04	18:24 (O3)	07:05	16:45 (DD1)	07:08	12:27 (DD3)	08:13	12:28 (DD3)	08:48	12:52 (DD3)
52	21:37	36	20:16 (O2)	20:28	44 19:08 (O3)	19:05	57 17:49 (O4)	16:48	80 16:01 (O1.b)	15:50	14:47 (O5)	15:41	60 14:38 (JV1)
53	05:05		19:40 (O2)	06:06	18:23 (O3)	07:07	16:44 (DD1)	07:10	12:26 (DD3)	08:15	12:29 (DD3)	08:48	12:52 (DD3)
54	21:35	37	20:17 (O2)	20:25	45 19:08 (O3)	19:03	64 17:51 (O4)	16:46	81 16:01 (O1.b)	15:48	14:47 (O5)	15:42	61 14:39 (JV1)
55	05:07		19:39 (O2)	06:08	18:23 (O3)	07:09	16:43 (DD1)	07:12	12:24 (DD3)	08:16	12:30 (DD3)	08:48	12:52 (DD3)
56	21:33	37	20:16 (O2)	20:22	45 19:08 (O3)	19:00	68 17:52 (O4)	16:44	83 16:00 (O1.b)	15:47	14:46 (O5)	15:43	61 14:39 (JV1)
57	05:09		19:39 (O2)	06:10	18:22 (O3)	07:11	16:42 (DD1)	07:14	12:24 (DD3)	08:18	12:31 (DD3)	08:49	12:51 (DD3)
58	21:31	38	20:17 (O2)	20:20	46 19:08 (O3)	18:57	71 17:53 (O4)	16:41	84 16:00 (O1.b)	15:46	14:46 (O5)	15:44	63 14:39 (JV1)
59	05:11		19:39 (O2)	06:12	18:22 (O3)	07:14	16:41 (DD1)	07:16	12:23 (DD3)	08:20	12:32 (DD3)	08:49	12:52 (DD3)
60	21:30	38	20:17 (O2)	20:17	46 19:08 (O3)	18:55	73 17:54 (O4)	16:39	83 15:59 (O1.b)	15:45	14:46 (O5)	15:45	63 14:40 (JV1)
61	05:13		19:38 (O2)	06:14	18:21 (O3)	07:16	17:18	93 12:22 (DD3)	15:46	14:46 (O5)	15:46	63 14:40 (JV1)	
62	21:28	39	20:17 (O2)	20:15	46 19:07 (O3)	18:55	73 17:54 (O4)	16:39	83 15:59 (O1.b)	15:45	14:46 (O5)	15:45	63 14:40 (JV1)
Potential sun hours	528		469		384		324		248		217		
Total, worst case	587		1247		1080		2035		2981		2105		
Sun reduction	0,47		0,52		0,43		0,29		0,08		0,08		
Oper. time red.	1,00		1,00		1,00		1,00		1,00		1,00		
Wind dir. red.	1,00		1,00		1,00		1,00		1,00		1,00		
Total reduction	0,47		0,52		0,43		0,29		0,08		0,08		
Total, real	277		651		466		590		224		177		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Celinmajas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (574)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:06	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:55	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:24 21:15	06:25 19:59	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:02	05:26 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:50 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:27 21:10	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	04:27 22:00	04:37 22:01	05:29 21:08	06:31 19:51	07:31 18:30	07:38 16:17	08:34 15:38
10	08:43 15:59	07:54 17:04	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:02	04:40 21:58	05:35 21:01	06:37 19:43	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:13 20:18	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:18	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:01	08:44 15:36
19	08:34 16:16	07:33 17:24	06:21 18:24	06:00 20:28	04:53 21:29	04:24 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:30	04:24 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:07	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:58	08:05 15:54	08:46 15:38
23	08:28 16:24	07:23 17:32	06:11 18:32	05:50 20:36	04:47 21:36	04:24 22:08	04:58 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:08	08:05 16:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:33	07:14 17:41	06:00 18:40	05:40 20:45	04:41 21:42	04:26 22:07	05:05 21:35	06:05 20:25	07:07 19:02	08:09 16:46	08:14 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 19:00	08:12 16:43	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:45	04:27 22:07	05:08 21:31	06:09 20:19	07:11 18:57	08:14 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:39	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:48		05:12 21:27	06:13 20:14	07:18 16:36			08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Celmalas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (555)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Celtekas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (518)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:46	08:12 16:43	07:08 17:45	06:47 19:51	05:30 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:51	07:20 16:34	08:22 15:43
2	08:48 15:47	08:10 16:45	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:17 21:21	06:19 20:06	07:19 18:46	07:25 16:29	08:25 15:41
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	07:27 16:27	08:27 15:40
5	08:47 15:51	08:04 16:52	06:58 17:54	06:36 19:59	05:21 21:01	04:30 21:55	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:23 21:15	06:25 19:58	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:38
8	08:45 15:56	07:58 16:59	06:50 18:00	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:57	07:56 17:01	06:48 18:03	06:25 20:07	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 19:50	07:31 18:30	07:38 16:17	08:34 15:37
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:37 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:11	05:09 21:13	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:35 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:06 21:15	04:25 22:03	04:40 21:58	05:35 21:01	06:37 19:42	07:38 18:22	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:04 21:17	04:24 22:03	04:41 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	05:02 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17	07:48 16:07	08:40 15:36
15	08:39 16:08	07:43 17:14	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:17	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:19	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:00	08:44 15:36
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:36
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:51 21:30	04:23 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:23 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:56 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:57	08:05 15:54	08:47 15:37
23	08:28 16:24	07:23 17:32	06:11 18:32	05:50 20:36	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:34	06:08 18:34	05:47 20:38	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:52	08:09 15:51	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:07	08:05 16:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	04:40 21:42	04:25 22:08	05:04 21:35	06:05 20:25	07:07 19:02	08:09 16:45	08:14 15:47	08:48 15:41
28	08:20 16:34	07:11 17:43	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 18:59	08:11 16:43	08:16 15:46	08:48 15:42
29	08:18 16:37		06:55 19:44	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:19	07:11 18:57	08:13 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:38	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Flickering_Nordex_N175_Prikuli_B

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 16:18/4.1.254

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Cielavinas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (430)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []
Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec.

Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

January		February		March		April		May		June		July		August		September		October		November		December	
08:48	08:13			07:09		16:23 (DD3)	06:47	05:31	04:35	04:29	05:14	06:16		07:15		17:58 (DD1)	07:20	08:22					
15:47	16:44			17:46	29	16:52 (DD3)	19:51	20:53	21:50	22:06	21:26	20:12		18:52	22	18:20 (DD1)	16:35	15:44					
08:48	08:11			07:06		16:23 (DD3)	06:44	05:29	04:34	04:30	05:16	06:18		07:17		17:59 (DD1)	07:23	08:23					
15:48	16:46			17:48	28	16:51 (DD3)	19:53	20:55	21:51	22:06	21:24	20:09		18:49	20	18:19 (DD1)	16:32	15:43					
08:48	08:09			07:04		16:25 (DD3)	06:42	05:27	04:33	04:31	05:18	06:20		07:19		17:59 (DD1)	07:25	08:25					
15:50	16:48			17:50	26	16:51 (DD3)	19:55	20:57	21:53	22:05	21:21	20:07		18:47	17	18:16 (DD1)	16:30	15:42					
08:47	08:07			07:01		16:25 (DD3)	06:39	05:24	04:32	04:32	05:20	06:22		07:22		18:00 (DD1)	07:27	08:27					
15:51	16:51			17:52	24	16:49 (DD3)	19:57	20:59	21:54	22:05	21:19	20:04		18:44	13	18:13 (DD1)	16:28	15:41					
08:47	08:05			06:59		16:26 (DD3)	06:36	05:22	04:31	04:33	05:22	06:24		07:24		18:02 (DD1)	07:29	08:28					
15:52	16:53			17:55	22	16:48 (DD3)	19:59	21:01	21:55	22:04	21:17	20:01		18:41	8	18:10 (DD1)	16:26	15:41					
08:46	08:03			06:56		16:28 (DD3)	06:34	05:20	04:30	04:34	05:24	06:26		07:26		17:08 (DD3)	07:31	08:30					
15:54	16:55			17:57	18	16:46 (DD3)	20:01	21:03	21:56	22:03	21:15	19:59		18:39	13	18:08 (DD1)	16:24	15:40					
08:46	08:00			06:53		16:30 (DD3)	06:31	05:18	04:29	04:35	05:26	06:28		07:28		17:04 (DD3)	07:33	08:31					
15:55	16:57			17:59	14	16:44 (DD3)	20:04	21:05	21:58	22:03	21:13	19:56		18:36	17	17:21 (DD3)	16:22	15:39					
08:45	07:58			06:51		16:34 (DD3)	06:29	05:16	04:28	04:36	05:28	06:30		07:30		17:02 (DD3)	07:36	08:33					
15:57	16:59			18:01	10	17:32 (DD1)	20:06	21:07	21:59	22:02	21:11	19:54		18:33	20	17:22 (DD3)	16:20	15:39					
08:44	07:56			06:48		17:24 (DD1)	06:26	05:13	04:28	04:37	05:30	06:32		07:32		17:01 (DD3)	07:38	08:34					
15:58	17:02			18:03	11	17:35 (DD1)	20:08	21:09	22:00	22:01	21:08	19:51		18:31	23	17:24 (DD3)	16:18	15:38					
08:44	07:54			06:46		17:22 (DD1)	06:23	05:11	04:27	04:38	05:32	06:34		07:34		16:59 (DD3)	07:40	08:35					
16:00	17:04			18:05	15	17:37 (DD1)	20:10	21:11	22:01	22:00	21:06	19:48		18:28	26	17:25 (DD3)	16:16	15:38					
08:43	07:52			06:43		17:20 (DD1)	06:21	05:09	04:26	04:40	05:34	06:36		07:36		16:58 (DD3)	07:42	08:37					
16:02	17:																						

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker
			(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Dadziš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (485)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:15	06:17	07:17	07:22	08:23
	15:47	16:45	17:47	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:05	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:02	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:00	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:05	15:36
16	08:37	07:40	06:29	06:07	04:59	04:23	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:18	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Dauguli - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (493)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Driveniški - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (449)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	
1	08:48	08:13	07:09	06:47	05:31	04:35	05:36 (P19.2b)
	15:47	16:44	17:46	19:51	20:53	21:50	21 05:57 (P19.2b)
2	08:48	08:11	07:06	06:45	05:29	04:34	05:37 (P19.2b)
	15:49	16:46	17:48	19:53	20:55	21:51	20 05:57 (P19.2b)
3	08:48	08:09	07:04	06:42	05:27	04:33	05:37 (P19.2b)
	15:50	16:49	17:50	19:55	20:57	21:53	19 05:56 (P19.2b)
4	08:47	08:07	07:01	06:39	05:25	04:32	05:39 (P19.2b)
	15:51	16:51	17:53	19:57	20:59	21:54	18 05:57 (P19.2b)
5	08:47	08:05	06:59	06:37	05:22	04:31	05:39 (P19.2b)
	15:53	16:53	17:55	20:00	21:01	21:55	17 05:56 (P19.2b)
6	08:46	08:03	06:56	06:34	05:20	04:30	05:40 (P19.2b)
	15:54	16:55	17:57	20:02	21:04	21:57	16 05:56 (P19.2b)
7	08:46	08:01	06:54	06:31	05:18	04:29	05:41 (P19.2b)
	15:56	16:58	17:59	20:04	21:06	21:58	15 05:56 (P19.2b)
8	08:45	07:58	06:51	06:29	05:16	04:29	05:41 (P19.2b)
	15:57	17:00	18:01	20:06	21:08	21:59	14 05:55 (P19.2b)
9	08:44	07:56	06:48	06:26	05:14	04:28	05:42 (P19.2b)
	15:59	17:02	18:03	20:08	21:10	22:00	12 05:54 (P19.2b)
10	08:44	07:54	06:46	06:24	05:12	05:42 (P19.2b)	04:27 05:43 (P19.2b)
	16:00	17:04	18:05	20:10	21:12	8 05:50 (P19.2b)	22:01 11 05:54 (P19.2b)
11	08:43	07:52	06:43	06:21	05:10	05:39 (P19.2b)	04:27 05:44 (P19.2b)
	16:02	17:06	18:08	20:12	21:14	13 05:52 (P19.2b)	22:02 10 05:54 (P19.2b)
12	08:42	07:50	06:41	06:18	05:08	05:38 (P19.2b)	04:26 05:44 (P19.2b)
	16:04	17:09	18:10	20:14	21:15	16 05:54 (P19.2b)	22:03 9 05:53 (P19.2b)
13	08:41	07:48	06:38	06:16	05:06	05:36 (P19.2b)	04:26 05:46 (P19.2b)
	16:05	17:11	18:12	20:16	21:17	19 05:55 (P19.2b)	22:03 7 05:53 (P19.2b)
14	08:40	07:45	06:35	06:13	05:04	05:36 (P19.2b)	04:25 05:47 (P19.2b)
	16:07	17:13	18:14	20:18	21:19	20 05:56 (P19.2b)	22:04 5 05:52 (P19.2b)
15	08:39	07:43	06:33	06:11	05:02	05:35 (P19.2b)	04:25 05:49 (P19.2b)
	16:09	17:15	18:16	20:20	21:21	22 05:57 (P19.2b)	22:05 2 05:51 (P19.2b)
16	08:38	07:41	06:30	06:08	05:00	05:34 (P19.2b)	04:25
	16:11	17:18	18:18	20:22	21:23	23 05:57 (P19.2b)	22:05
17	08:36	07:38	06:27	06:06	04:58	05:34 (P19.2b)	04:25
	16:13	17:20	18:20	20:24	21:25	24 05:58 (P19.2b)	22:06
18	08:35	07:36	06:25	06:03	04:56	05:34 (P19.2b)	04:25
	16:15	17:22	18:22	20:26	21:27	24 05:58 (P19.2b)	22:06
19	08:34	07:34	06:22	06:01	04:54	05:33 (P19.2b)	04:25
	16:17	17:24	18:24	20:29	21:29	25 05:58 (P19.2b)	22:07
20	08:33	07:31	06:19	05:58	04:53	05:33 (P19.2b)	04:25
	16:19	17:26	18:26	20:31	21:31	25 05:58 (P19.2b)	22:07
21	08:31	07:29	06:17	05:55	04:51	05:33 (P19.2b)	04:25
	16:21	17:29	18:29	20:33	21:32	25 05:58 (P19.2b)	22:07
22	08:30	07:26	06:14	05:53	04:49	05:33 (P19.2b)	04:25
	16:23	17:31	18:31	20:35	21:34	26 05:59 (P19.2b)	22:08
23	08:28	07:24	06:11	05:51	04:48	05:34 (P19.2b)	04:25
	16:25	17:33	18:33	20:37	21:36	25 05:59 (P19.2b)	22:08
24	08:27	07:21	06:09	05:48	04:46	05:33 (P19.2b)	04:25
	16:27	17:35	18:35	20:39	21:38	25 05:58 (P19.2b)	22:08
25	08:25	07:19	06:06	05:46	04:44	05:34 (P19.2b)	04:26
	16:29	17:37	18:37	20:41	21:39	25 05:59 (P19.2b)	22:08
26	08:23	07:17	06:03	05:43	04:43	05:34 (P19.2b)	04:26
	16:31	17:40	18:39	20:43	21:41	25 05:59 (P19.2b)	22:08
27	08:22	07:14	06:01	05:41	04:42	05:34 (P19.2b)	04:27
	16:33	17:42	18:41	20:45	21:43	24 05:58 (P19.2b)	22:08
28	08:20	07:11	05:58	05:38	04:40	05:34 (P19.2b)	04:27 05:51 (P19.2b)
	16:35	17:44	18:43	20:47	21:44	24 05:58 (P19.2b)	22:07 4 05:55 (P19.2b)
29	08:18		06:55	05:36	04:39	05:35 (P19.2b)	04:28 05:49 (P19.2b)
	16:38		19:45	20:49	21:46	23 05:58 (P19.2b)	22:07 6 05:55 (P19.2b)
30	08:16		06:53	05:34	04:38	05:35 (P19.2b)	04:29 05:49 (P19.2b)
	16:40		19:47	20:51	21:47	23 05:58 (P19.2b)	22:07 8 05:57 (P19.2b)
31	08:14		06:50		04:36	05:36 (P19.2b)	
	16:42		19:49		21:49	22 05:58 (P19.2b)	
Potential sun hours	236	266	366	426	507	528	
Total, worst case					486		214
Sun reduction					0,56		0,57
Oper. time red.					1,00		1,00
Wind dir. red.					1,00		1,00
Total reduction					0,56		0,57
Total, real					274		122

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Driveniški - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (449)
 Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December
1	04:29 22:06 9	05:49 (P19.2b) 05:58 (P19.2b) 21:26 15	05:48 (P19.2b) 06:03 (P19.2b) 20:12 18	07:16 18:52 16:35 15:44	07:21 16:35 16:35 15:44	08:22 15:44 15:44 15:44
2	04:30 22:06 11	05:47 (P19.2b) 05:58 (P19.2b) 21:24 12	05:50 (P19.2b) 06:02 (P19.2b) 20:10 18	07:18 18:49 16:33 15:43	07:23 16:33 16:33 15:43	08:24 15:43 15:43 15:43
3	04:31 22:05 12	05:47 (P19.2b) 05:59 (P19.2b) 21:22 6	05:53 (P19.2b) 05:59 (P19.2b) 20:07 18	07:20 18:47 16:30 15:42	07:25 16:30 16:30 15:42	08:25 15:42 15:42 15:42
4	04:32 22:05 13	05:47 (P19.2b) 05:59 (P19.2b) 21:19 15	06:00 (P19.2b) 06:00 (P19.2b) 20:04 18	07:22 18:44 16:28 15:42	07:27 16:28 16:28 15:42	08:27 15:42 15:42 15:42
5	04:33 22:04 15	05:46 (P19.2b) 06:01 (P19.2b) 21:17 16	06:02 (P19.2b) 06:02 (P19.2b) 20:02 18	07:24 18:42 16:26 15:41	07:29 16:26 16:26 15:41	08:28 15:41 15:41 15:41
6	04:34 22:03 16	05:46 (P19.2b) 06:00 (P19.2b) 21:15 16	06:02 (P19.2b) 06:02 (P19.2b) 19:59 18	07:26 18:39 16:24 15:40	07:31 16:24 16:24 15:40	08:30 15:40 15:40 15:40
7	04:35 22:03 16	05:46 (P19.2b) 06:02 (P19.2b) 21:13 18	06:28 19:56 18:36 16:22 15:40	07:28 18:36 16:22 15:40	07:34 16:22 16:22 15:40	08:31 15:40 15:40 15:40
8	04:36 22:02 18	05:45 (P19.2b) 06:03 (P19.2b) 21:11 19	06:30 19:54 18:34 16:20 15:39	07:30 18:34 16:20 15:39	07:36 16:20 16:20 15:39	08:33 15:39 15:39 15:39
9	04:37 22:01 19	05:45 (P19.2b) 06:04 (P19.2b) 21:09 19	06:32 19:51 18:31 16:18 15:39	07:32 18:31 16:18 15:39	07:38 16:18 16:18 15:39	08:34 15:39 15:39 15:39
10	04:39 22:00 19	05:45 (P19.2b) 06:04 (P19.2b) 21:06 21	06:34 19:48 18:28 16:16 15:38	07:34 18:28 16:16 15:38	07:40 16:16 16:16 15:38	08:35 15:38 15:38 15:38
11	04:40 21:59 21	05:45 (P19.2b) 06:06 (P19.2b) 21:04 21	06:36 19:46 18:26 16:14 15:38	07:36 18:26 16:14 15:38	07:42 16:14 16:14 15:38	08:37 15:38 15:38 15:38
12	04:41 21:58 21	05:45 (P19.2b) 06:06 (P19.2b) 21:02 22	06:38 19:43 18:23 16:12 15:37	07:38 18:23 16:12 15:37	07:44 16:12 16:12 15:37	08:38 15:37 15:37 15:37
13	04:43 21:57 22	05:44 (P19.2b) 06:06 (P19.2b) 20:59 22	06:40 19:40 18:21 16:10 15:37	07:40 18:21 16:10 15:37	07:46 16:10 16:10 15:37	08:39 15:37 15:37 15:37
14	04:44 21:55 22	05:44 (P19.2b) 06:06 (P19.2b) 20:57 23	06:42 19:38 18:18 16:08 15:37	07:42 18:18 16:08 15:37	07:49 16:08 16:08 15:37	08:40 15:37 15:37 15:37
15	04:46 21:54 23	05:44 (P19.2b) 06:07 (P19.2b) 20:55 23	06:44 19:35 18:16 16:07 15:37	07:44 18:16 16:07 15:37	07:51 16:07 16:07 15:37	08:41 15:37 15:37 15:37
16	04:47 21:53 23	05:44 (P19.2b) 06:07 (P19.2b) 20:52 24	06:46 19:32 18:13 16:05 15:37	07:46 18:13 16:05 15:37	07:53 16:05 16:05 15:37	08:42 15:37 15:37 15:37
17	04:49 21:51 24	05:43 (P19.2b) 06:07 (P19.2b) 20:50 24	06:48 19:30 18:11 16:03 15:37	07:48 18:11 16:03 15:37	07:55 16:03 16:03 15:37	08:43 15:37 15:37 15:37
18	04:50 21:50 24	05:44 (P19.2b) 06:08 (P19.2b) 20:48 25	06:50 19:27 18:08 16:01 15:37	07:50 18:08 16:01 15:37	07:57 16:01 16:01 15:37	08:44 15:37 15:37 15:37
19	04:52 21:49 25	05:43 (P19.2b) 06:08 (P19.2b) 20:45 25	06:52 19:24 18:06 16:00 15:38	07:53 18:06 16:00 15:38	07:59 16:00 16:00 15:38	08:45 15:38 15:38 15:38
20	04:53 21:47 25	05:44 (P19.2b) 06:09 (P19.2b) 20:43 25	06:54 19:22 18:03 15:58 15:38	07:55 18:03 15:58 15:38	08:01 15:58 15:58 15:38	08:45 15:38 15:38 15:38
21	04:55 21:45 25	05:43 (P19.2b) 06:08 (P19.2b) 20:40 25	06:56 19:19 18:01 15:57 15:38	07:57 18:01 15:57 15:38	08:03 15:57 15:57 15:38	08:46 15:38 15:38 15:38
22	04:57 21:44 25	05:44 (P19.2b) 06:09 (P19.2b) 20:38 25	06:58 19:16 17:58 15:55 15:39	07:59 17:58 15:55 15:39	08:05 15:55 15:55 15:39	08:47 15:39 15:39 15:39
23	04:58 21:42 25	05:43 (P19.2b) 06:08 (P19.2b) 20:35 25	07:00 19:13 17:56 15:54 15:39	08:01 17:56 15:54 15:39	08:07 15:54 15:54 15:39	08:47 15:39 15:39 15:39
24	05:00 21:41 25	05:44 (P19.2b) 06:09 (P19.2b) 20:33 25	07:02 19:11 17:53 15:52 15:40	08:03 17:53 15:52 15:40	08:09 15:52 15:52 15:40	08:47 15:40 15:40 15:40
25	05:02 21:39 25	05:44 (P19.2b) 06:09 (P19.2b) 20:30 25	07:04 19:08 16:51 15:51 15:41	07:05 16:51 15:51 15:41	08:11 15:51 15:51 15:41	08:48 15:41 15:41 15:41
26	05:04 21:37 24	05:44 (P19.2b) 06:08 (P19.2b) 20:28 25	07:06 19:05 16:49 15:50 15:41	07:08 16:49 15:50 15:41	08:13 15:50 15:50 15:41	08:48 15:41 15:41 15:41
27	05:05 21:35 23	05:45 (P19.2b) 06:08 (P19.2b) 20:25 25	07:08 19:03 16:46 15:49 15:42	07:10 16:46 15:49 15:42	08:15 15:49 15:49 15:42	08:48 15:42 15:42 15:42
28	05:07 21:33 22	05:45 (P19.2b) 06:07 (P19.2b) 20:22 25	07:10 19:00 16:44 15:47 15:43	07:12 16:44 15:47 15:43	08:16 15:47 15:47 15:43	08:48 15:43 15:43 15:43
29	05:09 21:31 21	05:46 (P19.2b) 06:07 (P19.2b) 20:20 25	07:12 18:57 16:42 15:46 15:44	07:14 16:42 15:46 15:44	08:18 15:46 15:46 15:44	08:49 15:44 15:44 15:44
30	05:11 21:30 19	05:47 (P19.2b) 06:06 (P19.2b) 20:17 25	06:12 18:55 16:39 15:45 15:45	07:16 16:39 15:45 15:45	08:20 15:45 15:45 15:45	08:49 15:45 15:45 15:45
31	05:13 21:28 17	05:48 (P19.2b) 06:05 (P19.2b) 20:15 25	06:14 18:55 16:37 15:46 15:46	07:18 16:37 15:46 15:46	08:20 15:46 15:46 15:46	08:48 15:46 15:46 15:46
Potential sun hours	528	469	384	324	248	217
Total, worst case	629	33				
Sun reduction	0,47	0,52				
Oper. time red.	1,00	1,00				
Wind dir. red.	1,00	1,00				
Total reduction	0,47	0,52				
Total, real	297	17				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Dubultnieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (556)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:46	08:12 16:43	07:08 17:45	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:51	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:45	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:06	07:19 18:46	07:25 16:30	08:25 15:41
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	07:27 16:27	08:27 15:41
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	05:21 21:01	04:30 21:55	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:23 21:15	06:25 19:58	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:38
8	08:45 15:56	07:58 16:59	06:50 18:00	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:10	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:25 20:07	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 19:51	07:31 18:30	07:38 16:17	08:34 15:37
10	08:43 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:11	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:35 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:02	04:40 21:58	05:35 21:01	06:37 19:42	07:38 18:23	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17	07:48 16:07	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:17	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:00	08:44 15:36
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:36
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:51 21:30	04:23 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:56 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:57	08:05 15:54	08:46 15:38
23	08:28 16:24	07:23 17:32	06:11 18:32	05:50 20:36	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:34	06:08 18:34	05:47 20:38	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:53	08:09 15:51	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:07	08:05 16:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	04:40 21:42	04:26 22:08	05:04 21:35	06:05 20:25	07:07 19:02	08:09 16:45	08:14 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 18:59	08:11 16:43	08:16 15:46	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:19	07:11 18:57	08:13 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:38	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14	07:18 16:36			08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Dzeniš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (411)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January			February			March			April			May			June		
1	08:48		14:48 (P19.2b)	08:13			07:09		16:03 (DD3)	06:47		18:54 (O3)	05:31			04:35		
	15:47	16	15:04 (P19.2b)	16:44			17:46	35	16:38 (DD3)	19:51	23	19:17 (O3)	20:53			21:50		
2	08:48		14:48 (P19.2b)	08:11			07:06		16:03 (DD3)	06:44		18:53 (O3)	05:29			04:34		
	15:48	18	15:06 (P19.2b)	16:46			17:48	34	16:37 (DD3)	19:53	24	19:17 (O3)	20:55			21:51		
3	08:48		14:48 (P19.2b)	08:09			07:04		16:04 (DD3)	06:42		18:53 (O3)	05:27			04:33		
	15:50	18	15:06 (P19.2b)	16:48			17:50	33	16:37 (DD3)	19:55	25	19:18 (O3)	20:57			21:53		
4	08:47		14:49 (P19.2b)	08:07			07:01		16:04 (DD3)	06:39		18:52 (O3)	05:24			04:32		
	15:51	19	15:08 (P19.2b)	16:51			17:52	32	16:36 (DD3)	19:57	25	19:17 (O3)	20:59			21:54		
5	08:47		14:49 (P19.2b)	08:05			06:59		16:05 (DD3)	06:37		18:53 (O3)	05:22			04:31		
	15:52	19	15:08 (P19.2b)	16:53			17:55	29	16:34 (DD3)	19:59	24	19:17 (O3)	21:01			21:55		
6	08:46		14:48 (P19.2b)	08:03			06:56		16:07 (DD3)	06:34		18:53 (O3)	05:20			04:30		
	15:54	21	15:09 (P19.2b)	16:55			17:57	26	16:33 (DD3)	20:01	23	19:16 (O3)	21:03			21:57		
7	08:46		14:48 (P19.2b)	08:00			06:53		16:08 (DD3)	06:31		18:53 (O3)	05:18			04:29		
	15:55	21	15:09 (P19.2b)	16:57			17:59	23	16:31 (DD3)	20:04	21	19:14 (O3)	21:05			21:58		
8	08:45		14:48 (P19.2b)	07:58			06:51		16:10 (DD3)	06:29		18:54 (O3)	05:16			04:28		
	15:57	22	15:10 (P19.2b)	17:00			18:01	19	16:29 (DD3)	20:06	19	19:13 (O3)	21:07			21:59		
9	08:44		14:49 (P19.2b)	07:56			06:48		16:13 (DD3)	06:26		18:55 (O3)	05:13			04:28		
	15:58	22	15:11 (P19.2b)	17:02			18:03	24	17:34 (DD1)	20:08	16	19:11 (O3)	21:09			22:00		
10	08:44		14:49 (P19.2b)	07:54			06:46		17:20 (DD1)	06:23		18:57 (O3)	05:11			04:27		
	16:00	23	15:12 (P19.2b)	17:04	8	16:32 (O5)	18:05	16	17:36 (DD1)	20:10	15	19:41 (O2)	21:11			22:01		
11	08:43		14:49 (P19.2b)	07:52			06:43		17:18 (DD1)	06:21		19:01 (O3)	05:09			04:26		
	16:02	23	15:12 (P19.2b)	17:06	13	16:34 (O5)	18:07	19	17:37 (DD1)	20:12	12	19:42 (O2)	21:13			22:02		
12	08:42		14:50 (P19.2b)	07:50			06:40		17:17 (DD1)	06:18		19:32 (O2)	05:07			04:26		
	16:03	23	15:13 (P19.2b)	17:08	17	16:37 (O5)	18:09	22	17:39 (DD1)	20:14	13	19:45 (O2)	21:15			22:03		
13	08:41		14:50 (P19.2b)	07:47			06:38		17:15 (DD1)	06:16		19:30 (O2)	05:05			04:25		
	16:05	24	15:14 (P19.2b)	17:11	19	16:38 (O5)	18:12	24	17:39 (DD1)	20:16	16	19:46 (O2)	21:17			22:03		
14	08:40		14:50 (P19.2b)	07:45			06:35		17:14 (DD1)	06:13		19:29 (O2)	05:03			04:25		
	16:07	24	15:14 (P19.2b)	17:13	24	16:39 (O5)	18:14	25	17:39 (DD1)	20:18	20	19:49 (O2)	21:19			22:04		
15	08:39		14:50 (P19.2b)	07:43			06:32		17:14 (DD1)	06:10		19:28 (O2)	05:01			04:25		
	16:09	24	15:14 (P19.2b)	17:15	27	16:40 (O5)	18:16	26	17:40 (DD1)	20:20	21	19:49 (O2)	21:21			22:05		
16	08:38		14:50 (P19.2b)	07:41			06:30		17:13 (DD1)	06:08		19:28 (O2)	04:59			04:25		
	16:11	24	15:14 (P19.2b)	17:17	30	16:40 (O5)	18:18	27	17:40 (DD1)	20:22	21	19:49 (O2)	21:23			22:05		
17	08:36		14:51 (P19.2b)	07:38			06:27		17:13 (DD1)	06:05		19:27 (O2)	04:58			04:24		
	16:13	24	15:15 (P19.2b)	17:20	32	16:41 (O5)	18:20	26	17:39 (DD1)	20:24	22	19:49 (O2)	21:25			22:06		
18	08:35		14:51 (P19.2b)	07:36			06:24		17:13 (DD1)	06:03		19:27 (O2)	04:56			04:24		
	16:15	24	15:15 (P19.2b)	17:22	33	16:40 (O5)	18:22	26	17:39 (DD1)	20:26	22	19:49 (O2)	21:27			22:06		
19	08:34		14:52 (P19.2b)	07:33			06:22		17:13 (DD1)	06:00		19:26 (O2)	04:54			04:24		
	16:16	24	15:16 (P19.2b)	17:24	35	16:41 (O5)	18:24	25	17:38 (DD1)	20:28	22	19:48 (O2)	21:29			22:07		
20	08:32		14:52 (P19.2b)	07:31			06:19		17:13 (DD1)	05:58		19:27 (O2)	04:52			04:24		
	16:18	23	15:15 (P19.2b)	17:26	35	16:40 (O5)	18:26	24	17:37 (DD1)	20:30	21	19:48 (O2)	21:31			22:07		
21	08:31		14:53 (P19.2b)	07:29			06:16		17:14 (DD1)	05:55		19:27 (O2)	04:51			04:24		
	16:21	22	15:15 (P19.2b)	17:28	35	16:40 (O5)	18:28	23	17:37 (DD1)	20:33	21	19:48 (O2)	21:32			22:07		
22	08:30		14:54 (P19.2b)	07:26			06:14		17:15 (DD1)	05:53		19:27 (O2)	04:49			04:25		
	16:23	21	15:15 (P19.2b)	17:31	35	16:39 (O5)	18:30	20	17:35 (DD1)	20:35	19	19:46 (O2)	21:34			22:08		
23	08:28		14:55 (P19.2b)	07:24			06:11		17:16 (DD1)	05:50		19:28 (O2)	04:47			04:25		
	16:25	20	15:15 (P19.2b)	17:33	36	16:40 (DD3)	18:32	17	17:33 (DD1)	20:37	17	19:45 (O2)	21:36			22:08		
24	08:27		14:56 (P19.2b)	07:21			06:08		17:18 (DD1)	05:48		19:30 (O2)	04:46			04:25		
	16:27	18	15:14 (P19.2b)	17:35	37	16:40 (DD3)	18:35	12	17:30 (DD1)	20:39	14	19:44 (O2)	21:38			22:08		
25	08:25		14:57 (P19.2b)	07:19			06:06			05:45		19:31 (O2)	04:44			04:25		
	16:29	17	15:14 (P19.2b)	17:37	37	16:39 (DD3)	18:37			20:41	10	19:41 (O2)	21:39			22:08		
26	08:23		14:59 (P19.2b)	07:16			06:03			05:43			04:43			04:26		
	16:31	13	15:12 (P19.2b)	17:39	37	16:40 (DD3)	18:39			20:43			21:41			22:08		
27	08:22		15:01 (P19.2b)	07:14			06:00		18:01 (O3)	05:41			04:41			04:26		
	16:33	10	15:11 (P19.2b)	17:42	37	16:39 (DD3)	18:41	11	18:12 (O3)	20:45			21:43			22:08		
28	08:20			07:11			05:58		17:59 (O3)	05:38			04:40			04:27		
	16:35			17:44	36	16:39 (DD3)	18:43	16	18:15 (O3)	20:47			21:44			22:07		
29	08:18						06:55		18:57 (O3)	05:36			04:39			04:28		
	16:37						19:45	19	19:16 (O3)	20:49			21:46			22:07		
30	08:16						06:52		18:55 (O3)	05:34			04:37			04:28		
	16:40						19:47	21	19:16 (O3)	20:51			21:47			22:07		
31	08:14						06:50		18:55 (O3)				04:36					
	16:42						19:49	23	19:18 (O3)				21:49					
Potential sun hours	236			266			366			426		507				528		
Total, worst case		557			563			677			486							
Sun reduction		0,13			0,22			0,39			0,44							
Oper. time red.		1,00			1,00			1,00			1,00							
Wind dir. red.		1,00			1,00			1,00			1,00							
Total reduction		0,13			0,22			0,39			0,44							
Total, real		75			127			265			215							

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Dzeniš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (411)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December
1	04:29 22:06	05:14 21:26	06:16 20:12	18:59 (O3) 07:15	17:55 (DD1) 07:20	15:55 (O5) 08:22
2	04:30 22:06	05:16 21:24	06:18 20:09	18:55 (O3) 07:17	17:56 (DD1) 07:23	16:01 (O5) 08:23
3	04:31 22:05	05:18 21:21	06:20 20:07	18:53 (O3) 07:20	17:57 (DD1) 07:25	15:44 08:25
4	04:32 22:05	05:20 21:19	06:22 20:04	18:51 (O3) 07:22	16:53 (DD3) 07:27	15:42 08:27
5	04:33 22:04	05:22 21:17	06:24 20:02	19:10 (O3) 07:24	18:12 (DD1) 07:29	15:41 08:28
6	04:34 22:03	05:24 21:15	06:26 19:59	19:11 (O3) 07:26	18:07 (DD1) 07:31	15:41 08:30
7	04:35 22:03	05:26 21:13	06:28 19:56	19:12 (O3) 07:28	17:07 (DD3) 07:33	15:40 08:31
8	04:36 22:02	05:28 21:11	06:30 19:54	19:12 (O3) 07:30	16:43 (DD3) 07:36	15:39 08:33
9	04:37 22:01	05:30 21:08	06:32 19:51	18:47 (O3) 07:32	16:41 (DD3) 07:38	15:39 08:34
10	04:38 22:00	05:32 21:06	06:34 19:48	19:12 (O3) 07:34	16:40 (DD3) 07:40	15:38 08:35
11	04:40 21:59	05:34 21:04	06:36 19:46	19:10 (O3) 07:36	16:39 (DD3) 07:42	15:38 08:37
12	04:41 21:58	05:36 21:02	06:38 19:43	18:46 (O3) 07:38	16:37 (DD3) 07:44	15:37 08:38
13	04:42 21:57	05:38 20:59	06:40 19:40	19:09 (O3) 07:40	17:12 (DD3) 07:46	15:37 08:39
14	04:44 21:55	05:40 20:57	06:42 19:38	19:08 (O3) 07:42	16:36 (DD3) 07:48	15:37 08:40
15	04:45 21:54	05:42 20:55	06:44 19:35	18:47 (O3) 07:44	16:35 (DD3) 07:51	14:38 (P19.2b) 15:37
16	04:47 21:53	05:44 20:52	06:46 19:32	19:07 (O3) 07:46	16:35 (DD3) 07:53	14:40 (P19.2b) 15:37
17	04:48 21:51	05:46 20:50	06:48 19:29	19:05 (O3) 07:48	16:35 (DD3) 07:55	14:41 (P19.2b) 15:37
18	04:50 21:50	05:48 20:47	06:49 19:27	18:57 (O3) 07:50	16:34 (DD3) 07:57	14:41 (P19.2b) 15:37
19	04:51 21:49	05:50 20:45	06:51 19:24	18:06 (DD1) 07:53	16:34 (DD3) 07:59	14:40 (P19.2b) 15:37
20	04:53 21:47	05:52 20:43	06:53 19:21	18:17 (DD1) 07:55	16:35 (DD3) 08:01	14:49 (P19.2b) 15:37
21	04:55 21:45	05:54 20:40	06:55 19:19	18:03 (DD1) 07:57	16:35 (DD3) 08:03	14:29 (P19.2b) 15:38
22	04:56 21:44	05:56 20:38	06:57 19:16	18:19 (DD1) 07:59	16:35 (DD3) 08:05	14:51 (P19.2b) 15:38
23	04:58 21:42	05:58 20:35	06:59 19:13	18:21 (DD1) 08:01	16:35 (DD3) 08:07	14:28 (P19.2b) 15:39
24	05:00 21:41	06:00 20:33	07:01 19:11	17:58 (DD1) 08:03	16:37 (DD3) 08:09	14:52 (P19.2b) 15:40
25	05:02 21:39	06:02 20:30	07:03 19:08	18:22 (DD1) 08:05	17:10 (O5) 15:52	14:29 (P19.2b) 15:40
26	05:03 21:37	06:04 20:27	07:05 19:05	18:22 (DD1) 08:07	16:10 (O5) 15:51	14:53 (P19.2b) 15:41
27	05:05 21:35	06:06 20:25	07:07 19:03	17:56 (DD1) 08:09	15:41 (DD3) 08:13	14:29 (P19.2b) 15:41
28	05:07 21:33	06:08 20:22	07:09 19:00	18:22 (DD1) 08:11	15:43 (DD3) 08:15	14:29 (P19.2b) 15:42
29	05:09 21:31	06:10 20:20	07:11 18:57	18:21 (DD1) 08:13	16:09 (O5) 15:48	14:54 (P19.2b) 15:42
30	05:11 21:30	06:12 20:17	07:13 18:55	17:55 (DD1) 08:15	15:45 (DD3) 08:16	14:30 (P19.2b) 15:43
31	05:13 21:28	06:14 20:15	07:15 18:53	18:20 (DD1) 08:17	16:08 (O5) 15:46	14:54 (P19.2b) 15:44
Potential sun hours	528	469	384	324	248	217
Total, worst case		265	591	893	346	448
Sun reduction		0,52	0,43	0,29	0,08	0,08
Oper. time red.		1,00	1,00	1,00	1,00	1,00
Wind dir. red.		1,00	1,00	1,00	1,00	1,00
Total reduction		0,52	0,43	0,29	0,08	0,08
Total, real		138	255	259	26	38

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Dzeni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (513)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Dzintarnieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (559)
Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:41
5	08:47	08:04	06:58	06:36	05:22	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:55	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:39
8	08:45	07:58	06:50	06:28	05:15	04:28	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:45	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:01	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:37
20	08:32	07:31	06:19	05:57	04:52	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:35	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:41	04:26	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:35	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:28	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Dzirnavas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (568)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:06	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:55	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:24 21:15	06:25 20:01	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:26 21:13	06:27 20:01	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:27 21:11	06:29 20:01	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	04:27 22:00	04:37 22:01	05:29 21:08	06:31 20:01	07:31 18:30	07:38 16:17	08:34 15:38
10	08:43 15:59	07:54 17:04	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 20:01	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 20:01	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:02	04:40 21:58	05:35 21:01	06:37 20:01	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:37 20:59	06:39 20:01	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:13 20:18	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 20:01	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:54	06:43 20:01	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:18	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 20:01	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 20:01	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 20:01	07:50 18:07	07:57 16:01	08:44 15:36
19	08:34 16:16	07:33 17:24	06:21 18:24	06:00 20:28	04:53 21:29	04:24 22:07	04:51 21:48	05:49 20:45	06:51 20:01	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:30	04:24 22:07	04:52 21:47	05:51 20:42	06:53 20:01	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 20:01	07:57 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 20:01	07:59 17:58	08:05 15:54	08:46 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	04:47 21:36	04:24 22:08	04:58 21:42	05:57 20:35	06:59 20:01	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 20:01	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 20:01	08:05 17:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 20:01	08:07 17:48	08:13 15:49	08:48 15:40
27	08:21 16:33	07:14 17:41	06:00 18:40	05:40 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:05 20:25	07:07 20:01	08:09 17:46	08:14 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 20:01	08:12 17:43	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 20:01	08:14 17:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:29	06:11 20:17	07:13 20:01	08:16 17:39	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:48		05:12 21:27	06:13 20:14	07:18 20:01	08:18 17:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Dzitari - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (495)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December		
1	08:48 15:46	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	19:55 (AP2) 20:17 (AP2)	04:34 21:50	04:28 22:06	05:14 21:25	20:03 (AP2) 20:28 (AP2)	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	19:54 (AP2) 20:18 (AP2)	04:33 21:51	04:29 22:06	05:16 21:23	20:03 (AP2) 20:28 (AP2)	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	19:53 (AP2) 20:19 (AP2)	04:32 21:53	04:30 22:05	05:18 21:21	20:03 (AP2) 20:29 (AP2)	06:19 20:06	07:19 18:46	07:25 16:30	08:25 15:41
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	19:53 (AP2) 20:19 (AP2)	04:31 21:54	04:31 22:05	05:20 21:19	20:03 (AP2) 20:29 (AP2)	06:21 20:04	07:21 18:44	07:27 16:27	08:27 15:41
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	05:22 21:01	19:53 (AP2) 20:19 (AP2)	04:30 21:55	04:32 22:04	05:22 21:17	20:03 (AP2) 20:30 (AP2)	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	05:19 21:03	19:53 (AP2) 20:19 (AP2)	04:29 21:56	04:33 22:03	05:23 21:15	20:02 (AP2) 20:29 (AP2)	06:25 19:59	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	19:52 (AP2) 20:19 (AP2)	04:28 21:58	04:34 22:03	05:25 21:13	20:02 (AP2) 20:29 (AP2)	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	19:52 (AP2) 20:19 (AP2)	04:28 21:59	04:35 22:02	05:27 21:11	20:02 (AP2) 20:29 (AP2)	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	19:52 (AP2) 20:19 (AP2)	04:27 22:00	04:36 22:01	05:29 21:08	20:03 (AP2) 20:28 (AP2)	06:31 19:51	07:31 18:30	07:38 16:17	08:34 15:38
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	19:53 (AP2) 20:19 (AP2)	04:26 22:01	04:38 22:00	05:31 21:06	20:03 (AP2) 20:28 (AP2)	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	19:53 (AP2) 20:18 (AP2)	04:26 22:02	04:39 21:59	05:33 21:04	20:03 (AP2) 20:26 (AP2)	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	19:53 (AP2) 20:17 (AP2)	04:25 22:03	04:40 21:58	05:35 21:01	20:03 (AP2) 20:26 (AP2)	06:37 19:43	07:38 18:23	07:44 16:11	08:38 15:36
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	19:54 (AP2) 20:18 (AP2)	04:25 22:03	04:42 21:57	05:37 20:59	20:04 (AP2) 20:25 (AP2)	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:13 20:18	05:03 21:19	19:55 (AP2) 20:17 (AP2)	04:24 22:04	04:43 21:55	05:39 20:57	20:05 (AP2) 20:23 (AP2)	06:41 19:37	07:42 18:17	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	19:55 (AP2) 20:16 (AP2)	04:24 22:05	04:45 21:54	05:41 20:54	20:07 (AP2) 20:22 (AP2)	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:38 16:10	07:40 17:17	06:29 18:18	06:07 20:22	04:59 21:23	19:56 (AP2) 20:14 (AP2)	04:24 22:05	04:46 21:53	05:43 20:52	20:10 (AP2) 20:19 (AP2)	06:45 19:32	07:46 18:12	07:53 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	19:58 (AP2) 20:14 (AP2)	04:24 22:06	04:48 21:51	05:45 20:50	20:11 (AP2) 20:09 (AP2)	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	19:59 (AP2) 20:12 (AP2)	04:24 22:06	04:49 21:50	05:47 20:47	20:12 (AP2) 20:07 (AP2)	06:49 19:26	07:50 18:07	07:57 16:01	08:44 15:36
19	08:34 16:16	07:33 17:24	06:21 18:24	06:00 20:28	04:53 21:29	20:01 (AP2) 20:11 (AP2)	04:23 22:07	04:51 21:48	05:49 20:45	20:13 (AP2) 20:08 (AP2)	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:30	20:05 (AP2) 20:06 (AP2)	04:24 22:07	04:52 21:47	05:51 20:42	20:14 (AP2) 20:09 (AP2)	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	20:07 (AP2) 20:08 (AP2)	04:24 22:07	04:54 21:45	05:53 20:40	20:15 (AP2) 20:10 (AP2)	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	20:09 (AP2) 20:10 (AP2)	04:24 22:08	04:56 21:44	05:55 20:37	20:16 (AP2) 20:11 (AP2)	06:57 19:16	07:59 17:57	08:05 15:54	08:47 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	04:47 21:36	20:11 (AP2) 20:12 (AP2)	04:24 22:08	04:57 21:42	05:57 20:35	20:12 (AP2) 20:13 (AP2)	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:37	20:13 (AP2) 20:14 (AP2)	04:24 22:08	04:59 21:40	05:59 20:32	20:14 (AP2) 20:19 (AP2)	07:01 19:10	08:03 17:53	08:09 15:51	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:39	20:15 (AP2) 20:16 (AP2)	04:25 22:08	05:01 21:39	06:01 20:30	20:11 (AP2) 20:22 (AP2)	07:03 19:08	07:05 16:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	20:17 (AP2) 20:05 (AP2)	04:25 22:08	05:03 21:37	06:03 20:27	20:08 (AP2) 20:23 (AP2)	07:06 19:05	07:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	20:01 (AP2) 21:42	20:19 (AP2) 20:12 (AP2)	04:26 22:08	05:05 21:35	06:05 20:25	20:07 (AP2) 20:25 (AP2)	07:07 19:02	07:09 16:46	08:14 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	19:59 (AP2) 20:15 (AP2)	20:21 (AP2) 20:16 (AP2)	04:26 22:07	05:06 21:33	06:07 20:22	20:07 (AP2) 20:26 (AP2)	07:07 19:00	07:12 16:43	08:16 15:46	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	19:58 (AP2) 20:16 (AP2)	20:23 (AP2) 21:46	04:27 22:07	05:08 21:31	06:09 20:20	20:05 (AP2) 20:26 (AP2)	07:11 18:57	07:14 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	19:56 (AP2) 20:17 (AP2)	20:24 (AP2) 21:47	04:28 22:07	05:10 21:29	06:11 20:17	20:05 (AP2) 20:27 (AP2)	07:13 18:54	07:16 16:39	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49	20:27 (AP2) 20:28 (AP2)	04:29 22:07	05:12 21:27	06:13 20:14	20:04 (AP2) 20:28 (AP2)	07:14 19:03	07:18 16:36	08:22 15:45	08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217		
Total, worst case				66	431		136		369					
Sun reduction				0,44	0,56		0,47		0,52					
Oper. time red.				1,00	1,00		1,00		1,00					
Wind dir. red.				1,00	1,00		1,00		1,00					
Total reduction				0,44	0,56		0,47		0,52					
Total, real				29	243		64		193					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Darzini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (471)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:49	08:13	07:09	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:46	19:51	20:53	21:50	22:07	21:26	20:12	18:52	16:34	15:43
2	08:48	08:11	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:23	08:24
	15:47	16:45	17:48	19:53	20:55	21:52	22:06	21:24	20:09	18:49	16:32	15:42
3	08:48	08:09	07:04	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:06	21:22	20:07	18:46	16:30	15:41
4	08:48	08:07	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:20	20:04	18:44	16:27	15:40
5	08:47	08:05	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:29
	15:51	16:52	17:54	19:59	21:02	21:56	22:05	21:17	20:01	18:41	16:25	15:40
6	08:47	08:03	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:04	21:57	22:04	21:15	19:59	18:38	16:23	15:39
7	08:46	08:01	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:34	08:32
	15:54	16:57	17:58	20:03	21:06	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:51	06:28	05:15	04:27	04:35	05:27	06:29	07:30	07:36	08:33
	15:56	16:59	18:01	20:05	21:08	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:45	07:56	06:48	06:26	05:13	04:27	04:36	05:29	06:31	07:32	07:38	08:34
	15:58	17:01	18:03	20:08	21:10	22:00	22:01	21:09	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:34	07:40	08:36
	15:59	17:03	18:05	20:10	21:12	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:14	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:50	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:16	22:03	21:58	21:02	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:18	22:04	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:13	05:03	04:24	04:43	05:39	06:41	07:42	07:49	08:40
	16:06	17:12	18:13	20:18	21:20	22:04	21:56	20:57	19:37	18:18	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:51	08:42
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:55	19:35	18:15	16:06	15:36
16	08:38	07:41	06:30	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:53	08:42
	16:10	17:17	18:18	20:22	21:23	22:06	21:53	20:52	19:32	18:12	16:04	15:36
17	08:37	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:52	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:07	21:50	20:47	19:27	18:07	16:00	15:36
19	08:34	07:33	06:22	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:36
20	08:33	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:55	08:01	08:46
	16:18	17:26	18:26	20:30	21:31	22:08	21:47	20:43	19:21	18:02	15:57	15:37
21	08:31	07:29	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:33	21:33	22:08	21:46	20:40	19:18	18:00	15:56	15:37
22	08:30	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:35	21:34	22:08	21:44	20:38	19:16	17:57	15:54	15:38
23	08:28	07:24	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:27	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:48
	16:26	17:35	18:34	20:39	21:38	22:08	21:41	20:33	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:40	22:08	21:39	20:30	19:08	17:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:22	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:15	08:49
	16:32	17:41	18:41	20:45	21:43	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:17	08:49
	16:34	17:43	18:43	20:47	21:44	22:08	21:34	20:22	19:00	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:49
	16:37		19:45	20:49	21:46	22:08	21:32	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:47	22:07	21:30	20:17	18:54	16:39	15:44	15:44
31	08:15		06:49		04:35		05:12	06:13		07:18		08:49
	16:41		19:49		21:49		21:28	20:15		16:36		15:45
Potential sun hours	235	266	366	426	508	528	529	469	385	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Darznieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (435)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:13 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:07	05:14 21:26	06:16 20:12	07:16 18:52	07:21 16:35	08:22 15:44
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:29 20:55	04:34 21:52	04:30 22:06	05:16 21:24	06:18 20:10	07:18 18:49	07:23 16:32	08:24 15:43
3	08:48 15:49	08:09 16:48	07:04 17:50	06:42 19:55	05:27 20:58	04:33 21:53	04:31 22:06	05:18 21:22	06:20 20:07	07:20 18:47	07:25 16:30	08:25 15:42
4	08:48 15:51	08:07 16:51	07:01 17:52	06:39 19:57	05:24 21:00	04:32 21:54	04:32 22:05	05:20 21:20	06:22 20:04	07:22 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:53	06:59 17:55	06:37 19:59	05:22 21:02	04:31 21:56	04:33 22:04	05:22 21:17	06:24 20:02	07:24 18:41	07:29 16:26	08:29 15:40
6	08:47 15:54	08:03 16:55	06:56 17:57	06:34 20:02	05:20 21:04	04:30 21:57	04:34 22:04	05:24 21:15	06:26 20:00	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:55	08:01 16:57	06:54 17:59	06:31 20:04	05:18 21:06	04:29 21:58	04:35 22:03	05:26 21:13	06:28 20:00	07:28 18:36	07:34 16:22	08:32 15:39
8	08:45 15:57	07:59 16:59	06:51 18:01	06:29 20:06	05:16 21:08	04:28 21:59	04:36 22:02	05:28 21:11	06:30 20:04	07:30 18:33	07:36 16:20	08:33 15:39
9	08:45 15:58	07:56 17:02	06:48 18:03	06:26 20:08	05:13 21:10	04:27 22:00	04:37 22:01	05:30 21:09	06:32 20:00	07:32 18:31	07:38 16:18	08:34 15:38
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:11 21:12	04:27 22:01	04:38 22:00	05:32 21:06	06:34 20:00	07:34 18:28	07:40 16:16	08:36 15:38
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:14	04:26 22:02	04:40 21:59	05:34 21:04	06:36 20:00	07:36 18:26	07:42 16:14	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:10	06:18 20:14	05:07 21:16	04:26 22:03	04:41 21:58	05:36 21:02	06:38 20:00	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:48 17:11	06:38 18:12	06:16 20:16	05:05 21:18	04:25 22:04	04:42 21:57	05:38 21:00	06:40 20:00	07:40 18:21	07:47 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:20	04:25 22:04	04:44 21:56	05:40 20:57	06:42 20:00	07:42 18:18	07:49 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:25 22:05	04:45 21:54	05:42 20:55	06:44 20:00	07:44 18:15	07:51 16:06	08:41 15:37
16	08:38 16:11	07:41 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:06	04:47 21:53	05:44 20:52	06:46 20:00	07:46 18:13	07:53 16:05	08:42 15:37
17	08:37 16:12	07:38 17:20	06:27 18:20	06:05 20:24	04:58 21:25	04:24 22:06	04:48 21:52	05:46 20:50	06:48 20:00	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:14	07:36 17:22	06:25 18:22	06:03 20:26	04:56 21:27	04:24 22:07	04:50 21:50	05:48 20:48	06:50 20:00	07:51 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:34 17:24	06:22 18:24	06:00 20:29	04:54 21:29	04:24 22:07	04:51 21:49	05:50 20:45	06:52 20:00	07:53 18:05	07:59 15:59	08:45 15:37
20	08:33 16:18	07:31 17:26	06:19 18:26	05:58 20:31	04:52 21:31	04:24 22:07	04:53 21:47	05:52 20:43	06:53 20:00	07:55 18:03	08:01 15:58	08:46 15:37
21	08:31 16:20	07:29 17:28	06:17 18:28	05:55 20:33	04:50 21:33	04:24 22:08	04:55 21:46	05:54 20:40	06:55 20:00	07:57 18:00	08:03 15:56	08:46 15:38
22	08:30 16:22	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:24 22:08	04:56 21:44	05:56 20:38	06:57 20:00	07:59 17:58	08:05 15:55	08:47 15:38
23	08:28 16:25	07:24 17:33	06:11 18:33	05:50 20:37	04:47 21:36	04:25 22:08	04:58 21:42	05:58 20:35	06:59 20:00	08:01 17:56	08:07 15:53	08:47 15:39
24	08:27 16:27	07:21 17:35	06:09 18:35	05:48 20:39	04:46 21:38	04:25 22:08	05:00 21:41	06:00 20:33	07:01 20:00	08:03 17:53	08:09 15:52	08:48 15:39
25	08:25 16:29	07:19 17:37	06:06 18:37	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:02 20:30	07:03 20:00	08:05 17:51	08:11 15:51	08:48 15:40
26	08:23 16:31	07:16 17:39	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:03 21:37	06:04 20:28	07:05 20:00	08:07 17:48	08:13 15:49	08:48 15:41
27	08:22 16:33	07:14 17:42	06:00 18:41	05:41 20:45	04:41 21:43	04:26 22:08	05:05 21:35	06:06 20:25	07:07 20:00	08:09 17:46	08:15 15:48	08:49 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:08	05:07 21:34	06:08 20:22	07:09 20:00	08:12 17:44	08:17 15:47	08:49 15:43
29	08:18 16:37		06:55 19:45	05:36 20:49	04:38 21:46	04:27 22:07	05:09 21:32	06:10 20:20	07:11 20:00	08:14 17:41	08:18 15:46	08:49 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:11 21:30	06:12 20:17	07:14 20:00	08:16 17:39	08:20 15:45	08:49 15:44
31	08:15 16:42		06:50 19:49		04:36 21:49		05:12 21:28	06:14 20:15	07:18 20:00	08:18 17:37		08:49 15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B
 Assumptions for shadow calculations

Shadow receptor: Elsti - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (507)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:41
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:10	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:42	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:24	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:01	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:52	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:35	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:26	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:35	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Elviras - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (578)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:29 22:06	05:14 21:25	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:07	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:55	06:56 17:56	06:34 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:24 21:15	06:25 19:59	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03	05:17 21:05	04:29 21:58	04:34 22:03	05:26 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:28 21:11	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	04:27 22:00	04:37 22:01	05:30 21:08	06:31 19:51	07:31 18:30	07:38 16:17	08:34 15:38
10	08:43 16:00	07:54 17:04	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 19:48	07:34 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:02	04:40 21:58	05:35 21:01	06:37 19:43	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:10	08:39 15:36
14	08:40 16:06	07:45 17:13	06:35 18:13	06:13 20:18	05:03 21:19	04:25 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:54	06:43 19:35	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:18	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:21 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:30	04:24 22:07	04:53 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:58	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:07	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:58	08:05 15:54	08:46 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	04:47 21:36	04:24 22:08	04:58 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:37	04:25 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:08	08:05 16:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:33	07:14 17:41	06:00 18:40	05:40 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:05 20:25	07:07 19:02	08:09 16:46	08:14 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	04:26 22:07	05:07 21:33	06:07 20:22	07:09 19:00	08:12 16:43	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 18:57	08:14 16:41	08:18 15:46	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:39	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:48		05:12 21:27	06:13 20:14	07:18 16:36			08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Fridrisgofa - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (436)
Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:15 21:25	06:16 20:12	07:15 18:52	07:20 16:35	08:22 15:44
2	08:48 15:49	08:10 16:46	07:06 17:48	06:45 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:17 21:23	06:18 20:09	07:18 18:49	07:23 16:33	08:23 15:43
3	08:48 15:50	08:09 16:49	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:18 21:21	06:20 20:07	07:20 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:51	07:01 17:53	06:39 19:57	05:25 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:22 18:44	07:27 16:28	08:27 15:42
5	08:47 15:53	08:05 16:53	06:59 17:55	06:37 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:01	07:24 18:41	07:29 16:26	08:28 15:41
6	08:46 15:54	08:02 16:55	06:56 17:57	06:34 20:01	05:20 21:03	04:30 21:56	04:34 22:03	05:24 21:15	06:26 19:59	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:56	08:00 16:57	06:53 17:59	06:31 20:04	05:18 21:05	04:29 21:57	04:35 22:02	05:26 21:13	06:28 19:56	07:28 18:36	07:33 16:22	08:31 15:40
8	08:45 15:57	07:58 17:00	06:51 18:01	06:29 20:06	05:16 21:07	04:29 21:59	04:36 22:02	05:28 21:11	06:30 19:54	07:30 18:34	07:36 16:20	08:33 15:39
9	08:44 15:59	07:56 17:02	06:48 18:03	06:26 20:08	05:14 21:09	04:28 22:00	04:37 22:01	05:30 21:08	06:32 19:51	07:32 18:31	07:38 16:18	08:34 15:38
10	08:43 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:12 21:11	04:27 22:01	04:39 22:00	05:32 21:06	06:34 19:48	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:10 21:13	04:27 22:01	04:40 21:59	05:34 21:04	06:36 19:46	07:36 18:26	07:42 16:14	08:37 15:38
12	08:42 16:04	07:50 17:09	06:40 18:10	06:18 20:14	05:07 21:15	04:26 22:02	04:41 21:58	05:36 21:02	06:38 19:43	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 17:11	06:38 18:12	06:16 20:16	05:05 21:17	04:26 22:03	04:43 21:56	05:38 20:59	06:40 19:40	07:40 18:21	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:04 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 19:38	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:11 20:20	05:02 21:21	04:25 22:04	04:46 21:54	05:42 20:55	06:44 19:35	07:44 18:16	07:50 16:07	08:41 15:37
16	08:37 16:11	07:40 17:18	06:30 18:18	06:08 20:22	05:00 21:23	04:25 22:05	04:47 21:53	05:44 20:52	06:46 19:32	07:46 18:13	07:53 16:05	08:42 15:37
17	08:36 16:13	07:38 17:20	06:27 18:20	06:05 20:24	04:58 21:25	04:25 22:06	04:49 21:51	05:46 20:50	06:48 19:29	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:15	07:36 17:22	06:25 18:22	06:03 20:26	04:56 21:27	04:25 22:06	04:50 21:50	05:48 20:47	06:50 19:27	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:17	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:25 22:07	04:52 21:48	05:50 20:45	06:52 19:24	07:53 18:05	07:59 16:00	08:44 15:38
20	08:32 16:19	07:31 17:26	06:19 18:26	05:58 20:30	04:52 21:30	04:25 22:07	04:53 21:47	05:52 20:42	06:54 19:21	07:55 18:03	08:01 15:58	08:45 15:38
21	08:31 16:21	07:29 17:29	06:17 18:28	05:55 20:32	04:51 21:32	04:25 22:07	04:55 21:45	05:54 20:40	06:56 19:19	07:57 18:01	08:03 15:57	08:46 15:38
22	08:29 16:23	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:25 22:07	04:57 21:44	05:56 20:38	06:57 19:16	07:59 17:58	08:05 15:55	08:46 15:39
23	08:28 16:25	07:24 17:33	06:11 18:33	05:50 20:37	04:48 21:36	04:25 22:08	04:58 21:42	05:58 20:35	06:59 19:13	08:01 17:56	08:07 15:54	08:47 15:39
24	08:26 16:27	07:21 17:35	06:09 18:35	05:48 20:39	04:46 21:37	04:25 22:08	05:00 21:40	06:00 20:33	07:01 19:11	08:03 17:53	08:09 15:52	08:47 15:40
25	08:25 16:29	07:19 17:37	06:06 18:37	05:46 20:41	04:44 21:39	04:26 22:08	05:02 21:39	06:02 20:30	07:03 19:08	08:05 16:51	08:11 15:51	08:48 15:41
26	08:23 16:31	07:16 17:40	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:04 21:37	06:04 20:27	07:05 19:05	08:07 16:49	08:13 15:50	08:48 15:41
27	08:21 16:33	07:14 17:42	06:01 18:41	05:41 20:45	04:42 21:42	04:27 22:07	05:05 21:35	06:06 20:25	07:07 19:03	08:09 16:46	08:14 15:49	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 19:00	08:12 16:44	08:16 15:47	08:48 15:43
29	08:18 16:38		06:55 19:45	05:36 20:49	04:39 21:45	04:28 22:07	05:09 21:31	06:10 20:20	07:11 18:57	08:14 16:42	08:18 15:46	08:48 15:44
30	08:16 16:40		06:53 19:47	05:34 20:51	04:38 21:47	04:29 22:07	05:11 21:29	06:12 20:17	07:13 18:55	08:16 16:39	08:20 15:45	08:48 15:45
31	08:14 16:42		06:50 19:49		04:36 21:48		05:13 21:27	06:14 20:15		07:18 16:37		08:48 15:46
Potential sun hours	236	266	366	426	507	527	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Gabri - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (551)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:27	15:41
5	08:47	08:04	06:58	06:36	05:22	04:30	04:32	05:22	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:55	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:39
8	08:45	07:58	06:50	06:28	05:15	04:28	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:08	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:45	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:01	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:37
20	08:32	07:31	06:19	05:57	04:52	04:24	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:24	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:35	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:41	04:26	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:35	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:37	04:28	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Gaitnieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (446)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:13	07:09	06:47	05:31	04:35	04:29	05:15	06:16	07:16	07:20	08:22
	15:47	16:44	17:46	19:51	20:53	21:50	22:06	21:26	20:12	18:52	16:35	15:44
2	08:48	08:11	07:06	06:45	05:29	04:34	04:30	05:17	06:18	07:18	07:23	08:23
	15:49	16:46	17:48	19:53	20:55	21:51	22:06	21:24	20:09	18:49	16:33	15:43
3	08:48	08:09	07:04	06:42	05:27	04:33	04:31	05:18	06:20	07:20	07:25	08:25
	15:50	16:49	17:50	19:55	20:57	21:53	22:05	21:21	20:07	18:47	16:30	15:42
4	08:47	08:07	07:01	06:39	05:25	04:32	04:32	05:20	06:22	07:22	07:27	08:27
	15:51	16:51	17:53	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:41
5	08:47	08:05	06:59	06:37	05:22	04:31	04:33	05:22	06:24	07:24	07:29	08:28
	15:53	16:53	17:55	19:59	21:01	21:55	22:04	21:17	20:02	18:41	16:26	15:41
6	08:46	08:03	06:56	06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31	08:30
	15:54	16:55	17:57	20:02	21:03	21:56	22:03	21:15	19:59	18:39	16:24	15:40
7	08:46	08:01	06:53	06:31	05:18	04:29	04:35	05:26	06:28	07:28	07:33	08:31
	15:55	16:57	17:59	20:04	21:05	21:58	22:03	21:13	19:56	18:36	16:22	15:39
8	08:45	07:58	06:51	06:29	05:16	04:28	04:36	05:28	06:30	07:30	07:36	08:33
	15:57	17:00	18:01	20:06	21:07	21:59	22:02	21:11	19:54	18:34	16:20	15:39
9	08:44	07:56	06:48	06:26	05:14	04:28	04:37	05:30	06:32	07:32	07:38	08:34
	15:59	17:02	18:03	20:08	21:09	22:00	22:01	21:08	19:51	18:31	16:18	15:38
10	08:44	07:54	06:46	06:23	05:12	04:27	04:39	05:32	06:34	07:34	07:40	08:35
	16:00	17:04	18:05	20:10	21:11	22:01	22:00	21:06	19:48	18:28	16:16	15:38
11	08:43	07:52	06:43	06:21	05:09	04:27	04:40	05:34	06:36	07:36	07:42	08:37
	16:02	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:46	18:26	16:14	15:38
12	08:42	07:50	06:40	06:18	05:07	04:26	04:41	05:36	06:38	07:38	07:44	08:38
	16:04	17:09	18:10	20:14	21:15	22:02	21:58	21:02	19:43	18:23	16:12	15:37
13	08:41	07:47	06:38	06:16	05:05	04:26	04:43	05:38	06:40	07:40	07:46	08:39
	16:05	17:11	18:12	20:16	21:17	22:03	21:57	20:59	19:40	18:21	16:10	15:37
14	08:40	07:45	06:35	06:13	05:03	04:25	04:44	05:40	06:42	07:42	07:48	08:40
	16:07	17:13	18:14	20:18	21:19	22:04	21:55	20:57	19:38	18:18	16:08	15:37
15	08:39	07:43	06:33	06:11	05:02	04:25	04:45	05:42	06:44	07:44	07:51	08:41
	16:09	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:16	16:07	15:37
16	08:38	07:41	06:30	06:08	05:00	04:25	04:47	05:44	06:46	07:46	07:53	08:42
	16:11	17:18	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:13	16:05	15:37
17	08:36	07:38	06:27	06:05	04:58	04:25	04:48	05:46	06:48	07:48	07:55	08:43
	16:13	17:20	18:20	20:24	21:25	22:06	21:51	20:50	19:30	18:10	16:03	15:37
18	08:35	07:36	06:25	06:03	04:56	04:25	04:50	05:48	06:50	07:51	07:57	08:44
	16:15	17:22	18:22	20:26	21:27	22:06	21:50	20:47	19:27	18:08	16:01	15:37
19	08:34	07:34	06:22	06:00	04:54	04:24	04:52	05:50	06:52	07:53	07:59	08:45
	16:17	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	16:00	15:37
20	08:32	07:31	06:19	05:58	04:52	04:25	04:53	05:52	06:54	07:55	08:01	08:45
	16:19	17:26	18:26	20:31	21:31	22:07	21:47	20:43	19:21	18:03	15:58	15:38
21	08:31	07:29	06:17	05:55	04:51	04:25	04:55	05:54	06:56	07:57	08:03	08:46
	16:21	17:29	18:28	20:33	21:32	22:07	21:45	20:40	19:19	18:01	15:57	15:38
22	08:30	07:26	06:14	05:53	04:49	04:25	04:57	05:56	06:58	07:59	08:05	08:47
	16:23	17:31	18:30	20:35	21:34	22:08	21:44	20:38	19:16	17:58	15:55	15:39
23	08:28	07:24	06:11	05:50	04:47	04:25	04:58	05:58	07:00	08:01	08:07	08:47
	16:25	17:33	18:33	20:37	21:36	22:08	21:42	20:35	19:13	17:56	15:54	15:39
24	08:26	07:21	06:09	05:48	04:46	04:25	05:00	06:00	07:02	08:03	08:09	08:47
	16:27	17:35	18:35	20:39	21:38	22:08	21:40	20:33	19:11	17:53	15:52	15:40
25	08:25	07:19	06:06	05:46	04:44	04:26	05:02	06:02	07:03	08:05	08:11	08:48
	16:29	17:37	18:37	20:41	21:39	22:08	21:39	20:30	19:08	17:51	15:51	15:40
26	08:23	07:16	06:03	05:43	04:43	04:26	05:04	06:04	07:05	08:08	08:13	08:48
	16:31	17:40	18:39	20:43	21:41	22:08	21:37	20:28	19:05	17:49	15:50	15:41
27	08:22	07:14	06:01	05:41	04:41	04:27	05:05	06:06	07:07	08:10	08:15	08:48
	16:33	17:42	18:41	20:45	21:42	22:08	21:35	20:25	19:03	17:46	15:48	15:42
28	08:20	07:11	05:58	05:38	04:40	04:27	05:07	06:08	07:10	08:12	08:16	08:48
	16:35	17:44	18:43	20:47	21:44	22:07	21:33	20:22	19:00	17:44	15:47	15:43
29	08:18		06:55	05:36	04:39	04:28	05:09	06:10	07:12	08:14	08:18	08:48
	16:38		19:45	20:49	21:46	22:07	21:31	20:20	18:57	17:42	15:46	15:44
30	08:16		06:53	05:34	04:37	04:29	05:11	06:12	07:14	08:16	08:20	08:48
	16:40		19:47	20:51	21:47	22:07	21:29	20:17	18:55	17:39	15:45	15:45
31	08:14		06:50		04:36		05:13	06:14		07:18		08:48
	16:42		19:49		21:49		21:28	20:15		16:37		15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Grovani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (483)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December					
1	08:48	08:12	07:09		16:32 (Pr3b)	06:47	05:31	04:34	04:28	05:14	06:15		07:15	17:48 (PrRR3)	07:20	08:22	
	15:46	16:43	17:45	21	16:53 (Pr3b)	19:51	20:53	21:50	22:07	21:25	20:12		18:51	18:14 (PrRR3)	16:34	15:43	
2	08:48	08:10	07:06		16:32 (Pr3b)	06:44	05:28	04:33	04:29	05:16	06:17		07:17	17:48 (PrRR3)	07:22	08:23	
	15:47	16:45	17:48	20	16:52 (Pr3b)	19:53	20:55	21:51	22:06	21:23	20:09		18:49	18:12 (PrRR3)	16:32	15:42	
3	08:48	08:08	07:03		16:34 (Pr3b)	06:41	05:26	04:32	04:30	05:18	06:19		07:19	17:49 (PrRR3)	07:25	08:25	
	15:49	16:48	17:50	16	16:50 (Pr3b)	19:55	20:57	21:53	22:05	21:21	20:06		18:46	18:10 (PrRR3)	16:30	15:41	
4	08:47	08:07	07:01		16:36 (Pr3b)	06:39	05:24	04:31	04:31	05:19	06:21		07:21	17:51 (PrRR3)	07:27	08:27	
	15:50	16:50	17:52	12	16:48 (Pr3b)	19:57	20:59	21:54	22:05	21:19	20:04		18:43	18:08 (PrRR3)	16:27	15:40	
5	08:47	08:04	06:58		16:36 (Pr3b)	06:36	05:21	04:30	04:32	05:21	06:23		07:23	17:54 (PrRR3)	07:29	08:28	
	15:51	16:52	17:54		19:59	21:01	21:55	22:04	21:17	20:01		18:41	10	18:04 (PrRR3)	16:25	15:40	
6	08:46	08:02	06:56		16:33 (Pr3b)	06:33	05:19	04:29	04:33	05:23	06:25		07:25		07:31	08:30	
	15:53	16:54	17:56		20:01	21:03	21:57	22:03	21:15	19:59		18:38			16:23	15:39	
7	08:46	08:00	06:53		16:31 (Pr3b)	06:31	05:17	04:28	04:34	05:25	06:27		07:27		07:33	08:31	
	15:54	16:57	17:58		20:03	21:05	21:58	22:03	21:13	19:56		18:36			16:21	15:38	
8	08:45	07:58	06:50		17:19 (PrRR3)	06:28	05:15	04:27	04:35	05:27	06:29		07:29		07:35	08:33	
	15:56	16:59	18:01	6	17:25 (PrRR3)	20:05	21:07	21:59	22:02	21:11	19:53		18:33		16:19	15:38	
9	08:44	07:56	06:48		17:14 (PrRR3)	06:25	05:13	04:27	04:36	05:29	06:31		07:31	17:13 (Pr3b)	07:38	08:34	
	15:58	17:01	18:03	15	17:29 (PrRR3)	20:07	21:09	22:00	22:01	21:08	19:51		18:30	7	17:20 (Pr3b)	16:17	15:37
10	08:44	07:54	06:45		17:12 (PrRR3)	06:23	05:11	04:26	04:37	05:31	06:33		07:33	17:09 (Pr3b)	07:40	08:35	
	15:59	17:03	18:05	19	17:31 (PrRR3)	20:09	21:11	22:01	22:00	21:06	19:48		18:28	14	17:23 (Pr3b)	16:15	15:37
11	08:43	07:52	06:43		17:10 (PrRR3)	06:20	05:09	04:25	04:39	05:33	06:35		07:36	17:08 (Pr3b)	07:42	08:37	
	16:01	17:06	18:07	23	17:33 (PrRR3)	20:12	21:13	22:02	21:59	21:04	19:45		17:25	17	17:25 (Pr3b)	16:13	15:37
12	08:42	07:49	06:40		17:08 (PrRR3)	06:18	05:07	04:25	04:40	05:35	06:37		07:38	17:06 (Pr3b)	07:44	08:38	
	16:03	17:08	18:09	25	17:33 (PrRR3)	20:14	21:15	22:03	21:58	21:02	19:43		18:23	20	17:26 (Pr3b)	16:11	15:36
13	08:41	07:47	06:37		17:08 (PrRR3)	06:15	05:05	04:25	04:41	05:37	06:39		07:40	17:05 (Pr3b)	07:46	08:39	
	16:04	17:10	18:11	27	17:35 (PrRR3)	20:16	21:17	22:03	21:57	20:59	19:40		18:20	22	17:27 (Pr3b)	16:09	15:36
14	08:40	07:45	06:35		17:06 (PrRR3)	06:12	05:03	04:24	04:43	05:39	06:41		07:42	17:03 (Pr3b)	07:48	08:40	
	16:06	17:12	18:13	29	17:35 (PrRR3)	20:18	21:19	22:04	21:55	20:57	19:37		18:17	24	17:27 (Pr3b)	16:07	15:36
15	08:39	07:43	06:32		17:05 (PrRR3)	06:10	05:01	04:24	04:44	05:41	06:43		07:44	17:03 (Pr3b)	07:50	08:41	
	16:08	17:15	18:15	33	17:47 (Pr25)	20:20	21:21	22:05	21:54	20:54	19:34	1	18:33 (Pr25)	17:27 (Pr3b)	16:06	15:36	
16	08:38	07:40	06:29		17:05 (PrRR3)	06:07	04:59	04:24	04:46	05:43	06:45		07:46	18:02 (PrRR3)	07:53	08:42	
	16:10	17:17	18:17	40	17:50 (Pr25)	20:22	21:23	22:05	21:53	20:52	19:32	19	18:39 (Pr25)	17:28 (Pr3b)	16:04	15:36	
17	08:36	07:38	06:27		17:04 (PrRR3)	06:05	04:57	04:23	04:47	05:45	06:47		07:48	17:58 (PrRR3)	07:55	08:43	
	16:12	17:19	9	16:48 (Pr3b)	18:20	44	17:52 (Pr25)	20:24	21:25	22:06	21:51	20:50	19:29	31	18:40 (Pr25)	18:10	15:36
18	08:35	07:36	06:24		17:04 (PrRR3)	06:02	04:55	04:23	04:49	05:47	06:49		07:50	17:55 (PrRR3)	07:57	08:44	
	16:14	17:21	14	16:50 (Pr3b)	18:22	47	17:53 (Pr25)	20:26	21:27	22:06	21:50	20:47	19:26	37	18:40 (Pr25)	18:07	15:36
19	08:34	07:33	06:21		17:04 (PrRR3)	06:00	04:53	04:23	04:51	05:49	06:51		07:52	17:53 (PrRR3)	07:59	08:45	
	16:16	17:23	18	16:53 (Pr3b)	18:24	50	17:56 (Pr25)	20:28	21:29	22:07	21:49	20:45	19:24	42	18:41 (Pr25)	18:05	15:36
20	08:32	07:31	06:19		17:04 (PrRR3)	05:57	04:51	04:23	04:52	05:51	06:53		07:54	17:51 (PrRR3)	07:54	08:45	
	16:18	17:26	21	16:54 (Pr3b)	18:26	51	17:57 (Pr25)	20:30	21:31	22:07	21:47	20:42	19:21	46	18:41 (Pr25)	18:02	15:37
21	08:31	07:28	06:16		17:04 (PrRR3)	05:55	04:50	04:23	04:54	05:53	06:55		07:57	17:50 (PrRR3)	07:57	08:46	
	16:20	17:28	22	16:55 (Pr3b)	18:28	50	17:56 (Pr25)	20:32	21:32	22:07	21:45	20:40	19:18	48	18:41 (Pr25)	18:00	15:37
22	08:30	07:26	06:13		17:04 (PrRR3)	05:52	04:48	04:24	04:56	05:55	06:57		07:59	17:49 (PrRR3)	07:59	08:47	
	16:22	17:30	23	16:55 (Pr3b)	18:30	50	17:56 (Pr25)	20:34	21:34	22:08	21:44	20:37	19:16	50	18:41 (Pr25)	17:57	15:38
23	08:28	07:24	06:11		17:05 (PrRR3)	05:50	04:46	04:24	04:57	05:57	06:59		07:57	17:48 (PrRR3)	08:01	08:47	
	16:24	17:32	24	16:55 (Pr3b)	18:32	47	17:56 (Pr25)	20:36	21:36	22:08	21:42	20:35	19:13	51	18:40 (Pr25)	17:55	15:38
24	08:26	07:21	06:08		17:06 (PrRR3)	05:47	04:45	04:24	04:59	05:59	07:01		08:03	17:47 (PrRR3)	08:03	08:48	
	16:26	17:35	25	16:56 (Pr3b)	18:34	44	17:55 (Pr25)	20:39	21:38	22:08	21:40	20:32	19:10	52	18:40 (Pr25)	17:53	15:39
25	08:25	07:19	06:05		17:07 (PrRR3)	05:45	04:43	04:25	05:01	06:01	07:03		08:05	17:47 (PrRR3)	07:05	08:48	
	16:28	17:37	25	16:55 (Pr3b)	18:36	39	17:53 (Pr25)	20:41	21:39	22:08	21:39	20:30	19:08	48	18:37 (Pr25)	16:50	15:39
26	08:23	07:16	06:03		17:09 (PrRR3)	05:42	04:42	04:25	05:03	06:03	07:05		08:07	17:46 (PrRR3)	07:07	08:48	
	16:30	17:39	25	16:56 (Pr3b)	18:38	32	17:52 (Pr25)	20:43	21:41	22:08	21:37	20:27	19:05	45	18:34 (Pr25)	16:48	15:40
27	08:21	07:14	06:00		17:12 (PrRR3)	05:40	04:40	04:25	05:04	06:05	07:07		08:09	17:46 (PrRR3)	07:09	08:48	
	16:32	17:41	24	16:55 (Pr3b)	18:40	22	17:50 (Pr25)	20:45	21:43	22:08	21:35	20:25	19:02	41	18:31 (Pr25)	16:45	15:41
28	08:20	07:11	05:57		17:41 (Pr25)	05:38	04:39	04:26	05:06	06:07	07:09		08:11	17:46 (PrRR3)	07:12	08:48	
	16:34	17:43	23	16:54 (Pr3b)	18:42	5	17:46 (Pr25)	20:47	21:44	22:08	21:33	20:22	18:59	36	18:29 (Pr25)	16:43	15:42
29	08:18		06:55		05:35	04:38	04:27	05:08	06:09	07:11	08:13		09:15	17:46 (PrRR3)	07:14	08:49	
	16:37		19:45		20:49	21:46	22:07	21:31	20:20	18:57	29	18:15 (PrRR3)	16:41		15:45	15:43	
30	08:16		06:52		05:33	04:36	04:27	05:10	06:11	07:13	08:15		09:17	17:46 (PrRR3)	07:16	08:49	
	16:39		19:47		20:51	21:47	22:07	21:29	20:17	18:54	28	18:14 (PrRR3)	16:38		15:44	15:44	
31	08:14		06:49		04:35		05:12	06:13					07:18		08:48		
	16:41		19:49		21:49		21:27	20:14					16:36		15:45		
Potential sun hours	236	266	366	426	507	528	529	469	384	604	428	248	217				
Total, worst case		253	767							0,43	0,29						
Sun reduction		0,23	0,39							0,43	0,29						
Oper. time red.		1,00	1,00							1,00	1,00						
Wind dir. red.		1,00	1,00							1,00	1,00						
Total reduction		0,23	0,39							0,43	0,29						
Total, real		57	300							261	124						

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Ievaiši - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (452)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January			February			March			April			May			June		
1	08:48	10:26 (AP6.1)	08:13	15:28 (Pr11)	07:09	07:46 (Pr25)	06:47	05:31	04:34									
	15:46	57	12:08 (JU1)	16:43	31	16:02 (Pr12)	17:46	50	15:51 (Pr11)	19:51	20:53	21:50						
2	08:48	10:26 (AP6.1)	08:11	15:25 (Pr11)	07:06	07:43 (Pr25)	06:44	05:28	04:33									
	15:48	56	12:07 (JU1)	16:46	39	16:04 (Pr12)	17:48	50	15:49 (Pr11)	19:53	20:55	21:52						
3	08:48	10:27 (AP6.1)	08:09	15:23 (Pr11)	07:04	07:42 (Pr25)	06:41	05:26	04:32									
	15:49	56	12:08 (JU1)	16:48	42	16:05 (Pr12)	17:50	48	15:47 (Pr11)	19:55	20:57	21:53						
4	08:48	10:27 (AP6.1)	08:07	15:22 (Pr11)	07:01	07:27 (PrRR3)	06:39	05:24	04:31									
	15:50	56	12:08 (JU1)	16:50	44	16:06 (Pr12)	17:52	55	15:44 (Pr11)	19:57	20:59	21:54						
5	08:47	10:28 (AP6.1)	08:05	15:19 (Pr11)	06:58	07:24 (PrRR3)	06:36	05:22	04:30									
	15:52	53	12:08 (JU1)	16:52	47	16:06 (Pr12)	17:54	47	15:37 (Pr11)	19:59	21:01	21:56						
6	08:47	10:29 (AP6.1)	08:03	15:19 (Pr11)	06:56	07:22 (PrRR3)	06:34	05:19	04:29									
	15:53	53	12:09 (JU1)	16:55	48	16:07 (Pr12)	17:56	47	08:09 (Pr25)	20:01	21:04	21:57						
7	08:46	10:30 (AP6.1)	08:01	15:18 (Pr11)	06:53	07:21 (PrRR3)	06:31	05:17	04:28									
	15:55	51	12:09 (JU1)	16:57	50	16:08 (Pr12)	17:59	48	08:09 (Pr25)	20:03	21:06	21:58						
8	08:45	10:31 (AP6.1)	07:58	15:17 (Pr11)	06:51	07:20 (PrRR3)	06:28	05:15	04:28									
	15:56	48	12:08 (JU1)	16:59	52	16:09 (Pr12)	18:01	49	08:09 (Pr25)	20:06	21:08	21:59						
9	08:45	10:32 (AP6.1)	07:56	15:16 (Pr11)	06:48	07:20 (PrRR3)	06:26	05:13	04:27									
	15:58	46	12:08 (JU1)	17:01	52	16:08 (Pr12)	18:03	50	08:10 (Pr25)	20:08	21:10	22:00						
10	08:44	10:33 (AP6.1)	07:54	15:15 (Pr11)	06:45	07:19 (PrRR3)	06:23	05:11	04:26									
	15:59	44	12:08 (JU1)	17:04	54	16:09 (Pr12)	18:05	50	08:09 (Pr25)	20:10	21:12	22:01						
11	08:43	10:33 (AP6.1)	07:52	15:14 (Pr11)	06:43	07:18 (PrRR3)	06:20	05:09	04:26									
	16:01	40	12:07 (JU1)	17:06	63	16:08 (Pr12)	18:07	56	17:28 (O6)	20:12	21:14	22:02						
12	08:42	10:35 (AP6.1)	07:50	15:13 (Pr11)	06:40	07:17 (PrRR3)	06:18	05:07	04:25									
	16:03	37	12:07 (JU1)	17:08	68	16:08 (Pr12)	18:09	64	17:33 (O6)	20:14	21:16	22:03						
13	08:41	10:37 (AP6.1)	07:47	15:12 (Pr11)	06:38	07:19 (PrRR3)	06:15	05:05	04:25									
	16:05	31	12:06 (JU1)	17:10	71	16:08 (Pr12)	18:11	68	17:35 (O6)	20:16	21:18	22:04						
14	08:40	10:40 (AP6.1)	07:45	15:11 (Pr11)	06:35	07:19 (PrRR3)	06:13	05:03	04:24									
	16:06	24	12:05 (JU1)	17:12	73	16:07 (Pr12)	18:13	72	17:37 (O6)	20:18	21:19	22:04						
15	08:39	11:51 (JU1)	07:43	15:10 (Pr11)	06:32	07:20 (PrRR3)	06:10	05:01	04:24									
	16:08	12	12:03 (JU1)	17:15	74	16:07 (Pr12)	18:16	72	17:38 (O6)	20:20	21:21	22:05						
16	08:38	11:54 (JU1)	07:41	15:09 (Pr11)	06:30	07:22 (PrRR3)	06:07	04:59	04:24									
	16:10	7	12:01 (JU1)	17:17	75	16:06 (Pr12)	18:18	67	17:39 (O6)	20:22	21:23	22:06						
17	08:37		07:38	15:08 (Pr11)	06:27	07:24 (PrRR3)	06:05	04:57	04:24									
	16:12		17:19	74	16:05 (Pr12)	18:20	61	17:39 (O6)	20:24	21:25	22:06							
18	08:35		07:36	15:07 (Pr11)	06:24	07:40 (Pr25)	06:02	04:55	04:24									
	16:14		17:21	74	16:03 (Pr12)	18:22	51	17:39 (O6)	20:26	21:27	22:07							
19	08:34		07:33	15:06 (Pr11)	06:22	07:42 (Pr25)	06:00	04:53	04:23									
	16:16		17:24	70	16:01 (Pr12)	18:24	48	17:40 (O6)	20:28	21:29	22:07							
20	08:33		07:31	15:05 (Pr11)	06:19	07:46 (Pr25)	05:57	04:52	04:24									
	16:18		17:26	70	15:59 (Pr11)	18:26	40	17:40 (O6)	20:30	21:31	22:07							
21	08:31		07:29	15:04 (Pr11)	06:16	17:06 (O6)	05:55	04:50	04:24									
	16:20		17:28	68	15:59 (Pr11)	18:28	33	17:39 (O6)	20:33	21:33	22:08							
22	08:30		07:26	15:03 (Pr11)	06:14	17:07 (O6)	05:52	04:48	04:24									
	16:22		17:30	65	15:58 (Pr11)	18:30	33	17:40 (O6)	20:35	21:34	22:08							
23	08:28		07:24	15:02 (Pr11)	06:11	17:06 (O6)	05:50	04:47	04:24									
	16:24		17:32	62	15:58 (Pr11)	18:32	33	17:39 (O6)	20:37	21:36	22:08							
24	08:27		07:21	15:01 (Pr11)	06:08	17:06 (O6)	05:47	04:45	04:24									
	16:26		17:35	58	15:57 (Pr11)	18:34	32	17:38 (O6)	20:39	21:38	22:08							
25	08:25		07:19	15:00 (Pr11)	06:06	17:07 (O6)	05:45	04:43	04:25									
	16:28		17:37	53	15:56 (Pr11)	18:36	31	17:38 (O6)	20:41	21:39	22:08							
26	08:23		07:16	15:00 (Pr11)	06:03	17:07 (O6)	05:43	04:42	04:25									
	16:30		17:39	40	15:56 (Pr11)	18:39	29	17:36 (O6)	20:43	21:41	22:08							
27	08:22		07:14	15:00 (Pr11)	06:00	17:08 (O6)	05:40	04:41	04:26									
	16:33		17:41	38	15:54 (Pr11)	18:41	27	17:35 (O6)	20:45	21:43	22:08							
28	08:20		07:11	15:00 (Pr11)	05:58	17:09 (O6)	05:38	04:39	04:26									
	16:35		17:43	48	15:53 (Pr11)	18:43	25	17:34 (O6)	20:47	21:44	22:08							
29	08:18				06:55	18:10 (O6)	05:35	04:38	04:27									
	16:37				19:45	18:32 (O6)	20:49	21:46	22:07									
30	08:16	15:47 (Pr12)			06:52	18:12 (O6)	05:33	04:37	04:28									
	16:39	11	15:58 (Pr12)		19:47	18:29 (O6)	20:51	21:47	22:07									
31	08:14	15:45 (Pr12)			06:49	18:15 (O6)		04:35										
	16:41	15	16:00 (Pr12)		19:49	18:26 (O6)		21:49										
Potential sun hours	236			266		366		426		507		528						
Total, worst case	697			1603		1386												
Sun reduction	0,13			0,23		0,39												
Oper. time red.	1,00			1,00		1,00												
Wind dir. red.	1,00			1,00		1,00												
Total reduction	0,13			0,23		0,39												
Total, real	94			361		543												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Ievaiši - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (452)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December
1	04:28	05:14	06:15	07:15	07:58 (PrRR3)	07:20 14:45 (Pr11) 08:22 10:16 (AP6.1)
	22:07	21:26	20:12	18:52	67 18:14 (O6)	16:34 53 15:38 (Pr12) 15:43 39 11:49 (JU1)
2	04:29	05:16	06:17	07:17	07:57 (PrRR3)	07:23 14:45 (Pr11) 08:24 10:15 (AP6.1)
	22:06	21:24	20:09	18:49	61 18:10 (O6)	16:32 53 15:38 (Pr12) 15:42 44 11:50 (JU1)
3	04:30	05:18	06:19	07:19	07:57 (PrRR3)	07:25 14:47 (Pr11) 08:25 10:15 (AP6.1)
	22:06	21:22	20:07	18:46	50 08:47 (Pr25)	16:30 51 15:38 (Pr12) 15:41 46 11:51 (JU1)
4	04:31	05:20	06:21	07:21	07:57 (PrRR3)	07:27 14:48 (Pr11) 08:27 10:15 (AP6.1)
	22:05	21:19	20:04	18:44	50 08:47 (Pr25)	16:28 50 15:38 (Pr12) 15:41 49 11:53 (JU1)
5	04:32	05:22	06:23	07:23	07:56 (PrRR3)	07:29 14:48 (Pr11) 08:29 10:15 (AP6.1)
	22:04	21:17	20:01	18:41	50 08:46 (Pr25)	16:25 49 15:37 (Pr12) 15:40 51 11:54 (JU1)
6	04:33	05:24	06:25	07:25	07:57 (PrRR3)	07:31 14:50 (Pr11) 08:30 10:14 (AP6.1)
	22:04	21:15	19:59	18:38	49 08:46 (Pr25)	16:23 47 15:37 (Pr12) 15:39 52 11:54 (JU1)
7	04:34	05:25	06:26	07:28	07:57 (PrRR3)	07:33 14:52 (Pr11) 08:32 10:15 (AP6.1)
	22:03	21:13	19:56	18:36	48 08:45 (Pr25)	16:21 44 15:36 (Pr12) 15:39 53 11:55 (JU1)
8	04:35	05:27	06:29	07:30	07:58 (PrRR3)	07:36 14:54 (Pr11) 08:33 10:15 (AP6.1)
	22:02	21:11	19:53	18:33	46 08:44 (Pr25)	16:19 42 15:36 (Pr12) 15:38 55 11:56 (JU1)
9	04:36	05:29	06:31	07:32	08:01 (PrRR3)	07:38 14:56 (Pr11) 08:34 10:15 (AP6.1)
	22:01	21:09	19:51	18:31	53 16:17 (Pr11)	16:17 38 15:34 (Pr12) 15:38 56 11:56 (JU1)
10	04:38	05:31	06:33	07:34	08:04 (PrRR3)	07:40 14:59 (Pr11) 08:36 10:16 (AP6.1)
	22:00	21:06	19:48	18:28	50 16:20 (Pr11)	16:15 32 15:33 (Pr12) 15:37 57 11:58 (JU1)
11	04:39	05:33	06:35	07:36	08:17 (Pr25)	07:42 15:17 (Pr12) 08:37 10:16 (AP6.1)
	21:59	21:04	19:45	18:25	50 16:22 (Pr11)	16:13 15 15:32 (Pr12) 15:37 57 11:58 (JU1)
12	04:40	05:35	06:37	18:07 (O6)	07:38	08:18 (Pr25) 07:44 15:19 (Pr12) 08:38 10:16 (AP6.1)
	21:58	21:02	19:43	18:23	51 16:24 (Pr11)	16:11 10 15:29 (Pr12) 15:36 58 11:58 (JU1)
13	04:42	05:37	06:39	18:03 (O6)	07:40	08:20 (Pr25) 07:46 15:36 59 11:59 (JU1)
	21:57	20:59	19:40	18:20 (O6)	18:20 50 16:25 (Pr11)	16:09 15:36 59 11:59 (JU1)
14	04:43	05:39	06:41	18:01 (O6)	07:42	08:23 (Pr25) 07:49 15:36 59 12:00 (JU1)
	21:56	20:57	19:37	18:22 (O6)	18:18 45 16:26 (Pr11)	16:08 15:36 59 12:00 (JU1)
15	04:45	05:41	06:43	17:59 (O6)	07:44	15:49 (Pr11) 07:51 15:36 60 12:00 (JU1)
	21:54	20:55	19:35	18:23 (O6)	18:15 38 16:27 (Pr11)	16:06 15:36 60 12:00 (JU1)
16	04:46	05:43	06:45	17:57 (O6)	07:46	08:53 (Pr3b) 07:53 15:36 60 12:01 (JU1)
	21:53	20:52	19:32	18:24 (O6)	18:13 48 16:28 (Pr11)	16:04 15:36 59 12:01 (JU1)
17	04:48	05:45	06:47	17:56 (O6)	07:48	08:49 (Pr3b) 07:55 15:36 61 12:02 (JU1)
	21:52	20:50	19:29	18:25 (O6)	18:10 55 16:28 (Pr11)	16:02 15:36 61 12:02 (JU1)
18	04:49	05:47	06:49	17:55 (O6)	07:50	08:47 (Pr3b) 07:57 15:36 61 12:02 (JU1)
	21:50	20:47	19:27	18:25 (O6)	18:07 60 16:28 (Pr11)	16:01 15:36 60 12:01 (JU1)
19	04:51	05:49	06:51	17:54 (O6)	07:52	08:46 (Pr3b) 07:59 15:36 60 12:01 (JU1)
	21:49	20:45	19:24	18:25 (O6)	18:05 63 16:29 (Pr11)	15:59 15:37 61 12:02 (JU1)
20	04:52	05:51	06:53	17:53 (O6)	07:55	08:45 (Pr3b) 08:01 15:37 61 12:03 (JU1)
	21:47	20:43	19:21	18:25 (O6)	18:02 66 16:29 (Pr11)	15:57 15:37 61 12:03 (JU1)
21	04:54	05:53	06:55	17:53 (O6)	07:57	08:44 (Pr3b) 08:03 15:37 61 12:03 (JU1)
	21:46	20:40	19:18	18:25 (O6)	18:00 68 16:29 (Pr11)	15:56 15:37 61 12:03 (JU1)
22	04:56	05:55	06:57	17:52 (O6)	07:59	08:44 (Pr3b) 08:05 15:37 61 12:04 (JU1)
	21:44	20:38	19:16	18:25 (O6)	17:58 68 16:29 (Pr11)	15:54 15:38 61 12:04 (JU1)
23	04:57	05:57	06:59	17:52 (O6)	08:01	08:44 (Pr3b) 08:07 15:38 61 12:04 (JU1)
	21:42	20:35	19:13	18:24 (O6)	17:55 72 16:32 (Pr12)	15:53 15:38 61 12:04 (JU1)
24	04:59	05:59	07:01	08:27 (Pr25)	08:03	08:44 (Pr3b) 08:09 15:39 61 12:05 (JU1)
	21:41	20:33	19:10	18:24 (O6)	17:53 73 16:34 (Pr12)	15:52 15:39 61 12:05 (JU1)
25	05:01	06:01	07:03	08:24 (Pr25)	07:05	07:43 (Pr3b) 08:11 15:40 61 12:05 (JU1)
	21:39	20:30	19:08	18:23 (O6)	16:50 76 15:35 (Pr12)	15:50 15:40 61 12:05 (JU1)
26	05:03	06:03	07:05	08:09 (PrRR3)	07:07	07:44 (Pr3b) 08:13 11:33 (JU1) 15:40 61 12:06 (JU1)
	21:37	20:27	19:05	18:22 (O6)	16:48 75 15:36 (Pr12)	15:49 6 11:39 (JU1) 15:40 61 12:06 (JU1)
27	05:05	06:05	07:07	08:04 (PrRR3)	07:10	07:45 (Pr3b) 08:15 11:30 (JU1) 15:40 61 12:06 (JU1)
	21:35	20:25	19:02	18:21 (O6)	16:46 74 15:37 (Pr12)	15:48 12 11:42 (JU1) 15:41 61 12:06 (JU1)
28	05:06	06:07	07:09	08:02 (PrRR3)	07:12	07:45 (Pr3b) 08:17 10:19 (AP6.1) 15:41 61 12:06 (JU1)
	21:33	20:22	19:00	18:20 (O6)	16:43 72 15:37 (Pr12)	15:46 24 11:44 (JU1) 15:42 60 12:06 (JU1)
29	05:08	06:09	07:11	08:00 (PrRR3)	07:14	07:47 (Pr3b) 08:18 10:17 (AP6.1) 15:42 60 12:06 (JU1)
	21:32	20:20	18:57	18:18 (O6)	16:41 71 15:38 (Pr12)	15:45 31 11:46 (JU1) 15:43 59 12:07 (JU1)
30	05:10	06:11	07:13	07:59 (PrRR3)	07:16	07:48 (Pr3b) 08:20 10:16 (AP6.1) 15:44 60 12:07 (JU1)
	21:30	20:17	18:54	18:16 (O6)	16:39 67 15:38 (Pr12)	15:44 37 11:48 (JU1) 15:44 60 12:07 (JU1)
31	05:12	06:13			07:18	07:50 (Pr3b) 08:21 10:17 (AP6.1) 15:45 59 12:07 (JU1)
	21:28	20:15			16:36 62 15:38 (Pr12)	15:45 59 12:07 (JU1)
Potential sun hours	529	469	384	324	248	217
Total, worst case			748	1828	594	1762
Sun reduction			0,43	0,29	0,08	0,08
Oper. time red.			1,00	1,00	1,00	1,00
Wind dir. red.			1,00	1,00	1,00	1,00
Total reduction			0,43	0,29	0,08	0,08
Total, real			323	530	45	149

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B
Assumptions for shadow calculations

Shadow receptor: Irbeni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (497)
Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June
1	08:48 15:46	08:12 16:43	07:09 17:45	06:47 19:51	05:31 20:53	19:52 (Pr25) 20:14 (Pr25)
2	08:48 15:48	08:10 16:45	07:06 17:48	06:44 19:53	22 20:55	20:14 (Pr25) 21:51
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	21 20:57	20:14 (Pr25) 21:53
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	11 20:59	19:13 (Pr3b) 20:59
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	17 21:01	19:09 (Pr3b) 20:13 (Pr25)
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	19 21:03	19:08 (Pr3b) 20:12 (Pr25)
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	20 21:05	19:06 (Pr3b) 20:25 (PrRR3)
8	08:45 15:56	07:58 16:59	06:50 18:01	06:28 20:05	23 21:07	19:04 (Pr3b) 20:28 (PrRR3)
9	08:44 15:58	07:56 17:01	06:48 18:03	06:25 20:07	25 21:09	19:03 (Pr3b) 20:29 (PrRR3)
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:09	26 21:11	19:02 (Pr3b) 20:31 (PrRR3)
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	26 21:13	20:07 (PrRR3) 20:32 (PrRR3)
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	25 21:15	20:06 (PrRR3) 20:32 (PrRR3)
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	26 21:17	20:05 (PrRR3) 20:33 (PrRR3)
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	28 21:19	20:05 (PrRR3) 20:34 (PrRR3)
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	29 21:21	20:05 (PrRR3) 20:35 (PrRR3)
16	08:38 16:10	07:40 17:17	06:29 18:17	06:07 20:22	30 21:23	20:04 (PrRR3) 20:35 (PrRR3)
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	31 21:25	20:04 (PrRR3) 20:36 (PrRR3)
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	32 21:27	20:03 (PrRR3) 20:36 (PrRR3)
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	33 21:29	20:03 (PrRR3) 20:35 (PrRR3)
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	32 21:30	20:03 (PrRR3) 20:36 (PrRR3)
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	33 21:32	20:03 (PrRR3) 20:36 (PrRR3)
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	33 21:34	20:03 (PrRR3) 20:36 (PrRR3)
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	33 21:36	20:04 (PrRR3) 20:37 (PrRR3)
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	33 21:38	20:03 (PrRR3) 20:36 (PrRR3)
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	33 21:39	20:04 (PrRR3) 20:37 (PrRR3)
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	33 21:41	20:04 (PrRR3) 20:37 (PrRR3)
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	33 21:42	20:04 (PrRR3) 20:36 (PrRR3)
28	08:20 16:35	07:11 17:43	05:57 18:42	05:38 20:47	32 21:44	20:04 (PrRR3) 20:36 (PrRR3)
29	08:18 16:37		06:55 19:45	05:35 20:49	32 21:46	20:04 (PrRR3) 20:36 (PrRR3)
30	08:16 16:39		06:52 19:47	05:33 20:51	32 21:47	20:05 (PrRR3) 20:36 (PrRR3)
31	08:14 16:41		06:49 19:49		31 21:49	20:05 (PrRR3) 20:36 (PrRR3)
Potential sun hours	236	266	366	426	507	528
Total, worst case				599	888	731
Sun reduction				0,44	0,56	0,57
Oper. time red.				1,00	1,00	1,00
Wind dir. red.				1,00	1,00	1,00
Total reduction				0,44	0,56	0,57
Total, real				265	500	415

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B
Assumptions for shadow calculations

Shadow receptor: Irbeni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (497)
Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July			August			September			October	November	December
1	04:28	20:15 (PrRR3)	05:14	20:17 (PrRR3)	06:15	19:01 (Pr3b)	07:15	07:20	08:22			
	22:06	25	20:40 (PrRR3)	21:25	25	20:42 (PrRR3)	20:12	29	19:30 (Pr3b)	18:51	16:34	15:43
2	04:29	20:14 (PrRR3)	05:16	20:18 (PrRR3)	06:17	19:01 (Pr3b)	07:17	07:22	08:23			
	22:06	25	20:39 (PrRR3)	21:23	24	20:42 (PrRR3)	20:09	28	19:29 (Pr3b)	18:49	16:32	15:42
3	04:30	20:15 (PrRR3)	05:18	20:10 (Pr25)	06:19	19:01 (Pr3b)	07:19	07:25	08:25			
	22:05	25	20:40 (PrRR3)	21:21	29	20:41 (PrRR3)	20:06	27	19:28 (Pr3b)	18:46	16:30	15:41
4	04:31	20:15 (PrRR3)	05:20	20:08 (Pr25)	06:21	19:02 (Pr3b)	07:21	07:27	08:27			
	22:05	26	20:41 (PrRR3)	21:19	29	20:39 (PrRR3)	20:04	25	19:27 (Pr3b)	18:44	16:27	15:41
5	04:32	20:14 (PrRR3)	05:21	20:05 (Pr25)	06:23	19:02 (Pr3b)	07:23	07:29	08:28			
	22:04	27	20:41 (PrRR3)	21:17	29	20:36 (PrRR3)	20:01	23	19:25 (Pr3b)	18:41	16:25	15:40
6	04:33	20:14 (PrRR3)	05:23	20:04 (Pr25)	06:25	19:03 (Pr3b)	07:25	07:31	08:30			
	22:03	28	20:42 (PrRR3)	21:15	24	20:33 (PrRR3)	19:59	20	19:23 (Pr3b)	18:38	16:23	15:39
7	04:34	20:14 (PrRR3)	05:25	20:03 (Pr25)	06:27	19:04 (Pr3b)	07:27	07:33	08:31			
	22:03	28	20:42 (PrRR3)	21:13	19	20:22 (Pr25)	19:56	17	19:21 (Pr3b)	18:36	16:21	15:38
8	04:35	20:14 (PrRR3)	05:27	20:03 (Pr25)	06:29	19:07 (Pr3b)	07:29	07:35	08:33			
	22:02	29	20:43 (PrRR3)	21:11	20	20:23 (Pr25)	19:53	11	19:18 (Pr3b)	18:33	16:19	15:38
9	04:36	20:14 (PrRR3)	05:29	20:02 (Pr25)	06:31		07:31	07:38	08:34			
	22:01	29	20:43 (PrRR3)	21:08	21	20:23 (Pr25)	19:51		18:30	16:17	15:37	
10	04:38	20:14 (PrRR3)	05:31	20:02 (Pr25)	06:33		07:33	07:40	08:35			
	22:00	29	20:43 (PrRR3)	21:06	22	20:24 (Pr25)	19:48		18:28	16:15	15:37	
11	04:39	20:13 (PrRR3)	05:33	20:01 (Pr25)	06:35		07:36	07:42	08:37			
	21:59	30	20:43 (PrRR3)	21:04	22	20:23 (Pr25)	19:45		18:25	16:13	15:37	
12	04:40	20:14 (PrRR3)	05:35	20:01 (Pr25)	06:37		07:38	07:44	08:38			
	21:58	31	20:45 (PrRR3)	21:01	22	20:23 (Pr25)	19:43		18:23	16:11	15:36	
13	04:42	20:14 (PrRR3)	05:37	20:01 (Pr25)	06:39		07:40	07:46	08:39			
	21:57	31	20:45 (PrRR3)	20:59	22	20:23 (Pr25)	19:40		18:20	16:09	15:36	
14	04:43	20:13 (PrRR3)	05:39	20:01 (Pr25)	06:41		07:42	07:48	08:40			
	21:55	32	20:45 (PrRR3)	20:57	22	20:23 (Pr25)	19:37		18:17	16:07	15:36	
15	04:44	20:14 (PrRR3)	05:41	20:01 (Pr25)	06:43		07:44	07:50	08:41			
	21:54	32	20:46 (PrRR3)	20:54	21	20:22 (Pr25)	19:34		18:15	16:06	15:36	
16	04:46	20:13 (PrRR3)	05:43	20:02 (Pr25)	06:45		07:46	07:53	08:42			
	21:53	33	20:46 (PrRR3)	20:52	18	20:20 (Pr25)	19:32		18:12	16:04	15:36	
17	04:47	20:13 (PrRR3)	05:45	20:03 (Pr25)	06:47		07:48	07:55	08:43			
	21:51	33	20:46 (PrRR3)	20:50	15	20:18 (Pr25)	19:29		18:10	16:02	15:36	
18	04:49	20:13 (PrRR3)	05:47	20:03 (Pr25)	06:49		07:50	07:57	08:44			
	21:50	33	20:46 (PrRR3)	20:47	12	20:15 (Pr25)	19:26		18:07	16:00	15:36	
19	04:51	20:13 (PrRR3)	05:49	20:04 (Pr25)	06:51		07:52	07:59	08:45			
	21:49	33	20:46 (PrRR3)	20:45	9	20:13 (Pr25)	19:24		18:05	15:59	15:36	
20	04:52	20:13 (PrRR3)	05:51	19:13 (Pr3b)	06:53		07:54	08:01	08:45			
	21:47	34	20:47 (PrRR3)	20:42	15	20:11 (Pr25)	19:21		18:02	15:57	15:37	
21	04:54	20:13 (PrRR3)	05:53	19:11 (Pr3b)	06:55		07:57	08:03	08:46			
	21:45	33	20:46 (PrRR3)	20:40	16	19:27 (Pr3b)	19:18		18:00	15:56	15:37	
22	04:56	20:14 (PrRR3)	05:55	19:09 (Pr3b)	06:57		07:59	08:05	08:47			
	21:44	33	20:47 (PrRR3)	20:37	19	19:28 (Pr3b)	19:16		17:57	15:54	15:38	
23	04:57	20:13 (PrRR3)	05:57	19:07 (Pr3b)	06:59		08:01	08:07	08:47			
	21:42	33	20:46 (PrRR3)	20:35	23	19:30 (Pr3b)	19:13		17:55	15:53	15:38	
24	04:59	20:14 (PrRR3)	05:59	19:06 (Pr3b)	07:01		08:03	08:09	08:47			
	21:40	32	20:46 (PrRR3)	20:32	24	19:30 (Pr3b)	19:10		17:53	15:51	15:39	
25	05:01	20:14 (PrRR3)	06:01	19:05 (Pr3b)	07:03		07:05	08:11	08:48			
	21:39	33	20:47 (PrRR3)	20:30	26	19:31 (Pr3b)	19:08		16:50	15:50	15:39	
26	05:03	20:14 (PrRR3)	06:03	19:03 (Pr3b)	07:05		07:07	08:13	08:48			
	21:37	32	20:46 (PrRR3)	20:27	28	19:31 (Pr3b)	19:05		16:48	15:49	15:40	
27	05:04	20:15 (PrRR3)	06:05	19:02 (Pr3b)	07:07		07:09	08:15	08:48			
	21:35	31	20:46 (PrRR3)	20:25	29	19:31 (Pr3b)	19:02		16:45	15:48	15:41	
28	05:06	20:15 (PrRR3)	06:07	19:02 (Pr3b)	07:09		07:12	08:16	08:48			
	21:33	31	20:46 (PrRR3)	20:22	29	19:31 (Pr3b)	18:59		16:43	15:46	15:42	
29	05:08	20:15 (PrRR3)	06:09	19:01 (Pr3b)	07:11		07:14	08:18	08:48			
	21:31	30	20:45 (PrRR3)	20:20	30	19:31 (Pr3b)	18:57		16:41	15:45	15:43	
30	05:10	20:16 (PrRR3)	06:11	19:01 (Pr3b)	07:13		07:16	08:20	08:48			
	21:29	28	20:44 (PrRR3)	20:17	30	19:31 (Pr3b)	18:54		16:39	15:44	15:44	
31	05:12	20:17 (PrRR3)	06:13	19:01 (Pr3b)			07:18		08:48			
	21:27	27	20:44 (PrRR3)	20:14	29	19:30 (Pr3b)			16:36		15:45	
Potential sun hours	529		469		384		324	248	217			
Total, worst case	936		703		180							
Sun reduction	0,47		0,52		0,43							
Oper. time red.	1,00		1,00		1,00							
Wind dir. red.	1,00		1,00		1,00							
Total reduction	0,47		0,52		0,43							
Total, real	441		367		78							

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B
Assumptions for shadow calculations

Shadow receptor: Irš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (548)
Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Ivaš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (486)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:42	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:26	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Ivdri - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (477)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:07	21:26	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:24
	15:47	16:45	17:48	19:53	20:55	21:52	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:09	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:06	21:21	20:06	18:46	16:29	15:41
4	08:47	08:07	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:05	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:57	22:04	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:36
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:02	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:38	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:53	08:42
	16:10	17:17	18:17	20:22	21:23	22:06	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:52	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:07	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:31	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:08	21:46	20:40	19:18	18:00	15:56	15:37
22	08:30	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:24	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:48
	16:26	17:34	18:34	20:39	21:38	22:08	21:41	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:22	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:15	08:48
	16:32	17:41	18:40	20:45	21:43	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:49
	16:34	17:43	18:42	20:47	21:44	22:08	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:49
	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:49
	16:41		19:49		21:49		21:28	20:14		16:36		15:45
Potential sun hours	235	266	366	426	508	528	529	469	384	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Jasmini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (530)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Jaunbruveri - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (592)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:13	07:09	06:47	05:31	04:35	04:29	05:14	06:16	07:15	07:21	08:22
	15:47	16:44	17:46	19:51	20:53	21:50	22:07	21:26	20:12	18:52	16:35	15:44
2	08:48	08:11	07:06	06:44	05:29	04:34	04:30	05:16	06:18	07:18	07:23	08:24
	15:48	16:46	17:48	19:53	20:55	21:52	22:06	21:24	20:09	18:49	16:32	15:43
3	08:48	08:09	07:04	06:42	05:27	04:33	04:31	05:18	06:20	07:20	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:06	21:22	20:07	18:47	16:30	15:42
4	08:47	08:07	07:01	06:39	05:24	04:32	04:32	05:20	06:22	07:22	07:27	08:27
	15:51	16:51	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:41
5	08:47	08:05	06:59	06:36	05:22	04:31	04:33	05:22	06:24	07:24	07:29	08:28
	15:52	16:53	17:55	19:59	21:02	21:55	22:04	21:17	20:02	18:41	16:26	15:40
6	08:47	08:03	06:56	06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31	08:30
	15:54	16:55	17:57	20:02	21:04	21:57	22:04	21:15	19:59	18:39	16:24	15:40
7	08:46	08:01	06:53	06:31	05:18	04:29	04:35	05:26	06:28	07:28	07:34	08:31
	15:55	16:57	17:59	20:04	21:06	21:58	22:03	21:13	19:56	18:36	16:22	15:39
8	08:45	07:58	06:51	06:29	05:16	04:28	04:36	05:28	06:30	07:30	07:36	08:33
	15:57	16:59	18:01	20:06	21:08	21:59	22:02	21:11	19:54	18:33	16:20	15:39
9	08:45	07:56	06:48	06:26	05:13	04:27	04:37	05:30	06:32	07:32	07:38	08:34
	15:58	17:02	18:03	20:08	21:10	22:00	22:01	21:09	19:51	18:31	16:18	15:38
10	08:44	07:54	06:46	06:23	05:11	04:27	04:38	05:32	06:34	07:34	07:40	08:36
	16:00	17:04	18:05	20:10	21:12	22:01	22:00	21:06	19:48	18:28	16:16	15:38
11	08:43	07:52	06:43	06:21	05:09	04:26	04:40	05:34	06:36	07:36	07:42	08:37
	16:02	17:06	18:07	20:12	21:14	22:02	21:59	21:04	19:46	18:26	16:14	15:37
12	08:42	07:50	06:40	06:18	05:07	04:26	04:41	05:36	06:38	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:16	22:03	21:58	21:02	19:43	18:23	16:12	15:37
13	08:41	07:48	06:38	06:16	05:05	04:25	04:42	05:38	06:40	07:40	07:46	08:39
	16:05	17:11	18:12	20:16	21:18	22:04	21:57	20:59	19:40	18:20	16:10	15:37
14	08:40	07:45	06:35	06:13	05:03	04:25	04:44	05:40	06:42	07:42	07:49	08:40
	16:07	17:13	18:14	20:18	21:19	22:04	21:56	20:57	19:38	18:18	16:08	15:37
15	08:39	07:43	06:32	06:10	05:01	04:25	04:45	05:42	06:44	07:44	07:51	08:41
	16:09	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:15	16:06	15:37
16	08:38	07:41	06:30	06:08	04:59	04:24	04:47	05:44	06:46	07:46	07:53	08:42
	16:11	17:17	18:18	20:22	21:23	22:06	21:53	20:52	19:32	18:13	16:04	15:37
17	08:37	07:38	06:27	06:05	04:57	04:24	04:48	05:46	06:48	07:48	07:55	08:43
	16:12	17:20	18:20	20:24	21:25	22:06	21:52	20:50	19:29	18:10	16:03	15:37
18	08:35	07:36	06:24	06:03	04:56	04:24	04:50	05:48	06:49	07:51	07:57	08:44
	16:14	17:22	18:22	20:26	21:27	22:07	21:50	20:48	19:27	18:08	16:01	15:37
19	08:34	07:34	06:22	06:00	04:54	04:24	04:51	05:50	06:51	07:53	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:37
20	08:33	07:31	06:19	05:58	04:52	04:24	04:53	05:52	06:53	07:55	08:01	08:46
	16:18	17:26	18:26	20:31	21:31	22:07	21:47	20:43	19:21	18:03	15:58	15:37
21	08:31	07:29	06:16	05:55	04:50	04:24	04:55	05:54	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:33	21:32	22:08	21:46	20:40	19:19	18:00	15:56	15:38
22	08:30	07:26	06:14	05:53	04:49	04:24	04:56	05:56	06:57	07:59	08:05	08:47
	16:22	17:31	18:30	20:35	21:34	22:08	21:44	20:38	19:16	17:58	15:55	15:38
23	08:28	07:24	06:11	05:50	04:47	04:25	04:58	05:58	06:59	08:01	08:07	08:47
	16:24	17:33	18:33	20:37	21:36	22:08	21:42	20:35	19:13	17:56	15:53	15:39
24	08:27	07:21	06:08	05:48	04:46	04:25	05:00	06:00	07:01	08:03	08:09	08:48
	16:27	17:35	18:35	20:39	21:38	22:08	21:41	20:33	19:11	17:53	15:52	15:39
25	08:25	07:19	06:06	05:45	04:44	04:25	05:01	06:02	07:03	08:05	08:11	08:48
	16:29	17:37	18:37	20:41	21:39	22:08	21:39	20:30	19:08	17:51	15:51	15:40
26	08:23	07:16	06:03	05:43	04:43	04:26	05:03	06:04	07:05	08:08	08:13	08:48
	16:31	17:39	18:39	20:43	21:41	22:08	21:37	20:28	19:05	17:48	15:49	15:41
27	08:22	07:14	06:00	05:41	04:41	04:26	05:05	06:06	07:07	08:10	08:15	08:48
	16:33	17:42	18:41	20:45	21:43	22:08	21:35	20:25	19:03	17:46	15:48	15:42
28	08:20	07:11	05:58	05:38	04:40	04:27	05:07	06:08	07:09	08:12	08:17	08:49
	16:35	17:44	18:43	20:47	21:44	22:08	21:33	20:22	19:00	17:44	15:47	15:42
29	08:18		06:55	05:36	04:38	04:27	05:09	06:10	07:11	08:14	08:18	08:49
	16:37		19:45	20:49	21:46	22:07	21:32	20:20	18:57	17:41	15:46	15:43
30	08:16		06:52	05:33	04:37	04:28	05:11	06:12	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:47	22:07	21:30	20:17	18:55	17:39	15:45	15:44
31	08:15		06:50		04:36		05:12	06:14		07:18		08:49
	16:42		19:49		21:49		21:28	20:15		16:37		15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Jaundzelzava - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (451)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:29 22:07	05:14 21:26	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:52	04:29 22:06	05:16 21:24	06:17 20:09	07:17 18:49	07:23 16:32	08:24 15:42
3	08:48 15:49	08:09 16:48	07:04 17:50	06:42 19:55	05:26 20:57	04:32 21:53	04:30 22:06	05:18 21:21	06:19 20:07	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:07 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:26	08:28 15:40
6	08:46 15:53	08:03 16:55	06:56 17:56	06:34 20:01	05:20 21:03	04:29 21:57	04:33 22:04	05:24 21:15	06:25 20:01	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:26 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:28 21:11	06:29 19:53	07:30 18:33	07:36 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:08	05:13 21:09	04:27 22:00	04:37 22:01	05:30 21:08	06:31 19:51	07:32 18:31	07:38 16:17	08:34 15:38
10	08:44 16:00	07:54 17:04	06:45 18:05	06:23 20:10	05:11 21:11	04:26 22:01	04:38 22:00	05:32 21:06	06:33 19:48	07:34 18:28	07:40 16:15	08:36 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:03	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:38 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:10	08:39 15:36
14	08:40 16:06	07:45 17:13	06:35 18:13	06:13 20:18	05:03 21:19	04:25 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:55	06:43 19:35	07:44 18:15	07:51 16:06	08:41 15:36
16	08:38 16:10	07:40 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:13	07:53 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 19:27	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:49	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:31	04:24 22:07	04:53 21:47	05:51 20:42	06:53 19:21	07:55 18:03	08:01 15:58	08:45 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:30 16:22	07:26 17:30	06:14 18:30	05:52 20:35	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:58	08:05 15:55	08:47 15:38
23	08:28 16:24	07:24 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:24 22:08	04:58 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:38	04:25 22:08	04:59 21:41	05:59 20:32	07:01 19:10	08:03 17:53	08:09 15:52	08:48 15:39
25	08:25 16:28	07:19 17:37	06:06 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:08	08:05 17:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:39	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:22 16:33	07:14 17:41	06:00 18:41	05:40 20:45	04:41 21:43	04:26 22:08	05:05 21:35	06:05 20:25	07:07 19:02	08:09 16:46	08:15 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:58 18:43	05:38 20:47	04:39 21:44	04:26 22:08	05:07 21:33	06:07 20:22	07:09 19:00	08:12 16:43	08:16 15:47	08:49 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 18:57	08:14 16:41	08:18 15:46	08:49 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:30	06:11 20:17	07:13 18:54	08:16 16:39	08:20 15:44	08:49 15:44
31	08:14 16:41		06:50 19:49		04:35 21:49		05:12 21:28	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Jaundzitari - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,° (516)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December		
1	08:48 15:46	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	19:54 (AP2) 20:17 (AP2)	04:34 21:50	04:28 22:06	05:14 21:25	20:03 (AP2) 20:28 (AP2)	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	19:53 (AP2) 20:18 (AP2)	04:33 21:51	04:29 22:06	05:16 21:23	20:02 (AP2) 20:28 (AP2)	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	19:53 (AP2) 20:18 (AP2)	04:32 21:53	04:30 22:05	05:18 21:21	20:02 (AP2) 20:29 (AP2)	06:19 20:06	07:19 18:46	07:25 16:30	08:25 15:41
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	19:53 (AP2) 20:19 (AP2)	04:31 21:54	04:31 22:05	05:20 21:19	20:02 (AP2) 20:29 (AP2)	06:21 20:04	07:21 18:44	07:27 16:27	08:27 15:41
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	05:22 21:01	19:52 (AP2) 20:19 (AP2)	04:30 21:55	04:32 22:04	05:22 21:17	20:02 (AP2) 20:29 (AP2)	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	05:19 21:03	19:52 (AP2) 20:19 (AP2)	04:29 21:56	04:33 22:03	05:23 21:15	20:01 (AP2) 20:28 (AP2)	06:25 19:59	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	19:52 (AP2) 20:19 (AP2)	04:28 21:58	04:34 22:03	05:25 21:13	20:01 (AP2) 20:28 (AP2)	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	19:52 (AP2) 20:19 (AP2)	04:28 21:59	04:35 22:02	05:27 21:11	20:02 (AP2) 20:28 (AP2)	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	19:52 (AP2) 20:19 (AP2)	04:27 22:00	04:36 22:01	05:29 21:08	20:02 (AP2) 20:28 (AP2)	06:31 19:51	07:31 18:30	07:38 16:17	08:34 15:38
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	19:52 (AP2) 20:18 (AP2)	04:26 22:01	04:38 22:00	05:31 21:06	20:03 (AP2) 20:28 (AP2)	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	19:52 (AP2) 20:18 (AP2)	04:26 22:02	04:39 21:59	05:33 21:04	20:02 (AP2) 20:26 (AP2)	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 18:09	06:40 19:14	06:18 20:12	05:07 21:14	19:53 (AP2) 20:17 (AP2)	04:25 22:03	04:40 21:58	05:35 21:01	20:03 (AP2) 20:25 (AP2)	06:37 19:43	07:38 18:23	07:44 16:11	08:38 15:36
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	19:54 (AP2) 20:17 (AP2)	04:25 22:03	04:42 21:57	05:37 20:59	20:04 (AP2) 20:24 (AP2)	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:13 20:18	05:03 21:19	19:54 (AP2) 20:16 (AP2)	04:24 22:04	04:43 21:55	05:39 20:57	20:05 (AP2) 20:23 (AP2)	06:41 19:37	07:42 18:17	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	19:55 (AP2) 20:15 (AP2)	04:24 22:05	04:45 21:54	05:41 20:54	20:07 (AP2) 20:22 (AP2)	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:38 16:10	07:40 17:17	06:29 18:18	06:07 20:22	04:59 21:23	19:55 (AP2) 20:14 (AP2)	04:24 22:05	04:46 21:53	05:43 20:52	20:09 (AP2) 20:19 (AP2)	06:45 19:32	07:46 18:12	07:53 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	19:57 (AP2) 20:14 (AP2)	04:24 22:06	04:48 21:51	05:45 20:50	20:11 (AP2) 20:19 (AP2)	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	19:58 (AP2) 20:12 (AP2)	04:24 22:06	04:49 21:50	05:47 20:47	20:10 (AP2) 20:17 (AP2)	06:49 19:26	07:50 18:07	07:57 16:01	08:44 15:36
19	08:34 16:16	07:33 17:24	06:21 18:24	06:00 20:28	04:53 21:29	20:01 (AP2) 20:11 (AP2)	04:23 22:07	04:51 21:48	05:49 20:45	20:11 (AP2) 20:16 (AP2)	06:51 19:24	07:52 18:05	08:01 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:30	20:05 (AP2) 20:06 (AP2)	04:24 22:07	04:52 21:47	05:51 20:42	20:12 (AP2) 20:17 (AP2)	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	20:07 (AP2) 20:07 (AP2)	04:24 22:07	04:54 21:45	05:53 20:40	20:18 (AP2) 20:18 (AP2)	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	20:08 (AP2) 20:08 (AP2)	04:24 22:08	05:55 21:44	05:57 20:37	20:19 (AP2) 20:19 (AP2)	06:57 19:16	07:59 17:57	08:05 15:54	08:47 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	04:47 21:36	20:09 (AP2) 20:08 (AP2)	04:24 22:08	04:57 21:42	05:59 20:35	20:20 (AP2) 20:21 (AP2)	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:37	20:10 (AP2) 20:12 (AP2)	04:24 22:08	04:59 21:40	05:59 20:32	20:22 (AP2) 20:19 (AP2)	07:01 19:10	08:03 17:53	08:09 15:51	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:39	20:13 (AP2) 20:01 (AP2)	04:25 22:08	05:01 21:39	06:01 20:30	20:10 (AP2) 20:08 (AP2)	06:01 19:03	07:05 16:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	20:01 (AP2) 20:05 (AP2)	04:25 22:08	05:03 21:37	06:03 15	20:08 (AP2) 20:23 (AP2)	06:03 20:27	07:05 19:05	07:07 16:48	08:13 15:49
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	04:41 21:42	20:06 (AP2) 20:12 (AP2)	04:26 22:08	05:05 21:35	06:05 17	20:07 (AP2) 20:24 (AP2)	06:05 20:25	07:07 19:02	07:09 16:46	08:14 15:48
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	19:59 (AP2) 20:14 (AP2)	04:26 22:07	05:06 21:33	06:07 20	20:06 (AP2) 20:26 (AP2)	06:07 20:22	07:09 19:00	07:12 16:43	08:16 15:46
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	19:57 (AP2) 20:16 (AP2)	04:27 22:07	05:08 21:31	06:09 21	20:05 (AP2) 20:26 (AP2)	06:09 20:20	07:11 18:57	07:14 16:41	08:18 15:45
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	19:55 (AP2) 20:16 (AP2)	04:28 22:07	05:10 21:29	06:11 23	20:04 (AP2) 20:27 (AP2)	06:11 20:17	07:13 18:54	07:16 16:39	08:20 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		04:35 22:07	05:12 21:27	06:13 24	20:04 (AP2) 20:28 (AP2)	06:13 20:14	07:18 16:36	08:22 15:44	08:48 15:45
Potential sun hours	236	266	366	426	507		528	529	469		372	384	324	248
Total, worst case				66	436			139			0,52			217
Sun reduction				0,44	0,56			0,47						
Oper. time red.				1,00	1,00			1,00			1,00			
Wind dir. red.				1,00	1,00			1,00			1,00			
Total reduction				0,44	0,56			0,47			0,52			
Total, real				29	245			66			194			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Jaunie Grantkalni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (438)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:31	04:35	04:29	05:15	06:16	07:16	07:20	08:22
	15:48	16:44	17:46	19:51	20:53	21:50	22:06	21:25	20:12	18:52	16:35	15:44
2	08:48	08:11	07:06	06:45	05:29	04:34	04:30	05:17	06:18	07:18	07:23	08:23
	15:49	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:33	15:43
3	08:48	08:09	07:04	06:42	05:27	04:33	04:31	05:19	06:20	07:20	07:25	08:25
	15:50	16:49	17:50	19:55	20:57	21:53	22:05	21:21	20:07	18:47	16:30	15:42
4	08:47	08:07	07:01	06:39	05:25	04:32	04:32	05:21	06:22	07:22	07:27	08:27
	15:51	16:51	17:53	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:42
5	08:47	08:05	06:59	06:37	05:22	04:31	04:33	05:22	06:24	07:24	07:29	08:28
	15:53	16:53	17:55	19:59	21:01	21:55	22:04	21:17	20:02	18:41	16:26	15:41
6	08:46	08:03	06:56	06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31	08:30
	15:54	16:55	17:57	20:02	21:03	21:56	22:03	21:15	19:59	18:39	16:24	15:40
7	08:46	08:00	06:54	06:31	05:18	04:29	04:35	05:26	06:28	07:28	07:33	08:31
	15:56	16:58	17:59	20:04	21:05	21:57	22:02	21:13	19:56	18:36	16:22	15:40
8	08:45	07:58	06:51	06:29	05:16	04:29	04:36	05:28	06:30	07:30	07:36	08:33
	15:57	17:00	18:01	20:06	21:07	21:59	22:02	21:11	19:54	18:34	16:20	15:39
9	08:44	07:56	06:48	06:26	05:14	04:28	04:38	05:30	06:32	07:32	07:38	08:34
	15:59	17:02	18:03	20:08	21:09	22:00	22:01	21:08	19:51	18:31	16:18	15:39
10	08:43	07:54	06:46	06:24	05:12	04:27	04:39	05:32	06:34	07:34	07:40	08:35
	16:00	17:04	18:05	20:10	21:11	22:01	22:00	21:06	19:48	18:28	16:16	15:38
11	08:43	07:52	06:43	06:21	05:10	04:27	04:40	05:34	06:36	07:36	07:42	08:37
	16:02	17:06	18:08	20:12	21:13	22:01	21:59	21:04	19:46	18:26	16:14	15:38
12	08:42	07:50	06:40	06:18	05:08	04:26	04:41	05:36	06:38	07:38	07:44	08:38
	16:04	17:09	18:10	20:14	21:15	22:02	21:58	21:02	19:43	18:23	16:12	15:38
13	08:41	07:47	06:38	06:16	05:06	04:26	04:43	05:38	06:40	07:40	07:46	08:39
	16:06	17:11	18:12	20:16	21:17	22:03	21:56	20:59	19:40	18:21	16:10	15:37
14	08:40	07:45	06:35	06:13	05:04	04:25	04:44	05:40	06:42	07:42	07:48	08:40
	16:07	17:13	18:14	20:18	21:19	22:04	21:55	20:57	19:38	18:18	16:08	15:37
15	08:39	07:43	06:33	06:11	05:02	04:25	04:46	05:42	06:44	07:44	07:51	08:41
	16:09	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:16	16:07	15:37
16	08:37	07:41	06:30	06:08	05:00	04:25	04:47	05:44	06:46	07:46	07:53	08:42
	16:11	17:18	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:13	16:05	15:37
17	08:36	07:38	06:27	06:06	04:58	04:25	04:49	05:46	06:48	07:48	07:55	08:43
	16:13	17:20	18:20	20:24	21:25	22:06	21:51	20:50	19:30	18:11	16:03	15:37
18	08:35	07:36	06:25	06:03	04:56	04:25	04:50	05:48	06:50	07:51	07:57	08:44
	16:15	17:22	18:22	20:26	21:27	22:06	21:50	20:47	19:27	18:08	16:02	15:37
19	08:34	07:33	06:22	06:00	04:54	04:25	04:52	05:50	06:52	07:53	07:59	08:45
	16:17	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:06	16:00	15:38
20	08:32	07:31	06:19	05:58	04:53	04:25	04:53	05:52	06:54	07:55	08:01	08:45
	16:19	17:26	18:26	20:30	21:30	22:07	21:47	20:43	19:21	18:03	15:58	15:38
21	08:31	07:29	06:17	05:55	04:51	04:25	04:55	05:54	06:56	07:57	08:03	08:46
	16:21	17:29	18:28	20:33	21:32	22:07	21:45	20:40	19:19	18:01	15:57	15:38
22	08:29	07:26	06:14	05:53	04:49	04:25	04:57	05:56	06:58	07:59	08:05	08:46
	16:23	17:31	18:31	20:35	21:34	22:07	21:44	20:38	19:16	17:58	15:55	15:39
23	08:28	07:24	06:11	05:51	04:48	04:25	04:58	05:58	07:00	08:01	08:07	08:47
	16:25	17:33	18:33	20:37	21:36	22:08	21:42	20:35	19:13	17:56	15:54	15:39
24	08:26	07:21	06:09	05:48	04:46	04:26	05:00	06:00	07:02	08:03	08:09	08:47
	16:27	17:35	18:35	20:39	21:37	22:08	21:40	20:33	19:11	17:53	15:52	15:40
25	08:25	07:19	06:06	05:46	04:45	04:26	05:02	06:02	07:04	08:05	08:11	08:48
	16:29	17:37	18:37	20:41	21:39	22:08	21:39	20:30	19:08	16:51	15:51	15:41
26	08:23	07:16	06:03	05:43	04:43	04:26	05:04	06:04	07:06	08:07	08:13	08:48
	16:31	17:40	18:39	20:43	21:41	22:08	21:37	20:28	19:05	16:49	15:50	15:41
27	08:21	07:14	06:01	05:41	04:42	04:27	05:06	06:06	07:08	08:09	08:14	08:48
	16:33	17:42	18:41	20:45	21:42	22:07	21:35	20:25	19:03	16:46	15:49	15:42
28	08:20	07:11	05:58	05:38	04:40	04:27	05:07	06:08	07:10	08:12	08:16	08:48
	16:36	17:44	18:43	20:47	21:44	22:07	21:33	20:22	19:00	16:44	15:47	15:43
29	08:18		06:55	05:36	04:39	04:28	05:09	06:10	07:12	08:14	08:18	08:48
	16:38		19:45	20:49	21:45	22:07	21:31	20:20	18:57	16:42	15:46	15:44
30	08:16		06:53	05:34	04:38	04:29	05:11	06:12	07:14	08:16	08:20	08:48
	16:40		19:47	20:51	21:47	22:07	21:29	20:17	18:55	16:39	15:45	15:45
31	08:14		06:50		04:36		05:13	06:14		07:18		08:48
	16:42		19:49		21:48		21:27	20:15		16:37		15:46
Potential sun hours	236	266	366	426	507	527	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Jaunie Mozuli - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (414)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:14 21:26	06:16 20:12	07:15 18:52	07:20 16:35	08:22 15:44
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:16 21:24	06:18 20:09	07:17 18:49	07:23 16:32	08:23 15:43
3	08:48 15:50	08:09 16:48	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:18 21:21	06:20 20:07	07:19 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:53	06:59 17:55	06:36 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:01	07:24 18:41	07:29 16:26	08:28 15:40
6	08:46 15:54	08:03 16:55	06:56 17:57	06:34 20:01	05:20 21:03	04:30 21:57	04:34 22:03	05:24 21:15	06:26 20:01	07:26 18:41	07:31 16:26	08:30 15:40
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03	05:18 21:05	04:29 21:58	04:35 22:03	05:26 21:13	06:28 20:01	07:28 18:36	07:33 16:22	08:31 15:39
8	08:45 15:57	07:58 16:59	06:51 18:01	06:29 20:06	05:16 21:07	04:28 21:59	04:36 22:02	05:28 21:11	06:30 20:04	07:30 18:33	07:36 16:20	08:33 15:39
9	08:44 15:58	07:56 17:02	06:48 18:03	06:26 20:08	05:13 21:09	04:27 22:00	04:37 22:01	05:30 21:08	06:32 20:01	07:32 18:31	07:38 16:18	08:34 15:38
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:11 21:11	04:27 22:01	04:38 22:00	05:32 21:06	06:34 20:04	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:13	04:26 22:02	04:40 21:59	05:34 21:04	06:36 20:04	07:36 18:26	07:42 16:14	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:26 22:03	04:41 21:58	05:36 21:02	06:38 20:04	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 17:11	06:38 18:12	06:16 20:16	05:05 21:17	04:25 22:03	04:42 21:57	05:38 20:59	06:40 20:04	07:40 18:20	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 20:04	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:25 22:05	04:45 21:54	05:42 20:55	06:43 20:04	07:44 18:15	07:51 16:06	08:41 15:37
16	08:38 16:11	07:41 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:05	04:47 21:53	05:44 20:52	06:45 20:04	07:46 18:13	07:53 16:04	08:42 15:37
17	08:36 16:12	07:38 17:20	06:27 18:20	06:05 20:24	04:58 21:25	04:24 22:06	04:48 21:51	05:46 20:50	06:47 20:04	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:14	07:36 17:22	06:24 18:22	06:03 20:26	04:56 21:27	04:24 22:06	04:50 21:50	05:48 20:47	06:49 20:04	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:49	05:50 20:45	06:51 20:04	07:53 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:58 20:30	04:52 21:31	04:24 22:07	04:53 21:47	05:52 20:43	06:53 20:04	07:55 18:03	08:01 15:58	08:45 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:33	04:50 21:32	04:24 22:07	04:55 21:45	05:54 20:40	06:55 20:04	07:57 18:00	08:03 15:56	08:46 15:38
22	08:30 16:22	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:24 22:08	04:56 21:44	05:56 20:38	06:57 20:04	07:59 18:01	08:05 15:55	08:47 15:38
23	08:28 16:25	07:24 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:25 22:08	04:58 21:42	05:58 20:35	06:59 20:04	08:01 18:03	08:07 17:55	08:47 15:39
24	08:26 16:27	07:21 17:35	06:08 18:35	05:48 20:39	04:46 21:38	04:25 22:08	05:00 21:40	06:00 20:33	07:01 20:04	08:03 18:03	08:09 17:53	08:47 15:39
25	08:25 16:29	07:19 17:37	06:06 18:37	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:02 20:30	07:03 20:04	08:05 18:01	08:11 17:51	08:48 15:40
26	08:23 16:31	07:16 17:39	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:03 21:37	06:04 20:27	07:05 20:04	08:07 18:01	08:13 17:48	08:48 15:41
27	08:22 16:33	07:14 17:42	06:00 18:41	05:41 20:45	04:41 21:43	04:26 22:08	05:05 21:35	06:06 20:25	07:07 20:04	08:09 18:03	08:15 17:46	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 20:04	08:12 18:00	08:16 17:44	08:48 15:43
29	08:18 16:37		06:55 19:45	05:36 20:49	04:38 21:46	04:28 22:07	05:09 21:31	06:10 20:20	07:11 20:04	08:14 18:01	08:18 17:41	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:11 21:29	06:12 20:17	07:13 20:04	08:16 18:01	08:20 17:45	08:48 15:44
31	08:14 16:42		06:50 19:49		04:36 21:49		05:12 21:28	06:14 20:15	07:18 20:04			08:48 15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Jaunkaleji - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (583)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:27	15:41
5	08:47	08:04	06:58	06:36	05:22	04:30	04:32	05:22	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:55	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:39
8	08:45	07:58	06:50	06:28	05:15	04:28	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:26	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:38
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:05	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:13	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:08	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:45	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:24	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:01	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:37
20	08:32	07:31	06:19	05:57	04:52	04:24	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:35	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:40
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:41	04:26	05:05	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:35	17:43	18:42	20:47	21:44	22:07	21:33	20:22	19:00	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:37	04:28	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Jaunkaleji 1 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (581)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:27	15:41
5	08:47	08:04	06:58	06:36	05:22	04:30	04:32	05:22	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:55	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:39
8	08:45	07:58	06:50	06:28	05:15	04:28	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:26	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:38
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:05	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:13	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:08	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:45	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:24	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:01	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:37
20	08:32	07:31	06:19	05:57	04:52	04:24	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:35	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:40
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:41	04:26	05:05	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:35	17:43	18:42	20:47	21:44	22:07	21:33	20:22	19:00	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:37	04:28	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Jaunlauki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (504)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:46	08:12 16:43	07:08 17:45	06:47 19:51	05:30 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:51	07:20 16:34	08:22 15:43
2	08:48 15:47	08:10 16:45	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:06	07:19 18:46	07:24 16:30	08:25 15:41
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	07:27 16:27	08:27 15:40
5	08:47 15:51	08:04 16:52	06:58 17:54	06:36 19:59	05:21 21:01	04:30 21:55	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:23 21:15	06:25 19:58	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:38
8	08:45 15:56	07:58 16:59	06:50 18:00	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:10	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:25 20:07	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 19:50	07:31 18:30	07:37 16:17	08:34 15:37
10	08:43 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:11	05:09 21:13	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:35 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:02	04:40 21:58	05:35 21:01	06:37 19:42	07:38 18:22	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17	07:48 16:07	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:17	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:19	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:00	08:44 15:36
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:36
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:51 21:30	04:23 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:23 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:56 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:57	08:05 15:54	08:46 15:38
23	08:28 16:24	07:23 17:32	06:11 18:32	05:50 20:36	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:34	06:08 18:34	05:47 20:38	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:53	08:09 15:51	08:47 15:39
25	08:25 16:28	07:18 17:37	06:05 18:36	05:45 20:41	04:43 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:07	08:05 16:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:32	07:13 17:41	06:00 18:40	05:40 20:45	04:40 21:42	04:26 22:08	05:04 21:35	06:05 20:25	07:07 19:02	08:09 16:45	08:14 15:47	08:48 15:41
28	08:20 16:34	07:11 17:43	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 18:59	08:11 16:43	08:16 15:46	08:48 15:42
29	08:18 16:37		06:55 19:44	05:35 20:49	04:38 21:45	04:27 22:07	05:08 21:31	06:09 20:19	07:11 18:57	08:13 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:38	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:48		05:12 21:27	06:13 20:14	07:18 16:36			08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Jaunozoli - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (541)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Jaunstikani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (421)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:31	04:35	04:29	05:14	06:16	07:15	07:20	08:22
	15:47	16:44	17:46	19:51	20:53	21:50	22:06	21:25	20:12	18:52	16:35	15:44
2	08:48	08:10	07:06	06:44	05:29	04:34	04:30	05:16	06:18	07:17	07:22	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:43
3	08:48	08:09	07:04	06:42	05:27	04:33	04:31	05:18	06:20	07:19	07:25	08:25
	15:50	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:07	18:46	16:30	15:42
4	08:47	08:07	07:01	06:39	05:24	04:32	04:32	05:20	06:22	07:21	07:27	08:27
	15:51	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:41
5	08:47	08:04	06:58	06:36	05:22	04:31	04:33	05:22	06:24	07:23	07:29	08:28
	15:52	16:53	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:26	15:40
6	08:46	08:02	06:56	06:34	05:20	04:30	04:34	05:24	06:26	07:25	07:31	08:30
	15:54	16:55	17:57	20:01	21:03	21:56	22:03	21:15	19:59	18:39	16:24	15:40
7	08:46	08:00	06:53	06:31	05:18	04:29	04:35	05:26	06:28	07:28	07:33	08:31
	15:55	16:57	17:59	20:03	21:05	21:57	22:02	21:13	19:56	18:36	16:22	15:39
8	08:45	07:58	06:51	06:29	05:16	04:28	04:36	05:28	06:30	07:30	07:35	08:33
	15:57	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:20	15:39
9	08:44	07:56	06:48	06:26	05:13	04:28	04:37	05:30	06:32	07:32	07:38	08:34
	15:58	17:02	18:03	20:08	21:09	22:00	22:01	21:08	19:51	18:31	16:18	15:38
10	08:43	07:54	06:45	06:23	05:11	04:27	04:38	05:32	06:34	07:34	07:40	08:35
	16:00	17:04	18:05	20:10	21:11	22:01	22:00	21:06	19:48	18:28	16:16	15:38
11	08:43	07:52	06:43	06:21	05:09	04:26	04:40	05:34	06:36	07:36	07:42	08:37
	16:02	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:26	16:14	15:37
12	08:42	07:50	06:40	06:18	05:07	04:26	04:41	05:36	06:38	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:02	19:43	18:23	16:12	15:37
13	08:41	07:47	06:38	06:15	05:05	04:25	04:42	05:38	06:39	07:40	07:46	08:39
	16:05	17:11	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:10	15:37
14	08:40	07:45	06:35	06:13	05:03	04:25	04:44	05:40	06:41	07:42	07:48	08:40
	16:07	17:13	18:14	20:18	21:19	22:04	21:55	20:57	19:37	18:18	16:08	15:37
15	08:39	07:43	06:32	06:10	05:01	04:25	04:45	05:42	06:43	07:44	07:50	08:41
	16:09	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:15	16:06	15:37
16	08:37	07:40	06:30	06:08	04:59	04:24	04:47	05:44	06:45	07:46	07:53	08:42
	16:11	17:17	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:13	16:04	15:37
17	08:36	07:38	06:27	06:05	04:58	04:24	04:48	05:46	06:47	07:48	07:55	08:43
	16:13	17:20	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:03	15:37
18	08:35	07:36	06:24	06:03	04:56	04:24	04:50	05:48	06:49	07:50	07:57	08:44
	16:14	17:22	18:22	20:26	21:27	22:06	21:50	20:47	19:27	18:08	16:01	15:37
19	08:34	07:33	06:22	06:00	04:54	04:24	04:51	05:50	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:37
20	08:32	07:31	06:19	05:58	04:52	04:24	04:53	05:52	06:53	07:55	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:03	15:58	15:38
21	08:31	07:29	06:16	05:55	04:50	04:24	04:55	05:54	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:19	18:00	15:56	15:38
22	08:29	07:26	06:14	05:53	04:49	04:24	04:56	05:56	06:57	07:59	08:05	08:46
	16:22	17:31	18:30	20:34	21:34	22:07	21:44	20:37	19:16	17:58	15:55	15:38
23	08:28	07:24	06:11	05:50	04:47	04:25	04:58	05:58	06:59	08:01	08:07	08:47
	16:25	17:33	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:39
24	08:26	07:21	06:08	05:48	04:46	04:25	05:00	06:00	07:01	08:03	08:09	08:47
	16:27	17:35	18:34	20:39	21:37	22:08	21:40	20:32	19:11	17:53	15:52	15:39
25	08:25	07:19	06:06	05:45	04:44	04:25	05:02	06:02	07:03	08:05	08:11	08:48
	16:29	17:37	18:37	20:41	21:39	22:08	21:39	20:30	19:08	17:51	15:51	15:40
26	08:23	07:16	06:03	05:43	04:43	04:26	05:03	06:04	07:05	08:07	08:13	08:48
	16:31	17:39	18:39	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:41
27	08:21	07:14	06:00	05:41	04:41	04:26	05:05	06:06	07:07	08:09	08:14	08:48
	16:33	17:42	18:41	20:45	21:42	22:07	21:35	20:25	19:02	16:46	15:48	15:42
28	08:20	07:11	05:58	05:38	04:40	04:27	05:07	06:08	07:09	08:12	08:16	08:48
	16:35	17:44	18:43	20:47	21:44	22:07	21:33	20:22	19:00	16:44	15:47	15:43
29	08:18		06:55	05:36	04:38	04:28	05:09	06:10	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:45	22:07	21:31	20:20	18:57	16:41	15:46	15:44
30	08:16		06:52	05:33	04:37	04:28	05:11	06:12	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:45	15:45
31	08:14		06:50		04:36		05:12	06:14		07:18		08:48
	16:42		19:49		21:48		21:27	20:14		16:37		15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Jaunstikani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (589)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:31	04:35	04:29	05:14	06:16	07:15	07:20	08:22
	15:47	16:44	17:46	19:51	20:53	21:50	22:06	21:25	20:12	18:52	16:35	15:44
2	08:48	08:10	07:06	06:44	05:29	04:34	04:30	05:16	06:18	07:17	07:23	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:43
3	08:48	08:09	07:04	06:42	05:27	04:33	04:31	05:18	06:20	07:19	07:25	08:25
	15:50	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:07	18:47	16:30	15:42
4	08:47	08:07	07:01	06:39	05:24	04:32	04:32	05:20	06:22	07:21	07:27	08:27
	15:51	16:51	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:41
5	08:47	08:05	06:59	06:36	05:22	04:31	04:33	05:22	06:24	07:23	07:29	08:28
	15:52	16:53	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:26	15:40
6	08:46	08:02	06:56	06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31	08:30
	15:54	16:55	17:57	20:01	21:03	21:56	22:03	21:15	19:59	18:39	16:24	15:40
7	08:46	08:00	06:53	06:31	05:18	04:29	04:35	05:26	06:28	07:28	07:33	08:31
	15:55	16:57	17:59	20:03	21:05	21:58	22:02	21:13	19:56	18:36	16:22	15:39
8	08:45	07:58	06:51	06:29	05:16	04:28	04:36	05:28	06:30	07:30	07:35	08:33
	15:57	16:59	18:01	20:06	21:07	21:59	22:02	21:11	19:53	18:33	16:20	15:39
9	08:44	07:56	06:48	06:26	05:13	04:28	04:37	05:30	06:32	07:32	07:38	08:34
	15:58	17:02	18:03	20:08	21:09	22:00	22:01	21:08	19:51	18:31	16:18	15:38
10	08:43	07:54	06:46	06:23	05:11	04:27	04:38	05:32	06:34	07:34	07:40	08:35
	16:00	17:04	18:05	20:10	21:11	22:01	22:00	21:06	19:48	18:28	16:16	15:38
11	08:43	07:52	06:43	06:21	05:09	04:26	04:40	05:34	06:36	07:36	07:42	08:37
	16:02	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:26	16:14	15:37
12	08:42	07:50	06:40	06:18	05:07	04:26	04:41	05:36	06:38	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:02	19:43	18:23	16:12	15:37
13	08:41	07:47	06:38	06:16	05:05	04:25	04:42	05:38	06:40	07:40	07:46	08:39
	16:05	17:11	18:12	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:10	15:37
14	08:40	07:45	06:35	06:13	05:03	04:25	04:44	05:40	06:41	07:42	07:48	08:40
	16:07	17:13	18:14	20:18	21:19	22:04	21:55	20:57	19:37	18:18	16:08	15:37
15	08:39	07:43	06:32	06:10	05:01	04:25	04:45	05:42	06:43	07:44	07:50	08:41
	16:09	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:15	16:06	15:37
16	08:37	07:40	06:30	06:08	04:59	04:24	04:47	05:44	06:45	07:46	07:53	08:42
	16:11	17:17	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:13	16:05	15:37
17	08:36	07:38	06:27	06:05	04:58	04:24	04:48	05:46	06:47	07:48	07:55	08:43
	16:13	17:20	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:03	15:37
18	08:35	07:36	06:24	06:03	04:56	04:24	04:50	05:48	06:49	07:50	07:57	08:44
	16:14	17:22	18:22	20:26	21:27	22:06	21:50	20:47	19:27	18:08	16:01	15:37
19	08:34	07:33	06:22	06:00	04:54	04:24	04:51	05:50	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	16:00	15:37
20	08:32	07:31	06:19	05:58	04:52	04:24	04:53	05:52	06:53	07:55	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:03	15:58	15:38
21	08:31	07:29	06:16	05:55	04:50	04:24	04:55	05:54	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:19	18:00	15:56	15:38
22	08:29	07:26	06:14	05:53	04:49	04:25	04:56	05:56	06:57	07:59	08:05	08:46
	16:22	17:31	18:30	20:35	21:34	22:07	21:44	20:37	19:16	17:58	15:55	15:38
23	08:28	07:24	06:11	05:50	04:47	04:25	04:58	05:58	06:59	08:01	08:07	08:47
	16:25	17:33	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:39
24	08:26	07:21	06:08	05:48	04:46	04:25	05:00	06:00	07:01	08:03	08:09	08:47
	16:27	17:35	18:34	20:39	21:37	22:08	21:40	20:32	19:11	17:53	15:52	15:39
25	08:25	07:19	06:06	05:45	04:44	04:25	05:02	06:02	07:03	08:05	08:11	08:48
	16:29	17:37	18:37	20:41	21:39	22:08	21:39	20:30	19:08	17:51	15:51	15:40
26	08:23	07:16	06:03	05:43	04:43	04:26	05:03	06:04	07:05	08:07	08:13	08:48
	16:31	17:39	18:39	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:41
27	08:21	07:14	06:00	05:41	04:41	04:26	05:05	06:06	07:07	08:09	08:14	08:48
	16:33	17:42	18:41	20:45	21:42	22:07	21:35	20:25	19:02	16:46	15:48	15:42
28	08:20	07:11	05:58	05:38	04:40	04:27	05:07	06:08	07:09	08:12	08:16	08:48
	16:35	17:44	18:43	20:47	21:44	22:07	21:33	20:22	19:00	16:44	15:47	15:43
29	08:18		06:55	05:36	04:38	04:28	05:09	06:10	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	15:46	15:44
30	08:16		06:52	05:33	04:37	04:28	05:11	06:12	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:45	15:45
31	08:14		06:50		04:36		05:13	06:14		07:18		08:48
	16:42		19:49		21:48		21:27	20:15		16:37		15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Jaunares - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (437)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:13	07:09	06:47	05:31	04:35	04:29	05:15	06:16	07:16	07:20	08:22
	15:48	16:44	17:46	19:51	20:53	21:50	22:06	21:26	20:12	18:52	16:35	15:44
2	08:48	08:11	07:06	06:45	05:29	04:34	04:30	05:17	06:18	07:18	07:23	08:23
	15:49	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:33	15:43
3	08:48	08:09	07:04	06:42	05:27	04:33	04:31	05:19	06:20	07:20	07:25	08:25
	15:50	16:49	17:50	19:55	20:57	21:53	22:05	21:21	20:07	18:47	16:30	15:42
4	08:47	08:07	07:01	06:39	05:25	04:32	04:32	05:21	06:22	07:22	07:27	08:27
	15:51	16:51	17:53	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:42
5	08:47	08:05	06:59	06:37	05:22	04:31	04:33	05:22	06:24	07:24	07:29	08:28
	15:53	16:53	17:55	19:59	21:01	21:55	22:04	21:17	20:02	18:41	16:26	15:41
6	08:46	08:03	06:56	06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31	08:30
	15:54	16:55	17:57	20:02	21:03	21:56	22:03	21:15	19:59	18:39	16:24	15:40
7	08:46	08:01	06:54	06:31	05:18	04:29	04:35	05:26	06:28	07:28	07:33	08:31
	15:56	16:58	17:59	20:04	21:05	21:58	22:03	21:13	19:56	18:36	16:22	15:40
8	08:45	07:58	06:51	06:29	05:16	04:29	04:36	05:28	06:30	07:30	07:36	08:33
	15:57	17:00	18:01	20:06	21:07	21:59	22:02	21:11	19:54	18:34	16:20	15:39
9	08:44	07:56	06:48	06:26	05:14	04:28	04:38	05:30	06:32	07:32	07:38	08:34
	15:59	17:02	18:03	20:08	21:09	22:00	22:01	21:08	19:51	18:31	16:18	15:39
10	08:44	07:54	06:46	06:24	05:12	04:27	04:39	05:32	06:34	07:34	07:40	08:35
	16:00	17:04	18:05	20:10	21:11	22:01	22:00	21:06	19:48	18:28	16:16	15:38
11	08:43	07:52	06:43	06:21	05:10	04:27	04:40	05:34	06:36	07:36	07:42	08:37
	16:02	17:06	18:08	20:12	21:13	22:02	21:59	21:04	19:46	18:26	16:14	15:38
12	08:42	07:50	06:40	06:18	05:08	04:26	04:41	05:36	06:38	07:38	07:44	08:38
	16:04	17:09	18:10	20:14	21:15	22:02	21:58	21:02	19:43	18:23	16:12	15:38
13	08:41	07:47	06:38	06:16	05:06	04:26	04:43	05:38	06:40	07:40	07:46	08:39
	16:06	17:11	18:12	20:16	21:17	22:03	21:56	20:59	19:40	18:21	16:10	15:37
14	08:40	07:45	06:35	06:13	05:04	04:25	04:44	05:40	06:42	07:42	07:48	08:40
	16:07	17:13	18:14	20:18	21:19	22:04	21:55	20:57	19:38	18:18	16:08	15:37
15	08:39	07:43	06:33	06:11	05:02	04:25	04:46	05:42	06:44	07:44	07:51	08:41
	16:09	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:16	16:07	15:37
16	08:38	07:41	06:30	06:08	05:00	04:25	04:47	05:44	06:46	07:46	07:53	08:42
	16:11	17:18	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:13	16:05	15:37
17	08:36	07:38	06:27	06:06	04:58	04:25	04:49	05:46	06:48	07:48	07:55	08:43
	16:13	17:20	18:20	20:24	21:25	22:06	21:51	20:50	19:30	18:11	16:03	15:37
18	08:35	07:36	06:25	06:03	04:56	04:25	04:50	05:48	06:50	07:51	07:57	08:44
	16:15	17:22	18:22	20:26	21:27	22:06	21:50	20:47	19:27	18:08	16:02	15:37
19	08:34	07:34	06:22	06:01	04:54	04:25	04:52	05:50	06:52	07:53	07:59	08:45
	16:17	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:06	16:00	15:38
20	08:32	07:31	06:19	05:58	04:53	04:25	04:53	05:52	06:54	07:55	08:01	08:45
	16:19	17:26	18:26	20:31	21:30	22:07	21:47	20:43	19:22	18:03	15:58	15:38
21	08:31	07:29	06:17	05:56	04:51	04:25	04:55	05:54	06:56	07:57	08:03	08:46
	16:21	17:29	18:28	20:33	21:32	22:07	21:45	20:40	19:19	18:01	15:57	15:38
22	08:30	07:26	06:14	05:53	04:49	04:25	04:57	05:56	06:58	07:59	08:05	08:46
	16:23	17:31	18:31	20:35	21:34	22:07	21:44	20:38	19:16	17:58	15:55	15:39
23	08:28	07:24	06:11	05:51	04:48	04:25	04:58	05:58	07:00	08:01	08:07	08:47
	16:25	17:33	18:33	20:37	21:36	22:08	21:42	20:35	19:13	17:56	15:54	15:39
24	08:26	07:21	06:09	05:48	04:46	04:26	05:00	06:00	07:02	08:03	08:09	08:47
	16:27	17:35	18:35	20:39	21:37	22:08	21:40	20:33	19:11	17:53	15:52	15:40
25	08:25	07:19	06:06	05:46	04:45	04:26	05:02	06:02	07:04	08:05	08:11	08:48
	16:29	17:37	18:37	20:41	21:39	22:08	21:39	20:30	19:08	17:51	15:51	15:41
26	08:23	07:16	06:03	05:43	04:43	04:26	05:04	06:04	07:06	08:07	08:13	08:48
	16:31	17:40	18:39	20:43	21:41	22:08	21:37	20:28	19:05	17:49	15:50	15:41
27	08:22	07:14	06:01	05:41	04:42	04:27	05:06	06:06	07:08	08:09	08:15	08:48
	16:33	17:42	18:41	20:45	21:42	22:07	21:35	20:25	19:03	17:46	15:49	15:42
28	08:20	07:11	05:58	05:38	04:40	04:27	05:07	06:08	07:10	08:12	08:16	08:48
	16:36	17:44	18:43	20:47	21:44	22:07	21:33	20:22	19:00	17:44	15:47	15:43
29	08:18		06:55	05:36	04:39	04:28	05:09	06:10	07:12	08:14	08:18	08:48
	16:38		19:45	20:49	21:46	22:07	21:31	20:20	18:57	17:42	15:46	15:44
30	08:16		06:53	05:34	04:38	04:29	05:11	06:12	07:14	08:16	08:20	08:48
	16:40		19:47	20:51	21:47	22:07	21:29	20:17	18:55	17:39	15:45	15:45
31	08:14		06:50		04:36		05:13	06:14		07:18		08:48
	16:42		19:49		21:49		21:28	20:15		16:37		15:46
Potential sun hours	236	266	366	426	507	527	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Jaurini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (572)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:29 22:06	05:14 21:25	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:07	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:55	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:24 21:15	06:25 20:01	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:26 21:13	06:27 20:01	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:28 21:11	06:29 20:01	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	04:27 22:00	04:37 22:01	05:29 21:08	06:31 20:01	07:31 18:30	07:38 16:17	08:34 15:38
10	08:43 15:59	07:54 17:04	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 20:01	07:34 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 20:01	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:02	04:40 21:58	05:35 21:01	06:37 20:01	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:37 20:59	06:39 20:01	07:40 18:20	07:46 16:10	08:39 15:36
14	08:40 16:06	07:45 17:13	06:35 18:13	06:13 20:18	05:03 21:19	04:25 22:04	04:43 21:55	05:39 20:57	06:41 20:01	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:54	06:43 20:01	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:18	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 20:01	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 20:01	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 20:01	07:50 18:07	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:21 18:24	06:00 20:28	04:53 21:29	04:24 22:07	04:51 21:48	05:49 20:45	06:51 20:01	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:30	04:24 22:07	04:53 21:47	05:51 20:42	06:53 20:01	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 20:01	07:57 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 20:01	07:59 17:58	08:05 15:54	08:46 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	04:47 21:36	04:24 22:08	04:58 21:42	05:57 20:35	06:59 20:01	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:37	04:25 22:08	04:59 21:40	05:59 20:32	07:01 20:01	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 20:01	08:05 17:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 20:01	08:07 17:48	08:13 15:49	08:48 15:40
27	08:21 16:33	07:14 17:41	06:00 18:40	05:40 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:05 20:25	07:07 20:01	08:09 17:46	08:14 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 20:01	08:12 17:43	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 18:57	08:14 17:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 17:39	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Jumiš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (510)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:24	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:10	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:25	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:18	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Kalna Driva - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (594)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:24	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:27	15:41
5	08:47	08:04	06:58	06:36	05:22	04:30	04:32	05:22	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:55	16:57	17:58	20:03	21:05	21:58	22:02	21:13	19:56	18:36	16:21	15:39
8	08:45	07:58	06:50	06:28	05:15	04:28	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:10	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:26	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:38
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:42	18:23	16:11	15:37
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:05	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:13	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:08	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:45	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:24	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:01	15:36
19	08:34	07:33	06:21	06:00	04:53	04:24	04:51	05:49	06:51	07:52	07:59	08:44
	16:16	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:37
20	08:32	07:31	06:19	05:57	04:52	04:24	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:07	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:35	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:53	15:52	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:40
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:41	04:26	05:05	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:07	21:35	20:25	19:02	16:45	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:35	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:45	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:37	04:28	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:48		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Kalnbirzes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (571)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:06	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:55	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:24 21:15	06:25 20:01	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 20:01	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:27 21:11	06:29 20:01	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 20:01	07:31 18:30	07:38 16:17	08:34 15:38
10	08:43 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 20:01	07:34 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 20:01	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:02	04:40 21:58	05:35 21:01	06:37 20:01	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:37 20:59	06:39 20:01	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:13 20:18	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 20:01	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:54	06:43 20:01	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:18	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 20:01	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 20:01	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 20:01	07:50 18:07	07:57 16:01	08:44 15:36
19	08:34 16:16	07:33 17:24	06:21 18:24	06:00 20:28	04:53 21:29	04:24 22:07	04:51 21:48	05:49 20:45	06:51 20:01	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:30	04:24 22:07	04:52 21:47	05:51 20:42	06:53 20:01	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 20:01	07:57 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 20:01	07:59 17:58	08:05 15:54	08:46 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	04:47 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 20:01	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 20:01	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 20:01	08:05 17:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 20:01	08:07 17:48	08:13 15:49	08:48 15:40
27	08:21 16:33	07:14 17:41	06:00 18:40	05:40 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:05 20:25	07:07 20:01	08:09 17:46	08:14 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 20:01	08:12 17:43	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 20:01	08:14 17:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 17:39	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Kalnieši 2 (kad. apz. 76740010016001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (465) Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January			February			March			April	May	June
1	08:49		10:29 (JU1)	08:13		15:05 (O6)	07:09		08:04 (Pr25)	06:47	05:31	04:34
	15:46	89	14:07 (Pr12)	16:43	35	15:40 (O6)	17:46	11	08:15 (Pr25)	19:51	20:53	21:50
2	08:48		10:29 (JU1)	08:11		15:05 (O6)	07:06		08:08 (Pr25)	06:44	05:28	04:33
	15:48	89	14:07 (Pr12)	16:46	36	15:41 (O6)	17:48	2	08:10 (Pr25)	19:53	20:55	21:52
3	08:48		10:31 (JU1)	08:09		15:04 (O6)	07:04			06:42	05:26	04:32
	15:49	86	14:08 (Pr12)	16:48	38	15:42 (O6)	17:50			19:55	20:57	21:53
4	08:48		10:32 (JU1)	08:07		15:04 (O6)	07:01			06:39	05:24	04:31
	15:50	85	14:08 (Pr12)	16:50	39	15:43 (O6)	17:52			19:57	21:00	21:54
5	08:47		10:33 (JU1)	08:05		15:03 (O6)	06:59			06:36	05:22	04:30
	15:52	82	14:08 (Pr12)	16:52	40	15:43 (O6)	17:54			19:59	21:02	21:56
6	08:47		10:35 (JU1)	08:03		15:03 (O6)	06:56			06:34	05:19	04:29
	15:53	80	14:09 (Pr12)	16:55	41	15:44 (O6)	17:56			20:01	21:04	21:57
7	08:46		10:37 (JU1)	08:01		15:03 (O6)	06:53			06:31	05:17	04:28
	15:55	75	14:09 (Pr12)	16:57	42	15:45 (O6)	17:59			20:03	21:06	21:58
8	08:45		12:19 (Pr11)	07:58		15:03 (O6)	06:51			06:28	05:15	04:28
	15:56	68	14:09 (Pr12)	16:59	43	15:46 (O6)	18:01			20:06	21:08	21:59
9	08:45		12:20 (Pr11)	07:56		15:02 (O6)	06:48			06:26	05:13	04:27
	15:58	66	14:09 (Pr12)	17:01	43	15:45 (O6)	18:03			20:08	21:10	22:00
10	08:44		12:21 (Pr11)	07:54		15:02 (O6)	06:45			06:23	05:11	04:26
	15:59	65	14:09 (Pr12)	17:04	44	15:46 (O6)	18:05			20:10	21:12	22:01
11	08:43		12:21 (Pr11)	07:52		15:03 (O6)	06:43			06:20	05:09	04:26
	16:01	64	14:09 (Pr12)	17:06	43	15:46 (O6)	18:07			20:12	21:14	22:02
12	08:42		12:21 (Pr11)	07:50		15:02 (O6)	06:40			06:18	05:07	04:25
	16:03	62	14:08 (Pr12)	17:08	44	15:46 (O6)	18:09			20:14	21:16	22:03
13	08:41		12:22 (Pr11)	07:47		15:03 (O6)	06:38			06:15	05:05	04:25
	16:05	60	14:08 (Pr12)	17:10	43	15:46 (O6)	18:11			20:16	21:18	22:04
14	08:40		12:23 (Pr11)	07:45		15:02 (O6)	06:35			06:13	05:03	04:24
	16:06	58	14:08 (Pr12)	17:13	43	15:45 (O6)	18:13			20:18	21:20	22:04
15	08:39		12:24 (Pr11)	07:43		15:03 (O6)	06:32			06:10	05:01	04:24
	16:08	53	14:06 (Pr12)	17:15	43	15:46 (O6)	18:16			20:20	21:21	22:05
16	08:38		12:25 (Pr11)	07:41		08:08 (Pr25)	06:30			06:08	04:59	04:24
	16:10	51	14:06 (Pr12)	17:17	49	15:45 (O6)	18:18			20:22	21:23	22:06
17	08:37		12:25 (Pr11)	07:38		08:06 (Pr25)	06:27			06:05	04:57	04:24
	16:12	46	14:04 (Pr12)	17:19	53	15:45 (O6)	18:20			20:24	21:25	22:06
18	08:35		12:27 (Pr11)	07:36		08:03 (Pr25)	06:24			06:02	04:55	04:24
	16:14	36	14:01 (Pr12)	17:21	55	15:43 (O6)	18:22			20:26	21:27	22:07
19	08:34		12:28 (Pr11)	07:33		08:02 (Pr25)	06:22			06:00	04:53	04:23
	16:16	31	12:59 (Pr11)	17:24	55	15:43 (O6)	18:24			20:28	21:29	22:07
20	08:33		12:29 (Pr11)	07:31		08:01 (Pr25)	06:19			05:57	04:52	04:24
	16:18	29	12:58 (Pr11)	17:26	56	15:42 (O6)	18:26			20:31	21:31	22:07
21	08:31		12:31 (Pr11)	07:29		08:01 (Pr25)	06:16			05:55	04:50	04:24
	16:20	27	12:58 (Pr11)	17:28	54	15:41 (O6)	18:28			20:33	21:33	22:08
22	08:30		12:32 (Pr11)	07:26		08:00 (Pr25)	06:14			05:52	04:48	04:24
	16:22	25	12:57 (Pr11)	17:30	51	15:39 (O6)	18:30			20:35	21:34	22:08
23	08:28		12:34 (Pr11)	07:24		08:00 (Pr25)	06:11			05:50	04:47	04:24
	16:24	21	12:55 (Pr11)	17:33	49	15:38 (O6)	18:32			20:37	21:36	22:08
24	08:27		12:36 (Pr11)	07:21		08:00 (Pr25)	06:08			05:47	04:45	04:24
	16:26	17	12:53 (Pr11)	17:35	43	15:35 (O6)	18:34			20:39	21:38	22:08
25	08:25		12:39 (Pr11)	07:19		08:00 (Pr25)	06:06			05:45	04:44	04:25
	16:28	22	15:26 (O6)	17:37	37	15:32 (O6)	18:36			20:41	21:40	22:08
26	08:23		15:13 (O6)	17:16		08:01 (Pr25)	06:03			05:43	04:42	04:25
	16:30	18	15:31 (O6)	17:39	23	15:26 (O6)	18:39			20:43	21:41	22:08
27	08:22		15:12 (O6)	07:14		08:01 (Pr25)	06:00			05:40	04:41	04:26
	16:33	21	15:33 (O6)	17:41	18	08:19 (Pr25)	18:41			20:45	21:43	22:08
28	08:20		15:10 (O6)	07:11		08:03 (Pr25)	05:58			05:38	04:39	04:26
	16:35	25	15:35 (O6)	17:43	15	08:18 (Pr25)	18:43			20:47	21:44	22:08
29	08:18		15:09 (O6)				06:55			05:35	04:38	04:27
	16:37	28	15:37 (O6)				19:45			20:49	21:46	22:08
30	08:16		15:07 (O6)				06:52			05:33	04:37	04:28
	16:39	30	15:37 (O6)				19:47			20:51	21:47	22:07
31	08:15		15:06 (O6)				06:50				04:35	
	16:41	33	15:39 (O6)				19:49				21:49	
Potential sun hours	236			266			366			426	507	528
Total, worst case	1542			1175			13					
Sun reduction	0,13			0,23			0,39					
Oper. time red.	1,00			1,00			1,00					
Wind dir. red.	1,00			1,00			1,00					
Total reduction	0,13			0,23			0,39					
Total, real	207			265			5					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Kalnieši 2 (kad. apz. 76740010016001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (465) Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October		November		December	
1	04:28 22:07	05:14 21:26	06:15 20:12	07:15 18:52		07:21 16:34	14:32 (O6) 15:15 (O6)	08:22 15:43	12:03 (Pr11) 13:50 (Pr12)
2	04:29 22:06	05:16 21:24	06:17 20:09	07:17 18:49		07:23 16:32	14:32 (O6) 15:15 (O6)	08:24 15:42	12:03 (Pr11) 13:51 (Pr12)
3	04:30 22:06	05:18 21:22	06:19 20:07	07:19 18:46		07:25 16:30	14:33 (O6) 15:15 (O6)	08:25 15:41	12:03 (Pr11) 13:52 (Pr12)
4	04:31 22:05	05:20 21:20	06:21 20:04	07:21 18:44		07:27 16:28	14:32 (O6) 15:14 (O6)	08:27 15:41	12:03 (Pr11) 13:53 (Pr12)
5	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41		07:29 16:25	14:33 (O6) 15:14 (O6)	08:29 15:40	10:22 (JU1) 13:54 (Pr12)
6	04:33 22:04	05:24 21:15	06:25 19:59	07:25 18:38		07:31 16:23	14:34 (O6) 15:14 (O6)	08:30 15:39	10:20 (JU1) 13:54 (Pr12)
7	04:34 22:03	05:26 21:13	06:27 19:56	07:28 18:36		07:34 16:21	14:34 (O6) 15:13 (O6)	08:32 15:39	10:20 (JU1) 13:55 (Pr12)
8	04:35 22:02	05:27 21:11	06:29 19:53	07:30 18:33		07:36 16:19	14:35 (O6) 15:13 (O6)	08:33 15:38	10:20 (JU1) 13:56 (Pr12)
9	04:36 22:01	05:29 21:09	06:31 19:51	07:32 18:31		07:38 16:17	14:36 (O6) 15:12 (O6)	08:34 15:38	10:19 (JU1) 13:56 (Pr12)
10	04:38 22:00	05:31 21:06	06:33 19:48	07:34 18:28		07:40 16:15	14:36 (O6) 15:11 (O6)	08:36 15:37	10:20 (JU1) 13:57 (Pr12)
11	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25		07:42 16:13	14:38 (O6) 15:10 (O6)	08:37 15:37	10:19 (JU1) 13:57 (Pr12)
12	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23	8 08:39 (Pr25)	07:44 16:11	14:39 (O6) 15:09 (O6)	08:38 15:37	10:19 (JU1) 13:57 (Pr12)
13	04:42 21:57	05:37 20:59	06:39 19:40	07:40 18:20	8 08:36 (Pr25)	07:46 16:09	14:41 (O6) 15:09 (O6)	08:39 15:36	10:20 (JU1) 13:59 (Pr12)
14	04:43 21:56	05:39 20:57	06:41 19:37	07:42 18:18	13 08:49 (Pr25)	07:49 16:08	14:42 (O6) 15:07 (O6)	08:40 15:36	10:20 (JU1) 13:59 (Pr12)
15	04:45 21:54	05:41 20:55	06:43 19:35	07:44 18:15	17 08:51 (Pr25)	07:51 16:06	14:44 (O6) 15:05 (O6)	08:41 15:36	10:20 (JU1) 13:59 (Pr12)
16	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:13	18 08:52 (Pr25)	07:53 16:04	14:47 (O6) 15:04 (O6)	08:42 15:36	10:20 (JU1) 14:00 (Pr12)
17	04:48 21:52	05:45 20:50	06:47 19:29	07:48 18:10	32 16:02 (O6)	07:55 16:02	15:04 (O6)	08:43 15:36	10:21 (JU1) 14:00 (Pr12)
18	04:49 21:50	05:47 20:47	06:49 19:27	07:50 18:08	40 08:32 (Pr25)	07:57 16:01	12:10 (Pr11) 12:27 (Pr11)	08:44 15:36	10:20 (JU1) 14:00 (Pr12)
19	04:51 21:49	05:49 20:45	06:51 19:24	07:53 18:05	45 16:07 (O6)	07:59 15:59	12:09 (Pr11) 12:30 (Pr11)	08:45 15:37	10:21 (JU1) 14:01 (Pr12)
20	04:52 21:47	05:51 20:43	06:53 19:21	07:55 18:03	51 08:31 (Pr25)	08:01 15:57	12:07 (Pr11) 12:32 (Pr11)	08:46 15:37	10:22 (JU1) 14:02 (Pr12)
21	04:54 21:46	05:53 20:40	06:55 19:19	07:57 18:00	54 16:11 (O6)	08:03 15:56	12:06 (Pr11) 12:33 (Pr11)	08:46 15:37	10:22 (JU1) 14:02 (Pr12)
22	04:56 21:44	05:55 20:38	06:57 19:16	07:59 17:58	55 08:31 (Pr25)	08:05 15:54	12:06 (Pr11) 12:35 (Pr11)	08:47 15:38	10:23 (JU1) 14:03 (Pr12)
23	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	56 16:12 (O6)	08:07 15:53	12:05 (Pr11) 12:36 (Pr11)	08:47 15:38	10:23 (JU1) 14:03 (Pr12)
24	04:59 21:41	05:59 20:33	07:01 19:10	08:03 17:53	55 08:34 (Pr25)	08:09 15:52	12:04 (Pr11) 13:38 (Pr12)	08:48 15:39	10:24 (JU1) 14:04 (Pr12)
25	05:01 21:39	06:01 20:30	07:03 19:08	07:05 16:50	55 16:14 (O6)	08:11 15:50	12:04 (Pr11) 13:42 (Pr12)	08:48 15:40	10:24 (JU1) 14:04 (Pr12)
26	05:03 21:37	06:03 20:27	07:05 19:05	07:08 16:48	52 07:36 (Pr25)	08:13 15:49	12:03 (Pr11) 13:44 (Pr12)	08:48 15:40	10:25 (JU1) 14:04 (Pr12)
27	05:05 21:35	06:05 20:25	07:07 19:02	07:10 16:46	47 15:15 (O6)	08:15 15:48	12:03 (Pr11) 13:45 (Pr12)	08:49 15:41	10:25 (JU1) 14:05 (Pr12)
28	05:06 21:34	06:07 20:22	07:09 19:00	07:12 16:43	43 14:32 (O6)	08:17 15:46	12:03 (Pr11) 13:47 (Pr12)	08:49 15:42	10:26 (JU1) 14:05 (Pr12)
29	05:08 21:32	06:09 20:20	07:11 18:57	07:14 16:41	43 15:15 (O6)	08:18 15:45	12:03 (Pr11) 13:49 (Pr12)	08:49 15:43	10:27 (JU1) 14:06 (Pr12)
30	05:10 21:30	06:11 20:17	07:13 18:54	07:16 16:39	44 14:32 (O6)	08:20 15:44	12:03 (Pr11) 13:50 (Pr12)	08:49 15:44	10:28 (JU1) 14:06 (Pr12)
31	05:12 21:28	06:13 20:15		07:18 16:36	43 15:15 (O6)			08:49 15:45	10:28 (JU1) 14:06 (Pr12)
Potential sun hours	529	469	384	324		248		217	
Total, worst case				815		1084		2678	
Sun reduction				0,29		0,08		0,08	
Oper. time red.				1,00		1,00		1,00	
Wind dir. red.				1,00		1,00		1,00	
Total reduction				0,29		0,08		0,08	
Total, real				236		81		226	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Kalnieš i 2 (kad. apz. 76740030024001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (456)

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January			February			March			April	May	June
1	08:49		10:12 (JU1)	08:13		12:28 (Pr11)	07:09		07:43 (Pr25)	06:47	05:31	04:34
	15:46	108	14:13 (Pr12)	16:43	24	12:52 (Pr11)	17:46	66	16:04 (O6)	19:51	20:53	21:50
2	08:48		10:12 (JU1)	08:11		12:31 (Pr11)	07:06		07:42 (Pr25)	06:44	05:28	04:33
	15:48	108	14:13 (Pr12)	16:46	19	12:50 (Pr11)	17:48	65	16:02 (O6)	19:53	20:55	21:52
3	08:48		10:13 (JU1)	08:09		12:35 (Pr11)	07:04		07:43 (Pr25)	06:42	05:26	04:32
	15:49	108	14:14 (Pr12)	16:48	11	12:46 (Pr11)	17:50	63	16:02 (O6)	19:55	20:57	21:53
4	08:48		10:13 (JU1)	08:07			07:01		07:43 (Pr25)	06:39	05:24	04:31
	15:50	109	14:14 (Pr12)	16:50			17:52	59	16:00 (O6)	19:57	21:00	21:54
5	08:47		10:13 (JU1)	08:05		15:34 (O6)	06:59		07:43 (Pr25)	06:36	05:22	04:30
	15:52	108	14:14 (Pr12)	16:52	14	15:48 (O6)	17:54	55	15:58 (O6)	19:59	21:02	21:56
6	08:47		10:15 (JU1)	08:03		15:31 (O6)	06:56		07:44 (Pr25)	06:34	05:19	04:29
	15:53	106	14:15 (Pr12)	16:55	21	15:52 (O6)	17:56	50	15:57 (O6)	20:01	21:04	21:57
7	08:46		10:15 (JU1)	08:01		15:29 (O6)	06:53		07:45 (Pr25)	06:31	05:17	04:28
	15:55	106	14:15 (Pr12)	16:57	26	15:55 (O6)	17:59	43	15:55 (O6)	20:03	21:06	21:58
8	08:45		10:16 (JU1)	07:58		15:27 (O6)	06:51		07:47 (Pr25)	06:28	05:15	04:28
	15:56	106	14:16 (Pr12)	16:59	30	15:57 (O6)	18:01	33	15:52 (O6)	20:06	21:08	21:59
9	08:45		10:17 (JU1)	07:56		15:25 (O6)	06:48		15:32 (O6)	06:26	05:13	04:27
	15:58	104	14:16 (Pr12)	17:01	33	15:58 (O6)	18:03	17	15:49 (O6)	20:08	21:10	22:00
10	08:44		10:18 (JU1)	07:54		15:24 (O6)	06:45			06:23	05:11	04:26
	15:59	103	14:16 (Pr12)	17:04	36	16:00 (O6)	18:05			20:10	21:12	22:01
11	08:43		10:19 (JU1)	07:52		15:23 (O6)	06:43			06:20	05:09	04:26
	16:01	101	14:17 (Pr12)	17:06	39	16:02 (O6)	18:07			20:12	21:14	22:02
12	08:42		10:19 (JU1)	07:50		15:22 (O6)	06:40			06:18	05:07	04:25
	16:03	101	14:16 (Pr12)	17:08	40	16:02 (O6)	18:09			20:14	21:16	22:03
13	08:41		10:21 (JU1)	07:47		15:21 (O6)	06:38			06:15	05:05	04:25
	16:05	97	14:17 (Pr12)	17:10	42	16:03 (O6)	18:11			20:16	21:18	22:04
14	08:40		10:23 (JU1)	07:45		15:20 (O6)	06:35			06:13	05:03	04:24
	16:06	94	14:17 (Pr12)	17:13	44	16:04 (O6)	18:13			20:18	21:20	22:04
15	08:39		10:24 (JU1)	07:43		15:20 (O6)	06:32			06:10	05:01	04:24
	16:08	89	14:16 (Pr12)	17:15	45	16:05 (O6)	18:16			20:20	21:21	22:05
16	08:38		10:27 (JU1)	07:41		15:19 (O6)	06:30			06:08	04:59	04:24
	16:10	84	14:17 (Pr12)	17:17	46	16:05 (O6)	18:18			20:22	21:23	22:06
17	08:37		12:12 (Pr11)	07:38		15:18 (O6)	06:27			06:05	04:57	04:24
	16:12	76	14:16 (Pr12)	17:19	48	16:06 (O6)	18:20			20:24	21:25	22:06
18	08:35		12:13 (Pr11)	07:36		15:17 (O6)	06:24			06:02	04:55	04:24
	16:14	74	14:16 (Pr12)	17:21	49	16:06 (O6)	18:22			20:26	21:27	22:07
19	08:34		12:13 (Pr11)	07:33		15:18 (O6)	06:22			06:00	04:53	04:24
	16:16	71	14:15 (Pr12)	17:24	49	16:07 (O6)	18:24			20:28	21:29	22:07
20	08:33		12:13 (Pr11)	07:31		15:17 (O6)	06:19			05:57	04:52	04:24
	16:18	69	14:14 (Pr12)	17:26	49	16:06 (O6)	18:26			20:31	21:31	22:07
21	08:31		12:15 (Pr11)	07:29		15:17 (O6)	06:16			05:55	04:50	04:24
	16:20	66	14:14 (Pr12)	17:28	50	16:07 (O6)	18:28			20:33	21:33	22:08
22	08:30		12:15 (Pr11)	07:26		15:17 (O6)	06:14			05:52	04:48	04:24
	16:22	63	14:13 (Pr12)	17:30	49	16:06 (O6)	18:30			20:35	21:34	22:08
23	08:28		12:16 (Pr11)	07:24		07:51 (Pr25)	06:11			05:50	04:47	04:24
	16:24	58	14:11 (Pr12)	17:33	59	16:07 (O6)	18:32			20:37	21:36	22:08
24	08:27		12:16 (Pr11)	07:21		07:48 (Pr25)	06:08			05:47	04:45	04:24
	16:26	51	14:08 (Pr12)	17:35	62	16:06 (O6)	18:34			20:39	21:38	22:08
25	08:25		12:17 (Pr11)	07:19		07:45 (Pr25)	06:06			05:45	04:44	04:25
	16:28	42	12:59 (Pr11)	17:37	65	16:05 (O6)	18:36			20:41	21:40	22:08
26	08:23		12:19 (Pr11)	07:16		07:45 (Pr25)	06:03			05:43	04:42	04:25
	16:30	40	12:59 (Pr11)	17:39	68	16:06 (O6)	18:39			20:43	21:41	22:08
27	08:22		12:20 (Pr11)	07:14		07:43 (Pr25)	06:00			05:40	04:41	04:26
	16:33	39	12:59 (Pr11)	17:41	69	16:05 (O6)	18:41			20:45	21:43	22:08
28	08:20		12:21 (Pr11)	07:11		07:43 (Pr25)	05:58			05:38	04:39	04:26
	16:35	37	12:58 (Pr11)	17:43	69	16:05 (O6)	18:43			20:47	21:44	22:08
29	08:18		12:23 (Pr11)				06:55			05:35	04:38	04:27
	16:37	34	12:57 (Pr11)				19:45			20:49	21:46	22:08
30	08:16		12:23 (Pr11)				06:52			05:33	04:37	04:28
	16:39	32	12:55 (Pr11)				19:47			20:51	21:47	22:07
31	08:15		12:25 (Pr11)				06:50				04:35	
	16:41	29	12:54 (Pr11)				19:49				21:49	
Potential sun hours	236			266			366		426	507	528	
Total, worst case		2413			1156		451					
Sun reduction		0,13			0,23		0,39					
Oper. time red.		1,00			1,00		1,00					
Wind dir. red.		1,00			1,00		1,00					
Total reduction		0,13			0,23		0,39					
Total, real		324			260		177					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Kalnieši 2 (kad. apz. 76740030024001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (456) Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December
1	04:28 22:07	05:14 21:26	06:15 20:12	07:15 18:52	07:21 16:34	14:54 (O6) 15:29 (O6)
2	04:29 22:06	05:16 21:24	06:17 20:09	07:17 18:49	07:23 16:32	15:43 15:27 (O6)
3	04:30 22:06	05:18 21:22	06:19 20:07	07:19 18:46	07:25 16:30	15:42 15:26 (O6)
4	04:31 22:05	05:20 21:20	06:21 20:04	07:21 18:44	07:27 16:24 (O6)	15:41 14:59 (O6)
5	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:28	15:40 15:24 (O6)
6	04:33 22:04	05:24 21:15	06:25 19:59	07:25 18:38	07:31 16:30 (O6)	15:39 15:01 (O6)
7	04:34 22:03	05:26 21:13	06:27 19:56	07:28 18:36	07:34 16:32 (O6)	15:38 15:26 (O6)
8	04:35 22:02	05:27 21:11	06:29 19:53	07:30 18:33	07:36 16:33 (O6)	15:37 15:24 (O6)
9	04:36 22:01	05:29 21:09	06:31 19:51	07:32 18:31	07:38 16:35 (O6)	15:36 15:21 (Pr11)
10	04:38 22:00	05:31 21:06	06:33 19:48	07:34 18:28	07:40 16:36 (O6)	15:35 15:17 (Pr11)
11	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:36 (O6)	15:34 15:15 (Pr11)
12	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23	07:44 16:37 (O6)	15:33 15:14 (Pr11)
13	04:42 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:37 (O6)	15:32 15:13 (Pr11)
14	04:43 21:56	05:39 20:57	06:41 19:37	07:42 18:18	07:49 16:37 (O6)	15:31 15:12 (Pr11)
15	04:45 21:54	05:41 20:55	06:43 19:35	07:44 18:15	07:51 16:38 (O6)	15:30 15:11 (Pr11)
16	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:13	07:53 16:38 (O6)	15:29 15:10 (Pr11)
17	04:48 21:52	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:38 (O6)	15:28 15:09 (Pr11)
18	04:49 21:50	05:47 20:47	06:49 19:27	07:50 18:08	07:57 16:37 (O6)	15:27 15:08 (Pr11)
19	04:51 21:49	05:49 20:45	06:51 19:24	07:53 18:05	07:59 16:38 (O6)	15:26 15:07 (Pr11)
20	04:52 21:47	05:51 20:43	06:53 19:21	07:55 18:03	08:01 15:48 (O6)	15:25 15:06 (Pr11)
21	04:54 21:46	05:53 20:40	06:55 19:19	07:57 18:00	08:03 15:47 (O6)	15:24 15:05 (Pr11)
22	04:56 21:44	05:55 20:38	06:57 19:16	07:59 17:58	08:05 15:47 (O6)	15:23 15:04 (Pr11)
23	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:48 (O6)	15:22 15:03 (Pr11)
24	04:59 21:41	05:59 20:33	07:01 19:10	08:03 17:53	08:09 15:48 (O6)	15:21 15:02 (Pr11)
25	05:01 21:39	06:01 20:30	07:03 19:08	08:05 16:50	08:11 15:35 (O6)	15:20 15:01 (Pr11)
26	05:03 21:37	06:03 20:27	07:05 19:05	08:08 16:48	08:13 15:35 (O6)	15:19 15:00 (Pr11)
27	05:05 21:35	06:05 20:25	07:07 19:02	08:10 16:46	08:15 15:34 (O6)	15:18 15:00 (Pr11)
28	05:06 21:34	06:07 20:22	07:09 19:00	08:12 16:43	08:17 15:33 (O6)	15:17 15:00 (Pr11)
29	05:08 21:32	06:09 20:20	07:11 18:57	08:14 16:41	08:18 15:33 (O6)	15:16 15:00 (Pr11)
30	05:10 21:30	06:11 20:17	07:13 18:54	08:16 16:39	08:20 15:31 (O6)	15:15 15:00 (Pr11)
31	05:12 21:28	06:13 20:15		08:18 16:36	08:24 15:30 (O6)	15:14 15:00 (Pr11)
Potential sun hours	529	469	384	324	248	217
Total, worst case				1425	1455	3327
Sun reduction				0,29	0,08	0,08
Oper. time red.				1,00	1,00	1,00
Wind dir. red.				1,00	1,00	1,00
Total reduction				0,29	0,08	0,08
Total, real				413	109	281

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Kalvani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (469)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:49	08:13	07:09	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:46	19:51	20:53	21:50	22:07	21:26	20:12	18:52	16:34	15:43
2	08:48	08:11	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:23	08:24
	15:47	16:46	17:48	19:53	20:55	21:52	22:06	21:24	20:09	18:49	16:32	15:42
3	08:48	08:09	07:04	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:06	21:22	20:07	18:46	16:30	15:41
4	08:48	08:07	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:20	20:04	18:44	16:27	15:40
5	08:47	08:05	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:29
	15:51	16:52	17:54	19:59	21:02	21:56	22:05	21:17	20:01	18:41	16:25	15:40
6	08:47	08:03	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:04	21:57	22:04	21:15	19:59	18:38	16:23	15:39
7	08:46	08:01	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:34	08:32
	15:54	16:57	17:58	20:03	21:06	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:51	06:28	05:15	04:27	04:35	05:27	06:29	07:30	07:36	08:33
	15:56	16:59	18:01	20:05	21:08	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:45	07:56	06:48	06:26	05:13	04:27	04:36	05:29	06:31	07:32	07:38	08:34
	15:58	17:01	18:03	20:08	21:10	22:00	22:01	21:09	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:34	07:40	08:36
	15:59	17:03	18:05	20:10	21:12	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:14	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:50	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:16	22:03	21:58	21:02	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:18	22:04	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:13	05:03	04:24	04:43	05:39	06:41	07:42	07:49	08:40
	16:06	17:12	18:13	20:18	21:20	22:04	21:56	20:57	19:37	18:18	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:51	08:42
	16:08	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:15	16:06	15:36
16	08:38	07:41	06:30	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:53	08:42
	16:10	17:17	18:18	20:22	21:23	22:06	21:53	20:52	19:32	18:12	16:04	15:36
17	08:37	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:52	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:07	21:50	20:47	19:27	18:07	16:00	15:36
19	08:34	07:33	06:22	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:36
20	08:33	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:55	08:01	08:46
	16:18	17:26	18:26	20:30	21:31	22:08	21:47	20:43	19:21	18:02	15:57	15:37
21	08:31	07:29	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:33	21:33	22:08	21:46	20:40	19:18	18:00	15:56	15:37
22	08:30	07:26	06:14	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:35	21:34	22:08	21:44	20:38	19:16	17:57	15:54	15:38
23	08:28	07:24	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:27	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:48
	16:26	17:35	18:34	20:39	21:38	22:08	21:41	20:33	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:40	22:08	21:39	20:30	19:08	17:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	17:48	15:49	15:40
27	08:22	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:15	08:49
	16:32	17:41	18:41	20:45	21:43	22:08	21:35	20:25	19:02	17:46	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:17	08:49
	16:35	17:43	18:43	20:47	21:44	22:08	21:34	20:22	19:00	17:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:49
	16:37		19:45	20:49	21:46	22:08	21:32	20:20	18:57	17:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:47	22:07	21:30	20:17	18:54	17:39	15:44	15:44
31	08:15		06:49		04:35		05:12	06:13		07:18		08:49
	16:41		19:49		21:49		21:28	20:15		16:36		15:45
Potential sun hours	235	266	366	426	508	528	529	469	385	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Kamenes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (536)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June
1	08:48 15:46	08:12 16:43	07:09 17:45	06:47 19:51	18:48 (PrRR3) 19:15 (PrRR3)	05:31 20:53
2	08:48 15:47	08:10 16:45	07:06 17:48	06:44 19:53	18:47 (PrRR3) 19:15 (PrRR3)	20:53 20:55
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	18:45 (PrRR3) 19:15 (PrRR3)	05:26 20:57
4	08:47 15:50	08:06 16:50	07:01 17:52	17:18 (Pr3b) 17:22 (Pr3b)	06:39 19:57	18:45 (PrRR3) 19:16 (PrRR3)
5	08:47 15:51	08:04 16:52	06:58 17:54	17:13 (Pr3b) 17:25 (Pr3b)	06:36 19:59	18:45 (PrRR3) 19:15 (PrRR3)
6	08:46 15:53	08:02 16:54	06:56 17:56	17:10 (Pr3b) 17:27 (Pr3b)	06:33 20:01	18:45 (PrRR3) 19:15 (PrRR3)
7	08:46 15:54	08:00 16:57	06:53 17:58	17:09 (Pr3b) 17:29 (Pr3b)	06:31 20:03	18:44 (PrRR3) 19:15 (PrRR3)
8	08:45 15:56	07:58 16:59	06:50 18:01	17:08 (Pr3b) 17:30 (Pr3b)	06:28 20:05	18:44 (PrRR3) 19:13 (PrRR3)
9	08:44 15:58	07:56 17:01	06:48 18:03	17:06 (Pr3b) 17:30 (Pr3b)	06:25 20:07	18:45 (PrRR3) 19:13 (PrRR3)
10	08:44 15:59	07:54 17:03	06:45 18:05	17:06 (Pr3b) 17:31 (Pr3b)	06:23 20:09	18:45 (PrRR3) 19:12 (PrRR3)
11	08:43 16:01	07:52 17:06	06:43 18:07	17:05 (Pr3b) 17:30 (Pr3b)	06:20 20:12	18:46 (PrRR3) 19:11 (PrRR3)
12	08:42 16:03	07:49 17:08	06:40 18:09	17:05 (Pr3b) 17:30 (Pr3b)	06:18 20:14	18:46 (PrRR3) 19:09 (PrRR3)
13	08:41 16:04	07:47 17:10	06:37 18:11	17:05 (Pr3b) 17:30 (Pr3b)	06:15 20:16	18:48 (PrRR3) 19:08 (PrRR3)
14	08:40 16:06	07:45 17:12	06:35 18:13	17:05 (Pr3b) 17:29 (Pr3b)	06:12 20:18	18:50 (PrRR3) 19:06 (PrRR3)
15	08:39 16:08	07:43 17:15	06:32 18:15	17:05 (Pr3b) 17:28 (Pr3b)	06:10 20:20	18:53 (PrRR3) 19:03 (PrRR3)
16	08:38 16:10	07:40 17:17	06:29 18:17	17:06 (Pr3b) 17:28 (Pr3b)	06:07 20:22	04:59 21:23
17	08:36 16:12	07:38 17:19	06:27 18:20	17:07 (Pr3b) 17:26 (Pr3b)	06:05 20:24	04:57 21:25
18	08:35 16:14	07:36 17:21	06:24 18:22	17:08 (Pr3b) 17:24 (Pr3b)	06:02 20:26	04:55 21:27
19	08:34 16:16	07:33 17:23	06:21 18:24	17:10 (Pr3b) 17:23 (Pr3b)	06:00 20:28	04:53 21:29
20	08:32 16:18	07:31 17:26	06:19 18:26	17:15 (Pr3b) 17:17 (Pr3b)	05:57 20:30	04:51 21:30
21	08:31 16:20	07:28 17:28	06:16 18:28		05:55 20:32	04:50 21:32
22	08:29 16:22	07:26 17:30	06:13 18:30		05:52 20:34	04:48 21:34
23	08:28 16:24	07:24 17:32	06:11 18:32		05:50 20:36	04:46 21:36
24	08:26 16:26	07:21 17:35	06:08 18:34		05:47 20:39	04:45 21:38
25	08:25 16:28	07:19 17:37	06:05 18:36		05:45 20:41	04:43 21:39
26	08:23 16:30	07:16 17:39	06:03 18:38		05:42 20:43	04:42 21:41
27	08:21 16:32	07:14 17:41	06:00 18:40	17:59 (PrRR3) 18:07 (PrRR3)	05:40 20:45	04:40 21:43
28	08:20 16:34	07:11 17:43	05:57 18:42	17:54 (PrRR3) 18:10 (PrRR3)	05:38 20:47	04:39 21:44
29	08:18 16:37		06:55 19:45	18:53 (PrRR3) 19:13 (PrRR3)	05:35 20:49	04:38 21:46
30	08:16 16:39		06:52 19:47	18:50 (PrRR3) 19:13 (PrRR3)	05:33 20:51	04:36 21:47
31	08:14 16:41		06:49 19:49	18:49 (PrRR3) 19:14 (PrRR3)		04:35 21:49
Potential sun hours	236	266	366	426	507	528
Total, worst case			410		385	
Sun reduction			0,39		0,44	
Oper. time red.			1,00		1,00	
Wind dir. red.			1,00		1,00	
Total reduction			0,39		0,44	
Total, real			161		170	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Kamenes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (536)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December
1	04:28 22:06	05:14 21:25	06:15 20:12	18:45 (PrRR3) 19:10 (PrRR3)	07:15 18:10 (Pr3b)	07:20 16:34
2	04:29 22:06	05:16 21:23	06:17 20:09	18:44 (PrRR3) 19:11 (PrRR3)	07:17 18:10 (Pr3b)	07:22 16:32
3	04:30 22:05	05:18 21:21	06:19 20:06	18:43 (PrRR3) 19:11 (PrRR3)	07:19 18:09 (Pr3b)	07:25 16:30
4	04:31 22:02	05:19 21:19	06:21 20:04	18:42 (PrRR3) 19:12 (PrRR3)	07:21 18:08 (Pr3b)	07:27 16:27
5	04:32 22:04	05:21 21:17	06:23 20:01	18:41 (PrRR3) 19:11 (PrRR3)	07:23 18:07 (Pr3b)	07:29 16:25
6	04:33 22:03	05:23 21:15	06:25 19:59	18:40 (PrRR3) 19:10 (PrRR3)	07:25 18:06 (Pr3b)	07:31 16:23
7	04:34 22:03	05:25 21:13	06:27 19:56	18:40 (PrRR3) 19:10 (PrRR3)	07:27 18:04 (Pr3b)	07:33 16:21
8	04:35 22:02	05:27 21:11	06:29 19:53	18:40 (PrRR3) 19:10 (PrRR3)	07:29 18:02 (Pr3b)	07:35 16:19
9	04:36 22:01	05:29 21:08	06:31 19:51	18:40 (PrRR3) 19:09 (PrRR3)	07:31 18:00 (Pr3b)	07:38 16:17
10	04:38 22:00	05:31 21:06	06:33 19:48	18:40 (PrRR3) 19:09 (PrRR3)	07:33 18:28	07:40 16:15
11	04:39 21:59	05:33 21:04	06:35 19:45	18:40 (PrRR3) 19:08 (PrRR3)	07:36 18:25	07:42 16:13
12	04:40 21:58	05:35 21:02	06:37 19:43	18:41 (PrRR3) 19:06 (PrRR3)	07:38 18:23	07:44 16:11
13	04:42 21:57	05:37 20:59	06:39 19:40	18:41 (PrRR3) 19:05 (PrRR3)	07:40 18:20	07:46 16:09
14	04:43 21:55	05:39 20:57	06:41 19:37	18:43 (PrRR3) 19:03 (PrRR3)	07:42 18:17	07:48 16:07
15	04:44 21:54	05:41 20:54	06:43 19:34	18:44 (PrRR3) 19:01 (PrRR3)	07:44 18:15	07:50 16:06
16	04:46 21:53	05:43 20:52	06:45 19:32	18:47 (PrRR3) 18:57 (PrRR3)	07:46 18:12	07:53 16:04
17	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:03 15:56
18	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:00	08:04 15:54
19	04:51 21:49	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:05 15:53
20	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:06 15:51
21	04:54 21:45	05:53 20:40	06:55 19:18	07:57 18:00	08:03 15:56	08:08 15:50
22	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:57	08:05 15:54	08:09 15:48
23	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:10 15:47
24	04:59 21:40	05:59 20:32	07:01 19:10	17:54 (Pr3b) 18:04 (Pr3b)	08:03 17:53	08:09 15:46
25	05:01 21:39	06:01 20:30	07:03 19:08	17:51 (Pr3b) 18:07 (Pr3b)	07:05 16:50	08:11 15:45
26	05:03 21:37	06:03 20:27	07:05 19:05	17:49 (Pr3b) 18:08 (Pr3b)	07:07 16:48	08:13 15:44
27	05:04 21:35	06:05 20:25	07:07 19:02	17:47 (Pr3b) 18:09 (Pr3b)	07:09 16:45	08:15 15:43
28	05:06 21:33	06:07 20:22	18:53 (PrRR3) 19:04 (PrRR3)	07:09 18:59	07:12 16:43	08:16 15:42
29	05:08 21:31	06:09 20:20	18:50 (PrRR3) 19:07 (PrRR3)	07:11 18:57	07:14 16:41	08:18 15:41
30	05:10 21:29	06:11 20:17	18:48 (PrRR3) 19:08 (PrRR3)	07:13 18:54	07:16 16:38	08:20 15:40
31	05:12 21:27	06:13 20:14	18:46 (PrRR3) 19:09 (PrRR3)	07:18 16:36	07:18 16:36	08:21 15:40
Potential sun hours	529	469	384	324	248	217
Total, worst case		71	551	187		
Sun reduction		0,52	0,43	0,29		
Oper. time red.		1,00	1,00	1,00		
Wind dir. red.		1,00	1,00	1,00		
Total reduction		0,52	0,43	0,29		
Total, real		37	238	54		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Kamiš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (585)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:27	15:41
5	08:47	08:04	06:58	06:36	05:22	04:30	04:32	05:22	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:55	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:39
8	08:45	07:58	06:50	06:28	05:15	04:28	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:38
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:08	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:45	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:24	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:01	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:37
20	08:32	07:31	06:19	05:57	04:52	04:24	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:35	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:41	04:26	05:05	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:35	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:37	04:28	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Karklini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (464)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:49 15:46	08:13 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:07	05:14 21:26	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:52	04:29 22:06	05:16 21:24	06:17 20:09	07:17 18:49	07:23 16:32	08:24 15:42
3	08:48 15:49	08:09 16:48	07:04 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:06	05:18 21:22	06:19 20:07	07:19 18:46	07:25 16:30	08:25 15:41
4	08:48 15:50	08:07 16:50	07:01 17:52	06:39 19:57	05:24 21:00	04:31 21:54	04:31 22:05	05:20 21:20	06:21 20:04	07:21 18:44	07:27 16:27	08:27 15:41
5	08:47 15:52	08:05 16:52	06:58 17:54	06:36 19:59	05:22 21:02	04:30 21:56	04:32 22:05	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:29 15:40
6	08:47 15:53	08:03 16:54	06:56 17:56	06:33 20:01	05:19 21:04	04:29 21:57	04:33 22:04	05:23 21:15	06:25 19:59	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:01 16:57	06:53 17:59	06:31 20:03	05:17 21:06	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:28 18:36	07:34 16:21	08:32 15:38
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:06	05:15 21:08	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:30 18:33	07:36 16:19	08:33 15:38
9	08:45 15:58	07:56 17:01	06:48 18:03	06:26 20:08	05:13 21:10	04:27 22:00	04:36 22:01	05:29 21:09	06:31 19:51	07:32 18:30	07:38 16:17	08:34 15:37
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:10	05:11 21:12	04:26 22:01	04:38 22:00	05:31 21:06	06:33 19:48	07:34 18:28	07:40 16:15	08:36 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:14	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:16	04:25 22:03	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:38 18:11	06:15 20:16	05:05 21:18	04:25 22:04	04:42 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:13 20:18	05:03 21:20	04:24 22:04	04:43 21:56	05:39 20:57	06:41 19:37	07:42 18:18	07:49 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:55	06:43 19:35	07:44 18:15	07:51 16:06	08:42 15:36
16	08:38 16:10	07:41 17:17	06:30 18:18	06:07 20:22	04:59 21:23	04:24 22:06	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:53 16:04	08:42 15:36
17	08:37 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:52	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:07	04:49 21:50	05:47 20:47	06:49 19:27	07:50 18:07	07:57 16:01	08:44 15:36
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:51 21:49	05:49 20:45	06:51 19:24	07:53 18:05	07:59 15:59	08:45 15:36
20	08:33 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:31	04:23 22:08	04:52 21:47	05:51 20:43	06:53 19:21	07:55 18:02	08:01 15:57	08:46 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:33	04:50 21:33	04:23 22:08	04:54 21:46	05:53 20:40	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:30 16:22	07:26 17:30	06:14 18:30	05:52 20:35	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:38	06:57 19:16	07:59 17:58	08:05 15:54	08:47 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:37	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:27 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:38	04:24 22:08	04:59 21:41	05:59 20:33	07:01 19:10	08:03 17:53	08:09 15:51	08:48 15:39
25	08:25 16:28	07:19 17:37	06:06 18:36	05:45 20:41	04:43 21:40	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:08	08:05 17:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:39	05:42 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 17:48	08:13 15:49	08:48 15:40
27	08:22 16:32	07:14 17:41	06:00 18:41	05:40 20:45	04:40 21:43	04:26 22:08	05:04 21:35	06:05 20:25	07:07 19:02	08:09 17:46	08:15 15:48	08:49 15:41
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	04:26 22:08	05:06 21:34	06:07 20:22	07:09 19:00	08:12 17:43	08:17 15:46	08:49 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:08	05:08 21:32	06:09 20:20	07:11 18:57	08:19 17:41	08:29 15:45	08:49 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:30	06:11 20:17	07:13 18:54	08:20 17:39	08:30 15:44	08:49 15:44
31	08:15 16:41		06:49 19:49		04:35 21:49		05:12 21:28	06:13 20:15		07:18 17:36		08:49 15:45
Potential sun hours	235	266	366	426	508	528	529	469	384	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Klavinas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (515)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Klavu Sala - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (444)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:13	07:09	06:47	05:32	04:35	04:30	05:15	06:16	07:16	07:21	08:22
	15:48	16:44	17:46	19:51	20:53	21:50	22:06	21:26	20:12	18:52	16:35	15:44
2	08:48	08:11	07:06	06:45	05:29	04:34	04:30	05:17	06:18	07:18	07:23	08:23
	15:49	16:47	17:48	19:53	20:55	21:51	22:06	21:24	20:10	18:50	16:33	15:43
3	08:48	08:09	07:04	06:42	05:27	04:33	04:31	05:19	06:20	07:20	07:25	08:25
	15:50	16:49	17:51	19:55	20:57	21:53	22:05	21:22	20:07	18:47	16:31	15:43
4	08:47	08:07	07:01	06:39	05:25	04:32	04:32	05:21	06:22	07:22	07:27	08:27
	15:51	16:51	17:53	19:58	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:42
5	08:47	08:05	06:59	06:37	05:23	04:31	04:33	05:23	06:24	07:24	07:29	08:28
	15:53	16:53	17:55	20:00	21:01	21:55	22:04	21:17	20:02	18:42	16:26	15:41
6	08:46	08:03	06:56	06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31	08:30
	15:54	16:55	17:57	20:02	21:04	21:56	22:03	21:15	19:59	18:39	16:24	15:40
7	08:46	08:01	06:54	06:32	05:18	04:30	04:35	05:26	06:28	07:28	07:34	08:31
	15:56	16:58	17:59	20:04	21:06	21:58	22:03	21:13	19:56	18:36	16:22	15:40
8	08:45	07:58	06:51	06:29	05:16	04:29	04:36	05:28	06:30	07:30	07:36	08:33
	15:57	17:00	18:01	20:06	21:08	21:59	22:02	21:11	19:54	18:34	16:20	15:39
9	08:44	07:56	06:48	06:26	05:14	04:28	04:38	05:30	06:32	07:32	07:38	08:34
	15:59	17:02	18:03	20:08	21:10	22:00	22:01	21:09	19:51	18:31	16:18	15:39
10	08:44	07:54	06:46	06:24	05:12	04:27	04:39	05:32	06:34	07:34	07:40	08:35
	16:00	17:04	18:06	20:10	21:12	22:01	22:00	21:06	19:48	18:29	16:16	15:38
11	08:43	07:52	06:43	06:21	05:10	04:27	04:40	05:34	06:36	07:36	07:42	08:37
	16:02	17:07	18:08	20:12	21:14	22:02	21:59	21:04	19:46	18:26	16:14	15:38
12	08:42	07:50	06:41	06:18	05:08	04:26	04:41	05:36	06:38	07:38	07:44	08:38
	16:04	17:09	18:10	20:14	21:15	22:02	21:58	21:02	19:43	18:23	16:12	15:38
13	08:41	07:48	06:38	06:16	05:06	04:26	04:43	05:38	06:40	07:40	07:46	08:39
	16:06	17:11	18:12	20:16	21:17	22:03	21:57	20:59	19:40	18:21	16:10	15:37
14	08:40	07:45	06:35	06:13	05:04	04:26	04:44	05:40	06:42	07:42	07:49	08:40
	16:07	17:13	18:14	20:18	21:19	22:04	21:55	20:57	19:38	18:18	16:09	15:37
15	08:39	07:43	06:33	06:11	05:02	04:25	04:46	05:42	06:44	07:44	07:51	08:41
	16:09	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:16	16:07	15:37
16	08:38	07:41	06:30	06:08	05:00	04:25	04:47	05:44	06:46	07:46	07:53	08:42
	16:11	17:18	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:13	16:05	15:37
17	08:36	07:38	06:27	06:06	04:58	04:25	04:49	05:46	06:48	07:49	07:55	08:43
	16:13	17:20	18:20	20:24	21:25	22:06	21:51	20:50	19:30	18:11	16:03	15:37
18	08:35	07:36	06:25	06:03	04:56	04:25	04:50	05:48	06:50	07:51	07:57	08:44
	16:15	17:22	18:22	20:26	21:27	22:06	21:50	20:48	19:27	18:08	16:02	15:38
19	08:34	07:34	06:22	06:01	04:54	04:25	04:52	05:50	06:52	07:53	07:59	08:45
	16:17	17:24	18:24	20:29	21:29	22:07	21:49	20:45	19:24	18:06	16:00	15:38
20	08:33	07:31	06:19	05:58	04:53	04:25	04:53	05:52	06:54	07:55	08:01	08:45
	16:19	17:27	18:26	20:31	21:31	22:07	21:47	20:43	19:22	18:03	15:58	15:38
21	08:31	07:29	06:17	05:56	04:51	04:25	04:55	05:54	06:56	07:57	08:03	08:46
	16:21	17:29	18:29	20:33	21:32	22:07	21:45	20:40	19:19	18:01	15:57	15:38
22	08:30	07:26	06:14	05:53	04:49	04:25	04:57	05:56	06:58	07:59	08:05	08:47
	16:23	17:31	18:31	20:35	21:34	22:08	21:44	20:38	19:16	17:58	15:55	15:39
23	08:28	07:24	06:11	05:51	04:48	04:25	04:59	05:58	07:00	08:01	08:07	08:47
	16:25	17:33	18:33	20:37	21:36	22:08	21:42	20:35	19:14	17:56	15:54	15:39
24	08:27	07:21	06:09	05:48	04:46	04:26	05:00	06:00	07:02	08:03	08:09	08:47
	16:27	17:35	18:35	20:39	21:38	22:08	21:41	20:33	19:11	17:53	15:53	15:40
25	08:25	07:19	06:06	05:46	04:45	04:26	05:02	06:02	07:04	08:05	08:11	08:48
	16:29	17:38	18:37	20:41	21:39	22:08	21:39	20:30	19:08	17:51	15:51	15:41
26	08:23	07:17	06:03	05:43	04:43	04:26	05:04	06:04	07:06	08:07	08:13	08:48
	16:31	17:40	18:39	20:43	21:41	22:08	21:37	20:28	19:05	17:49	15:50	15:41
27	08:22	07:14	06:01	05:41	04:42	04:27	05:06	06:06	07:08	08:09	08:15	08:48
	16:33	17:42	18:41	20:45	21:43	22:08	21:35	20:25	19:03	17:46	15:49	15:42
28	08:20	07:12	05:58	05:39	04:40	04:27	05:07	06:08	07:10	08:12	08:18	08:48
	16:36	17:44	18:43	20:47	21:44	22:07	21:33	20:23	19:00	17:44	15:48	15:43
29	08:18		06:55	05:36	04:39	04:28	05:09	06:10	07:12	08:14	08:18	08:48
	16:38		19:45	20:49	21:46	22:07	21:31	20:20	18:57	17:42	15:46	15:44
30	08:16		06:53	05:34	04:38	04:29	05:11	06:12	07:14	08:16	08:20	08:48
	16:40		19:47	20:51	21:47	22:07	21:30	20:17	18:55	17:39	15:45	15:45
31	08:14		06:50		04:36		05:13	06:14		07:18		08:48
	16:42		19:49		21:49		21:28	20:15		16:37		15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Flickering_Nordex_N175_Prikuli_B

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 16:18/4.1.254

Calculation: Flickering_Nordex_N175-Prikuli_B Shadow receptor: Laimnieki - Shadow Receptor: 1,0 x 1,0 Azimuth: 3,1° Slope: 90,0° (415)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

January		February		March		April		May		June		July		August		September		October		November		December	
08:48	08:13			07:09		16:17 (DD3)	06:47		05:31	04:35	04:29	05:14	06:16			07:15		17:52 (DD1)	07:20		08:22		
15:47	16:44			17:46	25	16:42 (DD3)	19:51		20:53	21:50	22:06	21:26	20:12			18:52	22	18:14 (DD1)	16:35		15:44		
08:48	08:11			07:06		16:18 (DD3)	06:44		05:29	04:34	04:30	05:16	06:18			07:17		17:51 (DD1)	07:23		08:23		
15:48	16:46			17:48	22	16:40 (DD3)	19:53		20:55	21:51	22:06	21:24	20:09			18:49	23	18:14 (DD1)	16:32		15:43		
08:48	08:09			07:04		16:20 (DD3)	06:42		05:27	04:33	04:31	05:18	06:20			07:19		17:51 (DD1)	07:25		08:25		
15:50	16:48			17:50	19	16:39 (DD3)	19:55		20:57	21:53	22:05	21:21	20:07			18:47	22	18:13 (DD1)	16:20		15:42		
08:47	08:07			07:01		16:22 (DD3)	06:39		05:24	04:32	04:32	05:20	06:22			07:22		17:51 (DD1)	07:27		08:27		
15:51	16:51			17:52	14	16:36 (DD3)	19:57		20:59	21:54	22:05	21:19	20:04			18:44	21	18:12 (DD1)	16:28		15:41		
08:47	08:05			06:59		16:27 (DD3)	06:36		05:22	04:31	04:33	05:22	06:24			07:24		17:52 (DD1)	07:29		08:28		
15:52	16:53			17:55	4	17:25 (DD1)	19:59		21:01	21:55	22:04	21:17	20:01			18:41	18	18:10 (DD1)	16:26		15:41		
08:46	08:03			06:56		17:20 (DD1)	06:34		05:20	04:30	04:34	05:24	06:26			07:26		17:53 (DD1)	07:31		08:30		
15:54	16:55			17:57	8	17:28 (DD1)	20:01		21:03	21:56	22:03	21:15	19:59			18:39	15	18:08 (DD1)	16:24		15:40		
08:46	08:00			06:53		17:17 (DD1)	06:31		05:18	04:29	04:35	05:26	06:28			07:28		17:54 (DD1)	07:33		08:31		
15:55	16:57			17:59	13	17:30 (DD1)	20:04		21:05	21:58	22:03	21:13	19:56			18:36	11	18:05 (DD1)	16:22		15:39		
08:45	07:58			06:51		17:15 (DD1)	06:29		05:16	04:28	04:36	05:28	06:30			07:30		17:56 (DD1)	07:36		08:33		
15:57	16:59			18:01	17	17:32 (DD1)	20:06		21:07	21:59	22:02	21:11	19:54			18:33	6	18:00 (DD1)	16:20		15:39		
08:44	07:56			06:48		17:15 (DD1)	06:26		05:13	04:28	04:37	05:30	06:32			07:32		17:00 (DD3)	07:38		08:34		
15:58	17:02			18:03	20	17:35 (DD1)	20:08		21:09	22:00	22:01	21:08	19:51			18:31	9	17:09 (DD3)	16:18		15:38		
08:44	07:54			06:46		17:13 (DD1)	06:23		05:11	04:27	04:38	05:32	06:34			07:34		16:56 (DD3)	07:40		08:35		
16:00	17:04			18:05	22	17:35 (DD1)	20:10		21:11	22:01	22:00	21:06	19:48			18:28	16	17:12 (DD3)	16:16		15:38		
08:43	07:52			06:43		17:13 (DD1)	06:21		05:09	04:26	04:40	05:34	06:36										

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Lapegles - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (514)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:05	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:02	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:00	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:18	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Latini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (440)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:31	04:35	04:29	05:15	06:16	07:16	07:20	08:22
	15:48	16:44	17:46	19:51	20:53	21:50	22:06	21:25	20:12	18:52	16:35	15:44
2	08:48	08:11	07:06	06:45	05:29	04:34	04:30	05:17	06:18	07:18	07:23	08:23
	15:49	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:33	15:43
3	08:48	08:09	07:04	06:42	05:27	04:33	04:31	05:19	06:20	07:20	07:25	08:25
	15:50	16:49	17:50	19:55	20:57	21:53	22:05	21:21	20:07	18:47	16:30	15:42
4	08:47	08:07	07:01	06:39	05:25	04:32	04:32	05:21	06:22	07:22	07:27	08:27
	15:51	16:51	17:53	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:42
5	08:47	08:05	06:59	06:37	05:22	04:31	04:33	05:22	06:24	07:24	07:29	08:28
	15:53	16:53	17:55	19:59	21:01	21:55	22:04	21:17	20:02	18:41	16:26	15:41
6	08:46	08:03	06:56	06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31	08:30
	15:54	16:55	17:57	20:02	21:03	21:56	22:03	21:15	19:59	18:39	16:24	15:40
7	08:46	08:00	06:54	06:31	05:18	04:29	04:35	05:26	06:28	07:28	07:33	08:31
	15:56	16:58	17:59	20:04	21:05	21:57	22:02	21:13	19:56	18:36	16:22	15:40
8	08:45	07:58	06:51	06:29	05:16	04:29	04:36	05:28	06:30	07:30	07:36	08:33
	15:57	17:00	18:01	20:06	21:07	21:59	22:02	21:11	19:54	18:34	16:20	15:39
9	08:44	07:56	06:48	06:26	05:14	04:28	04:38	05:30	06:32	07:32	07:38	08:34
	15:59	17:02	18:03	20:08	21:09	22:00	22:01	21:08	19:51	18:31	16:18	15:39
10	08:43	07:54	06:46	06:24	05:12	04:27	04:39	05:32	06:34	07:34	07:40	08:35
	16:00	17:04	18:05	20:10	21:11	22:01	22:00	21:06	19:48	18:28	16:16	15:38
11	08:43	07:52	06:43	06:21	05:10	04:27	04:40	05:34	06:36	07:36	07:42	08:37
	16:02	17:06	18:08	20:12	21:13	22:01	21:59	21:04	19:46	18:26	16:14	15:38
12	08:42	07:50	06:40	06:18	05:08	04:26	04:41	05:36	06:38	07:38	07:44	08:38
	16:04	17:09	18:10	20:14	21:15	22:02	21:58	21:02	19:43	18:23	16:12	15:38
13	08:41	07:47	06:38	06:16	05:06	04:26	04:43	05:38	06:40	07:40	07:46	08:39
	16:06	17:11	18:12	20:16	21:17	22:03	21:56	20:59	19:40	18:21	16:10	15:37
14	08:40	07:45	06:35	06:13	05:04	04:25	04:44	05:40	06:42	07:42	07:48	08:40
	16:07	17:13	18:14	20:18	21:19	22:04	21:55	20:57	19:38	18:18	16:08	15:37
15	08:39	07:43	06:33	06:11	05:02	04:25	04:46	05:42	06:44	07:44	07:51	08:41
	16:09	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:16	16:07	15:37
16	08:38	07:41	06:30	06:08	05:00	04:25	04:47	05:44	06:46	07:46	07:53	08:42
	16:11	17:18	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:13	16:05	15:37
17	08:36	07:38	06:27	06:06	04:58	04:25	04:49	05:46	06:48	07:48	07:55	08:43
	16:13	17:20	18:20	20:24	21:25	22:06	21:51	20:50	19:30	18:11	16:03	15:37
18	08:35	07:36	06:25	06:03	04:56	04:25	04:50	05:48	06:50	07:51	07:57	08:44
	16:15	17:22	18:22	20:26	21:27	22:06	21:50	20:47	19:27	18:08	16:02	15:37
19	08:34	07:34	06:22	06:00	04:54	04:25	04:52	05:50	06:52	07:53	07:59	08:45
	16:17	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:06	16:00	15:38
20	08:32	07:31	06:19	05:58	04:53	04:25	04:53	05:52	06:54	07:55	08:01	08:45
	16:19	17:26	18:26	20:30	21:30	22:07	21:47	20:43	19:21	18:03	15:58	15:38
21	08:31	07:29	06:17	05:55	04:51	04:25	04:55	05:54	06:56	07:57	08:03	08:46
	16:21	17:29	18:28	20:33	21:32	22:07	21:45	20:40	19:19	18:01	15:57	15:38
22	08:30	07:26	06:14	05:53	04:49	04:25	04:57	05:56	06:58	07:59	08:05	08:46
	16:23	17:31	18:31	20:35	21:34	22:07	21:44	20:38	19:16	17:58	15:55	15:39
23	08:28	07:24	06:11	05:51	04:48	04:25	04:58	05:58	07:00	08:01	08:07	08:47
	16:25	17:33	18:33	20:37	21:36	22:08	21:42	20:35	19:13	17:56	15:54	15:39
24	08:26	07:21	06:09	05:48	04:46	04:26	05:00	06:00	07:02	08:03	08:09	08:47
	16:27	17:35	18:35	20:39	21:37	22:08	21:40	20:33	19:11	17:53	15:52	15:40
25	08:25	07:19	06:06	05:46	04:45	04:26	05:02	06:02	07:04	08:05	08:11	08:48
	16:29	17:37	18:37	20:41	21:39	22:08	21:39	20:30	19:08	17:51	15:51	15:41
26	08:23	07:16	06:03	05:43	04:43	04:26	05:04	06:04	07:06	08:07	08:13	08:48
	16:31	17:40	18:39	20:43	21:41	22:08	21:37	20:28	19:05	17:49	15:50	15:41
27	08:22	07:14	06:01	05:41	04:42	04:27	05:06	06:06	07:08	08:09	08:15	08:48
	16:33	17:42	18:41	20:45	21:42	22:07	21:35	20:25	19:03	17:46	15:49	15:42
28	08:20	07:11	05:58	05:38	04:40	04:27	05:07	06:08	07:10	08:12	08:16	08:48
	16:36	17:44	18:43	20:47	21:44	22:07	21:33	20:22	19:00	17:44	15:47	15:43
29	08:18		06:55	05:36	04:39	04:28	05:09	06:10	07:12	08:14	08:18	08:48
	16:38		19:45	20:49	21:46	22:07	21:31	20:20	18:57	17:42	15:46	15:44
30	08:16		06:53	05:34	04:38	04:29	05:11	06:12	07:14	08:16	08:20	08:48
	16:40		19:47	20:51	21:47	22:07	21:29	20:17	18:55	17:39	15:45	15:45
31	08:14		06:50		04:36		05:13	06:14		07:18		08:48
	16:42		19:49		21:48		21:27	20:15		16:37		15:46
Potential sun hours	236	266	366	426	507	527	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Laucini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (473)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:49 15:46	08:13 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:07	05:14 21:26	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:47	08:11 16:45	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:52	04:29 22:06	05:16 21:24	06:17 20:09	07:17 18:49	07:23 16:32	08:24 15:42
3	08:48 15:49	08:09 16:48	07:04 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:06	05:18 21:22	06:19 20:07	07:19 18:46	07:25 16:30	08:25 15:41
4	08:48 15:50	08:07 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:20	06:21 20:04	07:21 18:44	07:27 16:27	08:27 15:40
5	08:47 15:51	08:05 16:52	06:58 17:54	06:36 19:59	05:21 21:02	04:30 21:56	04:32 22:05	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:29 15:40
6	08:47 15:53	08:03 16:54	06:56 17:56	06:33 20:01	05:19 21:04	04:29 21:57	04:33 22:04	05:23 21:15	06:25 19:59	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:01 16:57	06:53 17:58	06:31 20:03	05:17 21:06	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	07:34 16:21	08:32 15:38
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:08	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	07:36 16:19	08:33 15:38
9	08:45 15:58	07:56 17:01	06:48 18:03	06:26 20:08	05:13 21:10	04:27 22:00	04:36 22:01	05:29 21:09	06:31 19:51	07:32 18:30	07:38 16:17	08:34 15:37
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:10	05:11 21:12	04:26 22:01	04:37 22:00	05:31 21:06	06:33 19:48	07:34 18:28	07:40 16:15	08:36 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:14	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:16	04:25 22:03	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:18	04:24 22:04	04:41 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	05:03 21:19	04:24 22:04	04:43 21:56	05:39 20:57	06:41 19:37	07:42 18:17	07:49 16:07	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:55	06:43 19:35	07:44 18:15	07:51 16:06	08:42 15:36
16	08:38 16:10	07:41 17:17	06:30 18:18	06:07 20:22	04:59 21:23	04:24 22:06	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:53 16:04	08:42 15:36
17	08:37 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:52	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:07	04:49 21:50	05:47 20:47	06:49 19:27	07:50 18:07	07:57 16:00	08:44 15:36
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:51 21:49	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:36
20	08:33 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:51 21:31	04:23 22:08	04:52 21:47	05:51 20:43	06:53 19:21	07:55 18:02	08:01 15:57	08:46 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:33	04:50 21:33	04:23 22:08	04:54 21:46	05:53 20:40	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:30 16:22	07:26 17:30	06:13 18:30	05:52 20:35	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:38	06:57 19:16	07:59 17:57	08:05 15:54	08:47 15:37
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:37	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:27 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:38	04:24 22:08	04:59 21:41	05:59 20:33	07:01 19:10	08:03 17:53	08:09 15:51	08:48 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:40	04:24 22:08	05:01 21:39	06:01 20:30	07:03 19:08	08:05 16:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:22 16:32	07:14 17:41	06:00 18:41	05:40 20:45	04:40 21:43	04:25 22:08	05:04 21:35	06:05 20:25	07:07 19:02	08:09 16:45	08:15 15:47	08:49 15:41
28	08:20 16:34	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	04:26 22:08	05:06 21:34	06:07 20:22	07:09 19:00	08:12 16:43	08:17 15:46	08:49 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:08	05:08 21:32	06:09 20:20	07:11 18:57	08:14 16:41	08:18 15:45	08:49 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:30	06:11 20:17	07:13 18:54	08:16 16:39	08:20 15:44	08:49 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:28	06:13 20:15		07:18 16:36		08:49 15:45
Potential sun hours	235	266	366	426	508	528	529	469	385	324	247	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Lielo Orišu 2 maju zeme - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (482)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:07	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:52	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:09	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:06	21:21	20:06	18:46	16:29	15:41
4	08:47	08:07	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:57	22:04	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:36
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:02	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:38	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:53	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:07	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:31	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:08	21:45	20:40	19:18	18:00	15:56	15:37
22	08:30	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:24	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:48
	16:26	17:34	18:34	20:39	21:38	22:08	21:41	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:15	08:48
	16:32	17:41	18:40	20:45	21:43	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:49
	16:34	17:43	18:42	20:47	21:44	22:08	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:49
	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	235	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Linu Diki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (461)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December	
1	08:49 15:46	08:13 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:07	05:14 21:26	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43	
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:52	04:29 22:06	05:16 21:24	06:17 20:09	07:17 18:49	07:23 16:32	08:24 15:42	
3	08:48 15:49	08:09 16:48	07:04 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:06	05:18 21:22	06:19 20:07	07:19 18:46	07:25 16:30	08:25 15:41	
4	08:48 15:50	08:07 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:27	08:27 15:41	
5	08:47 15:52	08:05 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:56	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:29 15:40	
6	08:47 15:53	08:03 16:54	06:56 17:56	06:33 20:01	05:19 21:04	04:29 21:57	04:33 22:04	05:23 21:15	06:25 19:59	07:25 18:38	07:31 16:23	08:30 15:39	
7	08:46 15:54	08:01 16:57	06:53 17:59	06:31 20:03	05:17 21:06	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:32 15:38	
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:08	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:30 18:33	07:36 16:19	08:33 15:38	
9	08:45 15:58	07:56 17:01	06:48 18:03	06:26 20:08	05:13 21:10	04:27 22:00	04:36 22:01	05:29 21:09	06:31 19:51	07:32 18:30	07:38 16:17	08:34 15:37	
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:10	05:11 21:12	04:26 22:01	04:38 22:00	05:31 21:06	06:33 19:48	07:34 18:28	07:40 16:15	08:36 15:37	
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:14	04:26 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37	
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:16	04:25 22:03	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23	07:44 16:11	08:38 15:36	
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:18	04:25 22:04	04:42 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36	
14	08:40 16:06	07:45 17:12	06:35 18:13	06:13 20:18	05:03 21:19	04:24 22:04	04:43 21:56	05:39 20:57	06:41 19:37	07:42 18:18	07:49 16:08	08:40 15:36	10:59 (Pr25)
15	08:39 16:08	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:55	06:43 19:35	07:44 18:15	07:51 16:06	08:41 15:36	5 11:04 (Pr25)
16	08:38 16:10	07:41 17:17	06:30 18:18	06:07 20:22	04:59 21:23	04:24 22:06	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:53 16:04	08:42 15:36	7 11:05 (Pr25)
17	08:37 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:52	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36	9 11:07 (Pr25)
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:07	04:49 21:50	05:47 20:47	06:49 19:27	07:50 18:07	07:57 16:01	08:44 15:36	10 11:08 (Pr25)
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:51 21:49	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:36	11 11:09 (Pr25)
20	08:33 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:31	04:23 22:07	04:52 21:47	05:51 20:43	06:53 19:21	07:55 18:02	08:01 15:57	08:46 15:37	11 11:09 (Pr25)
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:33	04:50 21:33	04:24 22:08	04:54 21:46	05:53 20:40	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37	12 11:10 (Pr25)
22	08:30 16:22	07:26 17:30	06:14 18:30	05:52 20:35	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:38	06:57 19:16	07:59 17:58	08:05 15:54	08:47 15:38	12 11:11 (Pr25)
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:37	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38	12 11:11 (Pr25)
24	08:27 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:38	04:24 22:08	04:59 21:41	05:59 20:33	07:01 19:10	08:03 17:53	08:09 15:51	08:48 15:39	11 11:12 (Pr25)
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:08	07:05 16:50	08:11 15:50	08:48 15:39	11 11:01 (Pr25)
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	07:07 16:48	08:13 15:49	08:48 15:40	11 11:02 (Pr25)
27	08:22 16:32	07:14 17:41	06:00 18:41	05:40 20:45	04:40 21:43	04:26 22:08	05:04 21:35	06:05 20:25	07:07 19:02	07:10 16:46	08:15 15:48	08:49 15:41	10 11:12 (Pr25)
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	04:26 22:08	05:06 21:33	06:07 20:22	07:09 19:00	07:12 16:43	08:17 15:46	08:49 15:42	7 11:11 (Pr25)
29	08:18 16:37	07:09 17:45	05:55 18:55	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:32	06:09 20:20	07:11 18:57	07:14 16:41	08:18 15:45	08:49 15:43	6 11:11 (Pr25)
30	08:16 16:39	07:07 17:47	05:52 18:57	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:30	06:11 20:17	07:13 18:54	07:16 16:39	08:20 15:44	08:49 15:44	3 11:10 (Pr25)
31	08:14 16:41	07:05 17:49	05:49 18:59	05:35 20:53	04:35 21:49	04:25 22:07	05:12 21:28	06:13 20:15	07:18 16:36	07:18 15:44	08:18 15:45	08:49 15:45	
Potential sun hours	235	266	366	426	508	528	529	469	384	324	248	216	
Total, worst case													158
Sun reduction													0,08
Oper. time red.													1,00
Wind dir. red.													1,00
Total reduction													0,08
Total, real													13

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Ludvigova - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (447)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:13	07:09	06:47	05:32	04:35	04:30	05:15	06:16	07:16	07:21	08:22
	15:48	16:44	17:46	19:51	20:53	21:50	22:06	21:26	20:12	18:52	16:35	15:44
2	08:48	08:11	07:07	06:45	05:29	04:34	04:30	05:17	06:18	07:18	07:23	08:24
	15:49	16:47	17:48	19:53	20:55	21:52	22:06	21:24	20:10	18:50	16:33	15:43
3	08:48	08:09	07:04	06:42	05:27	04:33	04:31	05:19	06:20	07:20	07:25	08:25
	15:50	16:49	17:51	19:55	20:57	21:53	22:05	21:22	20:07	18:47	16:31	15:43
4	08:47	08:07	07:01	06:39	05:25	04:32	04:32	05:21	06:22	07:22	07:27	08:27
	15:51	16:51	17:53	19:58	21:00	21:54	22:05	21:20	20:04	18:44	16:28	15:42
5	08:47	08:05	06:59	06:37	05:23	04:31	04:33	05:23	06:24	07:24	07:29	08:28
	15:53	16:53	17:55	20:00	21:02	21:55	22:04	21:17	20:02	18:42	16:26	15:41
6	08:46	08:03	06:56	06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31	08:30
	15:54	16:55	17:57	20:02	21:04	21:57	22:03	21:15	19:59	18:39	16:24	15:40
7	08:46	08:01	06:54	06:32	05:18	04:29	04:35	05:26	06:28	07:28	07:34	08:31
	15:56	16:58	17:59	20:04	21:06	21:58	22:03	21:13	19:56	18:36	16:22	15:40
8	08:45	07:59	06:51	06:29	05:16	04:29	04:36	05:28	06:30	07:30	07:36	08:33
	15:57	17:00	18:01	20:06	21:08	21:59	22:02	21:11	19:54	18:34	16:20	15:39
9	08:44	07:56	06:48	06:26	05:14	04:28	04:38	05:30	06:32	07:32	07:38	08:34
	15:59	17:02	18:03	20:08	21:10	22:00	22:01	21:09	19:51	18:31	16:18	15:39
10	08:44	07:54	06:46	06:24	05:12	04:27	04:39	05:32	06:34	07:34	07:40	08:36
	16:00	17:04	18:06	20:10	21:12	22:01	22:00	21:06	19:48	18:29	16:16	15:38
11	08:43	07:52	06:43	06:21	05:10	04:27	04:40	05:34	06:36	07:36	07:42	08:37
	16:02	17:07	18:08	20:12	21:14	22:02	21:59	21:04	19:46	18:26	16:14	15:38
12	08:42	07:50	06:41	06:19	05:08	04:26	04:41	05:36	06:38	07:38	07:44	08:38
	16:04	17:09	18:10	20:14	21:16	22:03	21:58	21:02	19:43	18:23	16:12	15:38
13	08:41	07:48	06:38	06:16	05:06	04:26	04:43	05:38	06:40	07:40	07:46	08:39
	16:06	17:11	18:12	20:16	21:17	22:03	21:57	21:00	19:40	18:21	16:10	15:37
14	08:40	07:45	06:35	06:13	05:04	04:26	04:44	05:40	06:42	07:42	07:49	08:40
	16:07	17:13	18:14	20:18	21:19	22:04	21:55	20:57	19:38	18:18	16:09	15:37
15	08:39	07:43	06:33	06:11	05:02	04:25	04:46	05:42	06:44	07:44	07:51	08:41
	16:09	17:16	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:16	16:07	15:37
16	08:38	07:41	06:30	06:08	05:00	04:25	04:47	05:44	06:46	07:46	07:53	08:42
	16:11	17:18	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:13	16:05	15:37
17	08:37	07:38	06:27	06:06	04:58	04:25	04:49	05:46	06:48	07:49	07:55	08:43
	16:13	17:20	18:20	20:24	21:25	22:06	21:52	20:50	19:30	18:11	16:03	15:37
18	08:35	07:36	06:25	06:03	04:56	04:25	04:50	05:48	06:50	07:51	07:57	08:44
	16:15	17:22	18:22	20:27	21:27	22:06	21:50	20:48	19:27	18:08	16:02	15:38
19	08:34	07:34	06:22	06:01	04:54	04:25	04:52	05:50	06:52	07:53	07:59	08:45
	16:17	17:24	18:24	20:29	21:29	22:07	21:49	20:45	19:24	18:06	16:00	15:38
20	08:33	07:31	06:19	05:58	04:53	04:25	04:53	05:52	06:54	07:55	08:01	08:45
	16:19	17:27	18:27	20:31	21:31	22:07	21:47	20:43	19:22	18:03	15:58	15:38
21	08:31	07:29	06:17	05:56	04:51	04:25	04:55	05:54	06:56	07:57	08:03	08:46
	16:21	17:29	18:29	20:33	21:32	22:07	21:46	20:40	19:19	18:01	15:57	15:38
22	08:30	07:26	06:14	05:53	04:49	04:25	04:57	05:56	06:58	07:59	08:05	08:47
	16:23	17:31	18:31	20:35	21:34	22:08	21:44	20:38	19:16	17:58	15:55	15:39
23	08:28	07:24	06:11	05:51	04:48	04:25	04:59	05:58	07:00	08:01	08:07	08:47
	16:25	17:33	18:33	20:37	21:36	22:08	21:42	20:35	19:14	17:56	15:54	15:39
24	08:27	07:22	06:09	05:48	04:46	04:26	05:00	06:00	07:02	08:03	08:09	08:48
	16:27	17:35	18:35	20:39	21:38	22:08	21:41	20:33	19:11	17:53	15:53	15:40
25	08:25	07:19	06:06	05:46	04:45	04:26	05:02	06:02	07:04	08:06	08:11	08:48
	16:29	17:38	18:37	20:41	21:39	22:08	21:39	20:30	19:08	17:51	15:51	15:41
26	08:23	07:17	06:03	05:43	04:43	04:26	05:04	06:04	07:06	08:08	08:13	08:48
	16:31	17:40	18:39	20:43	21:41	22:08	21:37	20:28	19:06	17:49	15:50	15:41
27	08:22	07:14	06:01	05:41	04:42	04:27	05:06	06:06	07:08	08:10	08:15	08:48
	16:33	17:42	18:41	20:45	21:43	22:08	21:35	20:25	19:03	17:46	15:49	15:42
28	08:20	07:12	05:58	05:39	04:40	04:27	05:07	06:08	07:10	08:12	08:17	08:49
	16:36	17:44	18:43	20:47	21:44	22:07	21:33	20:23	19:00	17:44	15:48	15:43
29	08:18		06:55	05:36	04:39	04:28	05:09	06:10	07:12	08:14	08:18	08:49
	16:38		19:45	20:49	21:46	22:07	21:32	20:20	18:58	17:42	15:46	15:44
30	08:16		06:53	05:34	04:38	04:29	05:11	06:12	07:14	08:16	08:20	08:49
	16:40		19:47	20:51	21:47	22:07	21:30	20:17	18:55	17:39	15:45	15:45
31	08:15		06:50		04:36		05:13	06:14		07:18		08:48
	16:42		19:49		21:49		21:28	20:15		16:37		15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Lidumi (kad. apz. 76740020172001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (550)

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:46	08:12 16:43		07:09 17:45	06:47 19:51	05:30 20:53	04:34 21:50	04:28 22:07	05:14 21:25	06:15 20:12	07:15 18:51	07:20 16:34
2	08:48 15:47	08:10 16:45		07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:52	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32
3	08:48 15:49	08:09 16:48		07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:06	05:17 21:21	06:19 20:06	07:19 18:46	07:25 16:30
4	08:47 15:50	08:07 16:50		07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	07:27 16:27
5	08:47 15:51	08:04 16:52		06:58 17:54	06:36 19:59	05:21 21:01	04:30 21:55	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25
6	08:46 15:53	08:02 16:54		06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:57	04:33 22:04	05:23 21:15	06:25 19:59	07:25 18:38	07:31 16:23
7	08:46 15:54	08:00 16:57		06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	07:33 16:21
8	08:45 15:56	07:58 16:59		06:50 18:00	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	07:35 16:19
9	08:44 15:57	07:56 17:01		06:48 18:03	06:25 20:07	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 19:51	07:31 18:30	07:38 16:17
10	08:44 15:59	07:54 17:03		06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:37 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15
11	08:43 16:01	07:52 17:06		06:43 18:07	06:20 20:12	05:09 21:13	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13
12	08:42 16:03	07:49 17:08	16:28 (PrRR3)	06:40 18:09	06:18 20:14	05:06 21:15	04:25 22:03	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23	07:44 16:11
13	08:41 16:04	07:47 17:10	16:25 (PrRR3)	06:37 18:11	06:15 20:16	05:04 21:17	04:24 22:03	04:41 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09
14	08:40 16:06	07:45 17:12	16:38 (PrRR3)	06:35 18:13	06:12 20:18	05:02 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17	07:48 16:07
15	08:39 16:08	07:43 17:15	16:23 (PrRR3)	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:06
16	08:38 16:10	07:40 17:17	16:43 (PrRR3)	06:29 18:17	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	11 17:09 (PrRR3)
17	08:36 16:12	07:38 17:19	16:22 (PrRR3)	06:27 18:20	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	15 17:12 (PrRR3)
18	08:35 16:14	07:36 17:21	16:44 (PrRR3)	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	18 17:13 (PrRR3)
19	08:34 16:16	07:33 17:23	16:21 (PrRR3)	06:21 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:51 21:49	05:49 20:45	06:51 19:24	07:52 18:05	22 17:14 (PrRR3)
20	08:32 16:18	07:31 17:26	16:45 (PrRR3)	06:19 18:26	05:57 20:30	04:51 21:31	04:23 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	23 17:15 (PrRR3)
21	08:31 16:20	07:28 17:28	16:21 (PrRR3)	06:16 18:28	05:55 20:32	04:50 21:32	04:23 22:08	04:54 21:45	05:53 20:40	06:55 19:18	07:57 18:00	24 17:16 (PrRR3)
22	08:30 16:22	07:26 17:30	16:44 (PrRR3)	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:57	24 17:15 (PrRR3)
23	08:28 16:24	07:24 17:32	16:21 (PrRR3)	06:11 18:32	05:50 20:36	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	24 17:14 (PrRR3)
24	08:26 16:26	07:21 17:34	16:43 (PrRR3)	06:08 18:34	05:47 20:39	04:45 21:38	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:53	23 17:14 (PrRR3)
25	08:25 16:28	07:19 17:37	16:23 (PrRR3)	06:05 18:36	05:45 20:41	04:43 21:39	04:24 22:08	05:01 21:39	06:01 20:30	07:03 19:08	07:05 16:50	23 17:14 (PrRR3)
26	08:23 16:30	07:16 17:39	16:40 (PrRR3)	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	07:07 16:48	20 16:12 (PrRR3)
27	08:21 16:32	07:14 17:41	16:25 (PrRR3)	06:00 18:40	05:40 20:45	04:40 21:43	04:25 22:08	05:04 21:35	06:05 20:25	07:07 19:02	07:09 16:45	19 16:12 (PrRR3)
28	08:20 16:34	07:11 17:43	16:36 (PrRR3)	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:08	05:06 21:33	06:07 20:22	07:09 18:59	07:12 16:43	16 16:10 (PrRR3)
29	08:18 16:37			06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 18:57	07:14 16:41	12 15:55 (PrRR3)
30	08:16 16:39			06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 18:54	07:16 16:38	7 15:58 (PrRR3)
31	08:14 16:41			06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36	
Potential sun hours	236	266		366	426	507	528	529	469	384	324	248
Total, worst case			299								302	217
Sun reduction			0,23								0,29	
Oper. time red.			1,00								1,00	
Wind dir. red.			1,00								1,00	
Total reduction			0,23								0,29	
Total, real			67								88	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Lidumi (kad. apz. 76740020238001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (557)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Lidums - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (491)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:15	06:17	07:17	07:22	08:23
	15:47	16:45	17:47	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:56	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:05	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:02	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:00	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:05	15:36
16	08:37	07:40	06:29	06:07	04:59	04:23	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:23	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:18	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Lipenas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (500)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:46	08:12 16:43	07:08 17:45	06:47 19:51	05:30 20:53	04:34 21:50	04:28 22:07	05:14 21:25	06:15 20:12	07:15 18:51	07:20 16:34	08:22 15:43
2	08:48 15:47	08:10 16:45	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:52	04:29 22:06	05:15 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:06	05:17 21:21	06:19 20:06	07:19 18:46	07:25 16:29	08:25 15:41
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	07:27 16:27	08:27 15:40
5	08:47 15:51	08:04 16:52	06:58 17:54	06:36 19:59	05:21 21:01	04:30 21:55	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:57	04:33 22:04	05:23 21:15	06:25 19:59	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:38
8	08:45 15:56	07:58 16:59	06:50 18:00	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:57	07:56 17:01	06:48 18:03	06:25 20:07	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 19:51	07:31 18:30	07:38 16:17	08:34 15:37
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:37 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:08 21:13	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:36
12	08:42 16:02	07:49 17:08	06:40 18:09	06:18 20:14	05:06 21:15	04:25 22:03	04:40 21:58	05:35 21:02	06:37 19:42	07:38 18:22	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:04 21:17	04:24 22:03	04:41 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	05:02 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17	07:48 16:07	08:40 15:36
15	08:39 16:08	07:43 17:14	06:32 18:15	06:10 20:20	05:00 21:21	04:24 22:05	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:38 16:10	07:40 17:17	06:29 18:17	06:07 20:22	04:59 21:23	04:23 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:53 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:00	08:44 15:36
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:50 21:49	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:36
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:51 21:31	04:23 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:23 22:08	04:54 21:45	05:53 20:40	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:30 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:23 22:08	04:55 21:44	05:55 20:37	06:57 19:16	07:59 17:57	08:05 15:54	08:47 15:37
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:34	06:08 18:34	05:47 20:39	04:45 21:38	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:52	08:09 15:51	08:48 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:39	04:24 22:08	05:01 21:39	06:01 20:30	07:03 19:07	07:05 16:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:02 21:37	06:03 20:27	07:05 19:05	07:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	04:40 21:43	04:25 22:08	05:04 21:35	06:05 20:25	07:07 19:02	07:09 16:45	08:15 15:47	08:48 15:41
28	08:20 16:34	07:11 17:43	05:57 18:42	05:37 20:47	04:39 21:44	04:26 22:08	05:06 21:33	06:07 20:22	07:09 18:59	07:12 16:43	08:16 15:46	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 18:57	07:14 16:41	08:18 15:45	08:49 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 18:54	07:16 16:38	08:20 15:44	08:49 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	235	266	366	426	508	528	529	469	384	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Madaras - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (519)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		05:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Magones - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (552)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:15	06:17	07:17	07:22	08:23
	15:47	16:45	17:47	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:56	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:05	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:02	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:00	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:05	15:36
16	08:37	07:40	06:29	06:07	04:59	04:23	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:23	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:18	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Maksimova - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (466)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January		February	March	April	May	June	July	August	September	October	November	December
1	08:49	14:15 (06)	08:13	07:09	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:21	08:22
	15:46	28	14:43 (06)	16:43	17:46	19:51	20:53	21:50	22:07	21:26	20:12	18:52	16:34
2	08:48		14:43 (06)	08:11	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:23
	15:48	28	14:43 (06)	16:46	17:48	19:53	20:55	21:52	22:06	21:24	20:09	18:49	16:32
3	08:48		14:16 (06)	08:09	07:04	06:42	05:26	04:32	04:30	05:18	06:19	07:19	07:25
	15:49	28	14:44 (06)	16:48	17:50	19:55	20:57	21:53	22:06	21:22	20:07	18:46	16:30
4	08:48		14:16 (06)	08:07	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27
	15:50	29	14:45 (06)	16:50	17:52	19:57	21:00	21:54	22:05	21:20	20:04	18:44	16:28
5	08:47		14:15 (06)	08:05	06:59	06:36	05:22	04:30	04:32	05:22	06:23	07:23	07:29
	15:52	30	14:45 (06)	16:52	17:54	19:59	21:02	21:56	22:05	21:17	20:01	18:41	16:25
6	08:47		14:16 (06)	08:03	06:56	06:34	05:19	04:29	04:33	05:24	06:25	07:25	07:31
	15:53	30	14:46 (06)	16:55	17:56	20:01	21:04	21:57	22:04	21:15	19:59	18:38	16:23
7	08:46		14:17 (06)	08:01	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:28	07:34
	15:55	30	14:47 (06)	16:57	17:59	20:03	21:06	21:58	22:03	21:13	19:56	18:36	16:21
8	08:45		14:17 (06)	07:58	06:51	06:28	05:15	04:28	04:35	05:27	06:29	07:30	07:36
	15:56	31	14:48 (06)	16:59	18:01	20:06	21:08	21:59	22:02	21:11	19:53	18:33	16:19
9	08:45		14:17 (06)	07:56	06:48	06:26	05:13	04:27	04:36	05:29	06:31	07:32	07:38
	15:58	31	14:48 (06)	17:01	18:03	20:08	21:10	22:00	22:01	21:09	19:51	18:31	16:17
10	08:44		14:17 (06)	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:34	07:40
	15:59	32	14:49 (06)	17:04	18:05	20:10	21:12	22:01	22:00	21:06	19:48	18:28	16:15
11	08:43		14:18 (06)	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42
	16:01	32	14:50 (06)	17:06	18:07	20:12	21:14	22:02	21:59	21:04	19:45	18:25	16:13
12	08:42		14:17 (06)	07:50	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44
	16:03	32	14:49 (06)	17:08	18:09	20:14	21:16	22:03	21:58	21:02	19:43	18:23	16:11
13	08:41		14:18 (06)	07:47	06:38	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46
	16:05	32	14:50 (06)	17:10	18:11	20:16	21:18	22:04	21:57	20:59	19:40	18:20	16:09
14	08:40		14:18 (06)	07:45	06:35	06:13	05:03	04:24	04:43	05:39	06:41	07:42	07:49
	16:06	33	14:51 (06)	17:13	18:13	20:18	21:20	22:04	21:56	20:57	19:37	18:18	16:08
15	08:39		14:18 (06)	07:43	06:32	06:10	05:01	04:24	04:45	05:41	06:43	07:44	07:51
	16:08	33	14:51 (06)	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:15	16:06
16	08:38		14:19 (06)	07:41	06:30	06:08	04:59	04:24	04:46	05:43	06:45	07:46	07:53
	16:10	32	14:51 (06)	17:17	18:18	20:22	21:23	22:06	21:53	20:52	19:32	18:13	16:04
17	08:37		14:19 (06)	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	07:55
	16:12	32	14:51 (06)	17:19	18:20	20:24	21:25	22:06	21:52	20:50	19:29	18:10	16:02
18	08:35		14:20 (06)	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57
	16:14	32	14:52 (06)	17:21	18:22	20:26	21:27	22:07	21:50	20:47	19:27	18:07	16:01
19	08:34		14:20 (06)	07:33	06:22	06:00	04:53	04:23	04:51	05:49	06:51	07:53	07:59
	16:16	32	14:52 (06)	17:24	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59
20	08:33		14:21 (06)	07:31	06:19	05:57	04:52	04:23	04:52	05:51	06:53	07:55	08:01
	16:18	32	14:53 (06)	17:26	18:26	20:31	21:31	22:08	21:47	20:43	19:21	18:03	15:57
21	08:31		14:21 (06)	07:29	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:57	08:03
	16:20	32	14:53 (06)	17:28	18:28	20:33	21:33	22:08	21:46	20:40	19:19	18:00	15:56
22	08:30		14:21 (06)	07:26	06:14	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05
	16:22	31	14:52 (06)	17:30	18:30	20:35	21:34	22:08	21:44	20:38	19:16	17:58	15:54
23	08:28		14:22 (06)	07:24	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07
	16:24	30	14:52 (06)	17:33	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53
24	08:27		14:23 (06)	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09
	16:26	29	14:52 (06)	17:35	18:34	20:39	21:38	22:08	21:41	20:33	19:10	17:53	15:52
25	08:25		14:24 (06)	07:19	06:06	05:45	04:43	04:25	05:01	06:01	07:03	07:05	08:11
	16:28	28	14:52 (06)	17:37	18:36	20:41	21:40	22:08	21:39	20:30	19:08	16:50	15:50
26	08:23		14:25 (06)	07:16	06:03	05:43	04:42	04:25	05:03	06:03	07:05	07:08	08:13
	16:30	27	14:52 (06)	17:39	18:39	20:43	21:41	22:08	21:37	20:28	19:05	16:48	15:49
27	08:22		14:26 (06)	07:14	06:00	05:40	04:41	04:26	05:05	06:05	07:07	07:10	08:15
	16:32	25	14:51 (06)	17:41	18:41	20:45	21:43	22:08	21:35	20:25	19:02	16:46	15:48
28	08:20		14:28 (06)	07:11	05:58	05:38	04:39	04:26	05:06	06:07	07:09	07:12	08:17
	16:35	22	14:50 (06)	17:43	18:43	20:47	21:44	22:08	21:34	20:22	19:00	16:43	15:46
29	08:18		14:29 (06)		06:55	05:35	04:38	04:27	05:08	06:09	07:11	07:14	08:19
	16:37	20	14:49 (06)		19:45	20:49	21:46	22:08	21:32	20:20	18:57	16:41	15:45
30	08:16		14:31 (06)		06:52	05:33	04:37	04:28	05:10	06:11	07:13	07:16	08:20
	16:39	17	14:48 (06)		19:47	20:51	21:47	22:07	21:30	20:17	18:54	16:39	15:44
31	08:15		14:33 (06)		06:50	04:35			05:12	06:13		07:18	
	16:41	12	14:45 (06)		19:49	21:49			21:28	20:15		16:36	
Potential sun hours	235		266	366	426	507	528	529	469	384	324	248	216
Total, worst case	892											566	1036
Sun reduction	0,13											0,08	0,08
Oper. time red.	1,00											1,00	1,00
Wind dir. red.	1,00											1,00	1,00
Total reduction	0,13											0,08	0,08
Total, real	120											43	88

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Malova - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (472)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January			February			March			April	May	June
1	08:48		13:06 (JU1)	08:13		08:59 (Pr3b)	07:09		07:53 (PrRR3)	06:47	05:31	04:34
	15:46	28	13:34 (JU1)	16:43	27	09:26 (Pr3b)	17:46	89	16:28 (Pr11)	19:51	20:53	21:50
2	08:48		13:07 (JU1)	08:11		08:59 (Pr3b)	07:06		07:53 (PrRR3)	06:44	05:28	04:33
	15:48	26	13:33 (JU1)	16:46	27	09:26 (Pr3b)	17:48	81	16:25 (Pr11)	19:53	20:55	21:52
3	08:48		13:08 (JU1)	08:09		08:59 (Pr3b)	07:04		07:53 (PrRR3)	06:41	05:26	04:32
	15:49	26	13:34 (JU1)	16:48	28	09:27 (Pr3b)	17:50	67	16:19 (Pr11)	19:55	20:57	21:53
4	08:48		13:08 (JU1)	08:07		08:59 (Pr3b)	07:01		07:53 (PrRR3)	06:39	05:24	04:31
	15:50	26	13:34 (JU1)	16:50	28	09:27 (Pr3b)	17:52	62	09:21 (Pr25)	19:57	20:59	21:54
5	08:47		13:09 (JU1)	08:05		08:59 (Pr3b)	06:58		07:53 (PrRR3)	06:36	05:22	04:30
	15:52	24	13:33 (JU1)	16:52	27	09:26 (Pr3b)	17:54	59	09:19 (Pr25)	19:59	21:01	21:56
6	08:47		13:11 (JU1)	08:03		08:59 (Pr3b)	06:56		07:55 (PrRR3)	06:34	05:19	04:29
	15:53	23	13:34 (JU1)	16:55	31	16:21 (Pr12)	17:56	52	09:17 (Pr25)	20:01	21:04	21:57
7	08:46		13:11 (JU1)	08:01		08:57 (Pr25)	06:53		07:55 (PrRR3)	06:31	05:17	04:28
	15:55	23	13:34 (JU1)	16:57	39	16:24 (Pr12)	17:59	46	09:15 (Pr25)	20:03	21:06	21:58
8	08:45		13:12 (JU1)	07:58		08:55 (Pr25)	06:51		07:56 (PrRR3)	06:28	05:15	04:28
	15:56	22	13:34 (JU1)	16:59	45	16:27 (Pr12)	18:01	39	17:30 (O6)	20:05	21:08	21:59
9	08:45		13:14 (JU1)	07:56		08:52 (Pr25)	06:48		07:59 (PrRR3)	06:26	05:13	04:27
	15:58	19	13:33 (JU1)	17:01	50	16:28 (Pr12)	18:03	32	17:35 (O6)	20:08	21:10	22:00
10	08:44		13:15 (JU1)	07:54		08:51 (Pr25)	06:45		08:03 (PrRR3)	06:23	05:11	04:26
	15:59	18	13:33 (JU1)	17:03	53	16:30 (Pr12)	18:05	19	17:37 (O6)	20:10	21:12	22:01
11	08:43		13:16 (JU1)	07:52		08:49 (Pr25)	06:43		17:19 (O6)	06:20	05:09	04:26
	16:01	15	13:31 (JU1)	17:06	54	16:30 (Pr12)	18:07	19	17:38 (O6)	20:12	21:14	22:02
12	08:42		13:18 (JU1)	07:50		08:48 (Pr25)	06:40		17:19 (O6)	06:18	05:07	04:25
	16:03	13	13:31 (JU1)	17:08	57	16:31 (Pr12)	18:09	21	17:40 (O6)	20:14	21:16	22:03
13	08:41		13:21 (JU1)	07:47		08:47 (Pr25)	06:38		17:17 (O6)	06:15	05:05	04:25
	16:05	8	13:29 (JU1)	17:10	62	16:32 (Pr12)	18:11	23	17:40 (O6)	20:16	21:17	22:04
14	08:40			07:45		08:46 (Pr25)	06:35		17:16 (O6)	06:13	05:03	04:24
	16:06			17:12	64	16:32 (Pr11)	18:13	24	17:40 (O6)	20:18	21:19	22:04
15	08:39			07:43		08:45 (Pr25)	06:32		17:16 (O6)	06:10	05:01	04:24
	16:08			17:15	69	16:33 (Pr11)	18:16	23	17:39 (O6)	20:20	21:21	22:05
16	08:38			07:40		08:44 (Pr25)	06:30		17:16 (O6)	06:07	04:59	04:24
	16:10			17:17	71	16:33 (Pr11)	18:18	24	17:40 (O6)	20:22	21:23	22:06
17	08:37			07:38		08:44 (Pr25)	06:27		17:16 (O6)	06:05	04:57	04:24
	16:12			17:19	73	16:34 (Pr11)	18:20	23	17:39 (O6)	20:24	21:25	22:06
18	08:35			07:36		08:43 (Pr25)	06:24		17:15 (O6)	06:02	04:55	04:23
	16:14			17:21	75	16:34 (Pr11)	18:22	23	17:38 (O6)	20:26	21:27	22:07
19	08:34			07:33		08:43 (Pr25)	06:22		17:17 (O6)	06:00	04:53	04:23
	16:16			17:24	76	16:35 (Pr11)	18:24	21	17:38 (O6)	20:28	21:29	22:07
20	08:33			07:31		08:04 (PrRR3)	06:19		17:17 (O6)	05:57	04:52	04:23
	16:18			17:26	86	16:35 (Pr11)	18:26	19	17:36 (O6)	20:30	21:31	22:07
21	08:31			07:29		08:01 (PrRR3)	06:16		17:18 (O6)	05:55	04:50	04:24
	16:20			17:28	92	16:35 (Pr11)	18:28	16	17:34 (O6)	20:33	21:32	22:08
22	08:30			07:26		07:59 (PrRR3)	06:14		17:20 (O6)	05:52	04:48	04:24
	16:22			17:30	95	16:34 (Pr11)	18:30	12	17:32 (O6)	20:35	21:34	22:08
23	08:28		09:06 (Pr3b)	07:24		07:58 (PrRR3)	06:11		17:25 (O6)	05:50	04:47	04:24
	16:24	8	09:14 (Pr3b)	17:32	99	16:35 (Pr11)	18:32	2	17:27 (O6)	20:37	21:36	22:08
24	08:27		09:04 (Pr3b)	07:21		07:56 (PrRR3)	06:08			05:47	04:45	04:24
	16:26	13	09:17 (Pr3b)	17:35	100	16:34 (Pr11)	18:34			20:39	21:38	22:08
25	08:25		09:02 (Pr3b)	07:19		07:55 (PrRR3)	06:06			05:45	04:43	04:25
	16:28	17	09:19 (Pr3b)	17:37	99	16:33 (Pr11)	18:36			20:41	21:39	22:08
26	08:23		09:01 (Pr3b)	07:16		07:54 (PrRR3)	06:03			05:43	04:42	04:25
	16:30	19	09:20 (Pr3b)	17:39	99	16:32 (Pr11)	18:38			20:43	21:41	22:08
27	08:22		09:01 (Pr3b)	07:14		07:53 (PrRR3)	06:00			05:40	04:41	04:26
	16:32	21	09:22 (Pr3b)	17:41	97	16:31 (Pr11)	18:41			20:45	21:43	22:08
28	08:20		09:01 (Pr3b)	07:11		07:54 (PrRR3)	05:57			05:38	04:39	04:26
	16:35	22	09:23 (Pr3b)	17:43	93	16:30 (Pr11)	18:43			20:47	21:44	22:08
29	08:18		08:59 (Pr3b)				06:55			05:35	04:38	04:27
	16:37	24	09:23 (Pr3b)				19:45			20:49	21:46	22:07
30	08:16		08:59 (Pr3b)				06:52			05:33	04:37	04:28
	16:39	25	09:24 (Pr3b)				19:47			20:51	21:47	22:07
31	08:14		08:59 (Pr3b)				06:49				04:35	
	16:41	26	09:25 (Pr3b)				19:49				21:49	
Potential sun hours	236			266			366		426	507	528	
Total, worst case	446			1816			796					
Sun reduction	0,13			0,23			0,39					
Oper. time red.	1,00			1,00			1,00					
Wind dir. red.	1,00			1,00			1,00					
Total reduction	0,13			0,23			0,39					
Total, real	60			409			312					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Malova - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (472)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December								
1	04:28	05:14	06:15	07:15	17:57 (06)	07:20	08:21 (Pr25)	08:22	12:58 (JU1)					
	22:07	21:26	20:12	18:52	22	18:19 (06)	16:34	52	16:00 (Pr12)	15:43	15	13:13 (JU1)		
2	04:29	05:16	06:17	07:17	17:58 (06)	07:23	08:22 (Pr25)	08:24	12:57 (JU1)					
	22:06	21:24	20:09	18:49	20	18:18 (06)	16:32	50	15:58 (Pr12)	15:42	18	13:15 (JU1)		
3	04:30	05:18	06:19	07:19	17:59 (06)	07:25	08:24 (Pr25)	08:25	12:57 (JU1)					
	22:06	21:22	20:07	18:46	17	18:16 (06)	16:30	44	15:55 (Pr12)	15:41	19	13:16 (JU1)		
4	04:31	05:20	06:21	07:21	08:37 (PrRR3)	07:27	08:28 (Pr25)	08:27	12:57 (JU1)					
	22:05	21:19	20:04	18:44	24	18:13 (06)	16:28	37	15:53 (Pr12)	15:41	21	13:18 (JU1)		
5	04:32	05:22	06:23	07:23	08:34 (PrRR3)	07:29	08:29 (Pr3b)	08:29	12:57 (JU1)					
	22:04	21:17	20:01	18:41	39	18:10 (06)	16:25	30	15:50 (Pr12)	15:40	22	13:19 (JU1)		
6	04:33	05:24	06:25	07:25	08:32 (PrRR3)	07:31	08:30 (Pr3b)	08:30	12:56 (JU1)					
	22:04	21:15	19:59	18:38	41	09:49 (Pr25)	16:23	27	08:57 (Pr3b)	15:39	23	13:19 (JU1)		
7	04:34	05:25	06:27	07:27	08:30 (PrRR3)	07:33	08:29 (Pr3b)	08:32	12:56 (JU1)					
	22:03	21:13	19:56	18:36	50	09:52 (Pr25)	16:21	28	08:57 (Pr3b)	15:39	25	13:21 (JU1)		
8	04:35	05:27	06:29	07:30	08:29 (PrRR3)	07:36	08:29 (Pr3b)	08:33	12:56 (JU1)					
	22:02	21:11	19:53	18:33	55	09:53 (Pr25)	16:19	27	08:56 (Pr3b)	15:38	26	13:22 (JU1)		
9	04:36	05:29	06:31	07:32	08:28 (PrRR3)	07:38	08:30 (Pr3b)	08:34	12:56 (JU1)					
	22:01	21:09	19:51	18:30	60	09:55 (Pr25)	16:17	27	08:57 (Pr3b)	15:37	26	13:22 (JU1)		
10	04:38	05:31	06:33	07:34	08:28 (PrRR3)	07:40	08:30 (Pr3b)	08:36	12:57 (JU1)					
	22:00	21:06	19:48	18:28	64	09:57 (Pr25)	16:15	26	08:56 (Pr3b)	15:37	26	13:23 (JU1)		
11	04:39	05:33	06:35	07:36	08:27 (PrRR3)	07:42	08:31 (Pr3b)	08:37	12:56 (JU1)					
	21:59	21:04	19:45	18:25	76	16:57 (Pr11)	16:13	26	08:57 (Pr3b)	15:37	28	13:24 (JU1)		
12	04:40	05:35	06:37	07:38	08:26 (PrRR3)	07:44	08:31 (Pr3b)	08:38	12:56 (JU1)					
	21:58	21:02	19:43	18:23	86	17:00 (Pr11)	16:11	25	08:56 (Pr3b)	15:36	28	13:24 (JU1)		
13	04:42	05:37	06:39	07:40	08:26 (PrRR3)	07:46	08:31 (Pr3b)	08:39	12:56 (JU1)					
	21:57	20:59	19:40	18:20	90	17:01 (Pr11)	16:09	24	08:55 (Pr3b)	15:36	28	13:24 (JU1)		
14	04:43	05:39	06:41	07:42	08:26 (PrRR3)	07:49	08:33 (Pr3b)	08:40	12:58 (JU1)					
	21:56	20:57	19:37	18:18	94	17:02 (Pr11)	16:08	22	08:55 (Pr3b)	15:36	28	13:26 (JU1)		
15	04:45	05:41	06:43	07:44	08:27 (PrRR3)	07:51	08:33 (Pr3b)	08:41	12:58 (JU1)					
	21:54	20:55	19:35	18:15	98	17:04 (Pr11)	16:06	21	08:54 (Pr3b)	15:36	28	13:26 (JU1)		
16	04:46	05:43	06:45	07:46	08:27 (PrRR3)	07:53	08:35 (Pr3b)	08:42	12:58 (JU1)					
	21:53	20:52	19:32	18:12	100	17:05 (Pr11)	16:04	19	08:54 (Pr3b)	15:36	29	13:27 (JU1)		
17	04:48	05:45	06:47	07:48	08:27 (PrRR3)	07:55	08:36 (Pr3b)	08:43	12:59 (JU1)					
	21:52	20:50	19:29	18:10	100	17:05 (Pr11)	16:02	17	08:53 (Pr3b)	15:36	29	13:28 (JU1)		
18	04:49	05:47	06:49	07:50	08:27 (PrRR3)	07:57	08:38 (Pr3b)	08:44	12:58 (JU1)					
	21:50	20:47	19:27	18:07	99	17:05 (Pr11)	16:01	13	08:51 (Pr3b)	15:36	29	13:27 (JU1)		
19	04:51	05:49	06:51	07:52	08:28 (PrRR3)	07:59	08:41 (Pr3b)	08:45	12:59 (JU1)					
	21:49	20:45	19:24	18:05	98	17:05 (Pr11)	15:59	8	08:49 (Pr3b)	15:37	29	13:28 (JU1)		
20	04:52	05:51	06:53	07:55	08:30 (PrRR3)	08:01			08:46			13:00 (JU1)		
	21:47	20:43	19:21	18:02	97	17:06 (Pr11)	15:57		15:37		29	13:29 (JU1)		
21	04:54	05:53	06:55	18:07 (06)	07:57	08:32 (PrRR3)	08:03		08:46			12:59 (JU1)		
	21:46	20:40	19:18	10	18:17 (06)	18:00	90	17:05 (Pr11)	15:56		30	13:29 (JU1)		
22	04:56	05:55	06:57	18:04 (06)	07:59	08:37 (PrRR3)	08:05		08:47			13:00 (JU1)		
	21:44	20:38	19:16	15	18:19 (06)	17:58	79	17:05 (Pr11)	15:54		30	13:30 (JU1)		
23	04:57	05:57	06:59	18:02 (06)	08:01	09:14 (Pr25)	08:07		08:47			13:00 (JU1)		
	21:42	20:35	19:13	18	18:20 (06)	17:55	76	17:05 (Pr11)	15:53		30	13:30 (JU1)		
24	04:59	05:59	07:01	18:01 (06)	08:03	09:13 (Pr25)	08:09		08:48			13:02 (JU1)		
	21:41	20:33	19:10	20	18:21 (06)	17:53	75	17:04 (Pr11)	15:51		29	13:31 (JU1)		
25	05:01	06:01	07:03	17:59 (06)	07:05	08:14 (Pr25)	08:11		08:48			13:02 (JU1)		
	21:39	20:30	19:08	22	18:21 (06)	16:50	72	16:03 (Pr11)	15:50		29	13:31 (JU1)		
26	05:03	06:03	07:05	17:59 (06)	07:07	08:15 (Pr25)	08:13		08:48			13:02 (JU1)		
	21:37	20:27	19:05	23	18:22 (06)	16:48	70	16:03 (Pr11)	15:49		30	13:32 (JU1)		
27	05:05	06:05	07:07	17:58 (06)	07:10	08:15 (Pr25)	08:15		08:49			13:03 (JU1)		
	21:35	20:25	19:02	23	18:21 (06)	16:46	67	16:02 (Pr11)	15:48		29	13:32 (JU1)		
28	05:06	06:07	07:09	17:57 (06)	07:12	08:15 (Pr25)	08:17		08:49			13:03 (JU1)		
	21:33	20:22	19:00	24	18:21 (06)	16:43	65	16:01 (Pr11)	15:46		29	13:32 (JU1)		
29	05:08	06:09	07:11	17:57 (06)	07:14	08:17 (Pr25)	08:18		13:01 (JU1)			13:04 (JU1)		
	21:32	20:20	18:57	24	18:21 (06)	16:41	60	16:01 (Pr12)	15:45	8	13:09 (JU1)	15:43	29	13:33 (JU1)
30	05:10	06:11	07:13	17:57 (06)	07:16	08:18 (Pr25)	08:20		12:59 (JU1)			13:05 (JU1)		
	21:30	20:17	18:54	23	18:20 (06)	16:39	57	16:01 (Pr12)	15:44	13	13:12 (JU1)	15:44	28	13:33 (JU1)
31	05:12	06:13		17:18	08:19 (Pr25)				08:49			13:05 (JU1)		
	21:28	20:15		16:36	55	16:00 (Pr12)			15:45	28	13:33 (JU1)			
Potential sun hours	529	469	384	324			248		217					
Total, worst case			202		2096		544		827					
Sun reduction			0,43		0,29		0,08		0,08					
Oper. time red.			1,00		1,00		1,00		1,00					
Wind dir. red.			1,00		1,00		1,00		1,00					
Total reduction			0,43		0,29		0,08		0,08					
Total, real			87		608		41		70					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Maurini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (509)
 Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June
1	08:48	08:12	07:09	16:50 (AP2)	06:47	05:31
	15:46	16:43	17:45	22	17:12 (AP2)	19:51
2	08:48	08:10	07:06	16:49 (AP2)	06:44	05:28
	15:48	16:46	17:48	23	17:12 (AP2)	19:53
3	08:48	08:08	07:03	16:48 (AP2)	06:41	05:26
	15:49	16:48	17:50	24	17:12 (AP2)	19:55
4	08:47	08:07	07:01	16:49 (AP2)	06:39	05:24
	15:50	16:50	17:52	23	17:12 (AP2)	19:57
5	08:47	08:04	06:58	16:48 (AP2)	06:36	05:21
	15:52	16:52	17:54	24	17:12 (AP2)	19:59
6	08:46	08:02	06:56	16:49 (AP2)	06:33	05:19
	15:53	16:54	17:56	23	17:12 (AP2)	20:01
7	08:46	08:00	06:53	16:49 (AP2)	06:31	05:17
	15:54	16:57	17:58	21	17:10 (AP2)	20:03
8	08:45	07:58	06:51	16:50 (AP2)	06:28	05:15
	15:56	16:59	18:01	19	17:09 (AP2)	20:05
9	08:44	07:56	06:48	16:51 (AP2)	06:26	05:13
	15:58	17:01	18:03	16	17:07 (AP2)	20:07
10	08:44	07:54	06:45	16:53 (AP2)	06:23	05:11
	15:59	17:03	18:05	12	17:05 (AP2)	20:09
11	08:43	07:52	06:43	16:57 (AP2)	06:20	05:09
	16:01	17:06	18:07	4	17:01 (AP2)	20:12
12	08:42	07:49	06:40		06:18	05:07
	16:03	17:08	18:09		20:14	21:15
13	08:41	07:47	06:37		06:15	19:14 (Pr3b)
	16:04	17:10	18:11	14	19:28 (Pr3b)	21:17
14	08:40	07:45	06:35		06:12	19:10 (Pr3b)
	16:06	17:12	18:13	20	19:30 (Pr3b)	21:19
15	08:39	07:43	06:32		06:10	19:08 (Pr3b)
	16:08	17:15	18:15	25	19:33 (Pr3b)	21:21
16	08:38	07:40	06:29		06:07	19:05 (Pr3b)
	16:10	17:17	18:18	29	19:34 (Pr3b)	21:23
17	08:36	07:38	06:27		06:05	19:04 (Pr3b)
	16:12	17:19	18:20	32	19:36 (Pr3b)	21:25
18	08:35	07:36	06:24		06:02	19:02 (Pr3b)
	16:14	17:21	18:22	34	19:36 (Pr3b)	21:27
19	08:34	07:33	06:21		06:00	19:01 (Pr3b)
	16:16	17:24	18:24	36	19:37 (Pr3b)	21:29
20	08:32	07:31	06:19		05:57	18:59 (Pr3b)
	16:18	17:26	18:26	39	19:38 (Pr3b)	21:31
21	08:31	07:28	06:16		05:55	18:59 (Pr3b)
	16:20	17:28	18:28	39	19:38 (Pr3b)	21:32
22	08:30	07:26	06:13		05:52	18:58 (Pr3b)
	16:22	17:30	18:30	41	19:39 (Pr3b)	21:34
23	08:28	07:24	06:11		05:50	18:57 (Pr3b)
	16:24	17:32	18:32	42	19:39 (Pr3b)	21:36
24	08:26	07:21	16:58 (AP2)	06:08	05:47	18:57 (Pr3b)
	16:26	17:35	7	17:05 (AP2)	20:39	42
25	08:25	07:19	16:54 (AP2)	06:05	05:45	18:56 (Pr3b)
	16:28	17:37	13	17:07 (AP2)	20:41	44
26	08:23	07:16	16:53 (AP2)	06:03	05:42	18:55 (Pr3b)
	16:30	17:39	17	17:10 (AP2)	20:43	44
27	08:21	07:14	16:51 (AP2)	06:00	05:40	18:55 (Pr3b)
	16:32	17:41	20	17:11 (AP2)	20:45	44
28	08:20	07:11	16:50 (AP2)	05:57	05:38	18:55 (Pr3b)
	16:35	17:43	21	17:11 (AP2)	20:47	44
29	08:18		06:55		05:35	18:55 (Pr3b)
	16:37		19:45		20:49	45
30	08:16		06:52		05:33	18:55 (Pr3b)
	16:39		19:47		20:51	43
31	08:14		06:49			
	16:41		19:49			
Potential sun hours	236	266	366	426	507	528
Total, worst case		78	211	657	1185	138
Sun reduction		0,23	0,39	0,44	0,56	0,57
Oper. time red.		1,00	1,00	1,00	1,00	1,00
Wind dir. red.		1,00	1,00	1,00	1,00	1,00
Total reduction		0,23	0,39	0,44	0,56	0,57
Total, real		18	83	290	667	78

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Maurini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (509)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December
1	04:28 22:06	05:14 21:25	19:12 (Pr3b) 20:45 (Pr25)	06:15 20:12	07:15 18:52	07:20 16:34
2	04:29 22:06	20:29 (Pr25) 21:23	05:16 20:44 (Pr25)	54 20:09	06:17 18:49	07:17 16:32
3	04:30 22:05	20:27 (Pr25) 21:21	05:18 20:44 (Pr25)	54 20:07	06:19 18:46	07:19 17:32 (AP2)
4	04:31 22:05	6 20:33 (Pr25)	21:21 05:20	56 20:44 (Pr25)	20:07 06:21	10 17:42 (AP2)
5	04:32 22:04	9 20:35 (Pr25)	21:19 05:21	56 19:09 (Pr3b)	20:04 06:21	15 17:29 (AP2)
6	04:33 22:03	11 20:36 (Pr25)	21:17 05:23	54 20:43 (Pr25)	20:01 06:25	19 17:46 (AP2)
7	04:34 22:03	13 20:37 (Pr25)	21:15 05:25	52 19:06 (Pr3b)	19:59 06:27	20 17:26 (AP2)
8	04:35 22:02	14 20:38 (Pr25)	21:13 05:27	48 20:36 (Pr25)	18:38 19:56	22 17:46 (AP2)
9	04:36 22:01	16 20:39 (Pr25)	21:11 05:29	40 19:06 (Pr3b)	19:53 06:31	23 17:24 (AP2)
10	04:38 22:00	18 20:40 (Pr25)	21:08 05:31	42 19:47 (Pr3b)	19:51 06:33	24 17:47 (AP2)
11	04:39 21:59	20 20:42 (Pr25)	21:04 05:33	43 19:05 (Pr3b)	19:48 06:35	24 17:22 (AP2)
12	04:40 21:58	22 20:43 (Pr25)	21:02 05:35	44 19:04 (Pr3b)	19:45 06:37	24 17:47 (AP2)
13	04:42 21:57	22 20:43 (Pr25)	20:59 05:39	44 19:03 (Pr3b)	19:40 06:41	22 17:23 (AP2)
14	04:43 21:55	23 20:43 (Pr25)	20:57 05:41	44 19:03 (Pr3b)	19:37 06:43	21 17:44 (AP2)
15	04:44 21:54	24 20:44 (Pr25)	20:54 05:43	44 19:03 (Pr3b)	19:35 06:45	19 17:26 (AP2)
16	04:46 21:53	25 20:45 (Pr25)	20:52 05:45	44 19:03 (Pr3b)	19:32 06:47	15 17:43 (AP2)
17	04:47 21:51	26 20:45 (Pr25)	20:50 05:47	44 19:02 (Pr3b)	19:29 06:49	11 17:27 (AP2)
18	04:49 21:50	27 20:46 (Pr25)	20:47 05:49	43 19:02 (Pr3b)	19:26 06:51	2 17:38 (AP2)
19	04:51 21:49	27 20:46 (Pr25)	20:45 05:51	43 19:02 (Pr3b)	19:24 06:53	15:59 08:01
20	04:52 21:47	27 20:46 (Pr25)	20:42 05:53	42 19:03 (Pr3b)	19:21 06:55	15:57 08:03
21	04:54 21:45	28 20:46 (Pr25)	20:40 05:55	41 19:03 (Pr3b)	19:18 06:57	15:56 08:05
22	04:56 21:44	28 20:47 (Pr25)	20:37 05:57	40 19:04 (Pr3b)	19:16 06:59	15:54 08:07
23	04:57 21:42	29 20:47 (Pr25)	20:35 05:59	38 19:05 (Pr3b)	19:13 07:01	15:53 08:09
24	04:59 21:40	29 20:47 (Pr25)	20:32 06:01	36 19:41 (Pr3b)	19:10 07:03	15:51 08:11
25	05:01 21:39	28 20:47 (Pr25)	20:30 06:03	34 19:06 (Pr3b)	19:08 07:05	15:50 08:13
26	05:03 21:37	29 20:47 (Pr25)	20:27 06:05	31 19:06 (Pr3b)	19:05 07:07	15:49 08:15
27	05:04 21:35	39 19:22 (Pr3b)	20:25 06:07	29 19:37 (Pr3b)	19:02 07:09	16:45 08:18
28	05:06 21:33	45 19:19 (Pr3b)	20:22 06:09	25 19:09 (Pr3b)	19:00 07:11	16:43 08:16
29	05:08 21:31	48 20:46 (Pr25)	20:20 06:11	20 19:34 (Pr3b)	18:57 07:13	16:41 08:14
30	05:10 21:29	51 19:15 (Pr3b)	20:17 06:13	13 19:31 (Pr3b)	18:54 07:15	16:39 08:12
31	05:12 21:27	53 20:46 (Pr25)	20:14 06:15		16:36 07:17	15:44 08:10
Potential sun hours	529	469	384	324	248	217
Total, worst case	757	1240		294		
Sun reduction	0,47	0,52		0,29		
Oper. time red.	1,00	1,00		1,00		
Wind dir. red.	1,00	1,00		1,00		
Total reduction	0,47	0,52		0,29		
Total, real	357	647		85		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Maurinmajas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (577)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:27	15:41
5	08:47	08:04	06:58	06:36	05:22	04:30	04:32	05:22	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:55	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:39
8	08:45	07:58	06:50	06:28	05:15	04:28	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:08	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:45	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:24	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:01	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:37
20	08:32	07:31	06:19	05:57	04:52	04:24	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:35	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:41	04:26	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:35	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:37	04:28	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Meldri - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (526)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Mež noras - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (424)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December			
1	08:48	08:12	07:09	16:24 (DD3)	06:47	05:31	04:35	04:29	05:14	06:16	07:15	07:20	08:22		
2	15:47	16:44	17:46	20	16:44 (DD3)	19:51	20:53	21:50	22:06	21:26	20:12	18:52	16:35	15:44	
3	08:48	08:11	07:06	16:26 (DD3)	06:44	05:29	04:34	04:30	05:16	06:18	07:17	07:23	08:23		
4	15:48	16:46	17:48	16	16:42 (DD3)	19:53	20:55	21:51	22:06	21:24	20:09	18:49	16:32	15:43	
5	08:48	08:09	07:04	16:29 (DD3)	06:42	05:27	04:33	04:31	05:18	06:20	07:19	07:25	08:25		
6	15:50	16:48	17:50	11	16:40 (DD3)	19:55	20:57	21:53	22:05	21:21	20:07	18:47	16:30	15:42	
7	08:47	08:07	07:01		06:39	05:24	04:32	04:32	05:20	06:22	07:22	07:27	08:27		
8	15:51	16:51	17:52		19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:41		
9	08:47	08:05	06:59		06:36	05:22	04:31	04:33	05:22	06:24	07:24	07:29	08:28		
10	15:52	16:53	17:55		19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:26	15:41		
11	08:46	08:03	06:56		06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31	08:30		
12	15:54	16:55	17:57		20:01	21:03	21:56	22:03	21:15	19:59	18:39	16:24	15:40		
13	08:46	08:00	06:53		06:31	05:18	04:29	04:35	05:26	06:28	07:28	07:33	08:31		
14	15:55	16:57	17:59		20:04	21:05	21:58	22:03	21:13	19:56	18:36	16:22	15:39		
15	08:45	07:58	06:51		06:29	05:16	04:28	04:36	05:28	06:30	07:30	07:36	08:33		
16	15:57	16:59	18:01		20:06	21:07	21:59	22:02	21:11	19:54	18:33	16:20	15:39		
17	08:44	07:56	06:48		06:26	05:13	04:28	04:37	05:30	06:32	07:32	07:38	08:34		
18	15:58	17:02	18:03		20:08	21:09	22:00	22:01	21:08	19:51	18:31	16:18	15:38		
19	08:44	07:54	06:46		06:23	05:11	04:27	04:38	05:32	06:34	07:34	17:06 (DD3)	07:40	08:35	
20	16:00	17:04	18:05		20:10	21:11	22:01	22:00	21:06	19:48	18:28	6	17:12 (DD3)	16:16	15:38
21	08:43	07:52	06:43		06:21	05:09	04:26	04:40	05:34	06:36	07:36	17:01 (DD3)	07:42	08:37	
22	16:02	17:06	18:07		20:12	21:13	22:02	21:59	21:04	19:46	18:26	14	17:15 (DD3)	16:14	15:37
23	08:42	07:50	06:40		06:18	05:07	04:26	04:41	05:36	06:38	07:38	16:59 (DD3)	07:44	08:38	
24	16:03	17:08	18:09		20:14	21:15	22:02	21:58	21:02	19:43	18:23	18	17:17 (DD3)	16:12	15:37
25	08:41	07:47	06:38		06:16	05:05	04:25	04:42	05:38	06:40	07:40	16:57 (DD3)	07:46	08:39	
26	16:05	17:11	18:12		20:16	21:17	22:03	21:57	20:59	19:40	18:20	21	17:18 (DD3)	16:10	15:37
27	08:40	07:45	06:35	16:32 (DD3)	06:13	05:03	04:25	04:44	05:40	06:42	07:42	16:55 (DD3)	07:48	08:40	
28	16:07	17:13	7	16:39 (DD3)	20:18	21:19	22:04	21:55	20:57	19:37	18:18	23	17:18 (DD3)	16:08	15:37
29	08:39	07:43	14	16:29 (DD3)	06:10	05:01	04:25	04:45	05:42	06:44	07:44	16:55 (DD3)	07:51	08:41	
30	16:09	17:15	14	16:43 (DD3)	20:20	21:21	22:05	21:54	20:55	19:35	18:15	25	17:20 (DD3)	16:06	15:37
31	08:38	07:41	18	16:26 (DD3)	06:08	04:59	04:25	04:47	05:44	06:46	07:46	16:54 (DD3)	07:53	08:42	
32	16:11	17:17	18	16:44 (DD3)	20:22	21:23	22:05	21:53	20:52	19:32	18:13	26	17:20 (DD3)	16:05	15:37
33	08:36	07:38	21	16:25 (DD3)	06:05	04:58	04:24	04:48	05:46	06:47	07:48	16:53 (DD3)	07:55	08:43	
34	16:13	17:20	21	16:46 (DD3)	20:24	21:25	22:06	21:51	20:50	19:29	18:10	27	17:20 (DD3)	16:03	15:37
35	08:35	07:36	22	16:24 (DD3)	06:03	04:56	04:24	04:50	05:48	06:49	07:50	16:53 (DD3)	07:57	08:44	
36	16:14	17:22	22	16:46 (DD3)	20:26	21:27	22:06	21:50	20:47	19:27	18:08	28	17:19 (DD3)	16:01	15:37
37	08:34	07:33	25	16:23 (DD3)	06:00	04:54	04:24	04:51	05:50	06:51	07:53	16:52 (DD3)	07:59	08:45	
38	16:16	17:24	25	16:48 (DD3)	20:28	21:29	22:07	21:49	20:45	19:24	18:05	27	17:19 (DD3)	16:00	15:37
39	08:32	07:31	26	16:22 (DD3)	05:58	04:52	04:24	04:53	05:52	06:53	07:55	16:53 (DD3)	08:01	08:45	
40	16:18	17:26	26	16:48 (DD3)	20:30	21:31	22:07	21:47	20:43	19:21	18:03	29	17:19 (DD3)	15:58	15:38
41	08:31	07:29	27	16:22 (DD3)	05:55	04:51	04:24	04:55	05:54	06:55	07:57	16:53 (DD3)	08:03	08:46	
42	16:20	17:28	27	16:49 (DD3)	20:33	21:32	22:07	21:45	20:40	19:19	18:00	30	17:19 (DD3)	15:56	15:38
43	08:30	07:26	28	16:22 (DD3)	05:53	04:49	04:25	04:56	05:56	06:57	07:59	16:53 (DD3)	08:05	08:47	
44	16:23	17:31	26	16:48 (DD3)	20:35	21:34	22:08	21:44	20:38	19:16	17:58	31	17:18 (DD3)	15:55	15:38
45	08:28	07:24	27	16:22 (DD3)	05:50	04:47	04:25	04:58	05:58	06:59	08:01	16:54 (DD3)	08:07	08:47	
46	16:25	17:33	27	16:49 (DD3)	20:37	21:36	22:08	21:42	20:35	19:13	17:56	32	17:18 (DD3)	15:53	15:39
47	08:26	07:21	28	16:22 (DD3)	05:48	04:46	04:25	05:00	06:00	07:01	08:03	16:54 (DD3)	08:09	08:47	
48	16:27	17:35	26	16:48 (DD3)	20:39	21:38	22:08	21:40	20:33	19:11	17:53	33	17:16 (DD3)	15:52	15:40
49	08:25	07:19	26	16:21 (DD3)	05:45	04:44	04:25	05:02	06:02	07:03	08:05	15:55 (DD3)	08:11	08:48	
50	16:29	17:37	26	16:47 (DD3)	20:41	21:39	22:08	21:39	20:30	19:08	17:51	34	16:15 (DD3)	15:51	15:40
51	08:23	07:16	25	16:22 (DD3)	05:43	04:43	04:26	05:03	06:04	07:05	08:07	15:57 (DD3)	08:13	08:48	
52	16:31	17:39	25	16:47 (DD3)	20:43	21:41	22:08	21:37	20:27	19:05	17:48	35	16:14 (DD3)	15:49	15:41
53	08:22	07:14	24	16:22 (DD3)	05:41	04:41	04:26	05:05	06:06	07:07	08:09	15:59 (DD3)	08:15	08:48	
54	16:33	17:42	24	16:46 (DD3)	20:45	21:42	22:08	21:35	20:25	19:03	17:46	36	16:11 (DD3)	15:48	15:42
55	08:20	07:11	22	16:24 (DD3)	05:38	04:40	04:27	05:07	06:08	07:09	08:12	16:03 (DD3)	08:16	08:48	
56	16:35	17:44	22	16:46 (DD3)	20:47	21:44	22:07	21:33	20:22	19:00	17:44	37	16:07 (DD3)	15:47	15:43
57	08:18			06:55	05:36	04:38	04:28	05:09	06:10	07:11	08:14	4	16:07 (DD3)	15:47	15:43
58	16:37			19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41		15:46	15:44	
59	08:16			06:52	05:33	04:37	04:28	05:11	06:12	07:13	08:16		16:09	08:20	08:48
60	16:40			19:47	20:51	21:47	22:07	21:29	20:17	18:55	16:39		15:45	15:45	
61	08:14			06:50		04:36		05:13	06:14		07:18		15:48	08:48	
62	16:42			19:49		21:49		21:28	20:15		16:37		15:46	15:46	
Potential sun hours	236	266	366		426	507	528	528	469	384	324	248	217		
Total, worst case		336	47								389				
Sun reduction		0,22	0,39								0,29				
Oper. time red.		1,00	1,00								1,00				
Wind dir. red.		1,00	1,00								1,00				
Total reduction		0,22	0,39								0,29				
Total, real		76	18								113				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Mež otnes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (431)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December		
1	08:48 15:47	08:12 16:44	07:09 17:46	06:47 19:51	18:49 (DD3) 3 18:52 (DD3)	05:31 20:53	04:35 21:50	04:29 22:06	05:14 21:25	06:16 20:12	07:15 18:52	07:20 16:35	08:22 15:44	
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53		05:29 20:55	04:34 21:51	04:30 22:06	05:16 21:23	06:18 20:09	07:17 18:49	07:23 16:32	08:23 15:43	
3	08:48 15:50	08:09 16:48	07:04 17:50	06:42 19:55		05:27 20:57	04:33 21:53	04:31 22:05	05:18 21:21	06:20 20:07	07:19 18:47	07:25 16:30	08:25 15:42	
4	08:47 15:51	08:07 16:51	07:01 17:52	06:39 19:57		05:24 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:21 18:44	07:27 16:28	08:27 15:41	
5	08:47 15:52	08:05 16:53	06:59 17:55	06:36 19:59		05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:01	07:24 18:41	07:29 16:26	08:28 15:41	
6	08:46 15:54	08:03 16:55	06:56 17:57	06:34 20:01		05:20 21:03	04:30 21:56	04:34 22:03	05:24 21:15	06:26 19:59	07:26 18:39	07:31 16:24	08:30 15:40	
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03		05:18 21:05	04:29 21:58	04:35 22:03	05:26 21:13	06:28 19:56	07:28 18:36	07:33 16:22	08:31 15:39	
8	08:45 15:57	07:58 16:59	06:51 18:01	06:29 20:06		05:16 21:07	04:28 21:59	04:36 22:02	05:28 21:11	06:30 19:53	07:30 18:33	07:36 16:20	08:33 15:39	
9	08:44 15:58	07:56 17:02	06:48 18:03	06:26 20:08		05:13 21:09	04:28 22:00	04:37 22:01	05:30 21:08	06:32 19:51	07:32 18:31	07:38 16:18	08:34 15:38	
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10		05:11 21:11	04:27 22:01	04:38 22:00	05:32 21:06	06:34 19:48	07:34 18:28	07:40 16:16	08:35 15:38	
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12		05:09 21:13	04:26 22:02	04:40 21:59	05:34 21:04	06:36 19:45	07:36 18:26	07:42 16:14	08:37 15:37	
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14		05:07 21:15	04:26 22:02	04:41 21:58	05:36 21:02	06:38 19:43	18:37 (DD3) 11 18:48 (DD3)	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 17:11	06:38 18:12	06:16 20:16		05:05 21:17	04:25 22:03	04:42 21:56	05:38 20:59	06:40 19:40	18:35 (DD3) 15 18:50 (DD3)	07:40 18:20	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18		05:03 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 19:37	18:33 (DD3) 18 18:51 (DD3)	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:10 20:20		05:01 21:21	04:25 22:05	04:45 21:54	05:42 20:55	06:43 19:35	18:32 (DD3) 19 18:51 (DD3)	07:44 18:15	07:50 16:06	08:41 15:37
16	08:38 16:11	07:40 17:17	06:30 18:18	06:08 20:22		04:59 21:23	04:25 22:05	04:47 21:53	05:44 20:52	06:45 19:32	18:31 (DD3) 20 18:51 (DD3)	07:46 18:13	07:53 16:05	08:42 15:37
17	08:36 16:13	07:38 17:20	06:27 18:20	06:05 20:24		04:58 21:25	04:24 22:06	04:48 21:51	05:46 20:50	06:47 19:29	18:30 (DD3) 21 18:51 (DD3)	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:14	07:36 17:22	06:24 18:22	06:03 20:26		04:56 21:27	04:24 22:06	04:50 21:50	05:48 20:47	06:49 19:27	18:30 (DD3) 21 18:51 (DD3)	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:22 18:24	17:50 (DD3) 6 17:56 (DD3)	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:48	05:50 20:45	06:51 19:24	18:29 (DD3) 22 18:51 (DD3)	07:53 18:05	07:59 16:00	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	17:47 (DD3) 11 17:58 (DD3)	05:58 20:30	04:52 21:30	04:24 22:07	04:53 21:47	05:52 20:42	06:53 19:21	18:29 (DD3) 21 18:50 (DD3)	07:55 18:03	08:01 15:58	08:45 15:38
21	08:31 16:20	07:29 17:28	06:16 18:28	17:45 (DD3) 15 18:00 (DD3)	05:55 20:32	04:51 21:32	04:24 22:07	04:55 21:45	05:54 20:40	06:55 19:19	18:30 (DD3) 19 18:49 (DD3)	07:57 18:00	08:03 15:56	08:46 15:38
22	08:29 16:23	07:26 17:31	06:14 18:30	17:44 (DD3) 19 18:03 (DD3)	05:53 20:35	04:49 21:34	04:25 22:08	04:56 21:44	05:56 20:38	06:57 19:16	18:30 (DD3) 16 18:46 (DD3)	07:59 17:58	08:05 15:55	08:46 15:38
23	08:28 16:25	07:24 17:33	06:11 18:32	17:43 (DD3) 20 18:03 (DD3)	05:50 20:37	04:47 21:36	04:25 22:08	04:58 21:42	05:58 20:35	06:59 19:13	18:31 (DD3) 12 18:43 (DD3)	08:01 17:55	08:07 15:53	08:47 15:39
24	08:26 16:27	07:21 17:35	06:08 18:35	17:42 (DD3) 21 18:03 (DD3)	05:48 20:39	04:46 21:37	04:25 22:08	05:00 21:40	06:00 20:32	07:01 19:11	18:33 (DD3) 8 18:41 (DD3)	08:03 17:53	08:09 15:52	08:47 15:40
25	08:25 16:29	07:19 17:37	06:06 18:37	17:42 (DD3) 22 18:04 (DD3)	05:45 20:41	04:44 21:39	04:25 22:08	05:02 21:39	06:02 20:30	07:03 19:08		07:05 16:51	08:11 15:51	08:48 15:40
26	08:23 16:31	07:16 17:39	06:03 18:39	17:42 (DD3) 21 18:03 (DD3)	05:43 20:43	04:43 21:41	04:26 22:08	05:03 21:37	06:04 20:27	07:05 19:05		07:07 16:48	08:13 15:49	08:48 15:41
27	08:21 16:33	07:14 17:42	06:00 18:41	17:41 (DD3) 21 18:02 (DD3)	05:41 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:06 20:25	07:07 19:03		07:10 16:46	08:15 15:48	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	17:42 (DD3) 20 18:02 (DD3)	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 19:00		07:12 16:44	08:16 15:47	08:48 15:43
29	08:18 16:37		06:55 19:45	18:42 (DD3) 18 19:00 (DD3)	05:36 20:49	04:38 21:46	04:28 22:07	05:09 21:31	06:10 20:20	07:11 18:57		07:14 16:41	08:18 15:46	08:48 15:44
30	08:16 16:40		06:52 19:47	18:43 (DD3) 15 18:58 (DD3)	05:33 20:51	04:37 21:47	04:28 22:07	05:11 21:29	06:12 20:17	07:13 18:55		07:16 16:39	08:20 15:45	08:48 15:45
31	08:14 16:42		06:50 19:49	18:45 (DD3) 12 18:57 (DD3)		04:36 21:49		05:13 21:27	06:14 20:15			07:18 16:37	08:18 15:46	08:48 15:46
Potential sun hours	236	266	366	426		507	528	528	469	384	324	248	217	
Total, worst case			221	3						223				
Sun reduction			0,39	0,44						0,43				
Oper. time red.			1,00	1,00						1,00				
Wind dir. red.			1,00	1,00						1,00				
Total reduction			0,39	0,44						0,43				
Total, real			87	1						96				

Table layout: For each day in each month the following matrix apply

Day in month Sun rise (hh:mm) First time (hh:mm) with flicker (WTG causing flicker first time)
Sun set (hh:mm) Minutes with flicker Last time (hh:mm) with flicker (WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Mež rozītes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (535)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Mež viteni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (511)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Mež abele - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (481)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June
1	08:48	08:12	07:09	16:21 (Pr3b)	06:47	18:03 (PrRR3)
	15:46	16:43	17:45	33	16:54 (Pr3b)	19:51
2	08:48	08:10	07:06	16:21 (Pr3b)	06:44	18:03 (PrRR3)
	15:48	16:45	17:48	32	16:53 (Pr3b)	19:53
3	08:48	08:09	07:03	16:21 (Pr3b)	06:41	18:03 (PrRR3)
	15:49	16:48	17:50	31	16:52 (Pr3b)	19:55
4	08:47	08:07	07:01	16:22 (Pr3b)	06:39	18:03 (PrRR3)
	15:50	16:50	17:52	30	16:52 (Pr3b)	19:57
5	08:47	08:04	06:58	16:22 (Pr3b)	06:36	18:03 (PrRR3)
	15:52	16:52	17:54	29	16:51 (Pr3b)	19:59
6	08:46	08:02	06:56	16:23 (Pr3b)	06:33	18:04 (PrRR3)
	15:53	16:54	17:56	28	16:51 (Pr3b)	20:01
7	08:46	08:00	06:53	16:23 (Pr3b)	06:31	18:04 (PrRR3)
	15:54	16:57	17:58	27	16:50 (Pr3b)	20:03
8	08:45	07:58	06:51	16:24 (Pr3b)	06:28	18:04 (PrRR3)
	15:56	16:59	18:01	24	16:48 (Pr3b)	20:05
9	08:44	07:56	06:48	16:25 (Pr3b)	06:25	18:06 (PrRR3)
	15:58	17:01	18:03	20	16:45 (Pr3b)	20:07
10	08:44	07:54	06:45	16:28 (Pr3b)	06:23	18:07 (PrRR3)
	15:59	17:03	18:05	16	16:44 (Pr3b)	20:09
11	08:43	07:52	06:43	16:32 (Pr3b)	06:20	18:09 (PrRR3)
	16:01	17:06	18:07	7	16:39 (Pr3b)	20:12
12	08:42	07:49	06:40		06:18	18:10 (PrRR3)
	16:03	17:08	18:09		20:14	21:15
13	08:41	07:47	06:37		06:15	18:13 (PrRR3)
	16:04	17:10	18:11		20:16	21:17
14	08:40	07:45	06:35		06:12	18:16 (PrRR3)
	16:06	17:12	18:13		20:18	21:19
15	08:39	07:43	06:32		06:10	18:27 (PrRR3)
	16:08	17:15	18:15		20:20	21:21
16	08:38	07:40	06:29		06:07	18:32 (PrRR3)
	16:10	17:17	18:17		20:22	21:23
17	08:36	07:38	06:27		06:05	18:34 (PrRR3)
	16:12	17:19	18:20		20:24	21:25
18	08:35	07:36	06:24	17:24 (PrRR3)	06:02	18:36 (PrRR3)
	16:14	17:21	18:22	9	17:33 (PrRR3)	20:26
19	08:34	07:33	16:33 (Pr3b)	06:21	17:20 (PrRR3)	06:00
	16:16	17:23	16:45 (Pr3b)	18	17:38 (PrRR3)	20:28
20	08:32	07:31	16:29 (Pr3b)	06:19	17:16 (PrRR3)	05:57
	16:18	17:26	16:47 (Pr3b)	25	17:41 (PrRR3)	20:30
21	08:31	07:28	16:28 (Pr3b)	06:16	17:14 (PrRR3)	05:55
	16:20	17:28	16:50 (Pr3b)	28	17:42 (PrRR3)	20:32
22	08:30	07:26	16:26 (Pr3b)	06:13	17:11 (PrRR3)	05:52
	16:22	17:30	16:51 (Pr3b)	32	17:43 (PrRR3)	20:34
23	08:28	07:24	16:24 (Pr3b)	06:11	17:10 (PrRR3)	05:50
	16:24	17:32	16:51 (Pr3b)	46	18:03 (Pr25)	20:37
24	08:26	07:21	16:24 (Pr3b)	06:08	17:09 (PrRR3)	05:47
	16:26	17:35	16:53 (Pr3b)	52	18:05 (Pr25)	20:39
25	08:25	07:19	16:23 (Pr3b)	06:05	17:07 (PrRR3)	05:45
	16:28	17:37	16:53 (Pr3b)	59	18:06 (Pr25)	20:41
26	08:23	07:16	16:23 (Pr3b)	06:03	17:07 (PrRR3)	05:42
	16:30	17:39	16:54 (Pr3b)	60	18:07 (Pr25)	20:43
27	08:21	07:14	16:22 (Pr3b)	06:00	17:06 (PrRR3)	05:40
	16:32	17:41	16:54 (Pr3b)	62	18:08 (Pr25)	20:45
28	08:20	07:11	16:21 (Pr3b)	05:57	17:05 (PrRR3)	05:38
	16:35	17:43	16:53 (Pr3b)	63	18:08 (Pr25)	20:47
29	08:18		06:55	18:05 (PrRR3)	05:35	
	16:37		19:45	63	19:08 (Pr25)	20:49
30	08:16		06:52	18:04 (PrRR3)	05:33	
	16:39		19:47	64	19:08 (Pr25)	20:51
31	08:14		06:49	18:03 (PrRR3)		
	16:41		19:49	64	19:07 (Pr25)	
Potential sun hours	236	266	366	426	507	528
Total, worst case		258	922	605		
Sun reduction		0,23	0,39	0,44		
Oper. time red.		1,00	1,00	1,00		
Wind dir. red.		1,00	1,00	1,00		
Total reduction		0,23	0,39	0,44		
Total, real		58	361	267		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Mež abele - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (481)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December
1	04:28 22:07	05:14 21:25	06:15 20:12	18:07 (PrRR3) 18:35 (PrRR3)	07:15 18:51	07:20 16:34
2	04:29 22:06	05:16 21:23	06:17 20:09	18:06 (PrRR3) 18:37 (PrRR3)	07:17 18:49	07:22 16:32
3	04:30 22:06	05:18 21:21	06:19 20:07	18:04 (PrRR3) 18:38 (PrRR3)	07:19 18:46	17:08 (Pr3b) 17:20 (Pr3b)
4	04:31 22:05	05:19 21:19	06:21 20:04	18:03 (PrRR3) 18:52 (Pr25)	07:21 18:44	17:04 (Pr3b) 17:23 (Pr3b)
5	04:32 22:04	05:21 21:17	06:23 20:01	18:00 (PrRR3) 18:55 (Pr25)	07:23 18:41	17:02 (Pr3b) 17:24 (Pr3b)
6	04:33 22:03	05:23 21:15	06:25 19:59	17:59 (PrRR3) 18:57 (Pr25)	07:25 18:38	17:00 (Pr3b) 17:25 (Pr3b)
7	04:34 22:03	05:25 21:13	06:27 19:56	17:58 (PrRR3) 18:58 (Pr25)	07:27 18:36	16:59 (Pr3b) 17:26 (Pr3b)
8	04:35 22:02	05:27 21:11	06:29 19:53	17:57 (PrRR3) 18:59 (Pr25)	07:29 18:33	16:57 (Pr3b) 17:26 (Pr3b)
9	04:36 22:01	05:29 21:08	06:31 19:51	17:57 (PrRR3) 18:59 (Pr25)	07:31 18:30	16:56 (Pr3b) 17:26 (Pr3b)
10	04:38 22:00	05:31 21:06	06:33 19:48	17:56 (PrRR3) 19:00 (Pr25)	07:34 18:28	16:55 (Pr3b) 17:26 (Pr3b)
11	04:39 21:59	05:33 21:04	06:35 19:45	17:56 (PrRR3) 19:00 (Pr25)	07:36 18:25	16:55 (Pr3b) 17:27 (Pr3b)
12	04:40 21:58	05:35 21:02	06:37 19:43	17:55 (PrRR3) 19:00 (Pr25)	07:38 18:23	16:55 (Pr3b) 17:27 (Pr3b)
13	04:42 21:57	05:37 20:59	06:39 19:40	17:55 (PrRR3) 18:59 (Pr25)	07:40 18:20	16:54 (Pr3b) 17:27 (Pr3b)
14	04:43 21:55	05:39 20:57	06:41 19:37	17:55 (PrRR3) 18:59 (Pr25)	07:42 18:17	16:54 (Pr3b) 17:26 (Pr3b)
15	04:44 21:54	05:41 20:54	06:43 19:34	17:55 (PrRR3) 18:58 (Pr25)	07:44 18:15	16:54 (Pr3b) 17:25 (Pr3b)
16	04:46 21:53	05:43 20:52	06:45 19:32	17:55 (PrRR3) 18:57 (Pr25)	07:46 18:12	16:55 (Pr3b) 17:26 (Pr3b)
17	04:47 21:51	05:45 20:50	06:47 19:29	17:55 (PrRR3) 18:56 (Pr25)	07:48 18:10	16:55 (Pr3b) 17:25 (Pr3b)
18	04:49 21:50	05:47 20:47	06:49 19:26	17:56 (PrRR3) 18:55 (Pr25)	07:50 18:07	16:55 (Pr3b) 17:23 (Pr3b)
19	04:51 21:49	05:49 20:45	06:51 19:24	17:55 (PrRR3) 18:52 (Pr25)	07:52 18:05	16:56 (Pr3b) 17:22 (Pr3b)
20	04:52 21:47	05:51 20:42	06:53 19:21	17:56 (PrRR3) 18:49 (Pr25)	07:54 18:02	16:58 (Pr3b) 17:21 (Pr3b)
21	04:54 21:45	05:53 20:40	06:55 19:18	17:57 (PrRR3) 18:44 (Pr25)	07:57 18:00	16:59 (Pr3b) 17:19 (Pr3b)
22	04:56 21:44	05:55 20:37	06:57 19:16	17:58 (PrRR3) 18:27 (PrRR3)	07:59 17:57	17:00 (Pr3b) 17:17 (Pr3b)
23	04:57 21:42	05:57 20:35	06:59 19:13	17:59 (PrRR3) 18:25 (PrRR3)	08:01 17:55	17:03 (Pr3b) 17:13 (Pr3b)
24	04:59 21:40	05:59 20:32	07:01 19:10	18:02 (PrRR3) 18:22 (PrRR3)	08:03 17:53	08:09 15:51
25	05:01 21:39	06:01 20:30	07:03 19:08	18:05 (PrRR3) 18:18 (PrRR3)	07:05 16:50	08:11 15:50
26	05:03 21:37	06:03 20:27	07:05 19:05	07:07 16:48	07:07 16:48	08:13 15:49
27	05:04 21:35	06:05 20:25	07:07 19:02	07:09 16:45	07:09 16:45	08:15 15:48
28	05:06 21:33	06:07 20:22	07:09 19:00	07:12 16:43	07:12 16:43	08:16 15:46
29	05:08 21:31	06:09 20:20	07:11 18:17 (PrRR3)	07:14 16:41	07:14 16:41	08:18 15:45
30	05:10 21:29	06:11 20:17	07:13 18:12 (PrRR3)	07:16 16:39	07:16 16:39	08:20 15:44
31	05:12 21:27	06:13 20:14	07:15 18:10 (PrRR3)	07:18 16:36	07:18 16:36	08:22 15:43
Potential sun hours	529	469	384	324	248	217
Total, worst case		55	1211	540		
Sun reduction		0,52	0,43	0,29		
Oper. time red.		1,00	1,00	1,00		
Wind dir. red.		1,00	1,00	1,00		
Total reduction		0,52	0,43	0,29		
Total, real		29	523	157		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Mež ares - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (506)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:07	21:26	20:12	18:51	16:34	15:43
2	08:48	08:11	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:23	08:24
	15:47	16:45	17:48	19:53	20:55	21:52	22:06	21:24	20:09	18:49	16:32	15:42
3	08:48	08:09	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:06	21:21	20:07	18:46	16:29	15:41
4	08:47	08:07	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:05	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:56	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:03	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:57	22:04	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:51	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:36	08:33
	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:45	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:34	07:40	08:36
	15:59	17:03	18:05	20:10	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:50	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:02	17:08	18:09	20:14	21:15	22:03	21:58	21:02	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:04	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:56	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:00	04:24	04:44	05:41	06:43	07:44	07:51	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:55	19:34	18:15	16:06	15:36
16	08:38	07:40	06:29	06:07	04:59	04:23	04:46	05:43	06:45	07:46	07:53	08:42
	16:10	17:17	18:17	20:22	21:23	22:06	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:52	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:07	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:36
20	08:33	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:46
	16:18	17:26	18:26	20:30	21:31	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:08	21:46	20:40	19:18	18:00	15:56	15:37
22	08:30	07:26	06:13	05:52	04:48	04:23	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:24	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:27	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:48
	16:26	17:34	18:34	20:39	21:38	22:08	21:41	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:22	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:15	08:48
	16:32	17:41	18:40	20:45	21:43	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:17	08:49
	16:34	17:43	18:43	20:47	21:44	22:08	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:49
	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:47	22:07	21:30	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:49
	16:41		19:49		21:49		21:28	20:14		16:36		15:45
Potential sun hours	235	266	366	426	508	528	529	469	385	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Miežiš i (kad. apz. 76740020200001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (508)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June
1	08:48	08:12	07:09	06:47	05:31	04:34
	15:46	16:43	17:45	19:51	20:53	21:50
2	08:48	08:10	07:06	06:44	05:28	04:33
	15:47	16:45	17:48	19:53	20:55	21:51
3	08:48	08:08	07:03	06:41	05:26	04:32
	15:49	16:48	17:50	19:55	20:57	21:53
4	08:47	08:06	07:01	06:39	19:16 (PrRR3)	05:24
	15:50	16:50	17:52	19:57	11 19:27 (PrRR3)	20:59
5	08:47	08:04	06:58	06:36	19:12 (PrRR3)	05:21
	15:51	16:52	17:54	19:59	17 19:29 (PrRR3)	21:01
6	08:46	08:02	06:56	06:33	19:11 (PrRR3)	05:19
	15:53	16:54	17:56	20:01	20 19:31 (PrRR3)	21:03
7	08:46	08:00	06:53	06:31	19:09 (PrRR3)	05:17
	15:54	16:57	17:58	20:03	22 19:31 (PrRR3)	21:05
8	08:45	07:58	06:50	06:28	19:07 (PrRR3)	05:15
	15:56	16:59	18:01	20:05	25 19:32 (PrRR3)	21:07
9	08:44	07:56	06:48	06:25	19:07 (PrRR3)	05:13
	15:58	17:01	18:03	20:07	26 19:33 (PrRR3)	21:09
10	08:44	07:54	06:45	06:23	19:06 (PrRR3)	05:11
	15:59	17:03	18:05	20:09	26 19:32 (PrRR3)	21:11
11	08:43	07:52	06:43	06:20	19:06 (PrRR3)	05:09
	16:01	17:06	18:07	20:12	27 19:33 (PrRR3)	21:13
12	08:42	07:49	06:40	06:18	19:05 (PrRR3)	05:07
	16:03	17:08	18:09	20:14	27 19:32 (PrRR3)	21:15
13	08:41	07:47	06:37	17:33 (Pr3b)	06:15	19:05 (PrRR3)
	16:04	17:10	18:11	10 17:43 (Pr3b)	20:16	28 19:33 (PrRR3)
14	08:40	07:45	06:35	17:31 (Pr3b)	06:12	19:05 (PrRR3)
	16:06	17:12	18:13	14 17:45 (Pr3b)	20:18	27 19:32 (PrRR3)
15	08:39	07:43	06:32	17:29 (Pr3b)	06:10	19:05 (PrRR3)
	16:08	17:15	18:15	18 17:47 (Pr3b)	20:20	27 19:32 (PrRR3)
16	08:38	07:40	06:29	17:28 (Pr3b)	06:07	19:05 (PrRR3)
	16:10	17:17	18:17	21 17:49 (Pr3b)	20:22	25 19:30 (PrRR3)
17	08:36	07:38	06:27	17:27 (Pr3b)	06:05	19:06 (PrRR3)
	16:12	17:19	18:20	22 17:49 (Pr3b)	20:24	24 19:30 (PrRR3)
18	08:35	07:36	06:24	17:26 (Pr3b)	06:02	19:06 (PrRR3)
	16:14	17:21	18:22	23 17:49 (Pr3b)	20:26	22 19:28 (PrRR3)
19	08:34	07:33	06:21	17:25 (Pr3b)	06:00	19:08 (PrRR3)
	16:16	17:23	18:24	23 17:48 (Pr3b)	20:28	19 19:27 (PrRR3)
20	08:32	07:31	06:19	17:25 (Pr3b)	05:57	19:08 (PrRR3)
	16:18	17:26	18:26	24 17:49 (Pr3b)	20:30	17 19:25 (PrRR3)
21	08:31	07:28	06:16	17:25 (Pr3b)	05:55	19:11 (PrRR3)
	16:20	17:28	18:28	23 17:48 (Pr3b)	20:32	11 19:22 (PrRR3)
22	08:29	07:26	06:13	17:25 (Pr3b)	05:52	04:48
	16:22	17:30	18:30	22 17:47 (Pr3b)	20:34	21:34
23	08:28	07:24	06:11	17:26 (Pr3b)	05:50	04:46
	16:24	17:32	18:32	21 17:47 (Pr3b)	20:36	21:36
24	08:26	07:21	06:08	17:26 (Pr3b)	05:47	04:45
	16:26	17:34	18:34	19 17:45 (Pr3b)	20:39	21:38
25	08:25	07:19	06:05	17:27 (Pr3b)	05:45	04:43
	16:28	17:37	18:36	16 17:43 (Pr3b)	20:41	21:39
26	08:23	07:16	06:03	17:29 (Pr3b)	05:42	04:42
	16:30	17:39	18:38	12 17:41 (Pr3b)	20:43	21:41
27	08:21	07:14	06:00	17:33 (Pr3b)	05:40	04:40
	16:32	17:41	18:40	3 17:36 (Pr3b)	20:45	21:42
28	08:20	07:11	05:57		05:38	04:39
	16:34	17:43	18:42		20:47	21:44
29	08:18		06:55		05:35	04:38
	16:37		19:45		20:49	21:46
30	08:16		06:52		05:33	04:36
	16:39		19:47		20:51	21:47
31	08:14		06:49			04:35
	16:41		19:49			21:49
Potential sun hours	236	266	366	426	507	528
Total, worst case			271	401		
Sun reduction			0,39	0,44		
Oper. time red.			1,00	1,00		
Wind dir. red.			1,00	1,00		
Total reduction			0,39	0,44		
Total, real			106	177		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Mieziš i (kad. apz. 76740020200001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (508)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December
1	04:28 22:06	05:14 21:25	06:15 20:12	19:05 (PrRR3) 18:51	18:15 (Pr3b) 18:21 (Pr3b)	07:20 16:34
2	04:29 22:06	05:16 21:23	06:17 20:09	19:05 (PrRR3) 18:49		07:22 16:32
3	04:30 22:05	05:18 21:21	06:19 20:06	19:05 (PrRR3) 18:46		07:25 16:30
4	04:31 22:05	05:19 21:19	06:21 20:04	19:05 (PrRR3) 18:43		07:27 16:27
5	04:32 22:04	05:21 21:17	06:23 20:01	19:05 (PrRR3) 18:41		07:29 16:25
6	04:33 22:03	05:23 21:15	06:25 19:59	19:06 (PrRR3) 18:38		07:31 16:23
7	04:34 22:03	05:25 21:13	06:27 19:56	19:07 (PrRR3) 18:36		07:33 16:21
8	04:35 22:02	05:27 21:11	06:29 19:53	19:09 (PrRR3) 18:33		07:35 16:19
9	04:36 22:01	05:29 21:08	06:31 19:51			07:38 16:17
10	04:38 22:00	05:31 21:06	06:33 19:48			07:40 16:15
11	04:39 21:59	05:33 21:04	06:35 19:45			07:42 16:13
12	04:40 21:58	05:35 21:01	06:37 19:43			07:44 16:11
13	04:42 21:57	05:37 20:59	06:39 19:40			07:46 16:09
14	04:43 21:55	05:39 20:57	06:41 19:37			07:48 16:07
15	04:44 21:54	05:41 20:54	06:43 19:34			07:50 16:06
16	04:46 21:53	05:43 20:52	06:45 19:32			07:53 16:04
17	04:47 21:51	05:45 20:50	06:47 19:29	18:18 (Pr3b) 18:29 (Pr3b)		07:55 16:02
18	04:49 21:50	05:47 20:47	06:49 19:26	18:15 (Pr3b) 18:30 (Pr3b)		07:57 16:00
19	04:51 21:49	05:49 20:45	06:51 19:24	18:13 (Pr3b) 18:31 (Pr3b)		07:59 15:59
20	04:52 21:47	05:51 20:42	06:53 19:21	18:11 (Pr3b) 18:32 (Pr3b)		08:01 15:57
21	04:54 21:45	05:53 20:40	19:20 (PrRR3) 19:23 (PrRR3)	06:55 18:10 (Pr3b)		08:03 15:56
22	04:56 21:44	05:55 20:37	19:15 (PrRR3) 19:27 (PrRR3)	06:57 19:16		08:05 15:54
23	04:57 21:42	05:57 20:35	19:13 (PrRR3) 19:29 (PrRR3)	06:59 19:13		08:07 15:53
24	04:59 21:40	05:59 20:32	19:11 (PrRR3) 19:31 (PrRR3)	07:01 19:10		08:09 15:51
25	05:01 21:39	06:01 20:30	19:10 (PrRR3) 19:32 (PrRR3)	07:03 19:08		08:11 15:50
26	05:03 21:37	06:03 20:27	19:08 (PrRR3) 19:32 (PrRR3)	07:05 19:05		08:13 15:49
27	05:04 21:35	06:05 20:25	19:07 (PrRR3) 19:32 (PrRR3)	07:07 19:02		08:15 15:47
28	05:06 21:33	06:07 20:22	19:06 (PrRR3) 19:32 (PrRR3)	07:09 18:59		08:16 15:46
29	05:08 21:31	06:09 20:20	19:05 (PrRR3) 19:33 (PrRR3)	07:11 18:57		08:18 15:45
30	05:10 21:29	06:11 20:17	19:05 (PrRR3) 19:32 (PrRR3)	07:13 18:54		08:20 15:44
31	05:12 21:27	06:13 20:14	19:05 (PrRR3) 19:32 (PrRR3)			08:22 15:45
Potential sun hours	529	469	384	324	248	217
Total, worst case		230	451	6		
Sun reduction		0,52	0,43	0,29		
Oper. time red.		1,00	1,00	1,00		
Wind dir. red.		1,00	1,00	1,00		
Total reduction		0,52	0,43	0,29		
Total, real		120	195	2		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Miežiš i (kad. apz. 76740020200004) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (602)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June
1	08:48	08:12	07:09	06:47	05:31	04:34
	15:46	16:43	17:45	19:51	20:53	21:50
2	08:48	08:10	07:06	06:44	05:28	04:33
	15:47	16:45	17:48	19:53	20:55	21:51
3	08:48	08:08	07:03	06:41	05:26	04:32
	15:49	16:48	17:50	19:55	20:57	21:53
4	08:47	08:06	07:01	06:39	19:19 (PrRR3)	05:24
	15:50	16:50	17:52	19:57	19:26 (PrRR3)	05:29
5	08:47	08:04	06:58	06:36	19:15 (PrRR3)	05:21
	15:51	16:52	17:54	19:59	19:29 (PrRR3)	05:21
6	08:46	08:02	06:56	06:33	19:13 (PrRR3)	05:19
	15:53	16:54	17:56	20:01	19:31 (PrRR3)	05:17
7	08:46	08:00	06:53	06:31	19:11 (PrRR3)	05:17
	15:54	16:57	17:58	20:03	19:32 (PrRR3)	05:15
8	08:45	07:58	06:50	06:28	19:09 (PrRR3)	05:15
	15:56	16:59	18:01	20:05	19:32 (PrRR3)	05:17
9	08:44	07:56	06:48	06:25	19:08 (PrRR3)	05:13
	15:58	17:01	18:03	20:07	19:33 (PrRR3)	05:19
10	08:44	07:54	06:45	06:23	19:07 (PrRR3)	05:11
	15:59	17:03	18:05	20:09	19:33 (PrRR3)	05:11
11	08:43	07:52	06:43	06:20	19:07 (PrRR3)	05:09
	16:01	17:06	18:07	20:12	19:34 (PrRR3)	05:13
12	08:42	07:49	06:40	06:18	19:06 (PrRR3)	05:07
	16:03	17:08	18:09	20:14	19:33 (PrRR3)	05:15
13	08:41	07:47	06:37	17:35 (Pr3b)	19:06 (PrRR3)	05:05
	16:04	17:10	18:11	17:43 (Pr3b)	19:34 (PrRR3)	05:17
14	08:40	07:45	06:35	17:32 (Pr3b)	19:05 (PrRR3)	05:03
	16:06	17:12	18:13	17:45 (Pr3b)	19:33 (PrRR3)	05:19
15	08:39	07:43	06:32	17:29 (Pr3b)	19:06 (PrRR3)	05:01
	16:08	17:15	18:15	17:47 (Pr3b)	19:33 (PrRR3)	05:21
16	08:38	07:40	06:29	17:29 (Pr3b)	19:05 (PrRR3)	04:59
	16:10	17:17	18:17	17:49 (Pr3b)	19:32 (PrRR3)	05:23
17	08:36	07:38	06:27	17:27 (Pr3b)	19:06 (PrRR3)	04:57
	16:12	17:19	18:20	17:49 (Pr3b)	19:31 (PrRR3)	05:25
18	08:35	07:36	06:24	17:26 (Pr3b)	19:06 (PrRR3)	04:55
	16:14	17:21	18:22	17:49 (Pr3b)	19:30 (PrRR3)	05:27
19	08:34	07:33	06:21	17:26 (Pr3b)	19:08 (PrRR3)	04:53
	16:16	17:23	18:24	17:50 (Pr3b)	19:29 (PrRR3)	05:29
20	08:32	07:31	06:19	17:26 (Pr3b)	19:08 (PrRR3)	04:51
	16:18	17:26	18:26	17:49 (Pr3b)	19:27 (PrRR3)	05:30
21	08:31	07:28	06:16	17:25 (Pr3b)	19:10 (PrRR3)	04:50
	16:20	17:28	18:28	17:49 (Pr3b)	19:25 (PrRR3)	05:32
22	08:29	07:26	06:13	17:25 (Pr3b)	19:13 (PrRR3)	04:48
	16:22	17:30	18:30	17:48 (Pr3b)	19:23 (PrRR3)	05:34
23	08:28	07:24	06:11	17:26 (Pr3b)		04:46
	16:24	17:32	18:32	17:48 (Pr3b)		05:36
24	08:26	07:21	06:08	17:26 (Pr3b)		04:45
	16:26	17:34	18:34	17:46 (Pr3b)		05:38
25	08:25	07:19	06:05	17:27 (Pr3b)		04:43
	16:28	17:37	18:36	17:44 (Pr3b)		05:39
26	08:23	07:16	06:03	17:29 (Pr3b)		04:42
	16:30	17:39	18:38	17:43 (Pr3b)		05:41
27	08:21	07:14	06:00	17:31 (Pr3b)		04:40
	16:32	17:41	18:40	17:39 (Pr3b)		05:42
28	08:20	07:11	05:57			04:39
	16:34	17:43	18:42			05:44
29	08:18		06:55			04:38
	16:37		19:45			05:49
30	08:16		06:52			04:36
	16:39		19:47			05:51
31	08:14		06:49			04:35
	16:41		19:49			05:53
Potential sun hours	236	266	366	426	507	528
Total, worst case			279	412		
Sun reduction			0,39	0,44		
Oper. time red.			1,00	1,00		
Wind dir. red.			1,00	1,00		
Total reduction			0,39	0,44		
Total, real			109	182		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Mieziš i (kad. apz. 76740020200004) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (602)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December
1	04:28 22:06	05:14 21:25	06:15 20:12	19:06 (PrRR3) 18:51	18:17 (Pr3b) 18:21 (Pr3b)	07:20 16:34
2	04:29 22:06	05:16 21:23	06:17 20:09	19:06 (PrRR3) 18:49		07:22 16:32
3	04:30 22:05	05:18 21:21	06:19 20:06	19:06 (PrRR3) 18:46		07:25 16:30
4	04:31 22:05	05:19 21:19	06:21 20:04	19:07 (PrRR3) 18:43		07:27 16:27
5	04:32 22:04	05:21 21:17	06:23 20:01	19:07 (PrRR3) 18:41		07:29 16:25
6	04:33 22:03	05:23 21:15	06:25 19:59	19:08 (PrRR3) 18:38		07:31 16:23
7	04:34 22:03	05:25 21:13	06:27 19:56	19:10 (PrRR3) 18:36		07:33 16:21
8	04:35 22:02	05:27 21:11	06:29 19:53	19:13 (PrRR3) 18:33		07:35 16:19
9	04:36 22:01	05:29 21:08	06:31 19:51			07:38 16:17
10	04:38 22:00	05:31 21:06	06:33 19:48			07:40 16:15
11	04:39 21:59	05:33 21:04	06:35 19:45			07:42 16:13
12	04:40 21:58	05:35 21:01	06:37 19:43			07:44 16:11
13	04:42 21:57	05:37 20:59	06:39 19:40			07:46 16:09
14	04:43 21:55	05:39 20:57	06:41 19:37			07:48 16:07
15	04:44 21:54	05:41 20:54	06:43 19:34			07:50 16:06
16	04:46 21:53	05:43 20:52	06:45 19:32	18:22 (Pr3b) 18:28 (Pr3b)		07:53 16:04
17	04:47 21:51	05:45 20:50	06:47 19:29	18:18 (Pr3b) 18:31 (Pr3b)		07:55 16:02
18	04:49 21:50	05:47 20:47	06:49 19:26	18:15 (Pr3b) 18:31 (Pr3b)		07:57 16:00
19	04:51 21:49	05:49 20:45	06:51 19:24	18:13 (Pr3b) 18:32 (Pr3b)		07:59 15:59
20	04:52 21:47	05:51 20:42	06:53 19:21	18:12 (Pr3b) 18:33 (Pr3b)		08:01 15:57
21	04:54 21:45	05:53 20:40	19:17 (PrRR3) 19:28 (PrRR3)	06:55 19:18	18:11 (Pr3b) 18:33 (Pr3b)	07:57 18:00
22	04:56 21:44	05:55 20:37	19:14 (PrRR3) 19:30 (PrRR3)	06:57 19:16	18:10 (Pr3b) 18:33 (Pr3b)	07:59 17:57
23	04:57 21:42	05:57 20:35	19:13 (PrRR3) 19:32 (PrRR3)	06:59 19:13	18:09 (Pr3b) 18:33 (Pr3b)	08:01 17:55
24	04:59 21:40	05:59 20:32	19:11 (PrRR3) 19:33 (PrRR3)	07:01 19:10	18:09 (Pr3b) 18:33 (Pr3b)	08:03 17:53
25	05:01 21:39	06:01 20:30	19:10 (PrRR3) 19:34 (PrRR3)	07:03 19:08	18:09 (Pr3b) 18:32 (Pr3b)	07:05 16:50
26	05:03 21:37	06:03 20:27	19:08 (PrRR3) 19:33 (PrRR3)	07:05 19:05	18:09 (Pr3b) 18:31 (Pr3b)	07:07 16:48
27	05:04 21:35	06:05 20:25	19:07 (PrRR3) 19:34 (PrRR3)	07:07 19:02	18:09 (Pr3b) 18:30 (Pr3b)	07:09 16:45
28	05:06 21:33	06:07 20:22	19:07 (PrRR3) 19:34 (PrRR3)	07:09 18:59	18:10 (Pr3b) 18:29 (Pr3b)	07:12 16:43
29	05:08 21:31	06:09 20:20	19:06 (PrRR3) 19:34 (PrRR3)	07:11 18:57	18:11 (Pr3b) 18:26 (Pr3b)	07:14 16:41
30	05:10 21:29	06:11 20:17	19:06 (PrRR3) 19:34 (PrRR3)	07:13 18:54	18:12 (Pr3b) 18:23 (Pr3b)	07:16 16:38
31	05:12 21:27	06:13 20:14	19:06 (PrRR3) 19:33 (PrRR3)			07:18 16:36
Potential sun hours	529	469	384	324	248	217
Total, worst case		254	440	4		
Sun reduction		0,52	0,43	0,29		
Oper. time red.		1,00	1,00	1,00		
Wind dir. red.		1,00	1,00	1,00		
Total reduction		0,52	0,43	0,29		
Total, real		133	190	1		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Mikili - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (474)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:25	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		05:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B
Assumptions for shadow calculations

Shadow receptor: Mozuli - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (418)
Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January		February		March		April		May		June	
1	08:48	08:13			07:09		16:26 (DD3)	06:47		18:55 (O3)	05:31	04:35
	15:47	16:44			17:46	30	16:56 (DD3)	19:51	21	19:16 (O3)	20:53	21:50
2	08:48	08:11			07:06		16:25 (DD3)	06:44		18:54 (O3)	05:29	04:34
	15:48	16:46			17:48	31	16:56 (DD3)	19:53	21	19:15 (O3)	20:55	21:51
3	08:48	08:09			07:04		16:26 (DD3)	06:42		18:55 (O3)	05:27	04:33
	15:50	16:48			17:50	30	16:56 (DD3)	19:55	20	19:15 (O3)	20:57	21:53
4	08:47	08:07			07:01		16:26 (DD3)	06:39		18:55 (O3)	05:24	04:32
	15:51	16:51			17:52	29	16:55 (DD3)	19:57	19	19:14 (O3)	20:59	21:54
5	08:47	08:05			06:59		16:26 (DD3)	06:37		18:57 (O3)	05:22	04:31
	15:52	16:53			17:55	28	16:54 (DD3)	19:59	16	19:13 (O3)	21:01	21:55
6	08:46	08:03			06:56		16:27 (DD3)	06:34		18:58 (O3)	05:20	04:30
	15:54	16:55			17:57	26	16:53 (DD3)	20:01	12	19:10 (O3)	21:03	21:56
7	08:46	08:00			06:53		16:28 (DD3)	06:31		19:00 (O3)	05:18	04:29
	15:55	16:57			17:59	23	16:51 (DD3)	20:04	7	19:07 (O3)	21:05	21:58
8	08:45	07:58			06:51		16:29 (DD3)	06:29		05:16		04:28
	15:57	17:00			18:01	20	16:49 (DD3)	20:06		21:07		21:59
9	08:44	07:56			06:48		16:32 (DD3)	06:26		05:13		04:28
	15:58	17:02			18:03	16	16:48 (DD3)	20:08		21:09		22:00
10	08:44	07:54			06:46		16:35 (DD3)	06:23		05:11		04:27
	16:00	17:04			18:05	17	17:37 (DD1)	20:10		21:11		22:01
11	08:43	07:52			06:43		17:26 (DD1)	06:21		05:09		04:26
	16:02	17:06			18:07	13	17:39 (DD1)	20:12		21:13		22:02
12	08:42	07:50			06:40		17:25 (DD1)	06:18		05:07		04:26
	16:03	17:08			18:09	17	17:42 (DD1)	20:14		21:15		22:02
13	08:41	07:47			06:38		17:23 (DD1)	06:16		05:05		04:25
	16:05	17:11			18:12	20	17:43 (DD1)	20:16		21:17		22:03
14	08:40	07:45			06:35		17:22 (DD1)	06:13		05:03		04:25
	16:07	17:13			18:14	21	17:43 (DD1)	20:18		21:19		22:04
15	08:39	07:43			06:32		17:22 (DD1)	06:10		05:01		04:25
	16:09	17:15			18:16	22	17:44 (DD1)	20:20		21:21		22:05
16	08:38	07:41			06:30		17:21 (DD1)	06:08		04:59		04:25
	16:11	17:17			18:18	23	17:44 (DD1)	20:22		21:23		22:05
17	08:36	07:38			06:27		17:20 (DD1)	06:05		04:58		04:24
	16:13	17:20			18:20	23	17:43 (DD1)	20:24		21:25		22:06
18	08:35	07:36			06:24		17:21 (DD1)	06:03		04:56		04:24
	16:15	17:22			18:22	22	17:43 (DD1)	20:26		21:27		22:06
19	08:34	07:33			06:22		17:21 (DD1)	06:00		04:54		04:24
	16:16	17:24	11	16:48 (DD3)	18:24	21	17:42 (DD1)	20:28		21:29		22:07
20	08:32	07:31			06:19		17:21 (DD1)	05:58		04:52		04:24
	16:18	17:26	17	16:50 (DD3)	18:26	20	17:41 (DD1)	20:30		21:31		22:07
21	08:31	07:29			06:16		17:22 (DD1)	05:55		04:51		04:24
	16:20	17:28	21	16:53 (DD3)	18:28	17	17:39 (DD1)	20:33		21:32		22:07
22	08:30	07:26			06:14		17:24 (DD1)	05:53		04:49		04:25
	16:23	17:31	23	16:53 (DD3)	18:30	14	17:38 (DD1)	20:35		21:34		22:08
23	08:28	07:24			06:11		17:26 (DD1)	05:50		04:47		04:25
	16:25	17:33	26	16:55 (DD3)	18:32	8	17:34 (DD1)	20:37		21:36		22:08
24	08:26	07:21			06:08			05:48		04:46		04:25
	16:27	17:35	27	16:55 (DD3)	18:35			20:39		21:38		22:08
25	08:25	07:19			06:06		18:05 (O3)	05:45		04:44		04:25
	16:29	17:37	28	16:55 (DD3)	18:37	4	18:09 (O3)	20:41		21:39		22:08
26	08:23	07:16			06:03		18:01 (O3)	05:43		04:43		04:26
	16:31	17:39	29	16:56 (DD3)	18:39	10	18:11 (O3)	20:43		21:41		22:08
27	08:22	07:14			06:00		17:59 (O3)	05:41		04:41		04:26
	16:33	17:42	30	16:56 (DD3)	18:41	13	18:12 (O3)	20:45		21:42		22:08
28	08:20	07:11			05:58		17:58 (O3)	05:38		04:40		04:27
	16:35	17:44	31	16:57 (DD3)	18:43	17	18:15 (O3)	20:47		21:44		22:07
29	08:18				06:55		18:56 (O3)	05:36		04:39		04:28
	16:37				19:45	20	19:16 (O3)	20:49		21:46		22:07
30	08:16				06:52		18:55 (O3)	05:34		04:37		04:28
	16:40				19:47	21	19:16 (O3)	20:51		21:47		22:07
31	08:14				06:50		18:55 (O3)			04:36		
	16:42				19:49	22	19:17 (O3)			21:49		
Potential sun hours	236	266			366		426		507		528	
Total, worst case			243		598		116					
Sun reduction			0,22		0,39		0,44					
Oper. time red.			1,00		1,00		1,00					
Wind dir. red.			1,00		1,00		1,00					
Total reduction			0,22		0,39		0,44					
Total, real			55		234		51					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Mozuli - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (418)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December
1	04:29 22:06	05:14 21:26	06:16 20:12	07:15 18:52	18:03 (DD1) 18:22 (DD1)	07:20 16:35
2	04:30 22:06	05:16 21:24	06:18 20:09	07:17 18:49	18:04 (DD1) 18:19 (DD1)	07:23 16:32
3	04:31 22:05	05:18 21:21	06:20 20:07	07:19 18:47	18:05 (DD1) 18:16 (DD1)	07:25 16:30
4	04:32 22:05	05:20 21:19	06:22 20:04	07:22 18:44	17:10 (DD3) 18:13 (DD1)	07:27 16:28
5	04:33 22:04	05:22 21:17	06:24 20:01	18:57 (O3) 19:04 (O3)	07:24 18:41	17:07 (DD3) 17:26 (DD3)
6	04:34 22:03	05:24 21:15	06:26 19:59	18:54 (O3) 19:06 (O3)	07:26 18:39	17:05 (DD3) 17:27 (DD3)
7	04:35 22:03	05:26 21:13	06:28 19:56	18:52 (O3) 19:08 (O3)	07:28 18:36	17:03 (DD3) 17:28 (DD3)
8	04:36 22:02	05:28 21:11	06:30 19:54	18:51 (O3) 19:09 (O3)	07:30 18:33	17:02 (DD3) 17:28 (DD3)
9	04:37 22:01	05:30 21:08	06:32 19:51	18:49 (O3) 19:09 (O3)	07:32 18:31	17:02 (DD3) 17:30 (DD3)
10	04:38 22:00	05:32 21:06	06:34 19:48	18:48 (O3) 19:08 (O3)	07:34 18:28	17:00 (DD3) 17:30 (DD3)
11	04:40 21:59	05:34 21:04	06:36 19:46	18:47 (O3) 19:08 (O3)	07:36 18:26	17:00 (DD3) 17:30 (DD3)
12	04:41 21:58	05:36 21:02	06:38 19:43	18:47 (O3) 19:08 (O3)	07:38 18:23	16:59 (DD3) 17:30 (DD3)
13	04:42 21:57	05:38 20:59	06:40 19:40	18:47 (O3) 19:08 (O3)	07:40 18:20	16:58 (DD3) 17:29 (DD3)
14	04:44 21:55	05:40 20:57	06:42 19:38	18:47 (O3) 19:07 (O3)	07:42 18:18	16:58 (DD3) 17:29 (DD3)
15	04:45 21:54	05:42 20:55	06:44 19:35	18:47 (O3) 19:05 (O3)	07:44 18:15	16:59 (DD3) 17:29 (DD3)
16	04:47 21:53	05:44 20:52	06:46 19:32	18:48 (O3) 19:02 (O3)	07:46 18:13	16:59 (DD3) 17:28 (DD3)
17	04:48 21:51	05:46 20:50	06:47 19:29	18:49 (O3) 19:00 (O3)	07:48 18:10	16:59 (DD3) 17:27 (DD3)
18	04:50 21:50	05:48 20:47	06:49 19:27	18:51 (O3) 18:57 (O3)	07:50 18:08	16:59 (DD3) 17:26 (DD3)
19	04:51 21:49	05:50 20:45	06:51 19:24	07:53 18:05	17:00 (DD3) 17:25 (DD3)	07:59 16:00
20	04:53 21:47	05:52 20:43	06:53 19:21	18:14 (DD1) 18:20 (DD1)	07:55 18:03	17:02 (DD3) 17:24 (DD3)
21	04:55 21:45	05:54 20:40	06:55 19:19	18:10 (DD1) 18:23 (DD1)	07:57 18:00	17:03 (DD3) 17:22 (DD3)
22	04:56 21:44	05:56 20:38	06:57 19:16	18:08 (DD1) 18:24 (DD1)	07:59 17:58	17:04 (DD3) 17:20 (DD3)
23	04:58 21:42	05:58 20:35	06:59 19:13	18:06 (DD1) 18:25 (DD1)	08:01 17:56	17:08 (DD3) 17:17 (DD3)
24	05:00 21:40	06:00 20:33	07:01 19:11	18:05 (DD1) 18:26 (DD1)	08:03 17:53	08:09 15:52
25	05:02 21:39	06:02 20:30	07:03 19:08	18:04 (DD1) 18:26 (DD1)	07:05 16:51	08:11 15:51
26	05:03 21:37	06:04 20:27	07:05 19:05	18:03 (DD1) 18:26 (DD1)	07:07 16:48	08:13 15:50
27	05:05 21:35	06:06 20:25	07:07 19:03	18:03 (DD1) 18:26 (DD1)	07:10 16:46	08:15 15:48
28	05:07 21:33	06:08 20:22	07:09 19:00	18:03 (DD1) 18:25 (DD1)	07:12 16:44	08:16 15:47
29	05:09 21:31	06:10 20:20	07:11 18:57	18:03 (DD1) 18:24 (DD1)	07:14 16:41	08:18 15:46
30	05:11 21:29	06:12 20:17	07:13 18:55	18:03 (DD1) 18:23 (DD1)	07:16 16:39	08:20 15:45
31	05:13 21:28	06:14 20:15		07:18 16:37		08:48 15:46
Potential sun hours	528	469	384	324	248	217
Total, worst case			431	541		
Sun reduction			0,43	0,29		
Oper. time red.			1,00	1,00		
Wind dir. red.			1,00	1,00		
Total reduction			0,43	0,29		
Total, real			186	157		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Makoniš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (587)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:14 21:25	06:16 20:12	07:15 18:52	07:20 16:34	08:22 15:44
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:16 21:23	06:18 20:09	07:17 18:49	07:23 16:32	08:23 15:43
3	08:48 15:49	08:09 16:48	07:04 17:50	06:42 19:55	05:26 20:57	04:33 21:53	04:31 22:05	05:18 21:21	06:20 20:07	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:53	06:58 17:54	06:36 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:01	07:23 18:41	07:29 16:26	08:28 15:40
6	08:46 15:54	08:02 16:55	06:56 17:57	06:34 20:01	05:20 21:03	04:30 21:56	04:34 22:03	05:24 21:15	06:26 20:01	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03	05:18 21:05	04:29 21:58	04:35 22:03	05:26 21:13	06:28 19:56	07:28 18:36	07:33 16:22	08:31 15:39
8	08:45 15:57	07:58 16:59	06:51 18:01	06:28 20:06	05:15 21:07	04:28 21:59	04:36 22:02	05:28 21:11	06:30 19:53	07:30 18:33	07:36 16:20	08:33 15:39
9	08:44 15:58	07:56 17:02	06:48 18:03	06:26 20:08	05:13 21:09	04:27 22:00	04:37 22:01	05:30 21:08	06:32 19:51	07:32 18:31	07:38 16:18	08:34 15:38
10	08:44 16:00	07:54 17:04	06:45 18:05	06:23 20:10	05:11 21:11	04:27 22:01	04:38 22:00	05:32 21:06	06:34 19:48	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:13	04:26 22:02	04:40 21:59	05:34 21:04	06:36 19:45	07:36 18:26	07:42 16:14	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:26 22:02	04:41 21:58	05:36 21:02	06:37 19:43	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 17:11	06:38 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:38 20:59	06:39 19:40	07:40 18:20	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:41 19:37	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:25 22:05	04:45 21:54	05:42 20:55	06:43 19:35	07:44 18:15	07:50 16:06	08:41 15:37
16	08:38 16:11	07:40 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:05	04:47 21:53	05:44 20:52	06:45 19:32	07:46 18:13	07:53 16:04	08:42 15:37
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:46 20:50	06:47 19:29	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:14	07:36 17:22	06:24 18:22	06:03 20:26	04:56 21:27	04:24 22:06	04:50 21:50	05:48 20:47	06:49 19:27	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:48	05:50 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:58 20:30	04:52 21:30	04:24 22:07	04:53 21:47	05:52 20:42	06:53 19:21	07:55 18:03	08:01 15:58	08:45 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:55 21:45	05:54 20:40	06:55 19:19	07:57 18:00	08:03 15:56	08:46 15:38
22	08:29 16:22	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:24 22:08	04:56 21:44	05:56 20:37	06:57 19:16	07:59 17:58	08:05 15:55	08:46 15:38
23	08:28 16:24	07:24 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:25 22:08	04:58 21:42	05:58 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:39
24	08:26 16:27	07:21 17:35	06:08 18:34	05:48 20:39	04:46 21:37	04:25 22:08	05:00 21:40	06:00 20:32	07:01 19:11	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:29	07:19 17:37	06:06 18:37	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:02 20:30	07:03 19:08	08:05 16:51	08:11 15:51	08:48 15:40
26	08:23 16:31	07:16 17:39	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:03 21:37	06:04 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:41
27	08:21 16:33	07:14 17:41	06:00 18:41	05:40 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:06 20:25	07:07 19:02	08:09 16:46	08:15 15:48	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 19:00	08:12 16:44	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:36 20:49	04:38 21:46	04:27 22:07	05:09 21:31	06:10 20:20	07:11 18:57	08:14 16:41	08:18 15:46	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:11 21:29	06:12 20:17	07:13 18:54	08:16 16:39	08:20 15:45	08:48 15:44
31	08:14 16:42		06:50 19:49		04:36 21:49		05:12 21:27	06:14 20:15		07:18 16:37		08:48 15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Makoni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (417)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:14 21:25	06:16 20:12	07:15 18:52	07:20 16:34	08:22 15:44
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:16 21:23	06:18 20:09	07:17 18:49	07:23 16:32	08:23 15:43
3	08:48 15:49	08:09 16:48	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:18 21:21	06:20 20:07	07:19 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:53	06:59 17:54	06:36 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:01	07:23 18:41	07:29 16:26	08:28 15:40
6	08:46 15:54	08:03 16:55	06:56 17:57	06:34 20:01	05:20 21:03	04:30 21:56	04:34 22:03	05:24 21:15	06:26 20:01	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03	05:18 21:05	04:29 21:58	04:35 22:03	05:26 21:13	06:28 20:01	07:28 18:36	07:33 16:22	08:31 15:39
8	08:45 15:57	07:58 16:59	06:51 18:01	06:29 20:06	05:15 21:07	04:28 21:59	04:36 22:02	05:28 21:11	06:30 20:01	07:30 18:33	07:36 16:20	08:33 15:39
9	08:44 15:58	07:56 17:02	06:48 18:03	06:26 20:08	05:13 21:09	04:27 22:00	04:37 22:01	05:30 21:08	06:32 20:01	07:32 18:31	07:38 16:18	08:34 15:38
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:11 21:11	04:27 22:01	04:38 22:00	05:32 21:06	06:34 20:01	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:13	04:26 22:02	04:40 21:59	05:34 21:04	06:36 20:01	07:36 18:26	07:42 16:14	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:26 22:02	04:41 21:58	05:36 21:02	06:38 20:01	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 17:11	06:38 18:12	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:57	05:38 20:59	06:39 20:01	07:40 18:20	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:41 20:01	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:25 22:05	04:45 21:54	05:42 20:55	06:43 20:01	07:44 18:15	07:50 16:06	08:41 15:37
16	08:38 16:11	07:40 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:05	04:47 21:53	05:44 20:52	06:45 20:01	07:46 18:13	07:53 16:04	08:42 15:37
17	08:36 16:12	07:38 17:20	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:46 20:50	06:47 20:01	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:14	07:36 17:22	06:24 18:22	06:03 20:26	04:56 21:27	04:24 22:06	04:50 21:50	05:48 20:47	06:49 20:01	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:48	05:50 20:45	06:51 20:01	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:58 20:30	04:52 21:30	04:24 22:07	04:53 21:47	05:52 20:42	06:53 20:01	07:55 18:03	08:01 15:58	08:45 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:55 21:45	05:54 20:40	06:55 20:01	07:57 18:00	08:03 15:56	08:46 15:38
22	08:30 16:22	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:24 22:08	04:56 21:44	05:56 20:37	06:57 20:01	07:59 17:58	08:05 15:55	08:46 15:38
23	08:28 16:24	07:24 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:25 22:08	04:58 21:42	05:58 20:35	06:59 20:01	08:01 17:55	08:07 15:53	08:47 15:39
24	08:26 16:27	07:21 17:35	06:08 18:34	05:48 20:39	04:46 21:37	04:25 22:08	05:00 21:40	06:00 20:32	07:01 20:01	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:29	07:19 17:37	06:06 18:37	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:02 20:30	07:03 20:01	08:05 17:51	08:11 15:51	08:48 15:40
26	08:23 16:31	07:16 17:39	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:03 21:37	06:04 20:27	07:05 20:01	08:07 17:48	08:13 15:49	08:48 15:41
27	08:22 16:33	07:14 17:42	06:00 18:41	05:40 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:06 20:25	07:07 20:01	08:09 17:46	08:15 15:48	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 20:01	08:12 17:44	08:16 15:47	08:48 15:43
29	08:18 16:37		06:55 19:45	05:36 20:49	04:38 21:46	04:27 22:07	05:09 21:31	06:10 20:20	07:11 18:57	08:13 17:41	08:18 15:46	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:11 21:29	06:12 20:17	07:13 18:54	08:16 17:39	08:20 15:45	08:48 15:44
31	08:14 16:42		06:50 19:49		04:36 21:49		05:12 21:27	06:14 20:15		07:18 16:37		08:48 15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Nadež da - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (532)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Oriš u kapseta - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (522)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Ozolaine - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (590)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:13 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:14 21:26	06:16 20:12	07:15 18:52	07:20 16:35	08:22 15:44
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:16 21:24	06:18 20:09	07:17 18:49	07:23 16:32	08:23 15:43
3	08:48 15:49	08:09 16:48	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:18 21:21	06:20 20:07	07:19 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:53	06:59 17:55	06:36 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:01	07:24 18:41	07:29 16:26	08:28 15:40
6	08:46 15:54	08:03 16:55	06:56 17:57	06:34 20:01	05:20 21:03	04:30 21:57	04:34 22:03	05:24 21:15	06:26 20:01	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:04	05:18 21:05	04:29 21:58	04:35 22:03	05:26 21:13	06:28 20:01	07:28 18:36	07:33 16:22	08:31 15:39
8	08:45 15:57	07:58 16:59	06:51 18:01	06:29 20:06	05:15 21:07	04:28 21:59	04:36 22:02	05:28 21:11	06:30 20:04	07:30 18:33	07:36 16:20	08:33 15:39
9	08:44 15:58	07:56 17:02	06:48 18:03	06:26 20:08	05:13 21:09	04:27 22:00	04:37 22:01	05:30 21:08	06:32 20:01	07:32 18:31	07:38 16:18	08:34 15:38
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:11 21:11	04:27 22:01	04:38 22:00	05:32 21:06	06:34 20:04	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:13	04:26 22:02	04:40 21:59	05:34 21:04	06:36 20:01	07:36 18:26	07:42 16:14	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:26 22:03	04:41 21:58	05:36 21:02	06:38 20:01	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 17:11	06:38 18:12	06:16 20:16	05:05 21:17	04:25 22:03	04:42 21:57	05:38 20:59	06:40 20:01	07:40 18:20	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 20:01	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:25 22:05	04:45 21:54	05:42 20:55	06:43 20:01	07:44 18:15	07:51 16:06	08:41 15:37
16	08:38 16:11	07:41 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:05	04:47 21:53	05:44 20:52	06:45 20:01	07:46 18:13	07:53 16:04	08:42 15:37
17	08:36 16:12	07:38 17:20	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:46 20:50	06:47 20:01	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:14	07:36 17:22	06:24 18:22	06:03 20:26	04:56 21:27	04:24 22:06	04:50 21:50	05:48 20:47	06:49 20:01	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:49	05:50 20:45	06:51 20:01	07:53 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:58 20:30	04:52 21:31	04:24 22:07	04:53 21:47	05:52 20:43	06:53 20:01	07:55 18:03	08:01 15:58	08:45 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:33	04:50 21:32	04:24 22:07	04:55 21:45	05:54 20:40	06:55 20:01	07:57 18:00	08:03 15:56	08:46 15:38
22	08:30 16:22	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:24 22:08	04:56 21:44	05:56 20:38	06:57 20:01	07:59 17:58	08:05 15:55	08:47 15:38
23	08:28 16:24	07:24 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:25 22:08	04:58 21:42	05:58 20:35	06:59 20:01	08:01 17:55	08:07 15:53	08:47 15:39
24	08:27 16:27	07:21 17:35	06:08 18:35	05:48 20:39	04:46 21:38	04:25 22:08	05:00 21:41	06:00 20:33	07:01 20:01	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:29	07:19 17:37	06:06 18:37	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:02 20:30	07:03 20:01	08:05 17:51	08:11 15:51	08:48 15:40
26	08:23 16:31	07:16 17:39	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:03 21:37	06:04 20:27	07:05 20:01	08:07 17:48	08:13 15:49	08:48 15:41
27	08:22 16:33	07:14 17:42	06:00 18:41	05:41 20:45	04:41 21:43	04:26 22:08	05:05 21:35	06:06 20:25	07:07 20:01	08:09 17:46	08:15 15:48	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 20:01	08:12 17:44	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:36 20:49	04:38 21:46	04:27 22:07	05:09 21:31	06:10 20:20	07:11 18:57	08:14 17:41	08:18 15:46	08:49 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:11 21:30	06:12 20:17	07:13 18:55	08:16 17:39	08:20 15:45	08:49 15:44
31	08:14 16:42		06:50 19:49		04:36 21:49		05:12 21:28	06:14 20:15		07:18 16:37		08:48 15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B
Assumptions for shadow calculations

Shadow receptor: OŠ i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (420)
Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June
1	08:48 15:47	08:13 16:44	07:09 17:46	06:47 19:51	05:31 20:53	18:36 (JV1) 04:35 20:17 (O1.b)
2	08:48 15:48	08:11 16:46	07:06 17:48	06:45 19:53	05:29 20:55	19:12 (JV1) 21:50 20:17 (O1.b)
3	08:48 15:50	08:09 16:48	07:04 17:50	06:42 19:55	05:27 20:57	19:11 (JV1) 21:51 20:17 (O1.b)
4	08:47 15:51	08:07 16:51	07:01 17:53	06:39 19:57	05:24 20:59	19:09 (JV1) 21:53 20:18 (O1.b)
5	08:47 15:52	08:05 16:53	06:59 17:55	06:37 19:59	05:22 21:01	19:08 (JV1) 21:54 20:19 (O1.b)
6	08:46 15:54	08:03 16:55	06:56 17:57	06:34 20:02	05:20 21:03	19:06 (JV1) 21:55 20:19 (O1.b)
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:04	05:18 21:05	19:04 (JV1) 21:56 20:19 (O1.b)
8	08:45 15:57	07:58 17:00	06:51 18:01	06:29 20:06	05:16 21:07	18:48 (JV1) 04:29 20:19 (O1.b)
9	08:44 15:59	07:56 17:02	06:48 18:03	06:26 20:08	05:14 21:09	18:43 (JV1) 04:29 20:19 (O1.b)
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:12 21:11	18:38 (JV1) 04:27 20:21 (O1.b)
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:13	18:36 (JV1) 04:27 20:21 (O1.b)
12	08:42 16:04	07:50 17:09	06:40 18:10	06:18 20:14	05:07 21:15	18:36 (JV1) 04:26 20:22 (O1.b)
13	08:41 16:05	07:47 17:11	06:38 18:12	06:16 20:16	05:05 21:17	18:34 (JV1) 04:26 20:22 (O1.b)
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:19	18:34 (JV1) 04:25 20:23 (O1.b)
15	08:39 16:09	07:43 17:15	06:32 18:16	06:11 20:20	05:02 21:21	18:33 (JV1) 04:25 20:23 (O1.b)
16	08:38 16:11	07:41 17:17	06:30 18:18	06:08 20:22	05:00 21:23	18:33 (JV1) 04:25 20:23 (O1.b)
17	08:36 16:13	07:38 17:20	06:27 18:20	06:05 20:24	04:58 21:25	18:32 (JV1) 04:25 20:23 (O1.b)
18	08:35 16:15	07:36 17:22	06:25 18:22	06:03 20:26	04:56 21:27	18:32 (JV1) 04:24 20:24 (O1.b)
19	08:34 16:17	07:34 17:24	06:22 18:24	06:00 20:28	04:54 21:29	18:31 (JV1) 04:24 20:24 (O1.b)
20	08:32 16:19	07:31 17:26	06:19 18:26	05:58 20:30	04:52 21:31	18:31 (JV1) 04:24 20:24 (O1.b)
21	08:31 16:21	07:29 17:29	06:17 18:28	05:55 20:33	04:51 21:32	18:31 (JV1) 04:24 20:24 (O1.b)
22	08:30 16:23	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	18:31 (JV1) 04:25 20:25 (O1.b)
23	08:28 16:25	07:24 17:33	06:11 18:33	05:50 20:37	04:47 21:36	18:31 (JV1) 04:25 20:25 (O1.b)
24	08:26 16:27	07:21 17:35	06:09 18:35	05:48 20:39	04:46 21:38	18:32 (JV1) 04:25 20:26 (O1.b)
25	08:25 16:29	07:19 17:37	06:06 18:37	05:46 20:41	04:44 21:39	18:31 (JV1) 04:26 20:26 (O1.b)
26	08:23 16:31	07:16 17:40	06:03 18:39	05:43 20:43	04:43 21:41	18:32 (JV1) 04:26 20:26 (O1.b)
27	08:22 16:33	07:14 17:42	06:01 18:41	05:41 20:45	04:41 21:42	18:33 (JV1) 04:27 20:26 (O1.b)
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	18:34 (JV1) 04:27 20:25 (O1.b)
29	08:18 16:37		05:55 18:45	05:36 20:49	04:39 21:46	18:34 (JV1) 04:28 20:26 (O1.b)
30	08:16 16:40		05:53 18:47	05:34 20:51	04:37 21:47	18:35 (JV1) 04:28 20:26 (O1.b)
31	08:14 16:42		05:50 18:49		04:36 21:49	19:13 (JV1) 04:27 20:27 (O1.b)
Potential sun hours	236	266	366	426	507	528
Total, worst case				1109	753	685
Sun reduction				0,44	0,56	0,57
Oper. time red.				1,00	1,00	1,00
Wind dir. red.				1,00	1,00	1,00
Total reduction				0,44	0,56	0,57
Total, real				490	424	389

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: OŠ i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (420)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July			August			September			October			November			December		
1	04:29	20:25 (O1.b)	05:15		20:31 (O1.b)	06:16		18:35 (JV1)	07:16		07:20	08:22						
	22:06	23	20:48 (O1.b)	21:26	17	20:48 (O1.b)	20:12	42	19:17 (JV1)	18:52	16:35	15:44						
2	04:30	20:25 (O1.b)	05:16		20:34 (O1.b)	06:18		18:36 (JV1)	07:18		07:23	08:23						
	22:06	24	20:49 (O1.b)	21:24	13	20:47 (O1.b)	20:09	40	19:16 (JV1)	18:49	16:32	15:43						
3	04:31	20:25 (O1.b)	05:18		20:37 (O1.b)	06:20		18:37 (JV1)	07:20		07:25	08:25						
	22:05	24	20:49 (O1.b)	21:21	7	20:44 (O1.b)	20:07	37	19:14 (JV1)	18:47	16:30	15:42						
4	04:32	20:25 (O1.b)	05:20			06:22			18:38 (JV1)	07:22	07:27	08:27						
	22:05	25	20:50 (O1.b)	21:19		20:04		35	19:13 (JV1)	18:44	16:28	15:41						
5	04:33	20:25 (O1.b)	05:22		19:01 (JV1)	06:24			18:39 (JV1)	07:24	07:29	08:28						
	22:04	26	20:51 (O1.b)	21:17	5	19:06 (JV1)	20:02	32	19:11 (JV1)	18:41	16:26	15:41						
6	04:34	20:25 (O1.b)	05:24		18:56 (JV1)	06:26			18:41 (JV1)	07:26	07:31	08:30						
	22:03	26	20:51 (O1.b)	21:15	15	19:11 (JV1)	19:59	28	19:09 (JV1)	18:39	16:24	15:40						
7	04:35	20:25 (O1.b)	05:26		18:53 (JV1)	06:28			18:43 (JV1)	07:28	07:33	08:31						
	22:03	26	20:51 (O1.b)	21:13	21	19:14 (JV1)	19:56	23	19:06 (JV1)	18:36	16:22	15:39						
8	04:36	20:25 (O1.b)	05:28		18:51 (JV1)	06:30			18:46 (JV1)	07:30	07:36	08:33						
	22:02	27	20:52 (O1.b)	21:11	25	19:16 (JV1)	19:54	16	19:02 (JV1)	18:34	16:20	15:39						
9	04:37	20:25 (O1.b)	05:30		18:48 (JV1)	06:32				07:32	07:38	08:34						
	22:01	27	20:52 (O1.b)	21:08	29	19:17 (JV1)	19:51		18:31	16:18	15:38							
10	04:39	20:25 (O1.b)	05:32		18:47 (JV1)	06:34			07:34	07:40	08:35							
	22:00	27	20:52 (O1.b)	21:06	31	19:18 (JV1)	19:48		18:28	16:16	15:38							
11	04:40	20:24 (O1.b)	05:34		18:45 (JV1)	06:36			07:36	07:42	08:37							
	21:59	28	20:52 (O1.b)	21:04	34	19:19 (JV1)	19:46		18:26	16:14	15:38							
12	04:41	20:25 (O1.b)	05:36		18:44 (JV1)	06:38			07:38	07:44	08:38							
	21:58	29	20:54 (O1.b)	21:02	36	19:20 (JV1)	19:43		18:23	16:12	15:37							
13	04:43	20:25 (O1.b)	05:38		18:43 (JV1)	06:40			07:40	07:46	08:39							
	21:57	29	20:54 (O1.b)	20:59	38	19:21 (JV1)	19:40		18:21	16:10	15:37							
14	04:44	20:25 (O1.b)	05:40		18:42 (JV1)	06:42			07:42	07:48	08:40							
	21:55	29	20:54 (O1.b)	20:57	40	19:22 (JV1)	19:38		18:18	16:08	15:37							
15	04:45	20:24 (O1.b)	05:42		18:40 (JV1)	06:44			07:44	07:51	08:41							
	21:54	30	20:54 (O1.b)	20:55	42	19:22 (JV1)	19:35		18:15	16:06	15:37							
16	04:47	20:25 (O1.b)	05:44		18:39 (JV1)	06:46			07:46	07:53	08:42							
	21:53	29	20:54 (O1.b)	20:52	43	19:22 (JV1)	19:32		18:13	16:05	15:37							
17	04:48	20:24 (O1.b)	05:46		18:39 (JV1)	06:48			07:48	07:55	08:43							
	21:51	30	20:54 (O1.b)	20:50	44	19:23 (JV1)	19:30		18:10	16:03	15:37							
18	04:50	20:25 (O1.b)	05:48		18:38 (JV1)	06:50			07:50	07:57	08:44							
	21:50	30	20:55 (O1.b)	20:47	45	19:23 (JV1)	19:27		18:08	16:01	15:37							
19	04:52	20:25 (O1.b)	05:50		18:37 (JV1)	06:52			07:53	07:59	08:45							
	21:49	30	20:55 (O1.b)	20:45	47	19:24 (JV1)	19:24		18:05	16:00	15:37							
20	04:53	20:25 (O1.b)	05:52		18:37 (JV1)	06:54			07:55	08:01	08:45							
	21:47	30	20:55 (O1.b)	20:43	47	19:24 (JV1)	19:21		18:03	15:58	15:38							
21	04:55	20:25 (O1.b)	05:54		18:36 (JV1)	06:56			07:57	08:03	08:46							
	21:45	30	20:55 (O1.b)	20:40	48	19:24 (JV1)	19:19		18:01	15:57	15:38							
22	04:57	20:26 (O1.b)	05:56		18:36 (JV1)	06:57			07:59	08:05	08:47							
	21:44	29	20:55 (O1.b)	20:38	48	19:24 (JV1)	19:16		17:58	15:55	15:39							
23	04:58	20:25 (O1.b)	05:58		18:35 (JV1)	06:59			08:01	08:07	08:47							
	21:42	29	20:54 (O1.b)	20:35	48	19:23 (JV1)	19:13		17:56	15:54	15:39							
24	05:00	20:26 (O1.b)	06:00		18:35 (JV1)	07:01			08:03	08:09	08:47							
	21:40	29	20:55 (O1.b)	20:33	48	19:23 (JV1)	19:11		17:53	15:52	15:40							
25	05:02	20:26 (O1.b)	06:02		18:35 (JV1)	07:03			07:05	08:11	08:48							
	21:39	28	20:54 (O1.b)	20:30	47	19:22 (JV1)	19:08		16:51	15:51	15:40							
26	05:04	20:27 (O1.b)	06:04		18:35 (JV1)	07:05			07:08	08:13	08:48							
	21:37	27	20:54 (O1.b)	20:28	47	19:22 (JV1)	19:05		16:48	15:50	15:41							
27	05:05	20:27 (O1.b)	06:06		18:35 (JV1)	07:07			07:10	08:15	08:48							
	21:35	27	20:54 (O1.b)	20:25	47	19:22 (JV1)	19:03		16:46	15:48	15:42							
28	05:07	20:27 (O1.b)	06:08		18:35 (JV1)	07:09			07:12	08:16	08:48							
	21:33	25	20:52 (O1.b)	20:22	46	19:21 (JV1)	19:00		16:44	15:47	15:43							
29	05:09	20:28 (O1.b)	06:10		18:35 (JV1)	07:11			07:14	08:18	08:48							
	21:31	24	20:52 (O1.b)	20:20	45	19:20 (JV1)	18:57		16:41	15:46	15:44							
30	05:11	20:30 (O1.b)	06:12		18:35 (JV1)	07:13			07:16	08:20	08:48							
	21:29	21	20:51 (O1.b)	20:17	45	19:20 (JV1)	18:55		16:39	15:45	15:45							
31	05:13	20:30 (O1.b)	06:14		18:35 (JV1)				07:18		08:48							
	21:28	19	20:49 (O1.b)	20:15	43	19:18 (JV1)			16:37		15:46							
Potential sun hours	528			469			384		324		248		217					
Total, worst case		837		1091		253												
Sun reduction		0,47		0,52		0,43												
Oper. time red.		1,00		1,00		1,00												
Wind dir. red.		1,00		1,00		1,00												
Total reduction		0,47		0,52		0,43												
Total, real		395		570		109												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: OŠ mala - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (458)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:49	08:13	07:09	06:47	05:31	04:34	04:28	05:14	06:16	07:15	07:21	08:22
	15:46	16:43	17:46	19:51	20:53	21:51	22:07	21:26	20:12	18:52	16:34	15:43
2	08:49	08:11	07:06	06:44	05:28	04:33	04:29	05:16	06:18	07:17	07:23	08:24
	15:48	16:46	17:48	19:53	20:56	21:52	22:07	21:24	20:09	18:49	16:32	15:42
3	08:48	08:09	07:04	06:42	05:26	04:32	04:30	05:18	06:20	07:19	07:25	08:26
	15:49	16:48	17:50	19:55	20:58	21:53	22:06	21:22	20:07	18:46	16:30	15:41
4	08:48	08:07	07:01	06:39	05:24	04:31	04:31	05:20	06:22	07:22	07:27	08:27
	15:50	16:50	17:52	19:57	21:00	21:55	22:05	21:20	20:04	18:44	16:28	15:41
5	08:47	08:05	06:59	06:36	05:22	04:30	04:32	05:22	06:24	07:24	07:29	08:29
	15:52	16:52	17:54	19:59	21:02	21:56	22:05	21:18	20:02	18:41	16:26	15:40
6	08:47	08:03	06:56	06:34	05:19	04:29	04:33	05:24	06:25	07:26	07:32	08:30
	15:53	16:55	17:57	20:02	21:04	21:57	22:04	21:15	19:59	18:39	16:23	15:39
7	08:46	08:01	06:53	06:31	05:17	04:28	04:34	05:26	06:27	07:28	07:34	08:32
	15:55	16:57	17:59	20:04	21:06	21:58	22:03	21:13	19:56	18:36	16:21	15:39
8	08:46	07:59	06:51	06:28	05:15	04:28	04:35	05:28	06:29	07:30	07:36	08:33
	15:56	16:59	18:01	20:06	21:08	21:59	22:02	21:11	19:54	18:33	16:19	15:38
9	08:45	07:56	06:48	06:26	05:13	04:27	04:36	05:29	06:31	07:32	07:38	08:35
	15:58	17:01	18:03	20:08	21:10	22:00	22:01	21:09	19:51	18:31	16:17	15:38
10	08:44	07:54	06:46	06:23	05:11	04:26	04:38	05:31	06:33	07:34	07:40	08:36
	15:59	17:04	18:05	20:10	21:12	22:01	22:00	21:07	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:21	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:14	22:02	21:59	21:04	19:46	18:25	16:13	15:37
12	08:42	07:50	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:16	22:03	21:58	21:02	19:43	18:23	16:11	15:37
13	08:41	07:48	06:38	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:47	08:40
	16:05	17:10	18:11	20:16	21:18	22:04	21:57	21:00	19:40	18:20	16:10	15:36
14	08:40	07:45	06:35	06:13	05:03	04:24	04:43	05:39	06:41	07:42	07:49	08:41
	16:06	17:13	18:14	20:18	21:20	22:05	21:56	20:57	19:38	18:18	16:08	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:45	05:41	06:43	07:44	07:51	08:42
	16:08	17:15	18:16	20:20	21:22	22:05	21:55	20:55	19:35	18:15	16:06	15:36
16	08:38	07:41	06:30	06:08	04:59	04:24	04:46	05:43	06:45	07:46	07:53	08:43
	16:10	17:17	18:18	20:22	21:24	22:06	21:53	20:52	19:32	18:13	16:04	15:36
17	08:37	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	07:55	08:44
	16:12	17:19	18:20	20:24	21:25	22:06	21:52	20:50	19:29	18:10	16:02	15:36
18	08:36	07:36	06:24	06:02	04:55	04:24	04:49	05:47	06:49	07:51	07:57	08:44
	16:14	17:22	18:22	20:26	21:27	22:07	21:50	20:48	19:27	18:08	16:01	15:36
19	08:34	07:34	06:22	06:00	04:53	04:23	04:51	05:49	06:51	07:53	07:59	08:45
	16:16	17:24	18:24	20:29	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:37
20	08:33	07:31	06:19	05:57	04:52	04:24	04:52	05:51	06:53	07:55	08:01	08:46
	16:18	17:26	18:26	20:31	21:31	22:08	21:47	20:43	19:21	18:03	15:57	15:37
21	08:31	07:29	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:57	08:03	08:47
	16:20	17:28	18:28	20:33	21:33	22:08	21:46	20:40	19:19	18:00	15:56	15:37
22	08:30	07:26	06:14	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:35	21:35	22:08	21:44	20:38	19:16	17:58	15:54	15:38
23	08:28	07:24	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07	08:48
	16:24	17:33	18:32	20:37	21:36	22:08	21:43	20:35	19:13	17:55	15:53	15:38
24	08:27	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:48
	16:26	17:35	18:35	20:39	21:38	22:08	21:41	20:33	19:11	17:53	15:52	15:39
25	08:25	07:19	06:06	05:45	04:44	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:37	20:41	21:40	22:08	21:39	20:30	19:08	17:50	15:50	15:40
26	08:24	07:16	06:03	05:43	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:49
	16:30	17:39	18:39	20:43	21:41	22:08	21:37	20:28	19:05	17:48	15:49	15:40
27	08:22	07:14	06:00	05:40	04:41	04:26	05:05	06:06	07:07	08:09	08:15	08:49
	16:33	17:41	18:41	20:45	21:43	22:08	21:36	20:25	19:02	17:46	15:48	15:41
28	08:20	07:11	05:58	05:38	04:39	04:26	05:06	06:08	07:09	08:12	08:17	08:49
	16:35	17:44	18:43	20:47	21:45	22:08	21:34	20:23	19:00	17:43	15:47	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:10	07:11	08:14	08:19	08:49
	16:37		19:45	20:49	21:46	22:08	21:32	20:20	18:57	17:41	15:45	15:43
30	08:17		06:52	05:33	04:37	04:28	05:10	06:12	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:48	22:07	21:30	20:17	18:54	17:39	15:44	15:44
31	08:15		06:50		04:35		05:12	06:14		07:18		08:49
	16:41		19:49		21:49		21:28	20:15		16:36		15:45
Potential sun hours	235	266	366	426	508	528	529	469	385	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: OŠ ulejas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (416)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:14 21:26	06:16 20:12	07:15 18:52	07:20 16:35	08:22 15:44
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:16 21:23	06:18 20:09	07:17 18:49	07:23 16:32	08:23 15:43
3	08:48 15:50	08:09 16:48	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:18 21:21	06:20 20:07	07:19 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:51	07:01 17:52	06:39 19:57	05:24 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:53	06:59 17:55	06:36 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:01	07:24 18:41	07:29 16:26	08:28 15:40
6	08:46 15:54	08:03 16:55	06:56 17:57	06:34 20:01	05:20 21:03	04:30 21:56	04:34 22:03	05:24 21:15	06:26 19:59	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03	05:18 21:05	04:29 21:58	04:35 22:03	05:26 21:13	06:28 19:56	07:28 18:36	07:33 16:22	08:31 15:39
8	08:45 15:57	07:58 16:59	06:51 18:01	06:29 20:06	05:16 21:07	04:28 21:59	04:36 22:02	05:28 21:11	06:30 19:54	07:30 18:33	07:36 16:20	08:33 15:39
9	08:44 15:58	07:56 17:02	06:48 18:03	06:26 20:08	05:13 21:09	04:27 22:00	04:37 22:01	05:30 21:08	06:32 19:51	07:32 18:31	07:38 16:18	08:34 15:38
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:11 21:11	04:27 22:01	04:38 22:00	05:32 21:06	06:34 19:48	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:13	04:26 22:02	04:40 21:59	05:34 21:04	06:36 19:46	07:36 18:26	07:42 16:14	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:26 22:02	04:41 21:58	05:36 21:02	06:38 19:43	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 17:11	06:38 18:12	06:16 20:16	05:05 21:17	04:25 22:03	04:42 21:57	05:38 20:59	06:40 19:40	07:40 18:20	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 19:37	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:25 22:05	04:45 21:54	05:42 20:55	06:43 19:35	07:44 18:15	07:51 16:06	08:41 15:37
16	08:38 16:11	07:41 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:05	04:47 21:53	05:44 20:52	06:45 19:32	07:46 18:13	07:53 16:05	08:42 15:37
17	08:36 16:13	07:38 17:20	06:27 18:20	06:05 20:24	04:58 21:25	04:24 22:06	04:48 21:51	05:46 20:50	06:47 19:29	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:14	07:36 17:22	06:24 18:22	06:03 20:26	04:56 21:27	04:24 22:06	04:50 21:50	05:48 20:47	06:49 19:27	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:49	05:50 20:45	06:51 19:24	07:53 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:58 20:30	04:52 21:31	04:24 22:07	04:53 21:47	05:52 20:42	06:53 19:21	07:55 18:03	08:01 15:58	08:45 15:38
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:33	04:50 21:32	04:24 22:07	04:55 21:45	05:54 20:40	06:55 19:19	07:57 18:00	08:03 15:56	08:46 15:38
22	08:30 16:22	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:24 22:08	04:56 21:44	05:56 20:38	06:57 19:16	07:59 17:58	08:05 15:55	08:47 15:38
23	08:28 16:25	07:24 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:25 22:08	04:58 21:42	05:58 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:39
24	08:26 16:27	07:21 17:35	06:08 18:35	05:48 20:39	04:46 21:38	04:25 22:08	05:00 21:40	06:00 20:33	07:01 19:11	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:29	07:19 17:37	06:06 18:37	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:02 20:30	07:03 19:08	08:05 16:51	08:11 15:51	08:48 15:40
26	08:23 16:31	07:16 17:39	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:03 21:37	06:04 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:41
27	08:22 16:33	07:14 17:42	06:00 18:41	05:41 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:06 20:25	07:07 19:03	08:09 16:46	08:15 15:48	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 19:00	08:12 16:44	08:16 15:47	08:48 15:43
29	08:18 16:37		06:55 19:45	05:36 20:49	04:38 21:46	04:28 22:07	05:09 21:31	06:10 20:20	07:11 18:57	08:14 16:41	08:18 15:46	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:11 21:29	06:12 20:17	07:13 18:55	08:16 16:39	08:20 15:45	08:48 15:44
31	08:14 16:42		06:50 19:49		04:36 21:49		05:12 21:28	06:14 20:15		07:18 16:37		08:48 15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Paegles - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (540)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:05	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:02	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Palmas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (455)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:13 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:29 22:07	05:14 21:26	06:16 20:12	07:15 18:52	07:20 16:34	08:22 15:44
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:29 20:55	04:33 21:52	04:29 22:06	05:16 21:24	06:18 20:09	07:17 18:49	07:23 16:32	08:24 15:43
3	08:48 15:49	08:09 16:48	07:04 17:50	06:42 19:55	05:26 20:57	04:32 21:53	04:30 22:06	05:18 21:22	06:20 20:07	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:22 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:53	06:59 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:24 20:01	07:23 18:41	07:29 16:26	08:28 15:40
6	08:46 15:53	08:03 16:55	06:56 17:57	06:34 20:01	05:20 21:04	04:29 21:57	04:33 22:04	05:24 21:15	06:26 20:01	07:26 18:39	07:31 16:24	08:30 15:39
7	08:46 15:55	08:01 16:57	06:53 17:59	06:31 20:03	05:17 21:06	04:29 21:58	04:34 22:03	05:26 21:13	06:28 19:56	07:28 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:06	05:15 21:08	04:28 21:59	04:36 22:02	05:28 21:11	06:30 19:53	07:30 18:33	07:36 16:19	08:33 15:38
9	08:45 15:58	07:56 17:01	06:48 18:03	06:26 20:08	05:13 21:10	04:27 22:00	04:37 22:01	05:30 21:09	06:31 19:51	07:32 18:31	07:38 16:17	08:34 15:38
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:11 21:12	04:27 22:01	04:38 22:00	05:32 21:06	06:33 19:48	07:34 18:28	07:40 16:15	08:36 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:14	04:26 22:02	04:39 21:59	05:34 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:16	04:25 22:03	04:41 21:58	05:36 21:02	06:37 19:43	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 17:10	06:38 18:11	06:15 20:16	05:05 21:17	04:25 22:04	04:42 21:57	05:38 20:59	06:39 19:40	07:40 18:20	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:19	04:25 22:04	04:43 21:56	05:40 20:57	06:41 19:37	07:42 18:18	07:49 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:42 20:55	06:43 19:35	07:44 18:15	07:51 16:06	08:41 15:36
16	08:38 16:10	07:41 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:06	04:46 21:53	05:44 20:52	06:45 19:32	07:46 18:13	07:53 16:04	08:42 15:36
17	08:37 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:52	05:46 20:50	06:47 19:29	07:48 18:10	07:55 16:03	08:43 15:36
18	08:35 16:14	07:36 17:22	06:24 18:22	06:03 20:26	04:55 21:27	04:24 22:07	04:49 21:50	05:48 20:47	06:49 19:27	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:49	05:50 20:45	06:51 19:24	07:53 18:05	07:59 15:59	08:45 15:37
20	08:33 16:18	07:31 17:26	06:19 18:26	05:58 20:30	04:52 21:31	04:24 22:07	04:53 21:47	05:52 20:43	06:53 19:21	07:55 18:03	08:01 15:58	08:46 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:33	04:50 21:32	04:24 22:08	04:54 21:46	05:54 20:40	06:55 19:19	07:57 18:00	08:03 15:56	08:46 15:38
22	08:30 16:22	07:26 17:30	06:14 18:30	05:53 20:35	04:49 21:34	04:24 22:08	04:56 21:44	05:56 20:38	06:57 19:16	07:59 17:58	08:05 15:55	08:47 15:38
23	08:28 16:24	07:24 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:24 22:08	04:58 21:42	05:58 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:39
24	08:27 16:26	07:21 17:35	06:08 18:34	05:48 20:39	04:45 21:38	04:25 22:08	04:59 21:41	06:00 20:33	07:01 19:11	08:03 17:53	08:09 15:52	08:48 15:39
25	08:25 16:28	07:19 17:37	06:06 18:37	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:02 20:30	07:03 19:08	08:05 16:51	08:11 15:50	08:48 15:40
26	08:23 16:31	07:16 17:39	06:03 18:39	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:04 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:41
27	08:22 16:33	07:14 17:41	06:00 18:41	05:40 20:45	04:41 21:43	04:26 22:08	05:05 21:35	06:06 20:25	07:07 19:02	08:09 16:46	08:15 15:48	08:48 15:41
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:39 21:44	04:27 22:08	05:07 21:33	06:08 20:22	07:09 19:00	08:12 16:43	08:17 15:47	08:49 15:42
29	08:18 16:37		06:55 19:45	05:36 20:49	04:38 21:46	04:27 22:07	05:08 21:32	06:10 20:20	07:11 18:57	08:14 16:41	08:18 15:46	08:49 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:30	06:12 20:17	07:13 18:54	08:16 16:39	08:20 15:45	08:49 15:44
31	08:14 16:41		06:50 19:49		04:36 21:49		05:12 21:28	06:14 20:15		07:18 16:37		08:49 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Pastari - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (422)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:14 21:26	06:16 20:12	07:15 18:52	07:20 16:35	08:22 15:44
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:16 21:23	06:18 20:09	07:17 18:49	07:23 16:32	08:23 15:43
3	08:48 15:50	08:09 16:48	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:18 21:21	06:20 20:07	07:19 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:51	07:01 17:52	06:39 19:57	05:24 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:53	06:59 17:55	06:36 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:01	07:24 18:41	07:29 16:26	08:28 15:40
6	08:46 15:54	08:03 16:55	06:56 17:57	06:34 20:01	05:20 21:03	04:30 21:56	04:34 22:03	05:24 21:15	06:26 20:00	07:26 18:41	07:31 16:26	08:30 15:40
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03	05:18 21:05	04:29 21:58	04:35 22:03	05:26 21:13	06:28 20:00	07:28 18:41	07:33 16:22	08:31 15:39
8	08:45 15:57	07:58 16:59	06:51 18:01	06:29 20:06	05:16 21:07	04:28 21:59	04:36 22:02	05:28 21:11	06:30 20:04	07:30 18:44	07:36 16:20	08:33 15:39
9	08:44 15:58	07:56 17:02	06:48 18:03	06:26 20:08	05:13 21:09	04:27 22:00	04:37 22:01	05:30 21:08	06:32 20:01	07:32 18:41	07:38 16:18	08:34 15:38
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:11 21:11	04:27 22:01	04:38 22:00	05:32 21:06	06:34 20:04	07:34 18:48	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:13	04:26 22:02	04:40 21:59	05:34 21:04	06:36 20:04	07:36 18:46	07:42 16:14	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:26 22:03	04:41 21:58	05:36 21:02	06:38 20:04	07:38 18:43	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 17:11	06:38 18:12	06:16 20:16	05:05 21:17	04:25 22:03	04:42 21:57	05:38 20:59	06:40 20:00	07:40 18:20	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 20:00	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:25 22:05	04:45 21:54	05:42 20:55	06:43 20:00	07:44 18:15	07:51 16:06	08:41 15:37
16	08:38 16:11	07:41 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:05	04:47 21:53	05:44 20:52	06:45 20:00	07:46 18:13	07:53 16:04	08:42 15:37
17	08:36 16:12	07:38 17:20	06:27 18:20	06:05 20:24	04:58 21:25	04:24 22:06	04:48 21:51	05:46 20:50	06:47 20:00	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:14	07:36 17:22	06:24 18:22	06:03 20:26	04:56 21:27	04:24 22:06	04:50 21:50	05:48 20:47	06:49 20:00	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:49	05:50 20:45	06:51 20:00	07:53 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:58 20:30	04:52 21:31	04:24 22:07	04:53 21:47	05:52 20:42	06:53 20:00	07:55 18:03	08:01 15:58	08:45 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:33	04:50 21:32	04:24 22:07	04:55 21:45	05:54 20:40	06:55 20:00	07:57 18:00	08:03 15:56	08:46 15:38
22	08:30 16:22	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:24 22:08	04:56 21:44	05:56 20:38	06:57 20:00	07:59 18:00	08:05 15:55	08:47 15:38
23	08:28 16:25	07:24 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:25 22:08	04:58 21:42	05:58 20:35	06:59 20:00	08:01 18:00	08:07 15:53	08:47 15:39
24	08:26 16:27	07:21 17:35	06:08 18:35	05:48 20:39	04:46 21:38	04:25 22:08	05:00 21:40	06:00 20:33	07:01 20:00	08:03 18:00	08:09 15:52	08:47 15:39
25	08:25 16:29	07:19 17:37	06:06 18:37	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:02 20:30	07:03 20:00	08:05 18:00	08:11 15:51	08:48 15:40
26	08:23 16:31	07:16 17:39	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:03 21:37	06:04 20:27	07:05 20:00	08:07 18:00	08:13 15:49	08:48 15:41
27	08:22 16:33	07:14 17:42	06:00 18:41	05:41 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:06 20:25	07:07 20:00	08:09 18:00	08:15 15:48	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 20:00	08:12 18:00	08:16 15:47	08:48 15:43
29	08:18 16:37		06:55 19:45	05:36 20:49	04:38 21:46	04:28 22:07	05:09 21:31	06:10 20:20	07:11 20:00	08:14 18:00	08:18 15:46	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:11 21:29	06:12 20:17	07:13 20:00	08:16 18:00	08:20 15:45	08:48 15:44
31	08:14 16:42		06:50 19:49		04:36 21:49		05:12 21:28	06:14 20:15	07:18 20:00	08:18 18:00		08:48 15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Pastarini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (426)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:14 21:26	06:16 20:12	07:15 18:52	07:20 16:35	08:22 15:44
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:16 21:23	06:18 20:09	07:17 18:49	07:23 16:32	08:23 15:43
3	08:48 15:50	08:09 16:48	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:18 21:21	06:20 20:07	07:19 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:51	07:01 17:52	06:39 19:57	05:24 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:53	06:59 17:55	06:36 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:01	07:24 18:41	07:29 16:26	08:28 15:40
6	08:46 15:54	08:03 16:55	06:56 17:57	06:34 20:01	05:20 21:03	04:30 21:56	04:34 22:03	05:24 21:15	06:26 20:00	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03	05:18 21:05	04:29 21:58	04:35 22:03	05:26 21:13	06:28 20:00	07:28 18:36	07:33 16:22	08:31 15:39
8	08:45 15:57	07:58 16:59	06:51 18:01	06:29 20:06	05:16 21:07	04:28 21:59	04:36 22:02	05:28 21:11	06:30 20:04	07:30 18:33	07:36 16:20	08:33 15:39
9	08:44 15:58	07:56 17:02	06:48 18:03	06:26 20:08	05:13 21:09	04:28 22:00	04:37 22:01	05:30 21:08	06:32 20:00	07:32 18:31	07:38 16:18	08:34 15:38
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:11 21:11	04:27 22:01	04:38 22:00	05:32 21:06	06:34 20:04	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:13	04:26 22:02	04:40 21:59	05:34 21:04	06:36 20:00	07:36 18:26	07:42 16:14	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:26 22:02	04:41 21:58	05:36 21:02	06:38 20:00	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 17:11	06:38 18:12	06:16 20:16	05:05 21:17	04:25 22:03	04:42 21:57	05:38 20:59	06:40 20:00	07:40 18:20	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 20:00	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:25 22:05	04:45 21:54	05:42 20:55	06:44 20:00	07:44 18:15	07:51 16:06	08:41 15:37
16	08:38 16:11	07:41 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:05	04:47 21:53	05:44 20:52	06:45 20:00	07:46 18:13	07:53 16:05	08:42 15:37
17	08:36 16:13	07:38 17:20	06:27 18:20	06:05 20:24	04:58 21:25	04:24 22:06	04:48 21:51	05:46 20:50	06:47 20:00	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:14	07:36 17:22	06:24 18:22	06:03 20:26	04:56 21:27	04:24 22:06	04:50 21:50	05:48 20:47	06:49 20:00	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:49	05:50 20:45	06:51 20:00	07:53 18:05	07:59 16:00	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:58 20:30	04:52 21:31	04:24 22:07	04:53 21:47	05:52 20:42	06:53 20:00	07:55 18:03	08:01 15:58	08:45 15:38
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:33	04:50 21:32	04:24 22:07	04:55 21:45	05:54 20:40	06:55 20:00	07:57 18:00	08:03 15:56	08:46 15:38
22	08:30 16:22	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:24 22:08	04:56 21:44	05:56 20:38	06:57 20:00	07:59 18:00	08:05 15:55	08:47 15:38
23	08:28 16:25	07:24 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:25 22:08	04:58 21:42	05:58 20:35	06:59 20:00	08:01 18:00	08:07 17:55	08:47 15:39
24	08:26 16:27	07:21 17:35	06:08 18:35	05:48 20:39	04:46 21:38	04:25 22:08	05:00 21:40	06:00 20:33	07:01 20:00	08:03 18:00	08:09 17:53	08:47 15:39
25	08:25 16:29	07:19 17:37	06:06 18:37	05:45 20:41	04:44 21:39	04:25 22:08	05:02 21:39	06:02 20:30	07:03 20:00	08:05 18:00	08:11 17:51	08:48 15:40
26	08:23 16:31	07:16 17:39	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:03 21:37	06:04 20:27	07:05 20:00	08:07 18:00	08:13 17:48	08:48 15:41
27	08:22 16:33	07:14 17:42	06:00 18:41	05:41 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:06 20:25	07:07 20:00	08:09 18:00	08:15 17:46	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 20:00	08:12 18:00	08:16 17:44	08:48 15:43
29	08:18 16:37		06:55 19:45	05:36 20:49	04:38 21:46	04:28 22:07	05:09 21:31	06:10 20:20	07:11 20:00	08:14 18:00	08:18 17:41	08:48 15:44
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:11 21:29	06:12 20:17	07:13 20:00	08:16 18:00	08:20 17:45	08:48 15:45
31	08:14 16:42		06:50 19:49		04:36 21:49		05:13 21:28	06:14 20:15	07:18 20:00			08:48 15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Pavlani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (563)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:46	08:12 16:43	07:08 17:45	06:47 19:51	05:30 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:51	07:20 16:34	08:22 15:43
2	08:48 15:47	08:10 16:45	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:17 21:21	06:19 20:06	07:19 18:46	07:25 16:29	08:25 15:41
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	07:27 16:27	08:27 15:40
5	08:47 15:51	08:04 16:52	06:58 17:54	06:36 19:59	05:21 21:01	04:30 21:55	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:23 21:15	06:25 19:58	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:38
8	08:45 15:56	07:58 16:59	06:50 18:00	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:57	07:56 17:01	06:48 18:03	06:25 20:07	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 19:50	07:31 18:30	07:38 16:17	08:34 15:37
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:37 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:11	05:09 21:13	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:35 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:06 21:15	04:25 22:03	04:40 21:58	05:35 21:01	06:37 19:42	07:38 18:22	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:04 21:17	04:24 22:03	04:41 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	05:02 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17	07:48 16:07	08:40 15:36
15	08:39 16:08	07:43 17:14	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:17	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:19	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:00	08:44 15:36
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:36
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:51 21:30	04:23 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:23 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:56 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:55 21:44	05:55 20:37	06:57 19:16	07:59 17:57	08:05 15:54	08:47 15:37
23	08:28 16:24	07:23 17:32	06:11 18:32	05:50 20:36	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:34	06:08 18:34	05:47 20:38	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:52	08:09 15:51	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:39	04:24 22:08	05:01 21:39	06:01 20:30	07:03 19:07	08:05 16:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	04:40 21:42	04:25 22:08	05:04 21:35	06:05 20:25	07:07 19:02	08:09 16:45	08:14 15:47	08:48 15:41
28	08:20 16:34	07:11 17:43	05:57 18:42	05:37 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 18:59	08:11 16:43	08:16 15:46	08:48 15:42
29	08:18 16:37		06:55 19:44	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:19	07:11 18:57	08:13 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:38	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Priednieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (487)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:07	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:15	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:52	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:06	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:57	22:04	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:56	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:26	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:36
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:05	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:02	17:08	18:09	20:14	21:15	22:03	21:58	21:02	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:00	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:05	15:36
16	08:38	07:40	06:29	06:07	04:59	04:23	04:46	05:43	06:45	07:46	07:53	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:07	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:31	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:08	21:45	20:40	19:18	18:00	15:56	15:37
22	08:30	07:26	06:13	05:52	04:48	04:23	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:24	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:48
	16:26	17:34	18:34	20:39	21:38	22:08	21:41	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:15	08:48
	16:32	17:41	18:40	20:45	21:43	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:49
	16:34	17:43	18:42	20:47	21:44	22:08	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:37	04:27	05:08	06:09	07:11	08:14	08:18	08:49
	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	235	266	366	426	508	528	529	469	384	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Purmala - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (489)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June
1	08:48 15:46	08:12 16:43	15:23 (Pr3b) 17:45	07:09 17:14 (Pr25)	06:47 19:51	05:31 20:53
2	08:48 15:47	08:10 16:45	15:24 (Pr3b) 17:48	07:06 17:14 (Pr25)	06:44 19:53	05:28 20:55
3	08:48 15:49	08:09 16:48	15:24 (Pr3b) 17:50	07:03 17:15 (Pr25)	06:41 19:55	05:26 20:57
4	08:47 15:50	08:07 16:50	15:24 (Pr3b) 17:52	07:01 17:15 (Pr25)	06:39 19:57	05:24 20:59
5	08:47 15:51	08:05 16:52	15:24 (Pr3b) 17:54	06:58 17:14 (Pr25)	06:36 19:59	05:21 21:01
6	08:46 15:53	08:02 16:54	15:25 (Pr3b) 17:56	06:56 17:15 (Pr25)	06:33 20:01	05:19 21:03
7	08:46 15:54	08:00 16:57	15:26 (Pr3b) 17:58	06:53 17:14 (Pr25)	06:31 20:03	05:17 21:05
8	08:45 15:56	07:58 16:59	15:26 (Pr3b) 18:01	06:51 17:13 (Pr25)	06:28 20:05	05:15 21:07
9	08:44 15:58	07:56 17:01	15:28 (Pr3b) 18:03	06:48 17:11 (Pr25)	06:25 20:07	05:13 21:09
10	08:44 15:59	07:54 17:03	15:30 (Pr3b) 18:05	06:45 17:11 (Pr25)	06:23 20:09	05:11 21:11
11	08:43 16:01	07:52 17:06	15:31 (Pr3b) 18:07	06:43 17:09 (Pr25)	06:20 20:12	05:09 21:13
12	08:42 16:03	07:49 17:08	15:34 (Pr3b) 18:09	06:40 17:06 (Pr25)	06:18 20:14	05:07 21:15
13	08:41 16:04	07:47 17:10	15:49 (PrRR3) 18:11	06:37 17:02 (Pr25)	06:15 20:16	05:05 21:17
14	08:40 16:06	07:45 17:12	15:49 (PrRR3) 18:13	06:35 18:13	06:12 20:18	05:03 21:19
15	08:39 16:08	07:43 17:15	15:49 (PrRR3) 18:15	06:32 18:15	06:10 20:20	05:01 21:21
16	08:38 16:10	07:40 17:17	15:48 (PrRR3) 18:17	06:29 18:17	06:07 20:22	04:59 21:23
17	08:36 16:12	07:38 17:19	15:48 (PrRR3) 18:20	06:27 18:20	06:05 20:24	04:57 21:25
18	08:35 16:14	07:36 17:21	15:47 (PrRR3) 18:22	06:24 18:22	06:02 20:26	04:55 21:27
19	08:34 16:16	07:33 17:23	15:47 (PrRR3) 18:24	06:21 18:24	06:00 20:28	04:53 21:29
20	08:32 16:18	07:31 17:26	15:46 (PrRR3) 18:26	06:19 18:26	05:57 20:30	04:51 21:31
21	08:31 16:20	07:28 17:28	15:47 (PrRR3) 18:28	06:16 18:28	05:55 20:32	04:50 21:32
22	08:30 16:22	07:26 17:30	15:47 (PrRR3) 18:30	06:13 18:30	05:52 20:34	04:48 21:34
23	08:28 16:24	07:24 17:32	15:46 (PrRR3) 18:32	06:11 18:32	05:50 20:37	04:46 21:36
24	08:26 16:26	07:21 17:35	15:47 (PrRR3) 18:34	06:08 18:34	05:47 20:39	04:45 21:38
25	08:25 16:28	07:19 17:37	15:47 (PrRR3) 18:36	06:05 18:36	05:45 20:41	04:43 21:39
26	08:23 16:30	07:16 17:39	15:48 (PrRR3) 18:38	06:03 18:38	05:42 20:43	04:42 21:41
27	08:22 16:32	07:14 17:41	15:49 (PrRR3) 18:40	06:00 18:40	05:40 20:45	04:40 21:43
28	08:20 16:34	07:11 17:43	15:50 (PrRR3) 18:43	05:57 18:43	05:38 20:47	04:39 21:44
29	08:18 16:37	15:23 (Pr3b) 17:43	17:12 (Pr25) 18:43	05:55 19:45	05:35 20:49	04:38 21:46
30	08:16 16:39	15:23 (Pr3b) 17:43	17:12 (Pr25) 18:43	05:55 19:47	05:33 20:51	04:36 21:47
31	08:14 16:41	15:23 (Pr3b) 17:43	17:12 (Pr25) 18:43	05:55 19:49	05:35 21:49	04:38 21:49
Potential sun hours	236	266	366	426	507	528
Total, worst case	228	984	336			
Sun reduction	0,13	0,23	0,39			
Oper. time red.	1,00	1,00	1,00			
Wind dir. red.	1,00	1,00	1,00			
Total reduction	0,13	0,23	0,39			
Total, real	31	222	132			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Purmala - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (489)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October		November		December
1	04:28	05:14	06:15	07:15	17:35 (Pr25)	07:20	14:59 (Pr3b)	08:22
	22:07	21:26	20:12	18:51	10 17:45 (Pr25)	16:34	41 15:46 (PrRR3)	15:43
2	04:29	05:16	06:17	07:17	17:32 (Pr25)	07:22	14:57 (Pr3b)	08:24
	22:06	21:23	20:09	18:49	15 17:47 (Pr25)	16:32	40 15:44 (PrRR3)	15:42
3	04:30	05:18	06:19	07:19	17:30 (Pr25)	07:25	14:56 (Pr3b)	08:25
	22:06	21:21	20:07	18:46	18 17:48 (Pr25)	16:30	36 15:41 (PrRR3)	15:41
4	04:31	05:19	06:21	07:21	17:28 (Pr25)	07:27	14:56 (Pr3b)	08:27
	22:05	21:19	20:04	18:44	21 17:49 (Pr25)	16:27	24 15:20 (Pr3b)	15:40
5	04:32	05:21	06:23	07:23	17:27 (Pr25)	07:29	14:55 (Pr3b)	08:28
	22:04	21:17	20:01	18:41	23 17:50 (Pr25)	16:25	25 15:20 (Pr3b)	15:40
6	04:33	05:23	06:25	07:25	17:26 (Pr25)	07:31	14:55 (Pr3b)	08:30
	22:04	21:15	19:59	18:38	24 17:50 (Pr25)	16:23	27 15:22 (Pr3b)	15:39
7	04:34	05:25	06:27	07:27	17:25 (Pr25)	07:33	14:54 (Pr3b)	08:31
	22:03	21:13	19:56	18:36	25 17:50 (Pr25)	16:21	27 15:21 (Pr3b)	15:38
8	04:35	05:27	06:29	07:29	17:25 (Pr25)	07:35	14:54 (Pr3b)	08:33
	22:02	21:11	19:53	18:33	24 17:49 (Pr25)	16:19	27 15:21 (Pr3b)	15:38
9	04:36	05:29	06:31	07:31	17:24 (Pr25)	07:38	14:55 (Pr3b)	08:34
	22:01	21:08	19:51	18:30	25 17:49 (Pr25)	16:17	27 15:22 (Pr3b)	15:37
10	04:37	05:31	06:33	07:34	16:31 (PrRR3)	07:40	14:54 (Pr3b)	08:36
	22:00	21:06	19:48	18:28	37 17:48 (Pr25)	16:15	28 15:22 (Pr3b)	15:37
11	04:39	05:33	06:35	07:36	16:29 (PrRR3)	07:42	14:55 (Pr3b)	08:37
	21:59	21:04	19:45	18:25	43 17:49 (Pr25)	16:13	27 15:22 (Pr3b)	15:37
12	04:40	05:35	06:37	07:38	16:26 (PrRR3)	07:44	14:55 (Pr3b)	08:38
	21:58	21:02	19:43	18:23	47 17:48 (Pr25)	16:11	27 15:22 (Pr3b)	15:36
13	04:41	05:37	06:39	07:40	16:24 (PrRR3)	07:46	14:55 (Pr3b)	08:39
	21:57	20:59	19:40	18:20	47 17:46 (Pr25)	16:09	26 15:21 (Pr3b)	15:36
14	04:43	05:39	06:41	07:42	16:22 (PrRR3)	07:48	14:57 (Pr3b)	08:40
	21:55	20:57	19:37	18:17	49 17:45 (Pr25)	16:07	24 15:21 (Pr3b)	15:36
15	04:44	05:41	06:43	07:44	16:21 (PrRR3)	07:50	14:57 (Pr3b)	08:41
	21:54	20:55	19:34	18:15	45 17:42 (Pr25)	16:06	24 15:21 (Pr3b)	15:36
16	04:46	05:43	06:45	07:46	16:20 (PrRR3)	07:53	14:57 (Pr3b)	08:42
	21:53	20:52	19:32	18:12	43 17:40 (Pr25)	16:04	23 15:20 (Pr3b)	15:36
17	04:47	05:45	06:47	07:48	16:19 (PrRR3)	07:55	14:59 (Pr3b)	08:43
	21:51	20:50	19:29	18:10	35 16:54 (PrRR3)	16:02	21 15:20 (Pr3b)	15:36
18	04:49	05:47	06:49	07:50	16:18 (PrRR3)	07:57	15:00 (Pr3b)	08:44
	21:50	20:47	19:26	18:07	36 16:54 (PrRR3)	16:00	19 15:19 (Pr3b)	15:36
19	04:51	05:49	06:51	07:52	16:17 (PrRR3)	07:59	15:01 (Pr3b)	08:45
	21:49	20:45	19:24	18:05	37 16:54 (PrRR3)	15:59	16 15:17 (Pr3b)	15:36
20	04:52	05:51	06:53	07:54	16:18 (PrRR3)	08:01	15:04 (Pr3b)	08:45
	21:47	20:42	19:21	18:02	36 16:54 (PrRR3)	15:57	13 15:17 (Pr3b)	15:37
21	04:54	05:53	06:55	07:57	16:17 (PrRR3)	08:03	15:06 (Pr3b)	08:46
	21:45	20:40	19:18	18:00	37 16:54 (PrRR3)	15:56	8 15:14 (Pr3b)	15:37
22	04:56	05:55	06:57	07:59	16:17 (PrRR3)	08:05		08:47
	21:44	20:37	19:16	17:57	37 16:54 (PrRR3)	15:54		15:38
23	04:57	05:57	06:59	08:01	16:16 (PrRR3)	08:07		08:47
	21:42	20:35	19:13	17:55	37 16:53 (PrRR3)	15:53		15:38
24	04:59	05:59	07:01	08:03	16:17 (PrRR3)	08:09		08:48
	21:41	20:32	19:10	17:53	36 16:53 (PrRR3)	15:51		15:39
25	05:01	06:01	07:03	07:05	15:17 (PrRR3)	08:11		08:48
	21:39	20:30	19:08	16:50	36 15:53 (PrRR3)	15:50		15:39
26	05:03	06:03	07:05	07:07	15:17 (PrRR3)	08:13		08:48
	21:37	20:27	19:05	16:48	35 15:52 (PrRR3)	15:49		15:40
27	05:04	06:05	07:07	07:09	15:18 (PrRR3)	08:15		08:48
	21:35	20:25	19:02	16:45	34 15:52 (PrRR3)	15:47		15:41
28	05:06	06:07	07:09	07:12	15:19 (PrRR3)	08:16		08:49
	21:33	20:22	19:00	16:43	32 15:51 (PrRR3)	15:46		15:42
29	05:08	06:09	07:11	07:14	15:19 (PrRR3)	08:18		08:49
	21:31	20:20	18:57	16:41	30 15:49 (PrRR3)	15:45		15:43
30	05:10	06:11	07:13	07:16	15:03 (Pr3b)	08:20		08:49
	21:29	20:17	18:54	16:38	38 15:49 (PrRR3)	15:44		15:44
31	05:12	06:13		07:18	15:00 (Pr3b)			08:48
	21:28	20:14		16:36	40 15:47 (PrRR3)			15:45
Potential sun hours	529	469	384	324		248		217
Total, worst case				1032		530		
Sun reduction				0,29		0,08		
Oper. time red.				1,00		1,00		
Wind dir. red.				1,00		1,00		
Total reduction				0,29		0,08		
Total, real				299		40		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Pūrmalieši - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (558)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:07	21:26	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:24
	15:47	16:45	17:48	19:53	20:55	21:52	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:09	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:06	21:21	20:06	18:46	16:29	15:41
4	08:47	08:07	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:05	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:57	22:04	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:36
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:02	17:08	18:09	20:14	21:15	22:03	21:58	21:02	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:51	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:55	19:34	18:15	16:06	15:36
16	08:38	07:40	06:29	06:07	04:59	04:23	04:46	05:43	06:45	07:46	07:53	08:42
	16:10	17:17	18:17	20:22	21:23	22:06	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:52	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:07	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:31	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:08	21:46	20:40	19:18	18:00	15:56	15:37
22	08:30	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:24	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:48
	16:26	17:34	18:34	20:39	21:38	22:08	21:41	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:22	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:15	08:48
	16:32	17:41	18:40	20:45	21:43	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:49
	16:34	17:43	18:42	20:47	21:44	22:08	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:49
	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:49
	16:41		19:49		21:49		21:28	20:14		16:36		15:45
Potential sun hours	235	266	366	426	508	528	529	469	384	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Purvietas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (439)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:13	07:09	06:47	05:31	04:35	04:29	05:15	06:16	07:16	07:20	08:22
	15:47	16:44	17:46	19:51	20:53	21:50	22:06	21:26	20:12	18:52	16:35	15:44
2	08:48	08:11	07:06	06:45	05:29	04:34	04:30	05:17	06:18	07:18	07:23	08:23
	15:49	16:46	17:48	19:53	20:55	21:51	22:06	21:24	20:09	18:49	16:33	15:43
3	08:48	08:09	07:04	06:42	05:27	04:33	04:31	05:19	06:20	07:20	07:25	08:25
	15:50	16:49	17:50	19:55	20:57	21:53	22:05	21:21	20:07	18:47	16:30	15:42
4	08:47	08:07	07:01	06:39	05:25	04:32	04:32	05:20	06:22	07:22	07:27	08:27
	15:51	16:51	17:53	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:42
5	08:47	08:05	06:59	06:37	05:22	04:31	04:33	05:22	06:24	07:24	07:29	08:28
	15:53	16:53	17:55	19:59	21:01	21:55	22:04	21:17	20:02	18:41	16:26	15:41
6	08:46	08:03	06:56	06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31	08:30
	15:54	16:55	17:57	20:02	21:03	21:56	22:03	21:15	19:59	18:39	16:24	15:40
7	08:46	08:01	06:54	06:31	05:18	04:29	04:35	05:26	06:28	07:28	07:33	08:31
	15:56	16:58	17:59	20:04	21:05	21:58	22:03	21:13	19:56	18:36	16:22	15:40
8	08:45	07:58	06:51	06:29	05:16	04:29	04:36	05:28	06:30	07:30	07:36	08:33
	15:57	17:00	18:01	20:06	21:07	21:59	22:02	21:11	19:54	18:34	16:20	15:39
9	08:44	07:56	06:48	06:26	05:14	04:28	04:37	05:30	06:32	07:32	07:38	08:34
	15:59	17:02	18:03	20:08	21:09	22:00	22:01	21:09	19:51	18:31	16:18	15:39
10	08:44	07:54	06:46	06:24	05:12	04:27	04:39	05:32	06:34	07:34	07:40	08:35
	16:00	17:04	18:05	20:10	21:11	22:01	22:00	21:06	19:48	18:28	16:16	15:38
11	08:43	07:52	06:43	06:21	05:10	04:27	04:40	05:34	06:36	07:36	07:42	08:37
	16:02	17:06	18:08	20:12	21:13	22:02	21:59	21:04	19:46	18:26	16:14	15:38
12	08:42	07:50	06:40	06:18	05:08	04:26	04:41	05:36	06:38	07:38	07:44	08:38
	16:04	17:09	18:10	20:14	21:15	22:02	21:58	21:02	19:43	18:23	16:12	15:37
13	08:41	07:47	06:38	06:16	05:06	04:26	04:43	05:38	06:40	07:40	07:46	08:39
	16:05	17:11	18:12	20:16	21:17	22:03	21:57	20:59	19:40	18:21	16:10	15:37
14	08:40	07:45	06:35	06:13	05:04	04:25	04:44	05:40	06:42	07:42	07:48	08:40
	16:07	17:13	18:14	20:18	21:19	22:04	21:55	20:57	19:38	18:18	16:08	15:37
15	08:39	07:43	06:33	06:11	05:02	04:25	04:46	05:42	06:44	07:44	07:51	08:41
	16:09	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:16	16:07	15:37
16	08:38	07:41	06:30	06:08	05:00	04:25	04:47	05:44	06:46	07:46	07:53	08:42
	16:11	17:18	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:13	16:05	15:37
17	08:36	07:38	06:27	06:06	04:58	04:25	04:49	05:46	06:48	07:48	07:55	08:43
	16:13	17:20	18:20	20:24	21:25	22:06	21:51	20:50	19:30	18:11	16:03	15:37
18	08:35	07:36	06:25	06:03	04:56	04:25	04:50	05:48	06:50	07:51	07:57	08:44
	16:15	17:22	18:22	20:26	21:27	22:06	21:50	20:47	19:27	18:08	16:01	15:37
19	08:34	07:34	06:22	06:00	04:54	04:25	04:52	05:50	06:52	07:53	07:59	08:45
	16:17	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:06	16:00	15:38
20	08:32	07:31	06:19	05:58	04:53	04:25	04:53	05:52	06:54	07:55	08:01	08:45
	16:19	17:26	18:26	20:31	21:30	22:07	21:47	20:43	19:22	18:03	15:58	15:38
21	08:31	07:29	06:17	05:55	04:51	04:25	04:55	05:54	06:56	07:57	08:03	08:46
	16:21	17:29	18:28	20:33	21:32	22:07	21:45	20:40	19:19	18:01	15:57	15:38
22	08:30	07:26	06:14	05:53	04:49	04:25	04:57	05:56	06:58	07:59	08:05	08:46
	16:23	17:31	18:31	20:35	21:34	22:07	21:44	20:38	19:16	17:58	15:55	15:39
23	08:28	07:24	06:11	05:51	04:48	04:25	04:58	05:58	07:00	08:01	08:07	08:47
	16:25	17:33	18:33	20:37	21:36	22:08	21:42	20:35	19:13	17:56	15:54	15:39
24	08:26	07:21	06:09	05:48	04:46	04:25	05:00	06:00	07:02	08:03	08:09	08:47
	16:27	17:35	18:35	20:39	21:38	22:08	21:40	20:33	19:11	17:53	15:52	15:40
25	08:25	07:19	06:06	05:46	04:44	04:26	05:02	06:02	07:04	08:05	08:11	08:48
	16:29	17:37	18:37	20:41	21:39	22:08	21:39	20:30	19:08	17:51	15:51	15:41
26	08:23	07:16	06:03	05:43	04:43	04:26	05:04	06:04	07:06	08:07	08:13	08:48
	16:31	17:40	18:39	20:43	21:41	22:08	21:37	20:28	19:05	17:49	15:50	15:41
27	08:22	07:14	06:01	05:41	04:42	04:27	05:05	06:06	07:08	08:09	08:15	08:48
	16:33	17:42	18:41	20:45	21:42	22:08	21:35	20:25	19:03	17:46	15:49	15:42
28	08:20	07:11	05:58	05:38	04:40	04:27	05:07	06:08	07:10	08:12	08:16	08:48
	16:35	17:44	18:43	20:47	21:44	22:07	21:33	20:22	19:00	17:44	15:47	15:43
29	08:18		06:55	05:36	04:39	04:28	05:09	06:10	07:12	08:14	08:18	08:48
	16:38		19:45	20:49	21:46	22:07	21:31	20:20	18:57	17:42	15:46	15:44
30	08:16		06:53	05:34	04:38	04:29	05:11	06:12	07:14	08:16	08:20	08:48
	16:40		19:47	20:51	21:47	22:07	21:29	20:17	18:55	17:39	15:45	15:45
31	08:14		06:50		04:36		05:13	06:14		07:18		08:48
	16:42		19:49		21:49		21:28	20:15		16:37		15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Purvietinas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (441)
Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:13	07:09	06:47	05:31	04:35	04:29	05:15	06:16	07:16	07:20	08:22
	15:47	16:44	17:46	19:51	20:53	21:50	22:06	21:26	20:12	18:52	16:35	15:44
2	08:48	08:11	07:06	06:45	05:29	04:34	04:30	05:17	06:18	07:18	07:23	08:23
	15:49	16:46	17:48	19:53	20:55	21:51	22:06	21:24	20:09	18:49	16:33	15:43
3	08:48	08:09	07:04	06:42	05:27	04:33	04:31	05:19	06:20	07:20	07:25	08:25
	15:50	16:49	17:50	19:55	20:57	21:53	22:05	21:21	20:07	18:47	16:30	15:42
4	08:47	08:07	07:01	06:39	05:25	04:32	04:32	05:20	06:22	07:22	07:27	08:27
	15:51	16:51	17:53	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:42
5	08:47	08:05	06:59	06:37	05:22	04:31	04:33	05:22	06:24	07:24	07:29	08:28
	15:53	16:53	17:55	19:59	21:01	21:55	22:04	21:17	20:02	18:41	16:26	15:41
6	08:46	08:03	06:56	06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31	08:30
	15:54	16:55	17:57	20:02	21:03	21:56	22:03	21:15	19:59	18:39	16:24	15:40
7	08:46	08:01	06:54	06:31	05:18	04:29	04:35	05:26	06:28	07:28	07:33	08:31
	15:56	16:58	17:59	20:04	21:05	21:58	22:03	21:13	19:56	18:36	16:22	15:40
8	08:45	07:58	06:51	06:29	05:16	04:29	04:36	05:28	06:30	07:30	07:36	08:33
	15:57	17:00	18:01	20:06	21:07	21:59	22:02	21:11	19:54	18:34	16:20	15:39
9	08:44	07:56	06:48	06:26	05:14	04:28	04:37	05:30	06:32	07:32	07:38	08:34
	15:59	17:02	18:03	20:08	21:09	22:00	22:01	21:09	19:51	18:31	16:18	15:39
10	08:44	07:54	06:46	06:24	05:12	04:27	04:39	05:32	06:34	07:34	07:40	08:35
	16:00	17:04	18:05	20:10	21:11	22:01	22:00	21:06	19:48	18:28	16:16	15:38
11	08:43	07:52	06:43	06:21	05:10	04:27	04:40	05:34	06:36	07:36	07:42	08:37
	16:02	17:06	18:08	20:12	21:13	22:02	21:59	21:04	19:46	18:26	16:14	15:38
12	08:42	07:50	06:40	06:18	05:08	04:26	04:41	05:36	06:38	07:38	07:44	08:38
	16:04	17:09	18:10	20:14	21:15	22:02	21:58	21:02	19:43	18:23	16:12	15:37
13	08:41	07:47	06:38	06:16	05:06	04:26	04:43	05:38	06:40	07:40	07:46	08:39
	16:05	17:11	18:12	20:16	21:17	22:03	21:57	20:59	19:40	18:21	16:10	15:37
14	08:40	07:45	06:35	06:13	05:04	04:25	04:44	05:40	06:42	07:42	07:48	08:40
	16:07	17:13	18:14	20:18	21:19	22:04	21:55	20:57	19:38	18:18	16:08	15:37
15	08:39	07:43	06:33	06:11	05:02	04:25	04:46	05:42	06:44	07:44	07:51	08:41
	16:09	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:16	16:07	15:37
16	08:38	07:41	06:30	06:08	05:00	04:25	04:47	05:44	06:46	07:46	07:53	08:42
	16:11	17:18	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:13	16:05	15:37
17	08:36	07:38	06:27	06:06	04:58	04:25	04:49	05:46	06:48	07:48	07:55	08:43
	16:13	17:20	18:20	20:24	21:25	22:06	21:51	20:50	19:30	18:11	16:03	15:37
18	08:35	07:36	06:25	06:03	04:56	04:25	04:50	05:48	06:50	07:51	07:57	08:44
	16:15	17:22	18:22	20:26	21:27	22:06	21:50	20:47	19:27	18:08	16:01	15:37
19	08:34	07:34	06:22	06:00	04:54	04:25	04:52	05:50	06:52	07:53	07:59	08:45
	16:17	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:06	16:00	15:38
20	08:32	07:31	06:19	05:58	04:53	04:25	04:53	05:52	06:54	07:55	08:01	08:45
	16:19	17:26	18:26	20:31	21:30	22:07	21:47	20:43	19:22	18:03	15:58	15:38
21	08:31	07:29	06:17	05:55	04:51	04:25	04:55	05:54	06:56	07:57	08:03	08:46
	16:21	17:29	18:28	20:33	21:32	22:07	21:45	20:40	19:19	18:01	15:57	15:38
22	08:30	07:26	06:14	05:53	04:49	04:25	04:57	05:56	06:58	07:59	08:05	08:46
	16:23	17:31	18:31	20:35	21:34	22:08	21:44	20:38	19:16	17:58	15:55	15:39
23	08:28	07:24	06:11	05:51	04:48	04:25	04:58	05:58	07:00	08:01	08:07	08:47
	16:25	17:33	18:33	20:37	21:36	22:08	21:42	20:35	19:13	17:56	15:54	15:39
24	08:26	07:21	06:09	05:48	04:46	04:25	05:00	06:00	07:02	08:03	08:09	08:47
	16:27	17:35	18:35	20:39	21:38	22:08	21:40	20:33	19:11	17:53	15:52	15:40
25	08:25	07:19	06:06	05:46	04:44	04:26	05:02	06:02	07:04	08:05	08:11	08:48
	16:29	17:37	18:37	20:41	21:39	22:08	21:39	20:30	19:08	17:51	15:51	15:41
26	08:23	07:16	06:03	05:43	04:43	04:26	05:04	06:04	07:06	08:07	08:13	08:48
	16:31	17:40	18:39	20:43	21:41	22:08	21:37	20:28	19:05	17:49	15:50	15:41
27	08:22	07:14	06:01	05:41	04:42	04:27	05:05	06:06	07:08	08:09	08:15	08:48
	16:33	17:42	18:41	20:45	21:42	22:08	21:35	20:25	19:03	17:46	15:49	15:42
28	08:20	07:11	05:58	05:38	04:40	04:27	05:07	06:08	07:10	08:12	08:16	08:48
	16:35	17:44	18:43	20:47	21:44	22:07	21:33	20:22	19:00	17:44	15:47	15:43
29	08:18		06:55	05:36	04:39	04:28	05:09	06:10	07:12	08:14	08:18	08:48
	16:38		19:45	20:49	21:46	22:07	21:31	20:20	18:57	17:42	15:46	15:44
30	08:16		06:53	05:34	04:38	04:29	05:11	06:12	07:14	08:16	08:20	08:48
	16:40		19:47	20:51	21:47	22:07	21:29	20:17	18:55	17:39	15:45	15:45
31	08:14		06:50		04:36		05:13	06:14		07:18		08:48
	16:42		19:49		21:49		21:28	20:15		16:37		15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B
Assumptions for shadow calculations

Shadow receptor: Rapš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (488)
Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	19:51	18:42 (PrRR3)	05:31	04:34	04:28	05:14	06:15	07:15
	15:46	16:43	17:45	19:51	26	19:08 (PrRR3)	20:53	21:50	22:06	21:25	20:12	18:51
2	08:48	08:10	07:06	06:44		18:42 (PrRR3)	05:28	04:33	04:29	05:16	06:17	07:17
	15:47	16:45	17:48	19:53	25	19:07 (PrRR3)	20:55	21:51	22:06	21:23	20:09	18:49
3	08:48	08:08	07:03	06:41		18:42 (PrRR3)	05:26	04:32	04:30	05:18	06:19	07:19
	15:49	16:48	17:50	19:55	24	19:06 (PrRR3)	20:57	21:53	22:05	21:21	20:06	18:46
4	08:47	08:06	07:01	06:39		18:43 (PrRR3)	05:24	04:31	04:31	05:19	06:21	07:21
	15:50	16:50	17:52	19:57	23	19:06 (PrRR3)	20:59	21:54	22:05	21:19	20:04	18:53
5	08:47	08:04	06:58	06:36		18:43 (PrRR3)	05:21	04:30	04:32	05:21	06:23	07:23
	15:51	16:52	17:54	19:59	21	19:04 (PrRR3)	21:01	21:55	22:04	21:17	20:01	18:56
6	08:46	08:02	06:56	06:33		18:45 (PrRR3)	05:19	04:29	04:33	05:23	06:25	07:25
	15:53	16:54	17:56	19:59	18	19:03 (PrRR3)	21:03	21:57	22:03	21:15	20:01	18:58
7	08:46	08:00	06:53	06:31		18:46 (PrRR3)	05:17	04:28	04:34	05:25	06:27	07:27
	15:54	16:57	17:58	19:59	14	19:00 (PrRR3)	21:05	21:58	22:03	21:13	20:06	18:59
8	08:45	07:58	06:50	06:28		18:49 (PrRR3)	05:15	04:27	04:35	05:27	06:29	07:29
	15:56	16:59	18:01	19:59	7	18:56 (PrRR3)	21:07	21:59	22:02	21:11	20:04	18:59
9	08:44	07:56	06:48	06:25		18:50 (PrRR3)	05:13	04:27	04:36	05:29	06:31	07:31
	15:58	17:01	18:03	19:59	22	17:29 (PrRR3)	20:07	21:09	22:00	22:01	21:08	19:51
10	08:44	07:54	06:45	06:23		17:07 (PrRR3)	06:23	05:11	04:26	04:37	05:31	06:33
	15:59	17:03	18:05	19:59	23	17:30 (PrRR3)	20:09	21:11	22:01	22:00	21:06	19:48
11	08:43	07:52	06:43	06:20		17:07 (PrRR3)	06:20	05:09	04:25	04:39	05:33	06:35
	16:01	17:06	18:07	19:59	22	17:29 (PrRR3)	20:12	21:13	22:02	21:59	21:04	19:45
12	08:42	07:49	06:40	06:18		17:07 (PrRR3)	06:18	05:07	04:25	04:40	05:35	06:37
	16:03	17:08	18:09	19:59	21	17:28 (PrRR3)	20:14	21:15	22:03	21:58	21:01	19:43
13	08:41	07:47	06:37	06:15		17:08 (PrRR3)	06:15	05:05	04:25	04:41	05:37	06:39
	16:04	17:10	18:11	19:59	20	17:28 (PrRR3)	20:16	21:17	22:03	21:57	20:59	19:40
14	08:40	07:45	06:35	06:12		17:08 (PrRR3)	06:12	05:03	04:24	04:43	05:39	06:41
	16:06	17:12	18:13	19:59	19	17:27 (PrRR3)	20:18	21:19	22:04	21:55	20:57	19:37
15	08:39	07:43	06:32	06:10		17:09 (PrRR3)	06:10	05:01	04:24	04:44	05:41	06:43
	16:08	17:15	18:15	19:59	16	17:25 (PrRR3)	20:20	21:21	22:05	21:54	20:54	19:34
16	08:38	07:40	06:29	06:07		17:11 (PrRR3)	06:07	04:59	04:24	04:46	05:43	06:45
	16:10	17:17	18:17	19:59	12	17:23 (PrRR3)	20:22	21:23	22:05	21:53	20:52	19:32
17	08:36	07:38	06:27	06:05		17:15 (PrRR3)	06:05	04:57	04:23	04:47	05:45	06:47
	16:12	17:19	18:20	19:59	4	17:19 (PrRR3)	20:24	21:25	22:06	21:51	20:50	19:29
18	08:35	07:36	06:24	06:02		17:19 (PrRR3)	20:24	21:25	22:06	21:51	20:50	19:29
	16:14	17:21	18:22	19:59		17:19 (PrRR3)	20:24	21:25	22:06	21:51	20:50	19:29
19	08:34	07:33	06:21	06:00		17:19 (PrRR3)	20:24	21:25	22:06	21:51	20:50	19:29
	16:16	17:23	18:24	19:59		17:19 (PrRR3)	20:24	21:25	22:06	21:51	20:50	19:29
20	08:32	07:31	06:19	05:57		17:19 (PrRR3)	20:24	21:25	22:06	21:51	20:50	19:29
	16:18	17:26	18:26	19:59		17:19 (PrRR3)	20:24	21:25	22:06	21:51	20:50	19:29
21	08:31	07:28	06:16	05:55		17:19 (PrRR3)	20:24	21:25	22:06	21:51	20:50	19:29
	16:20	17:28	18:28	19:59		17:19 (PrRR3)	20:24	21:25	22:06	21:51	20:50	19:29
22	08:29	07:26	06:13	05:52		17:19 (PrRR3)	20:24	21:25	22:06	21:51	20:50	19:29
	16:22	17:30	18:30	19:59		17:19 (PrRR3)	20:24	21:25	22:06	21:51	20:50	19:29
23	08:28	07:24	06:11	05:50		17:19 (PrRR3)	20:24	21:25	22:06	21:51	20:50	19:29
	16:24	17:32	18:32	19:59	11	18:04 (PrRR3)	20:36	21:36	22:08	21:42	20:35	19:13
24	08:26	07:21	06:08	05:47		17:49 (PrRR3)	20:39	21:38	22:08	21:40	20:32	19:10
	16:26	17:34	18:34	19:59	17	18:06 (PrRR3)	20:39	21:38	22:08	21:40	20:32	19:10
25	08:25	07:19	06:05	05:45		17:47 (PrRR3)	20:41	21:39	22:08	21:39	20:30	19:08
	16:28	17:37	18:36	19:59	20	18:07 (PrRR3)	20:41	21:39	22:08	21:39	20:30	19:08
26	08:23	07:16	06:03	05:42		17:46 (PrRR3)	20:42	21:39	22:08	21:39	20:30	19:08
	16:30	17:39	18:38	19:59	22	18:08 (PrRR3)	20:43	21:41	22:08	21:37	20:27	19:05
27	08:21	07:14	06:00	05:40		17:45 (PrRR3)	20:40	21:38	22:07	21:35	20:25	19:02
	16:32	17:41	18:40	19:59	24	18:09 (PrRR3)	20:45	21:42	22:08	21:35	20:25	19:02
28	08:20	07:11	05:57	05:38		17:43 (PrRR3)	20:38	21:39	22:07	21:33	20:22	18:59
	16:34	17:43	18:42	19:59	26	18:09 (PrRR3)	20:47	21:44	22:07	21:33	20:22	18:59
29	08:18		06:55	05:35		18:43 (PrRR3)	20:35	21:44	22:07	21:33	20:22	18:59
	16:37		19:45	20:49	26	19:09 (PrRR3)	20:49	21:46	22:07	21:31	20:20	18:57
30	08:16		06:52	05:33		18:42 (PrRR3)	20:33	21:46	22:07	21:31	20:20	18:57
	16:39		19:47	20:51	27	19:09 (PrRR3)	20:51	21:47	22:07	21:29	20:17	18:54
31	08:14		06:49	05:31		18:42 (PrRR3)	20:31	21:47	22:07	21:29	20:17	18:54
	16:41		19:49	20:51	26	19:08 (PrRR3)	20:51	21:49	22:07	21:27	20:14	18:51
Potential sun hours	236	266	366	426				507	528	529	469	384
Total, worst case				158								186
Sun reduction				0,44								0,29
Oper. time red.				1,00								1,00
Wind dir. red.				1,00								1,00
Total reduction				0,44								0,29
Total, real				70								54

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Riteniši - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (496)
 Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December			
1	08:48	08:12	07:09	06:47	05:31	04:34	04:28	05:14	06:15	19:25 (AP2)	07:15	07:20	08:22		
2	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	16	19:41 (AP2)	18:52	16:34	15:43	
	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17		19:26 (AP2)	07:17	07:22	08:23	
3	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	13	19:39 (AP2)	18:49	16:32	15:42	
	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19		19:29 (AP2)	07:19	07:25	08:25	
4	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	8	19:37 (AP2)	18:46	16:30	15:41	
	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:20	06:21		07:21	07:27	08:27		
5	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04		18:44	16:27	15:41		
	08:47	08:04	06:58	06:36	05:22	04:30	04:32	05:22	06:23		07:23	07:29	08:28		
6	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01		18:41	16:25	15:40		
	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25		07:25	07:31	08:30		
7	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:59		18:38	16:23	15:39		
	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27		07:27	07:33	08:31		
8	15:55	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56		18:36	16:21	15:39		
	08:45	07:58	06:50	06:28	05:15	04:28	04:35	05:27	06:29		07:29	07:35	08:33		
9	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53		18:33	16:19	15:38		
	08:44	07:56	06:48	06:26	19:31 (AP2)	05:13	04:27	04:36	05:29		07:31	07:38	08:34		
10	15:58	17:01	18:03	20:07	8	19:39 (AP2)	21:09	22:00	22:01	19:51	18:30	16:17	15:37		
	08:44	07:54	06:45	06:23	19:27 (AP2)	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35		
11	15:59	17:03	18:05	20:09	13	19:40 (AP2)	21:11	22:01	22:00	19:48	18:28	16:15	15:37		
	08:43	07:52	06:43	06:20	19:26 (AP2)	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37		
12	16:01	17:06	18:07	20:12	17	19:43 (AP2)	21:13	22:02	21:59	19:45	18:25	16:13	15:37		
	08:42	07:49	06:40	06:18	19:24 (AP2)	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38		
13	16:03	17:08	18:09	20:14	20	19:44 (AP2)	21:15	22:03	21:58	19:43	18:23	16:11	15:36		
	08:41	07:47	06:37	06:15	19:23 (AP2)	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39		
14	16:04	17:10	18:11	20:16	22	19:45 (AP2)	21:17	22:03	21:57	19:40	18:20	16:09	15:36		
	08:40	07:45	06:35	06:13	19:22 (AP2)	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40		
15	16:06	17:12	18:13	20:18	23	19:45 (AP2)	21:19	22:04	21:55	19:37	18:17	16:08	15:36		
	08:39	07:43	06:32	06:10	19:22 (AP2)	05:01	04:24	04:45	05:41	06:43	07:44	07:50	08:41		
16	16:08	17:15	18:15	20:20	24	19:46 (AP2)	21:21	22:05	21:54	19:34	18:15	16:06	15:36		
	08:38	07:40	06:29	06:07	19:21 (AP2)	04:59	04:24	04:46	05:43	06:45	07:46	07:53	08:42		
17	16:10	17:17	18:18	20:22	24	19:45 (AP2)	21:23	22:05	21:53	19:32	18:12	16:04	15:36		
	08:36	07:38	06:27	06:05	19:21 (AP2)	04:57	04:24	04:48	05:45	06:47	07:48	07:55	08:43		
18	16:12	17:19	18:20	20:24	24	19:45 (AP2)	21:25	22:06	21:51	19:29	18:10	16:02	15:36		
	08:35	07:36	06:24	06:02	19:20 (AP2)	04:55	04:23	04:49	05:47	8	19:33 (AP2)	07:50	07:57	08:44	
19	16:14	17:21	18:22	20:26	24	19:44 (AP2)	21:27	22:06	21:50	19:26	18:07	16:01	15:36		
	08:34	07:33	06:21	06:00	19:21 (AP2)	04:53	04:23	04:51	05:49	19:30 (AP2)	07:52	07:59	08:45		
20	16:16	17:24	18:24	20:28	23	19:44 (AP2)	21:29	22:07	21:48	19:24	18:05	15:59	15:37		
	08:32	07:31	06:19	05:57	19:20 (AP2)	04:52	04:24	04:52	05:51	19:28 (AP2)	07:54	08:01	08:45		
21	16:18	17:26	18:26	20:30	23	19:43 (AP2)	21:30	22:07	21:47	19:21	18:02	15:57	15:37		
	08:31	07:28	06:16	05:55	19:21 (AP2)	04:50	04:24	04:54	05:53	19:27 (AP2)	07:57	08:03	08:46		
22	16:20	17:28	18:28	20:32	21	19:42 (AP2)	21:32	22:07	21:45	19:18	18:00	15:56	15:37		
	08:29	07:26	06:13	05:52	19:22 (AP2)	04:48	04:24	04:56	05:55	19:26 (AP2)	07:59	08:05	08:47		
23	16:22	17:30	18:30	20:34	20	19:42 (AP2)	21:34	22:08	21:44	19:16	17:57	15:54	15:38		
	08:28	07:24	06:11	05:50	19:23 (AP2)	04:47	04:24	04:57	05:57	19:25 (AP2)	07:59	08:07	08:47		
24	16:24	17:32	18:32	20:36	16	19:39 (AP2)	21:36	22:08	21:42	19:13	17:55	15:53	15:38		
	08:26	07:21	06:08	05:47	19:25 (AP2)	04:45	04:24	04:59	05:59	19:24 (AP2)	07:01	08:03	08:09	08:47	
25	16:26	17:35	18:34	20:39	13	19:38 (AP2)	21:37	22:08	21:40	19:10	17:53	15:51	15:39		
	08:25	07:19	06:05	05:45	19:28 (AP2)	04:43	04:25	05:01	06:01	19:24 (AP2)	07:03	07:05	08:11	08:48	
26	16:28	17:37	18:36	20:41	7	19:35 (AP2)	21:39	22:08	21:39	19:08	16:50	15:50	15:39		
	08:23	07:16	06:03	05:42		04:42	04:25	05:03	06:03	19:23 (AP2)	07:05	07:07	08:13	08:48	
27	16:30	17:39	18:38	20:43		21:41	22:08	21:37	20:27	24	19:47 (AP2)	19:05	16:48	15:49	15:40
	08:21	07:14	06:00	05:40		04:41	04:26	05:04	06:05	19:23 (AP2)	07:07	07:09	08:14	08:48	
28	16:32	17:41	18:40	20:45		21:42	22:08	21:35	20:25	24	19:47 (AP2)	19:02	16:45	15:48	15:41
	08:20	07:11	05:57	05:38		04:39	04:26	05:06	06:07	19:23 (AP2)	07:09	07:12	08:16	08:48	
29	16:35	17:43	18:42	20:47		21:44	22:07	21:33	20:22	23	19:46 (AP2)	19:00	16:43	15:46	15:42
	08:18		06:55	05:35		04:38	04:27	05:08	06:09	19:23 (AP2)	07:11	07:14	08:18	08:48	
30	16:37		19:45	20:49		21:46	22:07	21:31	20:20	23	19:46 (AP2)	18:57	16:41	15:45	15:43
	08:16		06:52	05:33		04:37	04:28	05:10	06:11	19:23 (AP2)	07:13	07:16	08:20	08:48	
31	16:39		19:47	20:51		21:47	22:07	21:29	20:17	22	19:45 (AP2)	18:54	16:39	15:44	15:44
	08:14		06:49			04:35		05:12	06:13	19:24 (AP2)		07:18	08:20	08:48	
	16:41		19:49			21:49		21:27	20:14	20	19:44 (AP2)		16:36	15:45	
Potential sun hours	236	266	366	426	507	528	529	469	384		324	248	217		
Total, worst case				322				286	37						
Sun reduction				0,44				0,52	0,43						
Oper. time red.				1,00				1,00	1,00						
Wind dir. red.				1,00				1,00	1,00						
Total reduction				0,44				0,52	0,43						
Total, real				142				149	16						

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Robež nieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (432)
Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:49	08:13	07:09	06:47	05:31	04:35	04:29	05:14	06:16	07:16	07:21	08:22
	15:47	16:44	17:46	19:51	20:53	21:50	22:07	21:26	20:12	18:52	16:35	15:44
2	08:48	08:11	07:06	06:45	05:29	04:34	04:30	05:16	06:18	07:18	07:23	08:24
	15:48	16:46	17:48	19:53	20:55	21:52	22:06	21:24	20:10	18:49	16:32	15:43
3	08:48	08:09	07:04	06:42	05:27	04:33	04:31	05:18	06:20	07:20	07:25	08:25
	15:50	16:48	17:50	19:55	20:58	21:53	22:06	21:22	20:07	18:47	16:30	15:42
4	08:48	08:07	07:01	06:39	05:24	04:32	04:32	05:20	06:22	07:22	07:27	08:27
	15:51	16:51	17:52	19:57	21:00	21:54	22:05	21:20	20:04	18:44	16:28	15:41
5	08:47	08:05	06:59	06:37	05:22	04:31	04:33	05:22	06:24	07:24	07:29	08:29
	15:52	16:53	17:55	20:00	21:02	21:56	22:04	21:17	20:02	18:41	16:26	15:40
6	08:47	08:03	06:56	06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31	08:30
	15:54	16:55	17:57	20:02	21:04	21:57	22:04	21:15	19:59	18:39	16:24	15:40
7	08:46	08:01	06:54	06:31	05:18	04:29	04:35	05:26	06:28	07:28	07:34	08:32
	15:55	16:57	17:59	20:04	21:06	21:58	22:03	21:13	19:56	18:36	16:22	15:39
8	08:45	07:59	06:51	06:29	05:16	04:28	04:36	05:28	06:30	07:30	07:36	08:33
	15:57	17:00	18:01	20:06	21:08	21:59	22:02	21:11	19:54	18:33	16:20	15:39
9	08:45	07:56	06:48	06:26	05:13	04:27	04:37	05:30	06:32	07:32	07:38	08:34
	15:58	17:02	18:03	20:08	21:10	22:00	22:01	21:09	19:51	18:31	16:18	15:38
10	08:44	07:54	06:46	06:23	05:11	04:27	04:38	05:32	06:34	07:34	07:40	08:36
	16:00	17:04	18:05	20:10	21:12	22:01	22:00	21:06	19:48	18:28	16:16	15:38
11	08:43	07:52	06:43	06:21	05:09	04:26	04:40	05:34	06:36	07:36	07:42	08:37
	16:02	17:06	18:07	20:12	21:14	22:02	21:59	21:04	19:46	18:26	16:14	15:37
12	08:42	07:50	06:40	06:18	05:07	04:26	04:41	05:36	06:38	07:38	07:44	08:38
	16:03	17:08	18:10	20:14	21:16	22:03	21:58	21:02	19:43	18:23	16:12	15:37
13	08:41	07:48	06:38	06:16	05:05	04:25	04:42	05:38	06:40	07:40	07:47	08:39
	16:05	17:11	18:12	20:16	21:18	22:04	21:57	21:00	19:40	18:21	16:10	15:37
14	08:40	07:45	06:35	06:13	05:03	04:25	04:44	05:40	06:42	07:42	07:49	08:40
	16:07	17:13	18:14	20:18	21:20	22:04	21:56	20:57	19:38	18:18	16:08	15:37
15	08:39	07:43	06:33	06:10	05:01	04:25	04:45	05:42	06:44	07:44	07:51	08:41
	16:09	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:15	16:06	15:37
16	08:38	07:41	06:30	06:08	04:59	04:24	04:47	05:44	06:46	07:46	07:53	08:42
	16:11	17:17	18:18	20:22	21:23	22:06	21:53	20:52	19:32	18:13	16:05	15:37
17	08:37	07:38	06:27	06:05	04:58	04:24	04:48	05:46	06:48	07:48	07:55	08:43
	16:13	17:20	18:20	20:24	21:25	22:06	21:52	20:50	19:30	18:10	16:03	15:37
18	08:35	07:36	06:25	06:03	04:56	04:24	04:50	05:48	06:50	07:51	07:57	08:44
	16:14	17:22	18:22	20:26	21:27	22:07	21:50	20:48	19:27	18:08	16:01	15:37
19	08:34	07:34	06:22	06:00	04:54	04:24	04:51	05:50	06:52	07:53	07:59	08:45
	16:16	17:24	18:24	20:29	21:29	22:07	21:49	20:45	19:24	18:05	16:00	15:37
20	08:33	07:31	06:19	05:58	04:52	04:24	04:53	05:52	06:54	07:55	08:01	08:46
	16:18	17:26	18:26	20:31	21:31	22:07	21:47	20:43	19:21	18:03	15:58	15:37
21	08:31	07:29	06:17	05:55	04:50	04:24	04:55	05:54	06:56	07:57	08:03	08:46
	16:20	17:28	18:28	20:33	21:33	22:08	21:46	20:40	19:19	18:00	15:56	15:38
22	08:30	07:26	06:14	05:53	04:49	04:24	04:56	05:56	06:58	07:59	08:05	08:47
	16:22	17:31	18:31	20:35	21:34	22:08	21:44	20:38	19:16	17:58	15:55	15:38
23	08:28	07:24	06:11	05:50	04:47	04:25	04:58	05:58	07:00	08:01	08:07	08:47
	16:25	17:33	18:33	20:37	21:36	22:08	21:42	20:35	19:13	17:56	15:53	15:39
24	08:27	07:21	06:09	05:48	04:46	04:25	05:00	06:00	07:01	08:03	08:09	08:48
	16:27	17:35	18:35	20:39	21:38	22:08	21:41	20:33	19:11	17:53	15:52	15:39
25	08:25	07:19	06:06	05:45	04:44	04:25	05:02	06:02	07:03	08:05	08:11	08:48
	16:29	17:37	18:37	20:41	21:39	22:08	21:39	20:30	19:08	17:51	15:51	15:40
26	08:23	07:17	06:03	05:43	04:43	04:26	05:03	06:04	07:05	08:08	08:13	08:48
	16:31	17:39	18:39	20:43	21:41	22:08	21:37	20:28	19:05	17:48	15:49	15:41
27	08:22	07:14	06:01	05:41	04:41	04:26	05:05	06:06	07:08	08:10	08:15	08:49
	16:33	17:42	18:41	20:45	21:43	22:08	21:35	20:25	19:03	17:46	15:48	15:42
28	08:20	07:11	05:58	05:38	04:40	04:27	05:07	06:08	07:10	08:12	08:17	08:49
	16:35	17:44	18:43	20:47	21:44	22:08	21:34	20:23	19:00	17:44	15:47	15:43
29	08:18		06:55	05:36	04:38	04:28	05:09	06:10	07:12	08:14	08:18	08:49
	16:37		19:45	20:49	21:46	22:07	21:32	20:20	18:57	17:41	15:46	15:43
30	08:16		06:52	05:34	04:37	04:28	05:11	06:12	07:14	08:16	08:20	08:49
	16:40		19:47	20:51	21:47	22:07	21:30	20:17	18:55	17:39	15:45	15:44
31	08:15		06:50		04:36		05:13	06:14		07:18		08:49
	16:42		19:49		21:49		21:28	20:15		16:37		15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Rozes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (428)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January			February			March			April			May			June		
1	08:48	14:53 (P19.2b)	08:13				07:09	16:06 (DD3)	06:47		18:52 (O3)	05:31	04:35					
	15:47	11	15:04 (P19.2b)	16:44			17:46	34	16:40 (DD3)	19:51	24	19:16 (O3)	20:53	21:50				
2	08:48	14:53 (P19.2b)	08:11				07:06		16:06 (DD3)	06:44		18:51 (O3)	05:29	04:34				
	15:48	13	15:06 (P19.2b)	16:46			17:48	33	16:39 (DD3)	19:53	24	19:15 (O3)	20:55	21:51				
3	08:48	14:53 (P19.2b)	08:09				07:04		16:07 (DD3)	06:42		18:52 (O3)	05:27	04:33				
	15:50	14	15:07 (P19.2b)	16:48			17:50	32	16:39 (DD3)	19:55	24	19:16 (O3)	20:57	21:53				
4	08:47	14:53 (P19.2b)	08:07				07:01		16:08 (DD3)	06:39		18:52 (O3)	05:24	04:32				
	15:51	16	15:09 (P19.2b)	16:51			17:52	29	16:37 (DD3)	19:57	23	19:15 (O3)	20:59	21:54				
5	08:47	14:53 (P19.2b)	08:05				06:59		16:09 (DD3)	06:37		18:52 (O3)	05:22	04:31				
	15:52	18	15:11 (P19.2b)	16:53			17:55	27	16:36 (DD3)	19:59	22	19:14 (O3)	21:01	21:55				
6	08:46	14:53 (P19.2b)	08:03				06:56		16:11 (DD3)	06:34		18:53 (O3)	05:20	04:30				
	15:54	19	15:12 (P19.2b)	16:55			17:57	24	16:35 (DD3)	20:01	20	19:13 (O3)	21:03	21:56				
7	08:46	14:53 (P19.2b)	08:00				06:53		16:12 (DD3)	06:31		18:53 (O3)	05:18	04:29				
	15:55	19	15:12 (P19.2b)	16:57			17:59	20	16:32 (DD3)	20:04	18	19:11 (O3)	21:05	21:58				
8	08:45	14:53 (P19.2b)	07:58				06:51		16:14 (DD3)	06:29		18:55 (O3)	05:16	04:28				
	15:57	20	15:13 (P19.2b)	17:00			18:01	19	17:30 (DD1)	20:06	15	19:10 (O3)	21:07	21:59				
9	08:44	14:53 (P19.2b)	07:56				06:48		17:22 (DD1)	06:26		18:57 (O3)	05:13	04:28				
	15:58	21	15:14 (P19.2b)	17:02			18:03	13	17:35 (DD1)	20:08	12	19:38 (O2)	21:09	22:00				
10	08:44	14:53 (P19.2b)	07:54			16:27 (O5)	06:46		17:19 (DD1)	06:23		19:32 (O2)	05:11	04:27				
	16:00	21	15:14 (P19.2b)	17:04	5	16:32 (O5)	18:05	17	17:36 (DD1)	20:10	9	19:41 (O2)	21:11	22:01				
11	08:43	14:53 (P19.2b)	07:52			16:23 (O5)	06:43		17:17 (DD1)	06:21		19:29 (O2)	05:09	04:26				
	16:02	22	15:15 (P19.2b)	17:06	11	16:34 (O5)	18:07	20	17:37 (DD1)	20:12	13	19:42 (O2)	21:13	22:02				
12	08:42	14:54 (P19.2b)	07:50			16:22 (O5)	06:40		17:16 (DD1)	06:18		19:28 (O2)	05:07	04:26				
	16:03	22	15:16 (P19.2b)	17:08	15	16:37 (O5)	18:09	23	17:39 (DD1)	20:14	17	19:45 (O2)	21:15	22:03				
13	08:41	14:54 (P19.2b)	07:47			16:21 (O5)	06:38		17:15 (DD1)	06:16		19:27 (O2)	05:05	04:25				
	16:05	23	15:17 (P19.2b)	17:11	18	16:39 (O5)	18:12	24	17:39 (DD1)	20:16	19	19:46 (O2)	21:17	22:03				
14	08:40	14:54 (P19.2b)	07:45			16:19 (DD3)	06:35		17:14 (DD1)	06:13		19:26 (O2)	05:03	04:25				
	16:07	23	15:17 (P19.2b)	17:13	21	16:40 (O5)	18:14	25	17:39 (DD1)	20:18	21	19:47 (O2)	21:19	22:04				
15	08:39	14:54 (P19.2b)	07:43			16:16 (DD3)	06:32		17:14 (DD1)	06:10		19:25 (O2)	05:01	04:25				
	16:09	24	15:18 (P19.2b)	17:15	25	16:41 (O5)	18:16	25	17:39 (DD1)	20:20	22	19:47 (O2)	21:21	22:05				
16	08:38	14:54 (P19.2b)	07:41			16:13 (DD3)	06:30		17:13 (DD1)	06:08		19:25 (O2)	04:59	04:25				
	16:11	24	15:18 (P19.2b)	17:17	28	16:41 (O5)	18:18	26	17:39 (DD1)	20:22	22	19:47 (O2)	21:23	22:05				
17	08:36	14:55 (P19.2b)	07:38			16:12 (DD3)	06:27		17:13 (DD1)	06:05		19:25 (O2)	04:58	04:24				
	16:13	23	15:18 (P19.2b)	17:20	30	16:42 (O5)	18:20	25	17:38 (DD1)	20:24	21	19:46 (O2)	21:25	22:06				
18	08:35	14:55 (P19.2b)	07:36			16:10 (DD3)	06:24		17:14 (DD1)	06:03		19:25 (O2)	04:56	04:24				
	16:15	23	15:18 (P19.2b)	17:22	31	16:41 (O5)	18:22	24	17:38 (DD1)	20:26	21	19:46 (O2)	21:27	22:06				
19	08:34	14:56 (P19.2b)	07:33			16:10 (DD3)	06:22		17:14 (DD1)	06:00		19:25 (O2)	04:54	04:24				
	16:16	23	15:19 (P19.2b)	17:24	32	16:42 (O5)	18:24	23	17:37 (DD1)	20:28	20	19:45 (O2)	21:29	22:07				
20	08:32	14:56 (P19.2b)	07:31			16:08 (DD3)	06:19		17:14 (DD1)	05:58		19:25 (O2)	04:52	04:24				
	16:18	23	15:19 (P19.2b)	17:26	33	16:41 (O5)	18:26	22	17:36 (DD1)	20:30	19	19:44 (O2)	21:31	22:07				
21	08:31	14:56 (P19.2b)	07:29			16:08 (DD3)	06:16		17:15 (DD1)	05:55		19:27 (O2)	04:51	04:24				
	16:21	23	15:19 (P19.2b)	17:28	33	16:41 (O5)	18:28	20	17:35 (DD1)	20:33	17	19:44 (O2)	21:32	22:07				
22	08:30	14:58 (P19.2b)	07:26			16:07 (DD3)	06:14		17:16 (DD1)	05:53		19:27 (O2)	04:49	04:25				
	16:23	21	15:19 (P19.2b)	17:31	34	16:41 (DD3)	18:30	17	17:33 (DD1)	20:35	15	19:42 (O2)	21:34	22:08				
23	08:28	14:58 (P19.2b)	07:24			16:07 (DD3)	06:11		17:18 (DD1)	05:50		19:29 (O2)	04:47	04:25				
	16:25	21	15:19 (P19.2b)	17:33	35	16:42 (DD3)	18:32	12	17:30 (DD1)	20:37	11	19:40 (O2)	21:36	22:08				
24	08:27	14:59 (P19.2b)	07:21			16:06 (DD3)	06:08		17:22 (DD1)	05:48			04:46	04:25				
	16:27	19	15:18 (P19.2b)	17:35	35	16:41 (DD3)	18:35	2	17:24 (DD1)	20:39			21:38	22:08				
25	08:25	15:00 (P19.2b)	07:19			16:05 (DD3)	06:06			05:45			04:44	04:25				
	16:29	18	15:18 (P19.2b)	17:37	36	16:41 (DD3)	18:37			20:41			21:39	22:08				
26	08:23	15:01 (P19.2b)	07:16			16:06 (DD3)	06:03		18:01 (O3)	05:43			04:43	04:26				
	16:31	16	15:17 (P19.2b)	17:39	35	16:41 (DD3)	18:39	10	18:11 (O3)	20:43			21:41	22:08				
27	08:22	15:03 (P19.2b)	07:14			16:06 (DD3)	06:00		17:58 (O3)	05:41			04:41	04:26				
	16:33	12	15:15 (P19.2b)	17:42	35	16:41 (DD3)	18:41	14	18:12 (O3)	20:45			21:43	22:08				
28	08:20	15:06 (P19.2b)	07:11			16:06 (DD3)	05:58		17:57 (O3)	05:38			04:40	04:27				
	16:35	7	15:13 (P19.2b)	17:44	35	16:41 (DD3)	18:43	18	18:15 (O3)	20:47			21:44	22:07				
29	08:18						06:55		18:55 (O3)	05:36			04:39	04:28				
	16:37						19:45	20	19:15 (O3)	20:49			21:46	22:07				
30	08:16						06:52		18:53 (O3)	05:34			04:37	04:28				
	16:40						19:47	22	19:15 (O3)	20:51			21:47	22:07				
31	08:14						06:50		18:53 (O3)				04:36					
	16:42						19:49	23	19:16 (O3)				21:49					
Potential sun hours	236			266			366			426			507			528		
Total, worst case	539			527			643			429								
Sun reduction	0,13			0,22			0,39			0,44								
Oper. time red.	1,00			1,00			1,00			1,00								
Wind dir. red.	1,00			1,00			1,00			1,00								
Total reduction	0,13			0,22			0,39			0,44								
Total, real	72			119			252			190								

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Rozes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (428)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December
1	04:29 22:06	05:14 21:26	06:16 20:12	19:28 (O2) 07:15	17:55 (DD1) 07:20	15:58 (O5) 08:22
2	04:30 22:06	05:16 21:24	06:18 20:09	19:30 (O2) 07:17	18:18 (DD1) 07:23	16:01 (O5) 08:23
3	04:31 22:05	05:18 21:21	06:20 20:07	19:39 (O2) 07:20	18:17 (DD1) 07:25	15:43 08:25
4	04:32 22:05	05:20 21:19	06:22 20:04	18:52 (O3) 07:22	17:58 (DD1) 07:27	15:42 08:27
5	04:33 22:04	05:22 21:17	06:24 20:02	19:07 (O3) 07:24	18:13 (DD1) 07:29	15:41 08:28
6	04:34 22:03	05:24 21:15	06:26 19:59	18:50 (O3) 07:26	16:53 (DD3) 07:31	15:41 08:30
7	04:35 22:03	05:26 21:13	06:28 19:56	19:09 (O3) 07:28	17:07 (DD3) 07:33	15:40 08:31
8	04:36 22:02	05:28 21:11	06:30 19:54	18:48 (O3) 07:30	16:47 (DD3) 07:36	15:39 08:33
9	04:37 22:01	05:30 21:08	06:32 19:51	18:46 (O3) 07:32	16:45 (DD3) 07:38	15:39 08:34
10	04:38 22:00	05:32 21:06	06:34 19:48	18:46 (O3) 07:34	16:44 (DD3) 07:40	15:38 08:35
11	04:40 21:59	05:34 21:04	06:36 19:46	18:45 (O3) 07:36	16:42 (DD3) 07:42	15:38 08:37
12	04:41 21:58	05:36 21:02	06:38 19:43	18:45 (O3) 07:38	16:41 (DD3) 07:44	15:37 08:38
13	04:42 21:57	05:38 20:59	06:40 19:40	18:44 (O3) 07:40	16:40 (DD3) 07:46	15:37 08:39
14	04:44 21:55	05:40 20:57	06:42 19:38	18:45 (O3) 07:42	16:39 (DD3) 07:48	15:37 08:40
15	04:45 21:54	05:42 20:55	06:44 19:35	18:46 (O3) 07:44	16:38 (DD3) 07:51	14:39 (P19.2b) 15:37
16	04:47 21:53	05:44 20:52	06:46 19:32	18:46 (O3) 07:46	16:37 (DD3) 07:53	14:46 (P19.2b) 15:37
17	04:48 21:51	05:46 20:50	06:48 19:29	19:02 (O3) 07:48	16:36 (DD3) 07:55	14:48 (P19.2b) 15:37
18	04:50 21:50	05:48 20:47	06:49 19:27	18:49 (O3) 07:50	16:35 (DD3) 07:57	14:50 (P19.2b) 15:37
19	04:51 21:49	05:50 20:45	06:51 19:24	19:00 (O3) 07:52	16:34 (DD3) 07:59	14:52 (P19.2b) 15:37
20	04:53 21:47	05:52 20:43	06:53 19:21	18:05 (DD1) 07:55	16:33 (DD3) 08:01	14:53 (P19.2b) 15:37
21	04:55 21:45	05:54 20:40	06:55 19:19	18:16 (DD1) 07:57	16:32 (DD3) 08:03	14:54 (P19.2b) 15:38
22	04:56 21:44	05:56 20:38	06:57 19:16	18:18 (DD1) 07:59	16:31 (DD3) 08:05	14:55 (P19.2b) 15:38
23	04:58 21:42	05:58 20:35	06:59 19:13	18:20 (DD1) 08:01	16:30 (DD3) 08:07	14:56 (P19.2b) 15:39
24	05:00 21:41	06:00 20:33	07:01 19:11	17:58 (DD1) 08:03	16:29 (DD3) 08:09	14:57 (P19.2b) 15:40
25	05:02 21:39	06:02 20:30	07:03 19:08	18:21 (DD1) 08:05	17:12 (O5) 15:52	14:58 (P19.2b) 15:40
26	05:03 21:37	06:04 20:27	07:05 19:05	18:22 (DD1) 08:07	17:11 (O5) 15:51	14:59 (P19.2b) 15:41
27	05:05 21:35	06:06 20:25	07:07 19:03	18:21 (DD1) 08:09	15:44 (DD3) 08:13	14:57 (P19.2b) 15:42
28	05:07 21:33	06:08 20:22	07:09 19:00	18:21 (DD1) 08:11	15:46 (DD3) 08:15	14:58 (P19.2b) 15:43
29	05:09 21:31	06:10 20:20	07:11 18:57	17:55 (DD1) 08:13	15:49 (O5) 08:16	14:59 (P19.2b) 15:44
30	05:11 21:30	06:12 20:17	07:13 18:55	18:20 (DD1) 08:15	15:51 (O5) 08:18	14:57 (P19.2b) 15:45
31	05:13 21:28	06:14 20:15	07:15 19:44 (O2)	17:55 (DD1) 08:17	15:52 (O5) 08:20	14:58 (P19.2b) 15:46
Potential sun hours	528	469	384	324	248	217
Total, worst case		233	553	836	347	306
Sun reduction		0,52	0,43	0,29	0,08	0,08
Oper. time red.		1,00	1,00	1,00	1,00	1,00
Wind dir. red.		1,00	1,00	1,00	1,00	1,00
Total reduction		0,52	0,43	0,29	0,08	0,08
Total, real		122	239	242	26	26

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Rož ulejas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (425)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:31	04:35	04:29	05:14	06:16	07:15	07:20	08:22
	15:47	16:44	17:46	19:51	20:53	21:50	22:06	21:25	20:12	18:52	16:35	15:44
2	08:48	08:10	07:06	06:44	05:29	04:34	04:30	05:16	06:18	07:17	07:22	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:43
3	08:48	08:09	07:04	06:42	05:27	04:33	04:31	05:18	06:20	07:19	07:25	08:25
	15:50	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:07	18:47	16:30	15:42
4	08:47	08:07	07:01	06:39	05:24	04:32	04:32	05:20	06:22	07:21	07:27	08:27
	15:51	16:51	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:41
5	08:47	08:05	06:58	06:36	05:22	04:31	04:33	05:22	06:24	07:23	07:29	08:28
	15:52	16:53	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:26	15:40
6	08:46	08:02	06:56	06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31	08:30
	15:54	16:55	17:57	20:01	21:03	21:56	22:03	21:15	19:59	18:39	16:24	15:40
7	08:46	08:00	06:53	06:31	05:18	04:29	04:35	05:26	06:28	07:28	07:33	08:31
	15:55	16:57	17:59	20:03	21:05	21:57	22:02	21:13	19:56	18:36	16:22	15:39
8	08:45	07:58	06:51	06:29	05:16	04:28	04:36	05:28	06:30	07:30	07:35	08:33
	15:57	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:20	15:39
9	08:44	07:56	06:48	06:26	05:13	04:28	04:37	05:30	06:32	07:32	07:38	08:34
	15:58	17:02	18:03	20:08	21:09	22:00	22:01	21:08	19:51	18:31	16:18	15:38
10	08:43	07:54	06:46	06:23	05:11	04:27	04:38	05:32	06:34	07:34	07:40	08:35
	16:00	17:04	18:05	20:10	21:11	22:01	22:00	21:06	19:48	18:28	16:16	15:38
11	08:43	07:52	06:43	06:21	05:09	04:26	04:40	05:34	06:36	07:36	07:42	08:37
	16:02	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:26	16:14	15:37
12	08:42	07:50	06:40	06:18	05:07	04:26	04:41	05:36	06:38	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:02	19:43	18:23	16:12	15:37
13	08:41	07:47	06:38	06:16	05:05	04:25	04:42	05:38	06:40	07:40	07:46	08:39
	16:05	17:11	18:12	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:10	15:37
14	08:40	07:45	06:35	06:13	05:03	04:25	04:44	05:40	06:41	07:42	07:48	08:40
	16:07	17:13	18:14	20:18	21:19	22:04	21:55	20:57	19:37	18:18	16:08	15:37
15	08:39	07:43	06:32	06:10	05:01	04:25	04:45	05:42	06:43	07:44	07:50	08:41
	16:09	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:15	16:06	15:37
16	08:37	07:40	06:30	06:08	04:59	04:24	04:47	05:44	06:45	07:46	07:53	08:42
	16:11	17:17	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:13	16:05	15:37
17	08:36	07:38	06:27	06:05	04:58	04:24	04:48	05:46	06:47	07:48	07:55	08:43
	16:13	17:20	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:03	15:37
18	08:35	07:36	06:24	06:03	04:56	04:24	04:50	05:48	06:49	07:50	07:57	08:44
	16:14	17:22	18:22	20:26	21:27	22:06	21:50	20:47	19:27	18:08	16:01	15:37
19	08:34	07:33	06:22	06:00	04:54	04:24	04:51	05:50	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:37
20	08:32	07:31	06:19	05:58	04:52	04:24	04:53	05:52	06:53	07:55	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:03	15:58	15:38
21	08:31	07:29	06:16	05:55	04:50	04:24	04:55	05:54	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:19	18:00	15:56	15:38
22	08:29	07:26	06:14	05:53	04:49	04:25	04:56	05:56	06:57	07:59	08:05	08:46
	16:22	17:31	18:30	20:35	21:34	22:07	21:44	20:37	19:16	17:58	15:55	15:38
23	08:28	07:24	06:11	05:50	04:47	04:25	04:58	05:58	06:59	08:01	08:07	08:47
	16:25	17:33	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:39
24	08:26	07:21	06:08	05:48	04:46	04:25	05:00	06:00	07:01	08:03	08:09	08:47
	16:27	17:35	18:34	20:39	21:37	22:08	21:40	20:32	19:11	17:53	15:52	15:39
25	08:25	07:19	06:06	05:45	04:44	04:25	05:02	06:02	07:03	08:05	08:11	08:48
	16:29	17:37	18:37	20:41	21:39	22:08	21:39	20:30	19:08	17:51	15:51	15:40
26	08:23	07:16	06:03	05:43	04:43	04:26	05:03	06:04	07:05	08:07	08:13	08:48
	16:31	17:39	18:39	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:41
27	08:21	07:14	06:00	05:41	04:41	04:26	05:05	06:06	07:07	08:09	08:14	08:48
	16:33	17:42	18:41	20:45	21:42	22:07	21:35	20:25	19:02	16:46	15:48	15:42
28	08:20	07:11	05:58	05:38	04:40	04:27	05:07	06:08	07:09	08:12	08:16	08:48
	16:35	17:44	18:43	20:47	21:44	22:07	21:33	20:22	19:00	16:44	15:47	15:43
29	08:18		06:55	05:36	04:38	04:28	05:09	06:10	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:45	22:07	21:31	20:20	18:57	16:41	15:46	15:44
30	08:16		06:52	05:33	04:37	04:28	05:11	06:12	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:45	15:45
31	08:14		06:50		04:36		05:13	06:14		07:18		08:48
	16:42		19:49		21:48		21:27	20:15		16:37		15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Rubeni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (450)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:13 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:15 21:26	06:16 20:12	07:16 18:52	07:20 16:35	08:22 15:44
2	08:48 15:49	08:11 16:46	07:06 17:48	06:45 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:17 21:24	06:18 20:09	07:18 18:49	07:23 16:33	08:23 15:43
3	08:48 15:50	08:09 16:49	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:19 21:21	06:20 20:07	07:20 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:51	07:01 17:53	06:39 19:57	05:25 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:22 18:44	07:27 16:28	08:27 15:42
5	08:47 15:53	08:05 16:53	06:59 17:55	06:37 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:02	07:24 18:41	07:29 16:26	08:28 15:41
6	08:46 15:54	08:03 16:55	06:56 17:57	06:34 20:02	05:20 21:03	04:30 21:56	04:34 22:03	05:24 21:15	06:26 19:59	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:56	08:01 16:58	06:54 17:59	06:31 20:04	05:18 21:05	04:29 21:58	04:35 22:03	05:26 21:13	06:28 19:56	07:28 18:36	07:33 16:22	08:31 15:40
8	08:45 15:57	07:58 17:00	06:51 18:01	06:29 20:06	05:16 21:07	04:29 21:59	04:36 22:02	05:28 21:11	06:30 19:54	07:30 18:34	07:36 16:20	08:33 15:39
9	08:44 15:59	07:56 17:02	06:48 18:03	06:26 20:08	05:14 21:09	04:28 22:00	04:38 22:01	05:30 21:09	06:32 19:51	07:32 18:31	07:38 16:18	08:34 15:39
10	08:44 16:00	07:54 17:04	06:46 18:05	06:24 20:10	05:12 21:11	04:27 22:01	04:39 22:00	05:32 21:06	06:34 19:48	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:08	06:21 20:12	05:10 21:13	04:27 22:02	04:40 21:59	05:34 21:04	06:36 19:46	07:36 18:26	07:42 16:14	08:37 15:38
12	08:42 16:04	07:50 17:09	06:40 18:10	06:18 20:14	05:08 21:15	04:26 22:02	04:41 21:58	05:36 21:02	06:38 19:43	07:38 18:23	07:44 16:12	08:38 15:38
13	08:41 16:06	07:47 17:11	06:38 18:12	06:16 20:16	05:06 21:17	04:26 22:03	04:43 21:57	05:38 20:59	06:40 19:40	07:40 18:21	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:04 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 19:38	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:33 18:16	06:11 20:20	05:02 21:21	04:25 22:05	04:46 21:54	05:42 20:55	06:44 19:35	07:44 18:16	07:51 16:07	08:41 15:37
16	08:38 16:11	07:41 17:18	06:30 18:18	06:08 20:22	05:00 21:23	04:25 22:05	04:47 21:53	05:44 20:52	06:46 19:32	07:46 18:13	07:53 16:05	08:42 15:37
17	08:36 16:13	07:38 17:20	06:27 18:20	06:06 20:24	04:58 21:25	04:25 22:06	04:49 21:51	05:46 20:50	06:48 19:30	07:48 18:11	07:55 16:03	08:43 15:37
18	08:35 16:15	07:36 17:22	06:25 18:22	06:03 20:26	04:56 21:27	04:25 22:06	04:50 21:50	05:48 20:47	06:50 19:27	07:51 18:08	07:57 16:01	08:44 15:37
19	08:34 16:17	07:34 17:24	06:22 18:24	06:01 20:28	04:54 21:29	04:25 22:07	04:52 21:48	05:50 20:45	06:52 19:24	07:53 18:06	07:59 16:00	08:45 15:38
20	08:32 16:19	07:31 17:26	06:19 18:26	05:58 20:31	04:53 21:30	04:25 22:07	04:53 21:47	05:52 20:43	06:54 19:22	07:55 18:03	08:01 15:58	08:45 15:38
21	08:31 16:21	07:29 17:29	06:17 18:28	05:55 20:33	04:51 21:32	04:25 22:07	04:55 21:45	05:54 20:40	06:56 19:19	07:57 18:01	08:03 15:57	08:46 15:38
22	08:30 16:23	07:26 17:31	06:14 18:31	05:53 20:35	04:49 21:34	04:25 22:07	04:57 21:44	05:56 20:38	06:58 19:16	07:59 17:58	08:05 15:55	08:46 15:39
23	08:28 16:25	07:24 17:33	06:11 18:33	05:51 20:37	04:48 21:36	04:25 22:08	04:58 21:42	05:58 20:35	07:00 19:13	08:01 17:56	08:07 15:54	08:47 15:39
24	08:26 16:27	07:21 17:35	06:09 18:35	05:48 20:39	04:46 21:38	04:25 22:08	05:00 21:40	06:00 20:33	07:02 19:11	08:03 17:53	08:09 15:52	08:47 15:40
25	08:25 16:29	07:19 17:37	06:06 18:37	05:46 20:41	04:44 21:39	04:26 22:08	05:02 21:39	06:02 20:30	07:04 19:08	07:05 16:51	08:11 15:51	08:48 15:41
26	08:23 16:31	07:16 17:40	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:04 21:37	06:04 20:28	07:06 19:05	07:08 16:49	08:13 15:50	08:48 15:41
27	08:22 16:33	07:14 17:42	06:01 18:41	05:41 20:45	04:42 21:42	04:27 22:08	05:05 21:35	06:06 20:25	07:08 19:03	07:10 16:46	08:15 15:49	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:10 19:00	07:12 16:44	08:16 15:47	08:48 15:43
29	08:18 16:38		06:55 19:45	05:36 20:49	04:39 21:46	04:28 22:07	05:09 21:31	06:10 20:20	07:12 18:57	07:14 16:42	08:18 15:46	08:48 15:44
30	08:16 16:40		06:53 19:47	05:34 20:51	04:38 21:47	04:29 22:07	05:11 21:29	06:12 20:17	07:14 18:55	07:16 16:39	08:20 15:45	08:48 15:45
31	08:14 16:42		06:50 19:49		04:36 21:49		05:13 21:28	06:14 20:15		07:18 16:37		08:48 15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Flickering_Nordex_N175_Prikuli_B

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 16:18/4.1.254

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Rudzdobes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (560)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:07	21:26	20:12	18:51	16:34	15:43
2	08:48	08:11	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:24
	15:47	16:45	17:48	19:53	20:55	21:52	22:06	21:24	20:09	18:49	16:32	15:42
3	08:48	08:09	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:06	21:21	20:07	18:46	16:29	15:41
4	08:47	08:07	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:05	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:56	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:57	22:04	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:51	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:36	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:34	07:40	08:36
	15:59	17:03	18:05	20:10	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:50	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:02	17:08	18:09	20:14	21:15	22:03	21:58	21:02	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:04	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:56	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:00	04:24	04:44	05:41	06:43	07:44	07:51	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:55	19:34	18:15	16:06	15:36
16	08:38	07:40	06:29	06:07	04:59	04:23	04:46	05:43	06:45	07:46	07:53	08:42
	16:10	17:17	18:17	20:22	21:23	22:06	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:52	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:07	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:46
	16:18	17:26	18:26	20:30	21:31	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:08	21:46	20:40	19:18	18:00	15:56	15:37
22	08:30	07:26	06:13	05:52	04:48	04:23	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:24	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:27	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:48
	16:26	17:34	18:34	20:39	21:38	22:08	21:41	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:22	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:15	08:48
	16:32	17:41	18:40	20:45	21:43	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:12	08:17	08:49
	16:34	17:43	18:42	20:47	21:44	22:08	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:49
	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:47	22:07	21:30	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:49
	16:41		19:49		21:49		21:28	20:14		16:36		15:45
Potential sun hours	235	266	366	426	508	528	529	469	385	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Salas pamatskola (kad. apz. 76740020242001) - Shadow Receptor: 1.0 x 1.0 Azimuth: 3,1° Slope: 90,0° (479)

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:46	08:12 16:43	07:08 17:45	06:47 19:51	05:30 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:51	07:20 16:34	08:22 15:43
2	08:48 15:47	08:10 16:45	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:17 21:21	06:19 20:06	07:19 18:46	07:25 16:29	08:25 15:41
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	07:27 16:27	08:27 15:40
5	08:47 15:51	08:04 16:52	06:58 17:54	06:36 19:59	05:21 21:01	04:30 21:55	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:23 21:15	06:25 19:58	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:38
8	08:45 15:56	07:58 16:59	06:50 18:00	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:57	07:56 17:01	06:48 18:03	06:25 20:07	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 19:50	07:31 18:30	07:38 16:17	08:34 15:37
10	08:43 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:37 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:11	05:09 21:13	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:35 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:06 21:15	04:25 22:03	04:40 21:58	05:35 21:01	06:37 19:42	07:38 18:22	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:04 21:17	04:24 22:03	04:41 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	05:02 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17	07:48 16:07	08:40 15:36
15	08:39 16:08	07:43 17:14	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:17	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:19	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:00	08:44 15:36
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:36
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:51 21:30	04:23 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:23 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:56 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:57	08:05 15:54	08:46 15:38
23	08:28 16:24	07:23 17:32	06:11 18:32	05:50 20:36	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:34	06:08 18:34	05:47 20:38	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:52	08:09 15:51	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:07	08:05 16:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	04:40 21:42	04:25 22:08	05:04 21:35	06:05 20:25	07:07 19:02	08:09 16:45	08:14 15:47	08:48 15:41
28	08:20 16:34	07:11 17:43	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 18:59	08:11 16:43	08:16 15:46	08:48 15:42
29	08:18 16:37		06:55 19:44	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:19	07:11 18:57	08:13 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:38	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Salas pamatskola (kad. apz. 76740020242004) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (597)

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		05:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Sauleskalni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (443)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:15 21:25	06:16 20:12	07:15 18:52	07:20 16:35	08:22 15:44
2	08:48 15:49	08:10 16:46	07:06 17:48	06:45 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:17 21:23	06:18 20:09	07:18 18:49	07:23 16:33	08:23 15:43
3	08:47 15:50	08:09 16:49	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:19 21:21	06:20 20:07	07:20 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:51	07:01 17:53	06:39 19:57	05:25 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:22 18:44	07:27 16:28	08:27 15:42
5	08:47 15:53	08:05 16:53	06:59 17:55	06:37 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:01	07:24 18:41	07:29 16:26	08:28 15:41
6	08:46 15:54	08:02 16:55	06:56 17:57	06:34 20:01	05:20 21:03	04:30 21:56	04:34 22:03	05:24 21:15	06:26 19:59	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:56	08:00 16:57	06:53 17:59	06:31 20:04	05:18 21:05	04:29 21:57	04:35 22:02	05:26 21:13	06:28 19:56	07:28 18:36	07:33 16:22	08:31 15:40
8	08:45 15:57	07:58 17:00	06:51 18:01	06:29 20:06	05:16 21:07	04:29 21:59	04:36 22:02	05:28 21:11	06:30 19:54	07:30 18:34	07:36 16:20	08:33 15:39
9	08:44 15:59	07:56 17:02	06:48 18:03	06:26 20:08	05:14 21:09	04:28 22:00	04:37 22:01	05:30 21:08	06:32 19:51	07:32 18:31	07:38 16:18	08:34 15:38
10	08:43 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:12 21:11	04:27 22:01	04:39 22:00	05:32 21:06	06:34 19:48	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:10 21:13	04:27 22:01	04:40 21:59	05:34 21:04	06:36 19:46	07:36 18:26	07:42 16:14	08:37 15:38
12	08:42 16:04	07:50 17:09	06:40 18:10	06:18 20:14	05:08 21:15	04:26 22:02	04:41 21:58	05:36 21:02	06:38 19:43	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 17:11	06:38 18:12	06:16 20:16	05:06 21:17	04:26 22:03	04:43 21:56	05:38 20:59	06:40 19:40	07:40 18:21	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:04 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 19:38	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:11 20:20	05:02 21:21	04:25 22:04	04:46 21:54	05:42 20:55	06:44 19:35	07:44 18:16	07:50 16:07	08:41 15:37
16	08:37 16:11	07:40 17:18	06:30 18:18	06:08 20:22	05:00 21:23	04:25 22:05	04:47 21:53	05:44 20:52	06:46 19:32	07:46 18:13	07:53 16:05	08:42 15:37
17	08:36 16:13	07:38 17:20	06:27 18:20	06:05 20:24	04:58 21:25	04:25 22:06	04:49 21:51	05:46 20:50	06:48 19:29	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:15	07:36 17:22	06:25 18:22	06:03 20:26	04:56 21:27	04:25 22:06	04:50 21:50	05:48 20:47	06:50 19:27	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:17	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:25 22:07	04:52 21:48	05:50 20:45	06:52 19:24	07:53 18:05	07:59 16:00	08:44 15:38
20	08:32 16:19	07:31 17:26	06:19 18:26	05:58 20:30	04:53 21:30	04:25 22:07	04:53 21:47	05:52 20:42	06:54 19:21	07:55 18:03	08:01 15:58	08:45 15:38
21	08:31 16:21	07:29 17:29	06:17 18:28	05:55 20:32	04:51 21:32	04:25 22:07	04:55 21:45	05:54 20:40	06:56 19:19	07:57 18:01	08:03 15:57	08:46 15:38
22	08:29 16:23	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:25 22:07	04:57 21:44	05:56 20:38	06:57 19:16	07:59 17:58	08:05 15:55	08:46 15:39
23	08:28 16:25	07:24 17:33	06:11 18:33	05:50 20:37	04:48 21:36	04:25 22:07	04:58 21:42	05:58 20:35	06:59 19:13	08:01 17:56	08:07 15:54	08:47 15:39
24	08:26 16:27	07:21 17:35	06:09 18:35	05:48 20:39	04:46 21:37	04:25 22:08	05:00 21:40	06:00 20:33	07:01 19:11	08:03 17:53	08:09 15:52	08:47 15:40
25	08:25 16:29	07:19 17:37	06:06 18:37	05:46 20:41	04:44 21:39	04:26 22:08	05:02 21:39	06:02 20:30	07:03 19:08	08:05 17:51	08:11 15:51	08:48 15:41
26	08:23 16:31	07:16 17:40	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:04 21:37	06:04 20:27	07:05 19:05	08:07 17:49	08:13 15:50	08:48 15:41
27	08:21 16:33	07:14 17:42	06:01 18:41	05:41 20:45	04:42 21:42	04:27 22:07	05:05 21:35	06:06 20:25	07:07 19:03	08:09 17:46	08:14 15:49	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 19:00	08:12 17:44	08:16 15:47	08:48 15:43
29	08:18 16:38		06:55 19:45	05:36 20:49	04:39 21:45	04:28 22:07	05:09 21:31	06:10 20:20	07:11 18:57	08:14 17:42	08:18 15:46	08:48 15:44
30	08:16 16:40		06:53 19:47	05:34 20:51	04:38 21:47	04:29 22:07	05:11 21:29	06:12 20:17	07:13 18:55	08:16 17:39	08:20 15:45	08:48 15:45
31	08:14 16:42		06:50 19:49		04:36 21:48		05:13 21:27	06:14 20:15		07:18 16:37		08:48 15:46
Potential sun hours	236	266	366	426	507	527	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Saulrieti - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (413)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:13 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:14 21:26	06:16 20:12	07:15 18:52	07:20 16:35	08:22 15:44
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:16 21:24	06:18 20:09	07:17 18:49	07:23 16:32	08:24 15:43
3	08:48 15:49	08:09 16:48	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:18 21:21	06:20 20:07	07:19 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:53	06:59 17:55	06:36 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:01	07:24 18:41	07:29 16:26	08:28 15:40
6	08:46 15:54	08:03 16:55	06:56 17:57	06:34 20:01	05:20 21:03	04:30 21:57	04:34 22:03	05:24 21:15	06:26 20:01	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:04	05:18 21:05	04:29 21:58	04:35 22:03	05:26 21:13	06:28 20:01	07:28 18:36	07:33 16:22	08:31 15:39
8	08:45 15:57	07:58 16:59	06:51 18:01	06:29 20:06	05:15 21:07	04:28 21:59	04:36 22:02	05:28 21:11	06:30 20:04	07:30 18:33	07:36 16:20	08:33 15:39
9	08:44 15:58	07:56 17:02	06:48 18:03	06:26 20:08	05:13 21:09	04:27 22:00	04:37 22:01	05:30 21:09	06:32 20:01	07:32 18:31	07:38 16:18	08:34 15:38
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:11 21:11	04:27 22:01	04:38 22:00	05:32 21:06	06:34 20:04	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:13	04:26 22:02	04:40 21:59	05:34 21:04	06:36 20:04	07:36 18:26	07:42 16:14	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:26 22:03	04:41 21:58	05:36 21:02	06:38 20:04	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 17:11	06:38 18:12	06:16 20:16	05:05 21:17	04:25 22:03	04:42 21:57	05:38 20:59	06:40 20:04	07:40 18:20	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 20:04	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:25 22:05	04:45 21:54	05:42 20:55	06:43 20:04	07:44 18:15	07:51 16:06	08:41 15:37
16	08:38 16:11	07:41 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:05	04:47 21:53	05:44 20:52	06:45 20:04	07:46 18:13	07:53 16:04	08:42 15:37
17	08:36 16:12	07:38 17:20	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:46 20:50	06:47 20:04	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:14	07:36 17:22	06:24 18:22	06:03 20:26	04:56 21:27	04:24 22:06	04:50 21:50	05:48 20:47	06:49 20:04	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:49	05:50 20:45	06:51 20:04	07:53 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:58 20:30	04:52 21:31	04:24 22:07	04:53 21:47	05:52 20:43	06:53 20:04	07:55 18:03	08:01 15:58	08:45 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:33	04:50 21:32	04:24 22:07	04:55 21:45	05:54 20:40	06:55 20:04	07:57 18:00	08:03 15:56	08:46 15:38
22	08:30 16:22	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:24 22:08	04:56 21:44	05:56 20:38	06:57 20:04	07:59 18:01	08:05 15:55	08:47 15:38
23	08:28 16:24	07:24 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:25 22:08	04:58 21:42	05:58 20:35	06:59 20:04	08:01 18:01	08:07 17:55	08:47 15:39
24	08:27 16:27	07:21 17:35	06:08 18:35	05:48 20:39	04:46 21:38	04:25 22:08	05:00 21:41	06:00 20:33	07:01 20:04	08:03 18:01	08:09 17:53	08:48 15:39
25	08:25 16:29	07:19 17:37	06:06 18:37	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:02 20:30	07:03 20:04	08:05 18:01	08:11 17:51	08:48 15:40
26	08:23 16:31	07:16 17:39	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:03 21:37	06:04 20:27	07:05 20:04	08:07 18:01	08:13 17:48	08:48 15:41
27	08:22 16:33	07:14 17:42	06:00 18:41	05:41 20:45	04:41 21:43	04:26 22:08	05:05 21:35	06:06 20:25	07:07 20:04	08:09 18:01	08:15 17:46	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 20:04	08:12 18:01	08:16 17:44	08:48 15:42
29	08:18 16:37		06:55 19:45	05:36 20:49	04:38 21:46	04:27 22:07	05:09 21:31	06:10 20:20	07:11 20:04	08:14 18:01	08:18 17:41	08:49 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:11 21:30	06:12 20:17	07:13 20:04	08:16 18:01	08:20 17:45	08:49 15:44
31	08:14 16:42		06:50 19:49		04:36 21:49		05:12 21:28	06:14 20:15	07:18 20:04	08:18 18:01		08:48 15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Saulstari - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (494)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:46	08:12 16:43	07:08 17:45	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:51	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:45	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:06	07:19 18:46	07:25 16:30	08:25 15:41
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	07:27 16:27	08:27 15:40
5	08:47 15:51	08:04 16:52	06:58 17:54	06:36 19:59	05:21 21:01	04:30 21:55	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:23 21:15	06:25 19:58	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:38
8	08:45 15:56	07:58 16:59	06:50 18:00	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:25 20:07	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 19:51	07:31 18:30	07:38 16:17	08:34 15:37
10	08:43 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:11	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:35 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:02	04:40 21:58	05:35 21:01	06:37 19:42	07:38 18:23	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17	07:48 16:07	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:17	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:00	08:44 15:36
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:36
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:51 21:30	04:23 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:23 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:56 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:57	08:05 15:54	08:46 15:38
23	08:28 16:24	07:23 17:32	06:11 18:32	05:50 20:36	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:34	06:08 18:34	05:47 20:38	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:53	08:09 15:51	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:07	08:05 16:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	04:40 21:42	04:26 22:08	05:04 21:35	06:05 20:25	07:07 19:02	08:09 16:45	08:14 15:48	08:48 15:41
28	08:20 16:34	07:11 17:43	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 18:59	08:11 16:43	08:16 15:46	08:48 15:42
29	08:18 16:37		06:55 19:44	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:19	07:11 18:57	08:13 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:38	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Senci - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (564)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Siladruvas (kad. apz. 76740020177001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (565) Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:46	08:12 16:43	07:09 17:45	06:47 19:51	05:30 20:53	04:34 21:50	04:28 22:07	05:14 21:26	06:15 20:12	07:15 18:51	07:20 16:34	08:22 15:43
2	08:48 15:47	08:10 16:45	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:52	04:29 22:06	05:15 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:24 15:42
3	08:48 15:49	08:09 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:06	05:17 21:21	06:19 20:06	07:19 18:46	07:25 16:29	08:25 15:41
4	08:47 15:50	08:07 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	07:27 16:27	08:27 15:40
5	08:47 15:51	08:04 16:52	06:58 17:54	06:36 19:59	05:21 21:01	04:30 21:55	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:57	04:33 22:04	05:23 21:15	06:25 19:59	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:38
8	08:45 15:56	07:58 16:59	06:50 18:00	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:57	07:56 17:01	06:48 18:03	06:25 20:07	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 19:51	07:31 18:30	07:38 16:17	08:34 15:37
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:37 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:36 15:37
11	08:43 16:01	07:52 17:05	06:43 18:07	06:20 20:12	05:08 21:13	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:36
12	08:42 16:02	07:49 17:08	06:40 18:09	06:18 20:14	05:06 21:15	04:25 22:03	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:22	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:04 21:17	04:24 22:03	04:41 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	05:02 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17	07:48 16:07	08:40 15:36
15	08:39 16:08	07:43 17:14	06:32 18:15	06:10 20:20	05:00 21:21	04:24 22:05	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:05	08:41 15:36
16	08:38 16:10	07:40 17:17	06:29 18:17	06:07 20:22	04:59 21:23	04:23 22:06	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:53 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:52	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:07	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:00	08:44 15:36
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:50 21:49	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:36
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:51 21:31	04:23 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:23 22:08	04:54 21:46	05:53 20:40	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:30 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:23 22:08	04:55 21:44	05:55 20:37	06:57 19:16	07:59 17:57	08:05 15:54	08:47 15:37
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:37	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:34	06:08 18:34	05:47 20:39	04:45 21:38	04:24 22:08	04:59 21:41	05:59 20:32	07:01 19:10	08:03 17:52	08:09 15:51	08:48 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:39	04:24 22:08	05:01 21:39	06:01 20:30	07:03 19:07	07:05 16:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:02 21:37	06:03 20:27	07:05 19:05	07:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	04:40 21:43	04:25 22:08	05:04 21:35	06:05 20:25	07:07 19:02	07:09 16:45	08:15 15:47	08:48 15:41
28	08:20 16:34	07:11 17:43	05:57 18:42	05:37 20:47	04:39 21:44	04:26 22:08	05:06 21:33	06:07 20:22	07:09 18:59	07:12 16:43	08:16 15:46	08:49 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 18:57	07:14 16:41	08:18 15:45	08:49 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 18:54	07:16 16:38	08:20 15:44	08:49 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:28	06:13 20:14		07:18 16:36		08:49 15:45
Potential sun hours	235	266	366	426	508	528	529	469	384	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Siladruvas (kad. apz. 76740020212001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (512) Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:57	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Silares - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (523)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:05	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:18	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Sirmiš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (502)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March		April	May	June	July	August	September		October		November	December	
1	08:48	08:12	07:09		17:09 (PrRR3)	06:47	05:30	04:34	04:28	05:14	06:15	07:15		17:42 (PrRR3)	07:20	08:22
	15:46	16:43	17:45	8	17:17 (PrRR3)	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16	17:58 (PrRR3)	16:34	15:43
2	08:48	08:10	07:06		17:06 (PrRR3)	06:44	05:28	04:33	04:29	05:16	06:17	07:17		17:41 (PrRR3)	07:22	08:23
	15:47	16:45	17:48	12	17:18 (PrRR3)	19:53	20:55	21:51	22:06	21:23	20:09	18:49	19	18:00 (PrRR3)	16:32	15:42
3	08:48	08:08	07:03		17:04 (PrRR3)	06:41	05:26	04:32	04:30	05:17	06:19	07:19		17:40 (PrRR3)	07:25	08:25
	15:49	16:48	17:50	16	17:20 (PrRR3)	19:55	20:57	21:53	22:05	21:21	20:06	18:46	21	18:01 (PrRR3)	16:30	15:41
4	08:47	08:06	07:01		17:04 (PrRR3)	06:39	05:24	04:31	04:31	05:19	06:21	07:21		17:39 (PrRR3)	07:27	08:27
	15:50	16:50	17:52	19	17:23 (PrRR3)	19:57	20:59	21:54	22:05	21:19	20:04	18:43	22	18:01 (PrRR3)	16:27	15:40
5	08:47	08:04	06:58		17:02 (PrRR3)	06:36	05:21	04:30	04:32	05:21	06:23	07:23		17:38 (PrRR3)	07:29	08:28
	15:51	16:52	17:54	21	17:23 (PrRR3)	19:59	21:01	21:55	22:04	21:17	20:01	18:41	23	18:01 (PrRR3)	16:25	15:40
6	08:46	08:02	06:56		17:01 (PrRR3)	06:33	05:19	04:29	04:33	05:23	06:25	07:25		17:38 (PrRR3)	07:31	08:30
	15:53	16:54	17:56	22	17:23 (PrRR3)	20:01	21:03	21:57	22:03	21:15	19:59	18:38	22	18:00 (PrRR3)	16:23	15:39
7	08:46	08:00	06:53		17:01 (PrRR3)	06:31	05:17	04:28	04:34	05:25	06:27	07:27		17:37 (PrRR3)	07:33	08:31
	15:54	16:57	17:58	23	17:24 (PrRR3)	20:03	21:05	21:58	22:03	21:13	19:56	18:36	23	18:00 (PrRR3)	16:21	15:38
8	08:45	07:58	06:50		17:01 (PrRR3)	06:28	05:15	04:27	04:35	05:27	06:29	07:29		17:37 (PrRR3)	07:35	08:33
	15:56	16:59	18:00	23	17:24 (PrRR3)	20:05	21:07	21:59	22:02	21:11	19:53	18:33	22	17:59 (PrRR3)	16:19	15:38
9	08:44	07:56	06:48		17:01 (PrRR3)	06:25	05:13	04:27	04:36	05:29	06:31	07:31		17:37 (PrRR3)	07:38	08:34
	15:57	17:01	18:03	22	17:23 (PrRR3)	20:07	21:09	22:00	22:01	21:08	19:51	18:30	21	17:58 (PrRR3)	16:17	15:37
10	08:44	07:54	06:45		17:01 (PrRR3)	06:23	05:11	04:26	04:37	05:31	06:33	07:33		17:38 (PrRR3)	07:40	08:35
	15:59	17:03	18:05	22	17:23 (PrRR3)	20:09	21:11	22:01	22:00	21:06	19:48	18:28	18	17:56 (PrRR3)	16:15	15:37
11	08:43	07:52	06:43		17:02 (PrRR3)	06:20	05:09	04:25	04:39	05:33	06:35	07:36		17:40 (PrRR3)	07:42	08:37
	16:01	17:06	18:07	20	17:22 (PrRR3)	20:12	21:13	22:02	21:59	21:04	19:45	18:25	14	17:54 (PrRR3)	16:13	15:37
12	08:42	07:49	06:40		17:02 (PrRR3)	06:18	05:06	04:25	04:40	05:35	06:37	07:38		17:41 (PrRR3)	07:44	08:38
	16:03	17:08	18:09	18	17:20 (PrRR3)	20:14	21:15	22:03	21:58	21:01	19:43	18:23	10	17:51 (PrRR3)	16:11	15:36
13	08:41	07:47	06:37		17:04 (PrRR3)	06:15	05:04	04:24	04:41	05:37	06:39	07:40		17:44 (PrRR3)	07:46	08:39
	16:04	17:10	18:11	15	17:19 (PrRR3)	20:16	21:17	22:03	21:57	20:59	19:40	18:20	4	17:48 (PrRR3)	16:09	15:36
14	08:40	07:45	06:35		17:06 (PrRR3)	06:12	05:02	04:24	04:43	05:39	06:41	07:42		17:48 (PrRR3)	07:48	08:40
	16:06	17:12	18:13	10	17:16 (PrRR3)	20:18	21:19	22:04	21:55	20:57	19:37	18:17		17:48 (PrRR3)	16:07	15:36
15	08:39	07:43	06:32			06:10	05:01	04:24	04:44	05:41	06:43	07:44		17:48 (PrRR3)	07:50	08:41
	16:08	17:15	18:15			20:20	21:21	22:05	21:54	20:54	19:34	18:15		17:48 (PrRR3)	16:06	15:36
16	08:38	07:40	06:29			06:07	04:59	04:24	04:46	05:43	06:45	07:46		17:48 (PrRR3)	07:53	08:42
	16:10	17:17	18:17			20:22	21:23	22:05	21:53	20:52	19:32	18:12		17:48 (PrRR3)	16:04	15:36
17	08:36	07:38	06:27			06:05	04:57	04:23	04:47	05:45	06:47	07:48		17:48 (PrRR3)	07:55	08:43
	16:12	17:19	18:20			20:24	21:25	22:06	21:51	20:50	19:29	18:10		17:48 (PrRR3)	16:02	15:36
18	08:35	07:36	06:24			06:02	04:55	04:23	04:49	05:47	06:49	07:50		17:48 (PrRR3)	07:57	08:44
	16:14	17:21	18:22			20:26	21:27	22:06	21:50	20:47	19:26	18:07		17:48 (PrRR3)	16:00	15:36
19	08:34	07:33	06:21			06:00	04:53	04:23	04:51	05:49	06:51	07:52		17:48 (PrRR3)	07:59	08:45
	16:16	17:23	18:24			20:28	21:29	22:07	21:49	20:45	19:24	18:05		17:48 (PrRR3)	15:59	15:36
20	08:32	07:31	06:19			05:57	04:51	04:23	04:52	05:51	06:53	07:54		17:48 (PrRR3)	08:01	08:45
	16:18	17:26	18:26			20:30	21:30	22:07	21:47	20:42	19:21	18:02		17:48 (PrRR3)	15:57	15:37
21	08:31	07:28	06:16			05:55	04:50	04:23	04:54	05:53	06:55	07:57		17:48 (PrRR3)	08:03	08:46
	16:20	17:28	18:28			20:32	21:32	22:07	21:45	20:40	19:18	18:00		17:48 (PrRR3)	15:56	15:37
22	08:29	07:26	06:13			05:52	04:48	04:24	04:56	05:55	06:57	07:59		17:48 (PrRR3)	08:05	08:47
	16:22	17:30	18:30			20:34	21:34	22:08	21:44	20:37	19:16	17:57		17:48 (PrRR3)	15:54	15:38
23	08:28	07:24	06:11			05:50	04:46	04:24	04:57	05:57	06:59	08:01		17:48 (PrRR3)	08:07	08:47
	16:24	17:32	18:32			20:36	21:36	22:08	21:42	20:35	19:13	17:55		17:48 (PrRR3)	15:53	15:38
24	08:26	07:21	06:08			05:47	04:45	04:24	04:59	05:59	07:01	08:03		17:48 (PrRR3)	08:09	08:47
	16:26	17:34	18:34			20:39	21:38	22:08	21:40	20:32	19:10	17:53		17:48 (PrRR3)	15:51	15:39
25	08:25	07:19	06:05			05:45	04:43	04:24	05:01	06:01	07:03	08:05		17:48 (PrRR3)	08:11	08:48
	16:28	17:37	18:36			20:41	21:39	22:08	21:39	20:30	19:08	16:50		17:48 (PrRR3)	15:50	15:39
26	08:23	07:16	06:03			05:42	04:42	04:25	05:03	06:03	07:05	08:07		17:48 (PrRR3)	08:13	08:48
	16:30	17:39	18:38			20:43	21:41	22:08	21:37	20:27	19:05	16:48		17:48 (PrRR3)	15:49	15:40
27	08:21	07:14	06:00			05:40	04:40	04:25	05:04	06:05	07:07	08:09		17:48 (PrRR3)	08:15	08:48
	16:32	17:41	18:40			20:45	21:43	22:08	21:35	20:25	19:02	16:45		17:48 (PrRR3)	15:47	15:41
28	08:20	07:11	05:57			05:38	04:39	04:26	05:06	06:07	07:09	08:11		17:48 (PrRR3)	08:16	08:48
	16:34	17:43	18:42			20:47	21:44	22:08	21:33	20:22	18:59	16:43		17:48 (PrRR3)	15:46	15:42
29	08:18		06:55			05:35	04:38	04:27	05:08	06:09	07:11	08:13		17:48 (PrRR3)	08:18	08:49
	16:37		19:45			20:49	21:46	22:07	21:31	20:20	18:57	16:41	8	17:55 (PrRR3)	15:45	15:43
30	08:16		06:52			05:33	04:36	04:27	05:10	06:11	07:13	08:15		17:44 (PrRR3)	08:20	08:49
	16:39		19:47			20:51	21:47	22:07	21:29	20:17	18:54	16:38	13	17:57 (PrRR3)	15:44	15:44
31	08:14		06:49				04:35		05:12	06:13		07:18				08:48
	16:41		19:49				21:49		21:27	20:14		16:36				15:45
Potential sun hours	236	266	366		426	507	528	529	469	384		324		248	217	
Total, worst case				251							21		235			
Sun reduction				0,39							0,43		0,29			
Oper. time red.				1,00							1,00		1,00			
Wind dir. red.				1,00							1,00		1,00			
Total reduction				0,39							0,43		0,29			
Total, real				98							9		68			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Skalbes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (419)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:13 16:44	19 15:16 (DD3) 17:09	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:14 21:26	06:16 20:12	07:15 18:52	07:20 16:35	08:22 15:44
2	08:48 15:48	08:11 16:46	15:18 (DD3) 17:06	06:44 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:16 21:24	06:18 20:09	07:17 18:49	07:23 16:32	08:23 15:43
3	08:48 15:50	08:09 16:48	15:20 (DD3) 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:18 21:21	06:20 20:07	07:20 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:51	15:23 (DD3) 17:52	07:01 19:57	06:39 20:59	05:24 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:22 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:53	15:30 (DD3) 17:52	06:59 19:57	06:36 20:59	05:22 21:54	04:33 22:05	05:22 21:19	06:24 20:04	07:24 18:44	07:29 16:28	08:28 15:41
6	08:46 15:54	08:03 16:55	17:55 17:57	06:56 20:01	06:34 21:03	05:20 21:57	04:30 22:03	05:24 21:15	06:26 19:59	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:55	08:01 16:57	06:53 17:59	06:31 20:04	05:18 21:05	04:29 21:58	04:35 22:03	05:26 21:13	06:28 19:56	07:28 18:36	07:33 16:22	08:31 15:39
8	08:45 15:57	07:58 16:59	06:51 18:01	06:29 20:06	05:16 21:07	04:36 21:59	04:36 22:02	05:28 21:11	06:30 19:54	07:30 18:33	07:36 16:20	08:33 15:39
9	08:44 15:58	07:56 17:02	06:48 18:03	06:26 20:08	05:13 21:10	04:28 22:00	04:37 22:01	05:30 21:09	06:32 19:51	07:32 18:31	07:38 16:18	08:34 15:38
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:11 21:11	04:27 22:00	04:38 22:01	05:32 21:06	06:34 19:48	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 15:16 (DD3) 17:06	06:43 18:07	06:21 20:12	05:09 21:13	04:26 22:02	04:40 21:59	05:34 21:04	06:36 19:46	07:36 18:26	07:42 16:14	08:37 15:37
12	08:42 16:03	07:50 15:15 (DD3) 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:26 22:03	04:41 21:58	05:36 21:02	06:38 19:43	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 15:14 (DD3) 17:11	06:38 18:12	06:16 20:16	05:05 21:17	04:25 22:03	04:42 21:57	05:38 20:59	06:40 19:40	07:40 18:20	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 15:13 (DD3) 17:13	06:35 18:14	06:13 20:18	05:03 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 19:38	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 15:12 (DD3) 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:25 22:05	04:45 21:54	05:42 20:55	06:44 19:35	07:44 18:15	07:51 16:06	08:41 15:37
16	08:38 16:11	07:41 15:11 (DD3) 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:05	04:47 21:53	05:44 20:52	06:46 19:32	07:46 18:13	07:53 16:05	08:42 15:37
17	08:36 16:13	07:38 15:12 (DD3) 17:20	06:27 18:20	06:05 20:24	04:58 21:25	04:24 22:06	04:48 21:51	05:46 20:50	06:47 19:29	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:14	07:36 15:11 (DD3) 17:22	06:24 18:22	06:03 20:26	04:56 21:27	04:24 22:06	04:50 21:50	05:48 20:47	06:49 19:27	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 15:11 (DD3) 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:49	05:50 20:45	06:51 19:24	07:53 18:05	07:59 16:00	08:45 15:37
20	08:32 16:18	07:31 15:13 (DD3) 17:26	06:19 18:26	05:58 20:30	04:52 21:31	04:24 22:07	04:53 21:47	05:52 20:43	06:53 19:21	07:55 18:03	08:01 15:58	08:45 15:38
21	08:31 16:20	07:29 15:11 (DD3) 17:28	06:16 18:28	05:55 20:33	04:50 21:32	04:24 22:07	04:55 21:45	05:54 20:40	06:55 19:19	07:57 18:00	08:03 15:56	08:46 15:38
22	08:30 16:22	07:26 15:11 (DD3) 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:25 22:08	04:56 21:44	05:56 20:38	06:57 19:16	07:59 17:58	08:05 15:55	08:47 15:38
23	08:28 16:25	07:24 15:11 (DD3) 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:25 22:08	04:58 21:42	05:58 20:35	06:59 19:13	08:01 17:56	08:07 15:53	08:47 15:39
24	08:27 16:27	07:21 15:11 (DD3) 17:35	06:08 18:35	05:48 20:39	04:46 21:38	04:25 22:08	05:00 21:41	06:00 20:33	07:01 19:11	08:03 17:53	08:09 15:52	08:47 15:40
25	08:25 16:29	07:19 15:11 (DD3) 17:37	06:06 18:37	05:45 20:41	04:44 21:39	04:25 22:08	05:02 21:39	06:02 20:30	07:03 19:08	07:05 16:51	08:11 15:51	08:48 15:40
26	08:23 16:31	07:16 15:12 (DD3) 17:39	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:03 21:37	06:04 20:27	07:05 19:05	07:07 16:48	08:13 15:49	08:48 15:41
27	08:22 16:33	07:14 15:12 (DD3) 17:42	06:00 18:41	05:41 20:45	04:41 21:43	04:26 22:08	05:05 21:35	06:06 20:25	07:07 19:03	07:10 16:46	08:15 15:48	08:48 15:42
28	08:20 16:35	07:11 15:12 (DD3) 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 19:00	07:12 16:44	08:16 15:47	08:48 15:43
29	08:18 16:37	07:09 15:13 (DD3) 17:44	06:55 19:45	05:36 20:49	04:38 21:46	04:28 22:07	05:09 21:31	06:10 20:20	07:11 18:57	07:14 16:41	08:18 15:46	08:49 15:44
30	08:16 16:40	07:07 15:14 (DD3) 17:44	06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:11 21:30	06:12 20:17	07:13 18:55	07:16 16:39	08:20 15:45	08:49 15:45
31	08:14 16:42	07:05 15:15 (DD3) 17:44	06:50 19:49	05:30 21:49	04:36 21:49	04:28 22:07	05:13 21:28	06:14 20:15	07:18 16:37	07:18 15:45	08:20 15:46	08:48 15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case	420	55									473	5
Sun reduction	0,13	0,22									0,08	0,08
Oper. time red.	1,00	1,00									1,00	1,00
Wind dir. red.	1,00	1,00									1,00	1,00
Total reduction	0,13	0,22									0,08	0,08
Total, real	56	12									35	0

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Slokas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (480)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:41
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:55	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:01	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:37
20	08:32	07:31	06:19	05:57	04:52	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:35	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:26	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:35	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:28	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Smelteri - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (484)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:41
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:42	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:24	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:26	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Smelteru biblioteka - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (545)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Smelteru kapseta - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (524)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:42	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:26	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Smedes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (442)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:15 21:26	06:16 20:12	07:16 18:52	07:20 16:35	08:22 15:44
2	08:48 15:49	08:11 16:46	07:06 17:48	06:45 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:17 21:23	06:18 20:09	07:18 18:49	07:23 16:33	08:23 15:43
3	08:48 15:50	08:09 16:49	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:19 21:21	06:20 20:07	07:20 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:51	07:01 17:53	06:39 19:57	05:25 20:59	04:32 21:54	04:32 22:05	05:21 21:19	06:22 20:04	07:22 18:44	07:27 16:28	08:27 15:42
5	08:47 15:53	08:05 16:53	06:59 17:55	06:37 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:02	07:24 18:41	07:29 16:26	08:28 15:41
6	08:46 15:54	08:03 16:55	06:56 17:57	06:34 20:02	05:20 21:03	04:30 21:56	04:34 22:03	05:24 21:15	06:26 19:59	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:56	08:00 16:58	06:54 17:59	06:31 20:04	05:18 21:05	04:29 21:58	04:35 22:02	05:26 21:13	06:28 19:56	07:28 18:36	07:33 16:22	08:31 15:40
8	08:45 15:57	07:58 17:00	06:51 18:01	06:29 20:06	05:16 21:07	04:29 21:59	04:36 22:02	05:28 21:11	06:30 19:54	07:30 18:34	07:36 16:20	08:33 15:39
9	08:44 15:59	07:56 17:02	06:48 18:03	06:26 20:08	05:14 21:09	04:28 22:00	04:38 22:01	05:30 21:08	06:32 19:51	07:32 18:31	07:38 16:18	08:34 15:39
10	08:44 16:00	07:54 17:04	06:46 18:05	06:24 20:10	05:12 21:11	04:27 22:01	04:39 22:00	05:32 21:06	06:34 19:48	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:08	06:21 20:12	05:10 21:13	04:27 22:02	04:40 21:59	05:34 21:04	06:36 19:46	07:36 18:26	07:42 16:14	08:37 15:38
12	08:42 16:04	07:50 17:09	06:40 18:10	06:18 20:14	05:08 21:15	04:26 22:02	04:41 21:58	05:36 21:02	06:38 19:43	07:38 18:23	07:44 16:12	08:38 15:38
13	08:41 16:06	07:47 17:11	06:38 18:12	06:16 20:16	05:06 21:17	04:26 22:03	04:43 21:56	05:38 20:59	06:40 19:40	07:40 18:21	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:04 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 19:38	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:33 18:16	06:11 20:20	05:02 21:21	04:25 22:05	04:46 21:54	05:42 20:55	06:44 19:35	07:44 18:16	07:51 16:07	08:41 15:37
16	08:38 16:11	07:41 17:18	06:30 18:18	06:08 20:22	05:00 21:23	04:25 22:05	04:47 21:53	05:44 20:52	06:46 19:32	07:46 18:13	07:53 16:05	08:42 15:37
17	08:36 16:13	07:38 17:20	06:27 18:20	06:06 20:24	04:58 21:25	04:25 22:06	04:49 21:51	05:46 20:50	06:48 19:30	07:48 18:11	07:55 16:03	08:43 15:37
18	08:35 16:15	07:36 17:22	06:25 18:22	06:03 20:26	04:56 21:27	04:25 22:06	04:50 21:50	05:48 20:47	06:50 19:27	07:51 18:08	07:57 16:01	08:44 15:37
19	08:34 16:17	07:34 17:24	06:22 18:24	06:01 20:28	04:54 21:29	04:25 22:07	04:52 21:48	05:50 20:45	06:52 19:24	07:53 18:06	07:59 16:00	08:45 15:38
20	08:32 16:19	07:31 17:26	06:19 18:26	05:58 20:31	04:53 21:30	04:25 22:07	04:53 21:47	05:52 20:43	06:54 19:22	07:55 18:03	08:01 15:58	08:45 15:38
21	08:31 16:21	07:29 17:29	06:17 18:28	05:55 20:33	04:51 21:32	04:25 22:07	04:55 21:45	05:54 20:40	06:56 19:19	07:57 18:01	08:03 15:57	08:46 15:38
22	08:30 16:23	07:26 17:31	06:14 18:31	05:53 20:35	04:49 21:34	04:25 22:07	04:57 21:44	05:56 20:38	06:58 19:16	07:59 17:58	08:05 15:55	08:46 15:39
23	08:28 16:25	07:24 17:33	06:11 18:33	05:51 20:37	04:48 21:36	04:25 22:08	04:58 21:42	05:58 20:35	07:00 19:13	08:01 17:56	08:07 15:54	08:47 15:39
24	08:26 16:27	07:21 17:35	06:09 18:35	05:48 20:39	04:46 21:37	04:26 22:08	05:00 21:40	06:00 20:33	07:02 19:11	08:03 17:53	08:09 15:52	08:47 15:40
25	08:25 16:29	07:19 17:37	06:06 18:37	05:46 20:41	04:44 21:39	04:26 22:08	05:02 21:39	06:02 20:30	07:04 19:08	07:05 16:51	08:11 15:51	08:48 15:41
26	08:23 16:31	07:16 17:40	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:04 21:37	06:04 20:28	07:06 19:05	07:08 16:49	08:13 15:50	08:48 15:41
27	08:22 16:33	07:14 17:42	06:01 18:41	05:41 20:45	04:42 21:42	04:27 22:07	05:06 21:35	06:06 20:25	07:08 19:03	07:10 16:46	08:15 15:49	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:10 19:00	07:12 16:44	08:16 15:47	08:48 15:43
29	08:18 16:38		06:55 19:45	05:36 20:49	04:39 21:46	04:28 22:07	05:09 21:31	06:10 20:20	07:12 18:57	07:14 16:42	08:18 15:46	08:48 15:44
30	08:16 16:40		06:53 19:47	05:34 20:51	04:38 21:47	04:29 22:07	05:11 21:29	06:12 20:17	07:14 18:55	07:16 16:39	08:20 15:45	08:48 15:45
31	08:14 16:42		06:50 19:49		04:36 21:49		05:13 21:27	06:14 20:15		07:18 16:37		08:48 15:46
Potential sun hours	236	266	366	426	507	527	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Sniedzini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (569)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:27	15:41
5	08:47	08:04	06:58	06:36	05:22	04:30	04:32	05:22	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:55	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:39
8	08:45	07:58	06:50	06:28	05:15	04:28	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:26	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:38
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:05	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:13	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:08	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:45	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:24	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:01	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:37
20	08:32	07:31	06:19	05:57	04:52	04:24	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:35	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:40
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:41	04:26	05:05	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:35	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:37	04:28	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Sporanu majas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (538)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June			
1	08:48 15:46 16:43	08:12 16:43	07:09 17:45 16:36 (AP2)	06:47 19:51 40	18:19 (Pr3b) 18:59 (Pr3b) 20:53	05:31 20:06 (Pr25) 21:50	19:37 (Pr25) 19:37 (Pr25) 21:50	04:34 21:50 50	19:43 (PrRR3) 20:33 (PrRR3) 20:33 (PrRR3)
2	08:48 15:48 16:46	08:10 16:46	07:06 17:48	06:44 19:53 41	18:18 (Pr3b) 18:59 (Pr3b) 20:55	05:28 20:06 (Pr25) 21:51	19:37 (Pr25) 20:06 (Pr25) 21:51	04:33 21:51 50	19:43 (PrRR3) 20:33 (PrRR3) 20:33 (PrRR3)
3	08:48 15:49 16:48	08:09 16:48	07:03 17:50	06:41 19:55 41	18:17 (Pr3b) 18:58 (Pr3b) 20:57	05:26 20:06 (Pr25) 21:53	19:37 (Pr25) 20:06 (Pr25) 21:53	04:32 21:53 51	19:43 (PrRR3) 20:34 (PrRR3) 20:34 (PrRR3)
4	08:47 15:50 16:50	08:07 16:50	07:01 17:52	06:39 19:57 41	18:18 (Pr3b) 18:59 (Pr3b) 20:59	05:24 20:05 (Pr25) 21:54	19:37 (Pr25) 20:05 (Pr25) 21:54	04:31 21:54 51	19:44 (PrRR3) 20:35 (PrRR3) 20:35 (PrRR3)
5	08:47 15:52 16:52	08:04 16:52	06:58 17:54	06:36 19:59 41	18:17 (Pr3b) 18:58 (Pr3b) 21:01	05:21 20:05 (Pr25) 21:55	19:38 (Pr25) 20:05 (Pr25) 21:55	04:30 21:55 51	19:44 (PrRR3) 20:35 (PrRR3) 20:35 (PrRR3)
6	08:46 15:53 16:54	08:02 16:54	06:56 17:56	06:33 20:01 42	18:17 (Pr3b) 18:59 (Pr3b) 21:03	05:19 20:04 (Pr25) 21:57	19:38 (Pr25) 20:04 (Pr25) 21:57	04:29 21:57 51	19:44 (PrRR3) 20:35 (PrRR3) 20:35 (PrRR3)
7	08:46 15:54 16:57	08:00 16:57	06:53 17:58	06:31 20:03 41	18:17 (Pr3b) 18:58 (Pr3b) 21:05	05:17 19:39 (Pr25) 21:58	19:39 (Pr25) 20:04 (Pr25) 21:58	04:28 21:58 51	19:44 (PrRR3) 20:35 (PrRR3) 20:35 (PrRR3)
8	08:45 15:56 16:59	07:58 16:59	06:51 18:01	06:28 20:05 41	18:16 (Pr3b) 18:57 (Pr3b) 21:07	05:15 20:03 (Pr25) 21:59	19:39 (Pr25) 20:03 (Pr25) 21:59	04:27 21:59 51	19:44 (PrRR3) 20:35 (PrRR3) 20:35 (PrRR3)
9	08:44 15:58 17:01	07:56 17:01	06:48 18:03	06:25 20:07 40	18:17 (Pr3b) 18:57 (Pr3b) 21:09	05:13 20:02 (Pr25) 22:00	19:40 (Pr25) 20:02 (Pr25) 22:00	04:27 22:00 51	19:44 (PrRR3) 20:35 (PrRR3) 20:35 (PrRR3)
10	08:44 15:59 17:03	07:54 17:03	06:45 18:05	06:23 20:09 39	18:17 (Pr3b) 18:56 (Pr3b) 21:11	05:11 20:01 (Pr25) 22:01	19:41 (Pr25) 20:01 (Pr25) 22:01	04:26 22:01 52	19:44 (PrRR3) 20:36 (PrRR3) 20:36 (PrRR3)
11	08:43 16:01 17:06	07:52 17:06	06:43 18:07	06:20 20:12 37	18:18 (Pr3b) 18:55 (Pr3b) 21:13	05:09 20:12 (PrRR3) 22:02	19:42 (Pr25) 20:12 (PrRR3) 22:02	04:26 22:02 51	19:45 (PrRR3) 20:36 (PrRR3) 20:36 (PrRR3)
12	08:42 16:03 17:08	07:49 17:08	06:40 18:09	06:18 20:14 36	18:18 (Pr3b) 18:54 (Pr3b) 21:15	05:07 20:16 (PrRR3) 22:03	19:44 (Pr25) 20:16 (PrRR3) 22:03	04:25 22:03 51	19:45 (PrRR3) 20:36 (PrRR3) 20:36 (PrRR3)
13	08:41 16:04 17:10	07:47 17:10	06:37 18:11	06:15 20:16 34	18:19 (Pr3b) 18:53 (Pr3b) 21:17	05:05 20:17 (PrRR3) 22:03	19:47 (Pr25) 20:19 (PrRR3) 22:03	04:25 22:03 52	19:45 (PrRR3) 20:37 (PrRR3) 20:37 (PrRR3)
14	08:40 16:06 17:12	07:45 17:12	06:35 18:13	06:12 20:18 32	18:19 (Pr3b) 18:51 (Pr3b) 21:19	05:03 20:21 (PrRR3) 22:04	19:54 (PrRR3) 20:21 (PrRR3) 22:04	04:24 22:04 52	19:45 (PrRR3) 20:37 (PrRR3) 20:37 (PrRR3)
15	08:39 16:08 17:15	07:43 17:15	06:32 18:15	06:10 20:20 29	18:21 (Pr3b) 18:50 (Pr3b) 21:21	05:01 20:22 (PrRR3) 22:05	19:52 (PrRR3) 20:22 (PrRR3) 22:05	04:24 22:05 51	19:46 (PrRR3) 20:37 (PrRR3) 20:37 (PrRR3)
16	08:38 16:10 17:17	07:40 17:17	06:29 18:18	06:07 20:22 26	18:22 (Pr3b) 18:48 (Pr3b) 21:23	04:59 20:23 (PrRR3) 22:05	19:51 (PrRR3) 20:23 (PrRR3) 22:05	04:24 22:05 52	19:45 (PrRR3) 20:37 (PrRR3) 20:37 (PrRR3)
17	08:36 16:12 17:19	07:38 17:19	06:27 18:20	06:05 20:24 22	18:24 (Pr3b) 18:46 (Pr3b) 21:25	04:57 20:25 (PrRR3) 22:06	19:50 (PrRR3) 20:25 (PrRR3) 22:06	04:24 22:06 52	19:45 (PrRR3) 20:37 (PrRR3) 20:37 (PrRR3)
18	08:35 16:14 17:21	07:36 17:21	06:24 18:22	06:02 20:26 17	18:26 (Pr3b) 18:43 (Pr3b) 21:27	04:55 20:25 (PrRR3) 22:06	19:49 (PrRR3) 20:25 (PrRR3) 22:06	04:23 22:06 51	19:46 (PrRR3) 20:37 (PrRR3) 20:37 (PrRR3)
19	08:34 16:16 17:24	07:33 17:24	06:21 18:24	06:00 20:28 7	18:31 (Pr3b) 18:38 (Pr3b) 21:29	04:53 20:26 (PrRR3) 22:07	19:47 (PrRR3) 20:26 (PrRR3) 22:07	04:23 22:07 51	19:46 (PrRR3) 20:37 (PrRR3) 20:37 (PrRR3)
20	08:32 16:18 17:26	07:31 17:26	06:19 18:26	05:57 20:30 10	20:01 (Pr25) 19:48 (Pr25) 21:32	04:52 20:27 (PrRR3) 22:07	19:47 (PrRR3) 20:27 (PrRR3) 22:07	04:23 22:07 52	19:47 (PrRR3) 20:39 (PrRR3) 20:39 (PrRR3)
21	08:31 16:20 17:28	07:28 17:28	06:16 18:28	05:55 20:32 15	19:48 (Pr25) 19:58 (Pr25) 21:34	04:50 20:28 (PrRR3) 22:07	19:46 (PrRR3) 20:28 (PrRR3) 22:07	04:24 22:07 52	19:47 (PrRR3) 20:39 (PrRR3) 20:39 (PrRR3)
22	08:30 16:22 17:30	07:26 17:30	06:13 18:30	05:52 20:34 19	19:46 (Pr25) 20:01 (Pr25) 21:36	04:48 20:29 (PrRR3) 22:08	19:46 (PrRR3) 20:29 (PrRR3) 22:08	04:24 22:08 52	19:47 (PrRR3) 20:39 (PrRR3) 20:39 (PrRR3)
23	08:28 16:24 17:32	07:24 17:32	06:11 18:32	05:50 20:37 19	19:43 (Pr25) 20:02 (Pr25) 21:38	04:46 20:30 (PrRR3) 22:08	19:46 (PrRR3) 20:30 (PrRR3) 22:08	04:24 22:08 51	19:47 (PrRR3) 20:38 (PrRR3) 20:38 (PrRR3)
24	08:26 16:26 17:35	07:21 17:35	06:08 18:34	05:47 20:39 22	19:42 (Pr25) 20:04 (Pr25) 21:40	04:45 20:30 (PrRR3) 22:08	19:45 (PrRR3) 20:30 (PrRR3) 22:08	04:24 22:08 51	19:48 (PrRR3) 20:39 (PrRR3) 20:39 (PrRR3)
25	08:25 16:28 17:37	07:19 17:37	06:05 18:36	05:45 20:41 24	19:41 (Pr25) 20:05 (Pr25) 21:41	04:43 20:31 (PrRR3) 22:08	19:45 (PrRR3) 20:31 (PrRR3) 22:08	04:25 22:08 52	19:47 (PrRR3) 20:39 (PrRR3) 20:39 (PrRR3)
26	08:23 16:30 17:39	07:16 17:39	06:03 18:38	05:42 20:43 26	19:39 (Pr25) 20:05 (Pr25) 21:41	04:42 20:32 (PrRR3) 22:08	19:45 (PrRR3) 20:32 (PrRR3) 22:08	04:25 22:08 52	19:47 (PrRR3) 20:39 (PrRR3) 20:39 (PrRR3)
27	08:21 16:32 17:41	07:14 17:41	06:00 18:40	05:40 20:45 26	19:39 (Pr25) 20:05 (Pr25) 21:43	04:40 20:32 (PrRR3) 22:08	19:45 (PrRR3) 20:32 (PrRR3) 22:08	04:26 22:08 52	19:48 (PrRR3) 20:40 (PrRR3) 20:40 (PrRR3)
28	08:20 16:35 17:43	07:11 17:43	05:57 18:43	05:38 20:47 33	19:38 (Pr25) 20:06 (Pr25) 21:44	04:39 20:31 (PrRR3) 22:08	19:44 (PrRR3) 20:31 (PrRR3) 22:08	04:26 22:08 51	19:49 (PrRR3) 20:40 (PrRR3) 20:40 (PrRR3)
29	08:18 16:37 17:45	07:08 17:45	05:55 18:45	05:35 20:49 35	19:38 (Pr25) 20:06 (Pr25) 21:46	04:38 20:32 (PrRR3) 22:07	19:44 (PrRR3) 20:32 (PrRR3) 22:07	04:27 22:07 52	19:48 (PrRR3) 20:40 (PrRR3) 20:40 (PrRR3)
30	08:16 16:39 17:47	07:06 17:47	05:52 18:47	05:33 20:51 37	19:37 (Pr25) 20:06 (Pr25) 21:47	04:36 20:31 (PrRR3) 22:07	19:44 (PrRR3) 20:32 (PrRR3) 22:07	04:27 22:07 51	19:49 (PrRR3) 20:40 (PrRR3) 20:40 (PrRR3)
31	08:14 16:41	07:03 17:49	05:49 18:50 (Pr3b)	05:31 20:53 38	19:36 (Pr25) 20:05 (Pr25)	04:35 20:30 (PrRR3)	19:44 (PrRR3) 20:30 (PrRR3)	04:27 22:07	19:49 (PrRR3) 20:40 (PrRR3)
Potential sun hours	236	266	366	426	507	528			
Total, worst case		249	251	874	1092	1540			
Sun reduction		0,23	0,39	0,44	0,56	0,57			
Oper. time red.		1,00	1,00	1,00	1,00	1,00			
Wind dir. red.		1,00	1,00	1,00	1,00	1,00			
Total reduction		0,23	0,39	0,44	0,56	0,57			
Total, real		56	98	386	614	875			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Sporanu majas - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (538)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running
 with worst case wind direction.

	July			August			September			October			November		December	
1	04:28		19:49 (PrRR3)	05:14		19:53 (Pr25)	06:15		18:17 (Pr3b)	07:15			07:20		08:22	
	22:06	52	20:41 (PrRR3)	21:25	31	20:25 (PrRR3)	20:12	37	18:54 (Pr3b)	18:51			16:34		15:43	
2	04:29		19:49 (PrRR3)	05:16		19:52 (Pr25)	06:17		18:16 (Pr3b)	07:17			07:22		08:23	
	22:06	51	20:40 (PrRR3)	21:23	23	20:20 (PrRR3)	20:09	39	18:55 (Pr3b)	18:49			16:32		15:42	
3	04:30		19:49 (PrRR3)	05:18		19:51 (Pr25)	06:19		18:15 (Pr3b)	07:19			07:25		08:25	
	22:05	51	20:40 (PrRR3)	21:21	20	20:11 (Pr25)	20:07	40	18:55 (Pr3b)	18:46			16:30		15:41	
4	04:31		19:49 (PrRR3)	05:20		19:50 (Pr25)	06:21		18:14 (Pr3b)	07:21			07:27		08:27	
	22:05	52	20:41 (PrRR3)	21:19	23	20:13 (Pr25)	20:04	41	18:55 (Pr3b)	18:44			16:27		15:41	
5	04:32		19:50 (PrRR3)	05:21		19:49 (Pr25)	06:23		18:13 (Pr3b)	07:23			07:29		08:28	
	22:04	51	20:41 (PrRR3)	21:17	24	20:13 (Pr25)	20:01	41	18:54 (Pr3b)	18:41			16:25		15:40	
6	04:33		19:50 (PrRR3)	05:23		19:48 (Pr25)	06:25		18:12 (Pr3b)	07:25			07:31		08:30	
	22:03	51	20:41 (PrRR3)	21:15	25	20:13 (Pr25)	19:59	42	18:54 (Pr3b)	18:38			16:23		15:39	
7	04:34		19:50 (PrRR3)	05:25		19:47 (Pr25)	06:27		18:12 (Pr3b)	07:27			07:33		08:31	
	22:03	51	20:41 (PrRR3)	21:13	27	20:14 (Pr25)	19:56	41	18:53 (Pr3b)	18:36			16:21		15:38	
8	04:35		19:50 (PrRR3)	05:27		19:47 (Pr25)	06:29		18:12 (Pr3b)	07:29			07:35		08:33	
	22:02	51	20:41 (PrRR3)	21:11	27	20:14 (Pr25)	19:53	41	18:53 (Pr3b)	18:33			16:19		15:38	
9	04:36		19:51 (PrRR3)	05:29		19:47 (Pr25)	06:31		18:12 (Pr3b)	07:31			07:38		08:34	
	22:01	50	20:41 (PrRR3)	21:08	28	20:15 (Pr25)	19:51	41	18:53 (Pr3b)	18:30			16:17		15:37	
10	04:38		19:51 (PrRR3)	05:31		19:46 (Pr25)	06:33		18:12 (Pr3b)	07:34			07:40		08:35	
	22:00	50	20:41 (PrRR3)	21:06	29	20:15 (Pr25)	19:48	40	18:52 (Pr3b)	18:28			16:15		15:37	
11	04:39		19:52 (PrRR3)	05:33		19:45 (Pr25)	06:35		18:12 (Pr3b)	07:36			07:42		08:37	
	21:59	50	20:42 (PrRR3)	21:04	29	20:14 (Pr25)	19:45	39	18:51 (Pr3b)	18:25			16:13		15:37	
12	04:40		19:52 (PrRR3)	05:35		19:45 (Pr25)	06:37		18:12 (Pr3b)	07:38		17:13 (AP2)	07:44		08:38	
	21:58	49	20:41 (PrRR3)	21:02	29	20:14 (Pr25)	19:43	38	18:50 (Pr3b)	18:23	2	17:15 (AP2)	16:11		15:36	
13	04:42		19:52 (PrRR3)	05:37		19:45 (Pr25)	06:39		18:12 (Pr3b)	07:40		17:08 (AP2)	07:46		08:39	
	21:57	49	20:41 (PrRR3)	20:59	29	20:14 (Pr25)	19:40	37	18:49 (Pr3b)	18:20	11	17:19 (AP2)	16:09		15:36	
14	04:43		19:52 (PrRR3)	05:39		19:46 (Pr25)	06:41		18:13 (Pr3b)	07:42		17:06 (AP2)	07:48		08:40	
	21:55	49	20:41 (PrRR3)	20:57	28	20:14 (Pr25)	19:37	35	18:48 (Pr3b)	18:17	15	17:21 (AP2)	16:07		15:36	
15	04:44		19:53 (PrRR3)	05:41		19:46 (Pr25)	06:43		18:14 (Pr3b)	07:44		17:04 (AP2)	07:50		08:41	
	21:54	48	20:41 (PrRR3)	20:54	27	20:13 (Pr25)	19:34	33	18:47 (Pr3b)	18:15	18	17:22 (AP2)	16:06		15:36	
16	04:46		19:53 (PrRR3)	05:43		19:46 (Pr25)	06:45		18:15 (Pr3b)	07:46		17:03 (AP2)	07:53		08:42	
	21:53	48	20:41 (PrRR3)	20:52	27	20:13 (Pr25)	19:32	30	18:45 (Pr3b)	18:12	20	17:23 (AP2)	16:04		15:36	
17	04:47		19:53 (PrRR3)	05:45		19:47 (Pr25)	06:47		18:16 (Pr3b)	07:48		17:02 (AP2)	07:55		08:43	
	21:51	47	20:40 (PrRR3)	20:50	25	20:12 (Pr25)	19:29	27	18:43 (Pr3b)	18:10	22	17:24 (AP2)	16:02		15:36	
18	04:49		19:54 (PrRR3)	05:47		19:47 (Pr25)	06:49		18:18 (Pr3b)	07:50		17:02 (AP2)	07:57		08:44	
	21:50	46	20:40 (PrRR3)	20:47	23	20:10 (Pr25)	19:26	23	18:41 (Pr3b)	18:07	22	17:24 (AP2)	16:01		15:36	
19	04:51		19:54 (PrRR3)	05:49		19:48 (Pr25)	06:51		18:19 (Pr3b)	07:52		17:01 (AP2)	07:59		08:45	
	21:49	46	20:40 (PrRR3)	20:45	21	20:09 (Pr25)	19:24	18	18:37 (Pr3b)	18:05	22	17:23 (AP2)	15:59		15:36	
20	04:52		19:55 (PrRR3)	05:51		19:49 (Pr25)	06:53		18:23 (Pr3b)	07:54		17:02 (AP2)	08:01		08:45	
	21:47	45	20:40 (PrRR3)	20:42	19	20:08 (Pr25)	19:21	9	18:32 (Pr3b)	18:02	22	17:24 (AP2)	15:57		15:37	
21	04:54		19:55 (PrRR3)	05:53		19:51 (Pr25)	06:55			07:57		17:01 (AP2)	08:03		08:46	
	21:45	44	20:39 (PrRR3)	20:40	15	20:06 (Pr25)	19:18			18:00	22	17:23 (AP2)	15:56		15:37	
22	04:56		19:57 (PrRR3)	05:55		19:53 (Pr25)	06:57			07:59		17:01 (AP2)	08:05		08:47	
	21:44	42	20:39 (PrRR3)	20:37	9	20:02 (Pr25)	19:16			17:57	21	17:22 (AP2)	15:54		15:38	
23	04:57		19:57 (PrRR3)	05:57			06:59			08:01		17:01 (AP2)	08:07		08:47	
	21:42	40	20:37 (PrRR3)	20:35			19:13			17:55	20	17:21 (AP2)	15:53		15:38	
24	04:59		19:58 (PrRR3)	05:59		18:34 (Pr3b)	07:01			08:03		17:03 (AP2)	08:09		08:48	
	21:40	39	20:37 (PrRR3)	20:32	9	18:43 (Pr3b)	19:10			17:53	17	17:20 (AP2)	15:51		15:39	
25	05:01		19:59 (PrRR3)	06:01		18:30 (Pr3b)	07:03			07:05		16:04 (AP2)	08:11		08:48	
	21:39	38	20:37 (PrRR3)	20:30	17	18:47 (Pr3b)	19:08			16:50	13	16:17 (AP2)	15:50		15:39	
26	05:03		19:59 (PrRR3)	06:03		18:26 (Pr3b)	07:05			07:07		16:05 (AP2)	08:13		08:48	
	21:37	36	20:35 (PrRR3)	20:27	22	18:48 (Pr3b)	19:05			16:48	9	16:14 (AP2)	15:49		15:40	
27	05:04		20:01 (PrRR3)	06:05		18:24 (Pr3b)	07:07			07:09		16:09 (AP2)	08:15		08:48	
	21:35	34	20:35 (PrRR3)	20:25	26	18:50 (Pr3b)	19:02			16:45	4	16:13 (AP2)	15:48		15:41	
28	05:06		20:02 (PrRR3)	06:07		18:22 (Pr3b)	07:09			07:12			08:16		08:48	
	21:33	32	20:34 (PrRR3)	20:22	29	18:51 (Pr3b)	19:00			16:43			15:46		15:42	
29	05:08		20:03 (PrRR3)	06:09		18:20 (Pr3b)	07:11			07:14			08:18		08:49	
	21:31	29	20:32 (PrRR3)	20:20	32	18:52 (Pr3b)	18:57			16:41			15:45		15:43	
30	05:10		20:00 (Pr25)	06:11		18:19 (Pr3b)	07:13			07:16			08:20		08:49	
	21:29	28	20:30 (PrRR3)	20:17	34	18:53 (Pr3b)	18:54			16:39			15:44		15:44	
31	05:12		19:56 (Pr25)	06:13		18:18 (Pr3b)				07:18			08:48			
	21:27	32	20:28 (PrRR3)	20:14	36	18:54 (Pr3b)				16:36			15:45			
Potential sun hours	529			469			384			324			248		217	
Total, worst case		1381			743			692			260					
Sun reduction		0,47			0,52			0,43			0,29					
Oper. time red.		1,00			1,00			1,00			1,00					
Wind dir. red.		1,00			1,00			1,00			1,00					
Total reduction		0,47			0,52			0,43			0,29					
Total, real		651			388			299			75					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Spridiš i 3 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (575)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:07	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:55	06:56 17:56	06:34 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:24 21:15	06:25 20:01	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:26 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:28 21:11	06:29 20:01	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	04:27 22:00	04:37 22:01	05:29 21:08	06:31 20:01	07:31 18:30	07:38 16:17	08:34 15:38
10	08:44 15:59	07:54 17:04	06:45 18:05	06:23 20:10	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 20:01	07:34 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 20:01	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:03	04:40 21:58	05:35 21:02	06:37 20:01	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:57	05:37 20:59	06:39 20:01	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:13	06:35 18:13	06:13 20:18	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 20:01	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:54	06:43 20:01	07:44 18:15	07:50 16:06	08:41 15:36
16	08:38 16:10	07:40 17:17	06:29 18:18	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 20:01	07:46 18:12	07:53 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 20:01	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 20:01	07:50 18:07	07:57 16:01	08:44 15:36
19	08:34 16:16	07:33 17:24	06:21 18:24	06:00 20:28	04:53 21:29	04:24 22:07	04:51 21:48	05:49 20:45	06:51 20:01	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:30	04:24 22:07	04:52 21:47	05:51 20:42	06:53 20:01	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 20:01	07:57 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 20:01	07:59 17:58	08:05 15:54	08:47 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:37	04:47 21:36	04:24 22:08	04:58 21:42	05:57 20:35	06:59 20:01	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:37	04:25 22:08	04:59 21:40	05:59 20:32	07:01 20:01	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 20:01	08:05 17:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 20:01	08:07 17:48	08:13 15:49	08:48 15:40
27	08:21 16:33	07:14 17:41	06:00 18:40	05:40 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:05 20:25	07:07 20:01	08:09 17:46	08:15 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 20:01	08:12 17:43	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 18:57	08:14 17:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 17:39	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Spulgas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (427)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:14 21:26	06:16 20:12	07:15 18:52	07:20 16:35	08:22 15:44
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:16 21:23	06:18 20:09	07:17 18:49	07:23 16:32	08:23 15:43
3	08:48 15:49	08:09 16:48	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:18 21:21	06:20 20:07	07:19 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:53	06:59 17:55	06:36 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:01	07:24 18:41	07:29 16:26	08:28 15:40
6	08:46 15:54	08:03 16:55	06:56 17:57	06:34 20:01	05:20 21:03	04:30 21:56	04:34 22:03	05:24 21:15	06:26 20:01	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03	05:18 21:05	04:29 21:58	04:35 22:03	05:26 21:13	06:28 20:01	07:28 18:36	07:33 16:22	08:31 15:39
8	08:45 15:57	07:58 16:59	06:51 18:01	06:29 20:06	05:16 21:07	04:28 21:59	04:36 22:02	05:28 21:11	06:30 20:04	07:30 18:33	07:36 16:20	08:33 15:39
9	08:44 15:58	07:56 17:02	06:48 18:03	06:26 20:08	05:13 21:09	04:27 22:00	04:37 22:01	05:30 21:08	06:32 20:01	07:32 18:31	07:38 16:18	08:34 15:38
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:11 21:11	04:27 22:01	04:38 22:00	05:32 21:06	06:34 20:04	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:13	04:26 22:02	04:40 21:59	05:34 21:04	06:36 20:01	07:36 18:26	07:42 16:14	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:26 22:03	04:41 21:58	05:36 21:02	06:38 20:01	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 17:11	06:38 18:12	06:16 20:16	05:05 21:17	04:25 22:03	04:42 21:57	05:38 20:59	06:40 20:01	07:40 18:20	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 20:01	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:25 22:05	04:45 21:54	05:42 20:55	06:43 20:01	07:44 18:15	07:51 16:06	08:41 15:37
16	08:38 16:11	07:41 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:05	04:47 21:53	05:44 20:52	06:45 20:01	07:46 18:13	07:53 16:04	08:42 15:37
17	08:36 16:12	07:38 17:20	06:27 18:20	06:05 20:24	04:58 21:25	04:24 22:06	04:48 21:51	05:46 20:50	06:47 20:01	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:14	07:36 17:22	06:24 18:22	06:03 20:26	04:56 21:27	04:24 22:06	04:50 21:50	05:48 20:47	06:49 20:01	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:49	05:50 20:45	06:51 20:01	07:53 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:58 20:30	04:52 21:31	04:24 22:07	04:53 21:47	05:52 20:42	06:53 20:01	07:55 18:03	08:01 15:58	08:45 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:33	04:50 21:32	04:24 22:07	04:55 21:45	05:54 20:40	06:55 20:01	07:57 18:00	08:03 15:56	08:46 15:38
22	08:30 16:22	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:24 22:08	04:56 21:44	05:56 20:38	06:57 20:01	07:59 17:58	08:05 15:55	08:47 15:38
23	08:28 16:25	07:24 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:25 22:08	04:58 21:42	05:58 20:35	06:59 20:01	08:01 17:55	08:07 15:53	08:47 15:39
24	08:26 16:27	07:21 17:35	06:08 18:35	05:48 20:39	04:46 21:38	04:25 22:08	05:00 21:40	06:00 20:33	07:01 20:01	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:29	07:19 17:37	06:06 18:37	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:02 20:30	07:03 20:01	08:05 17:51	08:11 15:51	08:48 15:40
26	08:23 16:31	07:16 17:39	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:03 21:37	06:04 20:27	07:05 20:01	08:07 17:48	08:13 15:49	08:48 15:41
27	08:22 16:33	07:14 17:42	06:00 18:41	05:41 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:06 20:25	07:07 20:01	08:09 17:46	08:15 15:48	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 20:01	08:12 17:44	08:16 15:47	08:48 15:43
29	08:18 16:37		06:55 19:45	05:36 20:49	04:38 21:46	04:28 22:07	05:09 21:31	06:10 20:20	07:11 18:57	08:14 17:41	08:18 15:46	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:11 21:29	06:12 20:17	07:13 18:55	08:16 17:39	08:20 15:45	08:48 15:44
31	08:14 16:42		06:50 19:49		04:36 21:49		05:12 21:28	06:14 20:15		07:18 16:37		08:48 15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Stikani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (499)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:15	06:17	07:17	07:22	08:23
	15:47	16:45	17:47	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:05	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:02	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:00	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:18	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Sturīš i (kad. apz. 76740020069001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (475) Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:07	21:26	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:24
	15:47	16:45	17:48	19:53	20:55	21:52	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:09	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:06	21:21	20:06	18:46	16:29	15:41
4	08:47	08:07	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:57	22:04	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:36
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:02	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:38	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:53	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:07	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:31	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:08	21:46	20:40	19:18	18:00	15:56	15:37
22	08:30	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:24	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:48
	16:26	17:34	18:34	20:39	21:38	22:08	21:41	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:15	08:48
	16:32	17:41	18:40	20:45	21:43	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:49
	16:34	17:43	18:42	20:47	21:44	22:08	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:49
	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:28	20:14		16:36		15:45
Potential sun hours	235	266	366	426	508	528	529	469	384	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Sturīš i (kad. apz. 76740020069009) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (604)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:07	21:26	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:24
	15:47	16:45	17:48	19:53	20:55	21:52	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:09	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:06	21:21	20:06	18:46	16:29	15:41
4	08:47	08:07	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:57	22:04	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:36
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:02	19:43	18:23	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:38	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:53	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:07	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:31	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:08	21:45	20:40	19:18	18:00	15:56	15:37
22	08:30	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:24	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:48
	16:26	17:34	18:34	20:39	21:38	22:08	21:41	20:32	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:15	08:48
	16:32	17:41	18:40	20:45	21:43	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:49
	16:34	17:43	18:42	20:47	21:44	22:08	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:49
	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:28	20:14		16:36		15:45
Potential sun hours	235	266	366	426	508	528	529	469	384	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Tebeci - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (463)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January		February		March		April	May	June
1	08:49	11:15 (JU1)	08:13	13:56 (Pr11)	07:09	08:04 (Pr25)	06:47	05:31	04:34
	15:46	61 14:58 (Pr12)	16:43	51 15:08 (Pr12)	17:46	59 16:48 (O6)	19:51	20:53	21:50
2	08:48	11:16 (JU1)	08:11	13:58 (Pr11)	07:06	08:05 (Pr25)	06:44	05:28	04:33
	15:48	61 14:59 (Pr12)	16:46	41 15:05 (Pr12)	17:48	56 16:47 (O6)	19:53	20:55	21:52
3	08:48	11:18 (JU1)	08:09	13:59 (Pr11)	07:04	08:07 (Pr25)	06:42	05:26	04:32
	15:49	59 15:00 (Pr12)	16:48	32 14:31 (Pr11)	17:50	54 16:48 (O6)	19:55	20:57	21:53
4	08:48	13:47 (Pr11)	08:07	14:01 (Pr11)	07:01	08:08 (Pr25)	06:39	05:24	04:31
	15:50	55 15:01 (Pr12)	16:50	30 14:31 (Pr11)	17:52	49 16:47 (O6)	19:57	20:59	21:54
5	08:47	13:47 (Pr11)	08:05	14:02 (Pr11)	06:58	08:11 (Pr25)	06:36	05:22	04:30
	15:52	56 15:02 (Pr12)	16:52	27 14:29 (Pr11)	17:54	41 16:46 (O6)	19:59	21:02	21:56
6	08:47	13:48 (Pr11)	08:03	14:04 (Pr11)	06:56	16:13 (O6)	06:34	05:19	04:29
	15:53	57 15:03 (Pr12)	16:55	23 14:27 (Pr11)	17:56	33 16:46 (O6)	20:01	21:04	21:57
7	08:46	13:48 (Pr11)	08:01	14:07 (Pr11)	06:53	16:14 (O6)	06:31	05:17	04:28
	15:55	59 15:04 (Pr12)	16:57	18 14:25 (Pr11)	17:59	30 16:44 (O6)	20:03	21:06	21:58
8	08:45	13:48 (Pr11)	07:58	14:12 (Pr11)	06:51	16:14 (O6)	06:28	05:15	04:28
	15:56	61 15:05 (Pr12)	16:59	9 14:21 (Pr11)	18:01	29 16:43 (O6)	20:06	21:08	21:59
9	08:45	13:48 (Pr11)	07:56		06:48	16:16 (O6)	06:26	05:13	04:27
	15:58	63 15:06 (Pr12)	17:01		18:03	26 16:42 (O6)	20:08	21:10	22:00
10	08:44	13:48 (Pr11)	07:54		06:45	16:17 (O6)	06:23	05:11	04:26
	15:59	65 15:07 (Pr12)	17:04		18:05	22 16:39 (O6)	20:10	21:12	22:01
11	08:43	13:48 (Pr11)	07:52		06:43	16:19 (O6)	06:20	05:09	04:26
	16:01	65 15:07 (Pr12)	17:06		18:07	17 16:36 (O6)	20:12	21:14	22:02
12	08:42	13:48 (Pr11)	07:50		06:40	16:24 (O6)	06:18	05:07	04:25
	16:03	67 15:08 (Pr12)	17:08		18:09	9 16:33 (O6)	20:14	21:16	22:03
13	08:41	13:48 (Pr11)	07:47		06:38		06:15	05:05	04:25
	16:05	68 15:09 (Pr12)	17:10		18:11		20:16	21:18	22:04
14	08:40	13:49 (Pr11)	07:45		06:35		06:13	05:03	04:24
	16:06	69 15:10 (Pr12)	17:13		18:13		20:18	21:19	22:04
15	08:39	13:49 (Pr11)	07:43		06:32		06:10	05:01	04:24
	16:08	69 15:10 (Pr12)	17:15		18:16		20:20	21:21	22:05
16	08:38	13:49 (Pr11)	07:41	08:13 (Pr25)	06:30		06:07	04:59	04:24
	16:10	71 15:11 (Pr12)	17:17	8 08:21 (Pr25)	18:18		20:22	21:23	22:06
17	08:37	13:49 (Pr11)	07:38	08:10 (Pr25)	06:27		06:05	04:57	04:24
	16:12	71 15:11 (Pr12)	17:19	20 16:34 (O6)	18:20		20:24	21:25	22:06
18	08:35	13:50 (Pr11)	07:36	08:08 (Pr25)	06:24		06:02	04:55	04:24
	16:14	71 15:12 (Pr12)	17:21	33 16:38 (O6)	18:22		20:26	21:27	22:07
19	08:34	13:49 (Pr11)	07:33	08:07 (Pr25)	06:22		06:00	04:53	04:23
	16:16	73 15:12 (Pr12)	17:24	41 16:41 (O6)	18:24		20:28	21:29	22:07
20	08:33	13:49 (Pr11)	07:31	08:05 (Pr25)	06:19		05:57	04:52	04:24
	16:18	73 15:12 (Pr12)	17:26	47 16:43 (O6)	18:26		20:30	21:31	22:07
21	08:31	13:50 (Pr11)	07:29	08:05 (Pr25)	06:16		05:55	04:50	04:24
	16:20	73 15:13 (Pr12)	17:28	51 16:45 (O6)	18:28		20:33	21:33	22:08
22	08:30	13:50 (Pr11)	07:26	08:04 (Pr25)	06:14		05:52	04:48	04:24
	16:22	72 15:13 (Pr12)	17:30	54 16:45 (O6)	18:30		20:35	21:34	22:08
23	08:28	13:51 (Pr11)	07:24	08:04 (Pr25)	06:11		05:50	04:47	04:24
	16:24	71 15:13 (Pr12)	17:33	57 16:47 (O6)	18:32		20:37	21:36	22:08
24	08:27	13:51 (Pr11)	07:21	08:03 (Pr25)	06:08		05:47	04:45	04:24
	16:26	71 15:13 (Pr12)	17:35	60 16:47 (O6)	18:34		20:39	21:38	22:08
25	08:25	13:51 (Pr11)	07:19	08:03 (Pr25)	06:06		05:45	04:43	04:25
	16:28	70 15:13 (Pr12)	17:37	60 16:47 (O6)	18:36		20:41	21:39	22:08
26	08:23	13:53 (Pr11)	07:16	08:03 (Pr25)	06:03		05:43	04:42	04:25
	16:30	68 15:13 (Pr12)	17:39	62 16:48 (O6)	18:39		20:43	21:41	22:08
27	08:22	13:53 (Pr11)	07:14	08:03 (Pr25)	06:00		05:40	04:41	04:26
	16:33	67 15:13 (Pr12)	17:41	62 16:48 (O6)	18:41		20:45	21:43	22:08
28	08:20	13:54 (Pr11)	07:11	08:04 (Pr25)	05:58		05:38	04:39	04:26
	16:35	65 15:13 (Pr12)	17:43	60 16:48 (O6)	18:43		20:47	21:44	22:08
29	08:18	13:54 (Pr11)			06:55		05:35	04:38	04:27
	16:37	63 15:12 (Pr12)			19:45		20:49	21:46	22:07
30	08:16	13:54 (Pr11)			06:52		05:33	04:37	04:28
	16:39	59 15:10 (Pr12)			19:47		20:51	21:47	22:07
31	08:15	13:55 (Pr11)			06:49			04:35	
	16:41	55 15:09 (Pr12)			19:49			21:49	
Potential sun hours	236		266		366		426	507	528
Total, worst case	2028		846		425				
Sun reduction	0,13		0,23		0,39				
Oper. time red.	1,00		1,00		1,00				
Wind dir. red.	1,00		1,00		1,00				
Total reduction	0,13		0,23		0,39				
Total, real	272		190		166				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Tebeci - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (463)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October		November		December
1	04:28 22:07	05:14 21:26	06:15 20:12	07:15 18:52		07:20 16:34		08:22 15:43 66
2	04:29 22:06	05:16 21:24	06:17 20:09	07:17 18:49	14	17:00 (O6) 17:14 (O6)		08:24 15:42 64
3	04:30 22:06	05:18 21:22	06:19 20:07	07:19 18:46	19	16:57 (O6) 17:16 (O6)	13:40 (Pr11) 13:52 (Pr11)	08:25 15:41 63
4	04:31 22:05	05:20 21:20	06:21 20:04	07:21 18:44	24	16:54 (O6) 17:18 (O6)	08:27 13:55 (Pr11)	13:32 (Pr11) 15:41 61
5	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	27	16:52 (O6) 17:19 (O6)	13:33 (Pr11) 13:57 (Pr11)	08:29 15:40 60
6	04:33 22:04	05:24 21:15	06:25 19:59	07:25 18:38	30	16:50 (O6) 17:20 (O6)	08:30 13:59 (Pr11)	13:33 (Pr11) 15:39 58
7	04:34 22:03	05:26 21:13	06:27 19:56	07:28 18:36	31	16:49 (O6) 17:20 (O6)	13:30 (Pr11) 14:01 (Pr11)	08:32 15:39 56
8	04:35 22:02	05:27 21:11	06:29 19:53	07:30 18:33	33	16:48 (O6) 17:21 (O6)	08:33 14:02 (Pr11)	13:35 (Pr11) 15:38 55
9	04:36 22:01	05:29 21:09	06:31 19:51	07:32 18:31	45	08:45 (Pr25) 17:22 (O6)	07:38 16:17	13:28 (Pr11) 15:38 59
10	04:38 22:00	05:31 21:06	06:33 19:48	07:34 18:28	51	08:42 (Pr25) 17:22 (O6)	07:40 16:15	13:27 (Pr11) 15:37 60
11	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	55	08:40 (Pr25) 17:22 (O6)	07:42 16:13	13:27 (Pr11) 15:37 61
12	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23	58	08:38 (Pr25) 17:21 (O6)	07:44 16:11	13:26 (Pr11) 15:36 60
13	04:42 21:57	05:37 20:59	06:39 19:40	07:40 18:20	60	08:37 (Pr25) 17:21 (O6)	07:46 16:09	13:26 (Pr11) 15:36 59
14	04:43 21:56	05:39 20:57	06:41 19:37	07:42 18:18	60	08:36 (Pr25) 17:20 (O6)	07:49 16:08	13:26 (Pr11) 15:36 58
15	04:45 21:54	05:41 20:55	06:43 19:35	07:44 18:15	62	08:36 (Pr25) 17:21 (O6)	07:51 16:06	13:25 (Pr11) 15:36 57
16	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:13	62	08:35 (Pr25) 17:20 (O6)	07:53 16:04	13:26 (Pr11) 15:36 56
17	04:48 21:52	05:45 20:50	06:47 19:29	07:48 18:10	61	08:35 (Pr25) 17:19 (O6)	07:55 16:02	13:25 (Pr11) 15:36 56
18	04:49 21:50	05:47 20:47	06:49 19:27	07:50 18:07	59	08:34 (Pr25) 17:18 (O6)	07:57 16:01	13:25 (Pr11) 15:36 53
19	04:51 21:49	05:49 20:45	06:51 19:24	07:53 18:05	57	08:35 (Pr25) 17:18 (O6)	07:59 15:59	13:26 (Pr11) 15:37 51
20	04:52 21:47	05:51 20:43	06:53 19:21	07:55 18:03	53	08:35 (Pr25) 17:16 (O6)	08:01 15:57	13:25 (Pr11) 15:37 50
21	04:54 21:46	05:53 20:40	06:55 19:19	07:57 18:00	51	08:35 (Pr25) 17:15 (O6)	08:03 15:56	13:25 (Pr11) 15:37 50
22	04:56 21:44	05:55 20:38	06:57 19:16	07:59 17:58	44	08:36 (Pr25) 17:12 (O6)	08:05 15:54	13:25 (Pr11) 15:38 50
23	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	40	08:37 (Pr25) 17:11 (O6)	08:07 15:53	13:27 (Pr11) 15:38 50
24	04:59 21:41	05:59 20:33	07:01 19:10	08:03 17:53	31	08:38 (Pr25) 17:08 (O6)	08:09 15:52	13:27 (Pr11) 15:39 50
25	05:01 21:39	06:01 20:30	07:03 19:08	07:05 16:50	13	07:40 (Pr25) 07:53 (Pr25)	08:11 15:50	13:27 (Pr11) 15:40 53
26	05:03 21:37	06:03 20:27	07:05 19:05	07:07 16:48	6	07:44 (Pr25) 07:50 (Pr25)	08:13 15:49	13:27 (Pr11) 15:40 54
27	05:05 21:35	06:05 20:25	07:07 19:02	07:10 16:46			08:15 15:48	13:28 (Pr11) 15:41 56
28	05:06 21:34	06:07 20:22	07:09 19:00	07:12 16:43			08:17 15:46	13:28 (Pr11) 15:42 58
29	05:08 21:32	06:09 20:20	07:11 18:57	07:14 16:41			08:18 15:45	13:29 (Pr11) 15:43 59
30	05:10 21:30	06:11 20:17	07:13 18:54	07:16 16:39			08:20 15:44	13:29 (Pr11) 15:44 60
31	05:12 21:28	06:13 20:15		07:18 16:36				08:49 15:45 60
Potential sun hours	529	469	384	324		248		217
Total, worst case				1046		1601		1763
Sun reduction				0,29		0,08		0,08
Oper. time red.				1,00		1,00		1,00
Wind dir. red.				1,00		1,00		1,00
Total reduction				0,29		0,08		0,08
Total, real				303		120		149

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Torna iela 10 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (544)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Torna iela 11 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (528)
Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:46	08:12 16:43	07:08 17:45	06:47 19:51	05:30 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:51	07:20 16:34	08:22 15:43
2	08:48 15:47	08:10 16:45	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:17 21:21	06:19 20:06	07:19 18:46	07:25 16:29	08:25 15:41
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	07:27 16:27	08:27 15:40
5	08:47 15:51	08:04 16:52	06:58 17:54	06:36 19:59	05:21 21:01	04:30 21:55	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:23 21:15	06:25 19:58	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:38
8	08:45 15:56	07:58 16:59	06:50 18:00	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:57	07:56 17:01	06:48 18:03	06:25 20:07	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 19:51	07:31 18:30	07:38 16:17	08:34 15:37
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:37 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:11	05:09 21:13	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:35 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:06 21:15	04:25 22:03	04:40 21:58	05:35 21:01	06:37 19:42	07:38 18:22	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:04 21:17	04:24 22:03	04:41 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	05:02 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17	07:48 16:07	08:40 15:36
15	08:39 16:08	07:43 17:14	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:17	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:19	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:00	08:44 15:36
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:36
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:51 21:30	04:23 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:23 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:56 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:55 21:44	05:55 20:37	06:57 19:16	07:59 17:57	08:05 15:54	08:47 15:37
23	08:28 16:24	07:23 17:32	06:11 18:32	05:50 20:36	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:34	06:08 18:34	05:47 20:39	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:52	08:09 15:51	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:39	04:24 22:08	05:01 21:39	06:01 20:30	07:03 19:07	08:05 16:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	04:40 21:42	04:25 22:08	05:04 21:35	06:05 20:25	07:07 19:02	08:09 16:45	08:14 15:47	08:48 15:41
28	08:20 16:34	07:11 17:43	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 18:59	08:12 16:43	08:16 15:46	08:48 15:42
29	08:18 16:37		06:55 19:44	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:19	07:11 18:57	08:14 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:38	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Torna iela 12 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (599)
Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Torna iela 2 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (525)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Torna iela 3 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (598)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Torna iela 3A - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (531)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Torna iela 4 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (521)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Torna iela 5 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (542)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		05:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Torna iela 6 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (517)
Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Torna iela 7 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (529)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Torna iela 8 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (546)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		05:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Torna iela 9 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (520)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Tumš upe (kad. apz. 76820020140001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (448)

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:15 21:25	06:16 20:12	07:16 18:52	07:20 16:35	08:22 15:44
2	08:48 15:49	08:10 16:46	07:06 17:48	06:45 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:17 21:23	06:18 20:09	07:18 18:49	07:23 16:33	08:23 15:43
3	08:47 15:50	08:09 16:49	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:19 21:21	06:20 20:07	07:20 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:51	07:01 17:53	06:39 19:57	05:25 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:22 18:44	07:27 16:28	08:27 15:42
5	08:47 15:53	08:05 16:53	06:59 17:55	06:37 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:02	07:24 18:41	07:29 16:26	08:28 15:41
6	08:46 15:54	08:02 16:55	06:56 17:57	06:34 20:01	05:20 21:03	04:30 21:56	04:34 22:03	05:24 21:15	06:26 20:00	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:56	08:00 16:57	06:53 17:59	06:31 20:04	05:18 21:05	04:29 21:57	04:35 22:02	05:26 21:13	06:28 19:56	07:28 18:36	07:33 16:22	08:31 15:40
8	08:45 15:57	07:58 17:00	06:51 18:01	06:29 20:06	05:16 21:07	04:29 21:58	04:36 22:02	05:28 21:11	06:30 19:54	07:30 18:34	07:36 16:20	08:33 15:39
9	08:44 15:59	07:56 17:02	06:48 18:03	06:26 20:08	05:14 21:09	04:28 22:00	04:38 22:01	05:30 21:08	06:32 19:51	07:32 18:31	07:38 16:18	08:34 15:39
10	08:43 16:00	07:54 17:04	06:46 18:05	06:24 20:10	05:12 21:11	04:27 22:01	04:39 22:00	05:32 21:06	06:34 19:48	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:10 21:13	04:27 22:01	04:40 21:59	05:34 21:04	06:36 19:46	07:36 18:26	07:42 16:14	08:37 15:38
12	08:42 16:04	07:50 17:09	06:40 18:10	06:18 20:14	05:08 21:15	04:26 22:02	04:41 21:58	05:36 21:02	06:38 19:43	07:38 18:23	07:44 16:12	08:38 15:38
13	08:41 16:05	07:47 17:11	06:38 18:12	06:16 20:16	05:06 21:17	04:26 22:03	04:43 21:56	05:38 20:59	06:40 19:40	07:40 18:21	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:04 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 19:38	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:11 20:20	05:02 21:21	04:25 22:04	04:46 21:54	05:42 20:55	06:44 19:35	07:44 18:16	07:50 16:07	08:41 15:37
16	08:37 16:11	07:40 17:18	06:30 18:18	06:08 20:22	05:00 21:23	04:25 22:05	04:47 21:53	05:44 20:52	06:46 19:32	07:46 18:13	07:53 16:05	08:42 15:37
17	08:36 16:13	07:38 17:20	06:27 18:20	06:06 20:24	04:58 21:25	04:25 22:06	04:49 21:51	05:46 20:50	06:48 19:29	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:15	07:36 17:22	06:25 18:22	06:03 20:26	04:56 21:27	04:25 22:06	04:50 21:50	05:48 20:47	06:50 19:27	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:17	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:25 22:07	04:52 21:48	05:50 20:45	06:52 19:24	07:53 18:06	07:59 16:00	08:44 15:38
20	08:32 16:19	07:31 17:26	06:19 18:26	05:58 20:30	04:53 21:30	04:25 22:07	04:53 21:47	05:52 20:42	06:54 19:21	07:55 18:03	08:01 15:58	08:45 15:38
21	08:31 16:21	07:29 17:29	06:17 18:28	05:55 20:32	04:51 21:32	04:25 22:07	04:55 21:45	05:54 20:40	06:56 19:19	07:57 18:01	08:03 15:57	08:46 15:38
22	08:29 16:23	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:25 22:07	04:57 21:44	05:56 20:38	06:58 19:16	07:59 17:58	08:05 15:55	08:46 15:39
23	08:28 16:25	07:24 17:33	06:11 18:33	05:51 20:37	04:48 21:36	04:25 22:07	04:58 21:42	05:58 20:35	06:59 19:13	08:01 17:56	08:07 15:54	08:47 15:39
24	08:26 16:27	07:21 17:35	06:09 18:35	05:48 20:39	04:46 21:37	04:25 22:08	05:00 21:40	06:00 20:33	07:01 19:11	08:03 17:53	08:09 15:52	08:47 15:40
25	08:25 16:29	07:19 17:37	06:06 18:37	05:46 20:41	04:44 21:39	04:26 22:08	05:02 21:39	06:02 20:30	07:03 19:08	08:05 16:51	08:11 15:51	08:48 15:41
26	08:23 16:31	07:16 17:40	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:04 21:37	06:04 20:27	07:05 19:05	08:07 16:49	08:13 15:50	08:48 15:41
27	08:21 16:33	07:14 17:42	06:01 18:41	05:41 20:45	04:42 21:42	04:27 22:07	05:05 21:35	06:06 20:25	07:07 19:03	08:09 16:46	08:14 15:49	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 19:00	08:12 16:44	08:16 15:47	08:48 15:43
29	08:18 16:38		06:55 19:45	05:36 20:49	04:39 21:45	04:28 22:07	05:09 21:31	06:10 20:20	07:11 18:57	08:14 16:42	08:18 15:46	08:48 15:44
30	08:16 16:40		06:53 19:47	05:34 20:51	04:38 21:47	04:29 22:07	05:11 21:29	06:12 20:17	07:13 18:55	08:16 16:39	08:20 15:45	08:48 15:45
31	08:14 16:42		06:50 19:49		04:36 21:48		05:13 21:27	06:14 20:15		07:18 16:37		08:48 15:46
Potential sun hours	236	266	366	426	507	527	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Tumš upe (kad. apz. 76820020140006) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (588) Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:15 21:25	06:16 20:12	07:16 18:52	07:20 16:35	08:22 15:44
2	08:48 15:49	08:10 16:46	07:06 17:48	06:45 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:17 21:23	06:18 20:09	07:18 18:49	07:23 16:33	08:23 15:43
3	08:47 15:50	08:09 16:49	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:19 21:21	06:20 20:07	07:20 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:51	07:01 17:53	06:39 19:57	05:25 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:22 18:44	07:27 16:28	08:27 15:42
5	08:47 15:53	08:05 16:53	06:59 17:55	06:37 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:02	07:24 18:41	07:29 16:26	08:28 15:41
6	08:46 15:54	08:02 16:55	06:56 17:57	06:34 20:01	05:20 21:03	04:30 21:56	04:34 22:03	05:24 21:15	06:26 19:59	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:56	08:00 16:57	06:53 17:59	06:31 20:04	05:18 21:05	04:29 21:57	04:35 22:02	05:26 21:13	06:28 19:56	07:28 18:36	07:33 16:22	08:31 15:40
8	08:45 15:57	07:58 17:00	06:51 18:01	06:29 20:06	05:16 21:07	04:29 21:58	04:36 22:02	05:28 21:11	06:30 19:54	07:30 18:34	07:36 16:20	08:33 15:39
9	08:44 15:59	07:56 17:02	06:48 18:03	06:26 20:08	05:14 21:09	04:28 22:00	04:38 22:01	05:30 21:08	06:32 19:51	07:32 18:31	07:38 16:18	08:34 15:39
10	08:43 16:00	07:54 17:04	06:46 18:05	06:24 20:10	05:12 21:11	04:27 22:01	04:39 22:00	05:32 21:06	06:34 19:48	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:10 21:13	04:27 22:01	04:40 21:59	05:34 21:04	06:36 19:46	07:36 18:26	07:42 16:14	08:37 15:38
12	08:42 16:04	07:50 17:09	06:40 18:10	06:18 20:14	05:08 21:15	04:26 22:02	04:41 21:58	05:36 21:02	06:38 19:43	07:38 18:23	07:44 16:12	08:38 15:38
13	08:41 16:05	07:47 17:11	06:38 18:12	06:16 20:16	05:06 21:17	04:26 22:03	04:43 21:56	05:38 20:59	06:40 19:40	07:40 18:21	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:04 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 19:38	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:11 20:20	05:02 21:21	04:25 22:04	04:46 21:54	05:42 20:55	06:44 19:35	07:44 18:16	07:50 16:07	08:41 15:37
16	08:37 16:11	07:40 17:18	06:30 18:18	06:08 20:22	05:00 21:23	04:25 22:05	04:47 21:53	05:44 20:52	06:46 19:32	07:46 18:13	07:53 16:05	08:42 15:37
17	08:36 16:13	07:38 17:20	06:27 18:20	06:06 20:24	04:58 21:25	04:25 22:06	04:49 21:51	05:46 20:50	06:48 19:29	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:15	07:36 17:22	06:25 18:22	06:03 20:26	04:56 21:27	04:25 22:06	04:50 21:50	05:48 20:47	06:50 19:27	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:17	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:25 22:07	04:52 21:48	05:50 20:45	06:52 19:24	07:53 18:06	07:59 16:00	08:44 15:38
20	08:32 16:19	07:31 17:26	06:19 18:26	05:58 20:30	04:53 21:30	04:25 22:07	04:53 21:47	05:52 20:42	06:54 19:21	07:55 18:03	08:01 15:58	08:45 15:38
21	08:31 16:21	07:29 17:29	06:17 18:28	05:55 20:32	04:51 21:32	04:25 22:07	04:55 21:45	05:54 20:40	06:56 19:19	07:57 18:01	08:03 15:57	08:46 15:38
22	08:29 16:23	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:25 22:07	04:57 21:44	05:56 20:38	06:58 19:16	07:59 17:58	08:05 15:55	08:46 15:39
23	08:28 16:25	07:24 17:33	06:11 18:33	05:51 20:37	04:48 21:36	04:25 22:07	04:58 21:42	05:58 20:35	06:59 19:13	08:01 17:56	08:07 15:54	08:47 15:39
24	08:26 16:27	07:21 17:35	06:09 18:35	05:48 20:39	04:46 21:37	04:25 22:08	05:00 21:40	06:00 20:33	07:01 19:11	08:03 17:53	08:09 15:52	08:47 15:40
25	08:25 16:29	07:19 17:37	06:06 18:37	05:46 20:41	04:44 21:39	04:26 22:08	05:02 21:39	06:02 20:30	07:03 19:08	08:05 17:51	08:11 15:51	08:48 15:41
26	08:23 16:31	07:16 17:40	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:04 21:37	06:04 20:27	07:05 19:05	08:07 17:49	08:13 15:50	08:48 15:41
27	08:21 16:33	07:14 17:42	06:01 18:41	05:41 20:45	04:42 21:42	04:27 22:07	05:05 21:35	06:06 20:25	07:07 19:03	08:09 17:46	08:14 15:49	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 19:00	08:12 17:44	08:16 15:47	08:48 15:43
29	08:18 16:38		06:55 19:45	05:36 20:49	04:39 21:45	04:28 22:07	05:09 21:31	06:10 20:20	07:11 18:57	08:14 17:42	08:18 15:46	08:48 15:44
30	08:16 16:40		06:53 19:47	05:34 20:51	04:38 21:47	04:29 22:07	05:11 21:29	06:12 20:17	07:13 18:55	08:16 17:39	08:20 15:45	08:48 15:45
31	08:14 16:42		06:50 19:49		04:36 21:48		05:13 21:27	06:14 20:15		07:18 16:37		08:48 15:46
Potential sun hours	236	266	366	426	507	527	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Vecie Cerini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (570)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:06	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:55	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:24 21:15	06:25 20:01	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:02	05:26 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:50 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:27 21:10	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	04:27 22:00	04:37 22:01	05:29 21:08	06:31 19:51	07:31 18:30	07:38 16:17	08:34 15:38
10	08:43 15:59	07:54 17:04	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:02	04:40 21:58	05:35 21:01	06:37 19:43	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:13 20:18	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:18	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:01	08:44 15:36
19	08:34 16:16	07:33 17:24	06:21 18:24	06:00 20:28	04:53 21:29	04:24 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:30	04:24 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:07	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:58	08:05 15:54	08:46 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	04:47 21:36	04:24 22:08	04:58 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:08	08:05 16:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:33	07:14 17:41	06:00 18:40	05:40 20:45	04:41 21:42	04:26 22:07	05:05 21:35	06:05 20:25	07:07 19:02	08:09 16:46	08:14 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 19:00	08:12 16:43	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:45	04:27 22:07	05:08 21:31	06:09 20:20	07:11 18:57	08:14 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:39	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:48		05:12 21:27	06:13 20:14	07:18 16:36			08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Vecas Zemesbites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (503)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June
1	08:48	08:12	07:09	06:47	05:31	04:34
	15:46	16:43	17:45	19:51	20:53	21:50
2	08:48	08:10	07:06	06:44	05:28	04:33
	15:48	16:45	17:48	19:53	20:55	21:51
3	08:48	08:08	07:03	06:41	05:26	04:32
	15:49	16:48	17:50	19:55	20:57	21:53
4	08:47	08:06	07:01	06:39	19:22 (Pr25)	05:24
	15:50	16:50	17:52	19:57	19:29 (Pr25)	20:59
5	08:47	08:04	06:58	06:36	19:19 (Pr25)	05:21
	15:51	16:52	17:54	19:59	19:30 (Pr25)	21:01
6	08:46	08:02	06:56	06:33	19:18 (Pr25)	05:19
	15:53	16:54	17:56	20:01	19:33 (Pr25)	21:03
7	08:46	08:00	06:53	06:31	19:13 (PrRR3)	05:17
	15:54	16:57	17:58	20:03	19:34 (Pr25)	21:05
8	08:45	07:58	06:50	06:28	19:10 (PrRR3)	05:15
	15:56	16:59	18:01	20:05	19:36 (Pr25)	21:07
9	08:44	07:56	06:48	06:25	19:08 (PrRR3)	05:13
	15:58	17:01	18:03	20:07	19:36 (Pr25)	21:09
10	08:44	07:54	06:45	06:23	19:06 (PrRR3)	05:11
	15:59	17:03	18:05	20:09	19:36 (Pr25)	21:11
11	08:43	07:52	06:43	17:24 (Pr3b)	19:05 (PrRR3)	05:09
	16:01	17:06	18:07	17:36 (Pr3b)	19:36 (Pr25)	21:13
12	08:42	07:49	06:40	17:21 (Pr3b)	19:03 (PrRR3)	05:07
	16:03	17:08	18:09	17:38 (Pr3b)	19:35 (Pr25)	21:15
13	08:41	07:47	06:37	17:19 (Pr3b)	19:03 (PrRR3)	05:05
	16:04	17:10	18:11	17:40 (Pr3b)	19:35 (Pr25)	21:17
14	08:40	07:45	06:35	17:17 (Pr3b)	19:02 (PrRR3)	05:03
	16:06	17:12	18:13	17:41 (Pr3b)	19:34 (PrRR3)	21:19
15	08:39	07:43	06:32	17:16 (Pr3b)	19:02 (PrRR3)	05:01
	16:08	17:15	18:15	17:41 (Pr3b)	19:35 (PrRR3)	21:21
16	08:38	07:40	06:29	17:16 (Pr3b)	19:01 (PrRR3)	04:59
	16:10	17:17	18:17	17:42 (Pr3b)	19:34 (PrRR3)	21:23
17	08:36	07:38	06:27	17:15 (Pr3b)	19:01 (PrRR3)	04:57
	16:12	17:19	18:20	17:42 (Pr3b)	19:35 (PrRR3)	21:25
18	08:35	07:36	06:24	17:14 (Pr3b)	19:00 (PrRR3)	04:55
	16:14	17:21	18:22	17:42 (Pr3b)	19:34 (PrRR3)	21:27
19	08:34	07:33	06:21	17:14 (Pr3b)	19:00 (PrRR3)	04:53
	16:16	17:23	18:24	17:42 (Pr3b)	19:34 (PrRR3)	21:29
20	08:32	07:31	06:19	17:14 (Pr3b)	19:00 (PrRR3)	04:51
	16:18	17:26	18:26	17:42 (Pr3b)	19:33 (PrRR3)	21:30
21	08:31	07:28	06:16	17:13 (Pr3b)	19:00 (PrRR3)	04:50
	16:20	17:28	18:28	17:41 (Pr3b)	19:33 (PrRR3)	21:32
22	08:29	07:26	06:13	17:13 (Pr3b)	19:01 (PrRR3)	04:48
	16:22	17:30	18:30	17:40 (Pr3b)	19:32 (PrRR3)	21:34
23	08:28	07:24	06:11	17:14 (Pr3b)	19:01 (PrRR3)	04:46
	16:24	17:32	18:32	17:39 (Pr3b)	19:31 (PrRR3)	21:36
24	08:26	07:21	06:08	17:15 (Pr3b)	19:02 (PrRR3)	04:45
	16:26	17:35	18:34	17:38 (Pr3b)	19:30 (PrRR3)	21:38
25	08:25	07:19	06:05	17:15 (Pr3b)	19:03 (PrRR3)	04:43
	16:28	17:37	18:36	17:36 (Pr3b)	19:29 (PrRR3)	21:39
26	08:23	07:16	06:03	17:17 (Pr3b)	19:03 (PrRR3)	04:42
	16:30	17:39	18:38	17:35 (Pr3b)	19:27 (PrRR3)	21:41
27	08:21	07:14	06:00	17:19 (Pr3b)	19:05 (PrRR3)	04:40
	16:32	17:41	18:40	17:32 (Pr3b)	19:26 (PrRR3)	21:43
28	08:20	07:11	05:57		19:07 (PrRR3)	04:39
	16:34	17:43	18:42		19:24 (PrRR3)	21:44
29	08:18		06:55		19:10 (PrRR3)	04:38
	16:37		19:45		19:22 (PrRR3)	21:46
30	08:16		06:52			04:36
	16:39		19:47			21:47
31	08:14		06:49			04:35
	16:41		19:49			21:49
Potential sun hours	236	266	366	426	507	528
Total, worst case			391	688		
Sun reduction			0,39	0,44		
Oper. time red.			1,00	1,00		
Wind dir. red.			1,00	1,00		
Total reduction			0,39	0,44		
Total, real			153	304		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Vecas Zemesbites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (503)
Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August		September		October		November	December	
1	04:28 22:06	05:14 21:25		06:15 20:12	31	19:04 (PrRR3) 19:35 (Pr25)	07:15 18:51	18:00 (Pr3b) 18:19 (Pr3b)	07:20 16:34	08:22 15:43
2	04:29 22:06	05:16 21:23		06:17 20:09	30	19:05 (PrRR3) 19:35 (Pr25)	07:17 18:49	18:01 (Pr3b) 18:16 (Pr3b)	07:22 16:32	08:23 15:42
3	04:30 22:05	05:18 21:21		06:19 20:06	28	19:06 (PrRR3) 19:34 (Pr25)	07:19 18:46	18:05 (Pr3b) 18:12 (Pr3b)	07:25 16:30	08:25 15:41
4	04:31 22:05	05:19 21:19		06:21 20:04	26	19:08 (PrRR3) 19:34 (Pr25)	07:21 18:43		07:27 16:27	08:27 15:40
5	04:32 22:04	05:21 21:17		06:23 20:01	22	19:09 (PrRR3) 19:31 (Pr25)	07:23 18:41		07:29 16:25	08:28 15:40
6	04:33 22:03	05:23 21:15		06:25 19:59	15	19:13 (Pr25) 19:28 (Pr25)	07:25 18:38		07:31 16:23	08:30 15:39
7	04:34 22:03	05:25 21:13		06:27 19:56	11	19:14 (Pr25) 19:25 (Pr25)	07:27 18:36		07:33 16:21	08:31 15:38
8	04:35 22:02	05:27 21:11		06:29 19:53	7	19:16 (Pr25) 19:23 (Pr25)	07:29 18:33		07:35 16:19	08:33 15:38
9	04:36 22:01	05:29 21:08		06:31 19:51			07:31 18:30		07:38 16:17	08:34 15:37
10	04:38 22:00	05:31 21:06		06:33 19:48			07:33 18:28		07:40 16:15	08:35 15:37
11	04:39 21:59	05:33 21:04		06:35 19:45			07:36 18:25		07:42 16:13	08:37 15:37
12	04:40 21:58	05:35 21:02		06:37 19:43			07:38 18:23		07:44 16:11	08:38 15:36
13	04:42 21:57	05:37 20:59	19:21 (PrRR3) 19:26 (PrRR3)	06:39 19:40			07:40 18:20		07:46 16:09	08:39 15:36
14	04:43 21:55	05:39 20:57	19:16 (PrRR3) 19:30 (PrRR3)	06:41 19:37			07:42 18:17		07:48 16:07	08:40 15:36
15	04:44 21:54	05:41 20:54	19:14 (PrRR3) 19:32 (PrRR3)	06:43 19:34			07:44 18:15		07:50 16:06	08:41 15:36
16	04:46 21:53	05:43 20:52	19:12 (PrRR3) 19:34 (PrRR3)	06:45 19:32	11	18:09 (Pr3b) 18:20 (Pr3b)	07:46 18:12		07:53 16:04	08:42 15:36
17	04:47 21:51	05:45 20:50	19:10 (PrRR3) 19:35 (PrRR3)	06:47 19:29	17	18:06 (Pr3b) 18:23 (Pr3b)	07:48 18:10		07:55 16:02	08:43 15:36
18	04:49 21:50	05:47 20:47	19:08 (PrRR3) 19:35 (PrRR3)	06:49 19:26	20	18:03 (Pr3b) 18:23 (Pr3b)	07:50 18:07		07:57 16:00	08:44 15:36
19	04:51 21:49	05:49 20:45	19:07 (PrRR3) 19:36 (PrRR3)	06:51 19:24	23	18:01 (Pr3b) 18:24 (Pr3b)	07:52 18:05		07:59 15:59	08:45 15:36
20	04:52 21:47	05:51 20:42	19:06 (PrRR3) 19:37 (PrRR3)	06:53 19:21	25	18:00 (Pr3b) 18:25 (Pr3b)	07:54 18:02		08:01 15:57	08:45 15:37
21	04:54 21:45	05:53 20:40	19:06 (PrRR3) 19:37 (PrRR3)	06:55 19:18	26	17:59 (Pr3b) 18:25 (Pr3b)	07:57 18:00		08:03 15:56	08:46 15:37
22	04:56 21:44	05:55 20:37	19:05 (PrRR3) 19:37 (PrRR3)	06:57 19:16	27	17:58 (Pr3b) 18:25 (Pr3b)	07:59 17:57		08:05 15:54	08:47 15:38
23	04:57 21:42	05:57 20:35	19:04 (PrRR3) 19:38 (PrRR3)	06:59 19:13	28	17:57 (Pr3b) 18:25 (Pr3b)	08:01 17:55		08:07 15:53	08:47 15:38
24	04:59 21:40	05:59 20:32	19:04 (PrRR3) 19:38 (PrRR3)	07:01 19:10	28	17:57 (Pr3b) 18:25 (Pr3b)	08:03 17:53		08:09 15:51	08:47 15:39
25	05:01 21:39	06:01 20:30	19:04 (PrRR3) 19:38 (PrRR3)	07:03 19:08	29	17:56 (Pr3b) 18:25 (Pr3b)	07:05 16:50		08:11 15:50	08:48 15:39
26	05:03 21:37	06:03 20:27	19:02 (PrRR3) 19:36 (PrRR3)	07:05 19:05	28	17:56 (Pr3b) 18:24 (Pr3b)	07:07 16:48		08:13 15:49	08:48 15:40
27	05:04 21:35	06:05 20:25	19:02 (PrRR3) 19:36 (PrRR3)	07:07 19:02	27	17:56 (Pr3b) 18:23 (Pr3b)	07:09 16:45		08:15 15:48	08:48 15:41
28	05:06 21:33	06:07 20:22	19:02 (PrRR3) 19:36 (PrRR3)	07:09 18:59	25	17:57 (Pr3b) 18:22 (Pr3b)	07:12 16:43		08:16 15:46	08:48 15:42
29	05:08 21:31	06:09 20:20	19:03 (PrRR3) 19:35 (PrRR3)	07:11 18:57	24	17:57 (Pr3b) 18:21 (Pr3b)	07:14 16:41		08:18 15:45	08:49 15:43
30	05:10 21:29	06:11 20:17	19:03 (PrRR3) 19:35 (Pr25)	07:13 18:54	22	17:58 (Pr3b) 18:20 (Pr3b)	07:16 16:38		08:20 15:44	08:49 15:44
31	05:12 21:27	06:13 20:14	19:03 (PrRR3) 19:35 (Pr25)				07:18 16:36			08:48 15:45
Potential sun hours	529	469		384			324		248	217
Total, worst case			534		530		41			
Sun reduction			0,52		0,43		0,29			
Oper. time red.			1,00		1,00		1,00			
Wind dir. red.			1,00		1,00		1,00			
Total reduction			0,52		0,43		0,29			
Total, real			279		229		12			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Veikals - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (561)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Veldres - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (527)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Viesani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (584)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:46	19:51	20:53	21:50	22:06	21:25	20:12	18:52	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:41
5	08:47	08:04	06:58	06:36	05:22	04:30	04:32	05:22	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:24	06:25	07:25	07:31	08:30
	15:53	16:55	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:55	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:39
8	08:45	07:58	06:51	06:28	05:15	04:28	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:26	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:38
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:34	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:43	18:23	16:11	15:37
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:05	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:13	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:18	16:08	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:45	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:35	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:24	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:01	15:36
19	08:34	07:33	06:21	06:00	04:53	04:24	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:37
20	08:32	07:31	06:19	05:57	04:52	04:24	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:58	15:54	15:38
23	08:28	07:24	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:35	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:52	15:39
25	08:25	07:19	06:05	05:45	04:44	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:40
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:41	04:26	05:05	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:46	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:35	17:43	18:43	20:47	21:44	22:07	21:33	20:22	19:00	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:37	04:28	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Viktorovka - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (468)
Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January		February	March	April	May	June	July	August	September	October	November	December
1	08:49		14:48 (06)	08:13	07:09	06:47	05:31	04:34	04:28	05:14	06:15	07:15	08:22
	15:46	16	15:04 (06)	16:43	17:46	19:51	20:53	21:50	22:07	21:26	20:12	18:52	16:34
2	08:48		14:48 (06)	08:11	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	08:24
	15:48	16	15:04 (06)	16:46	17:48	19:53	20:55	21:52	22:06	21:24	20:09	18:49	16:32
3	08:48		14:49 (06)	08:09	07:04	06:41	05:26	04:32	04:30	05:18	06:19	07:19	08:25
	15:49	17	15:06 (06)	16:48	17:50	19:55	20:57	21:53	22:06	21:22	20:07	18:46	16:30
4	08:48		14:48 (06)	08:07	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	08:27
	15:50	18	15:06 (06)	16:50	17:52	19:57	21:00	21:54	22:05	21:20	20:04	18:44	16:28
5	08:47		14:48 (06)	08:05	06:58	06:36	05:22	04:30	04:32	05:22	06:23	07:23	08:29
	15:52	19	15:07 (06)	16:52	17:54	19:59	21:02	21:56	22:05	21:17	20:01	18:41	16:25
6	08:47		14:49 (06)	08:03	06:56	06:34	05:19	04:29	04:33	05:24	06:25	07:25	08:30
	15:53	19	15:08 (06)	16:55	17:56	20:01	21:04	21:57	22:04	21:15	19:59	18:38	16:23
7	08:46		14:49 (06)	08:01	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:28	08:32
	15:55	20	15:09 (06)	16:57	17:59	20:03	21:06	21:58	22:03	21:13	19:56	18:36	16:21
8	08:45		14:49 (06)	07:58	06:51	06:28	05:15	04:27	04:35	05:27	06:29	07:30	08:33
	15:56	21	15:10 (06)	16:59	18:01	20:06	21:08	21:59	22:02	21:11	19:53	18:33	16:19
9	08:45		14:49 (06)	07:56	06:48	06:26	05:13	04:27	04:36	05:29	06:31	07:32	08:38
	15:58	22	15:11 (06)	17:01	18:03	20:08	21:10	22:00	22:01	21:09	19:51	18:31	16:17
10	08:44		14:49 (06)	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:34	08:40
	15:59	22	15:11 (06)	17:04	18:05	20:10	21:12	22:01	22:00	21:06	19:48	18:28	16:15
11	08:43		14:49 (06)	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	08:42
	16:01	23	15:12 (06)	17:06	18:07	20:12	21:14	22:02	21:59	21:04	19:45	18:25	16:13
12	08:42		14:48 (06)	07:50	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	08:44
	16:03	24	15:12 (06)	17:08	18:09	20:14	21:16	22:03	21:58	21:02	19:43	18:23	16:11
13	08:41		14:49 (06)	07:47	06:38	06:15	05:05	04:25	04:42	05:37	06:39	07:40	08:46
	16:04	24	15:13 (06)	17:10	18:11	20:16	21:18	22:04	21:57	20:59	19:40	18:20	16:09
14	08:40		14:49 (06)	07:45	06:35	06:13	05:03	04:24	04:43	05:39	06:41	07:42	08:47
	16:06	25	15:14 (06)	17:12	18:13	20:18	21:20	22:04	21:56	20:57	19:37	18:18	16:08
15	08:39		14:49 (06)	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	08:49
	16:08	25	15:14 (06)	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:15	16:06
16	08:38		14:50 (06)	07:41	06:30	06:07	04:59	04:24	04:46	05:43	06:45	07:46	08:51
	16:10	25	15:15 (06)	17:17	18:18	20:22	21:23	22:06	21:53	20:52	19:32	18:13	16:04
17	08:37		14:50 (06)	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	08:53
	16:12	25	15:15 (06)	17:19	18:20	20:24	21:25	22:06	21:52	20:50	19:29	18:10	16:02
18	08:35		14:50 (06)	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	08:55
	16:14	25	15:15 (06)	17:21	18:22	20:26	21:27	22:07	21:50	20:47	19:27	18:07	16:01
19	08:34		14:50 (06)	07:33	06:22	06:00	04:53	04:23	04:51	05:49	06:51	07:53	08:57
	16:16	25	15:15 (06)	17:24	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59
20	08:33		14:51 (06)	07:31	06:19	05:57	04:52	04:23	04:52	05:51	06:53	07:55	08:01
	16:18	24	15:15 (06)	17:26	18:26	20:30	21:31	22:08	21:47	20:43	19:21	18:02	15:57
21	08:31		14:52 (06)	07:29	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:57	08:03
	16:20	24	15:16 (06)	17:28	18:28	20:33	21:33	22:08	21:46	20:40	19:19	18:00	15:56
22	08:30		14:52 (06)	07:26	06:14	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05
	16:22	24	15:16 (06)	17:30	18:30	20:35	21:34	22:08	21:44	20:38	19:16	17:58	15:54
23	08:28		14:53 (06)	07:24	06:11	05:50	04:47	04:24	04:57	05:57	06:59	08:01	08:07
	16:24	22	15:15 (06)	17:32	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53
24	08:27		14:53 (06)	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09
	16:26	22	15:15 (06)	17:35	18:34	20:39	21:38	22:08	21:41	20:33	19:10	17:53	15:51
25	08:25		14:54 (06)	07:19	06:06	05:45	04:43	04:25	05:01	06:01	07:03	07:05	08:11
	16:28	20	15:14 (06)	17:37	18:36	20:41	21:40	22:08	21:39	20:30	19:08	16:50	15:50
26	08:23		14:56 (06)	07:16	06:03	05:43	04:42	04:25	05:03	06:03	07:05	07:07	08:13
	16:30	19	15:15 (06)	17:39	18:39	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49
27	08:22		14:58 (06)	07:14	06:00	05:40	04:41	04:26	05:05	06:05	07:07	07:10	08:15
	16:32	16	15:14 (06)	17:41	18:41	20:45	21:43	22:08	21:35	20:25	19:02	16:46	15:48
28	08:20		15:00 (06)	07:11	05:58	05:38	04:39	04:26	05:06	06:07	07:09	07:12	08:17
	16:35	12	15:12 (06)	17:43	18:43	20:47	21:44	22:08	21:34	20:22	19:00	16:43	15:46
29	08:18		15:02 (06)		06:55	05:35	04:38	04:27	05:08	06:09	07:11	07:14	08:19
	16:37	8	15:10 (06)		19:45	20:49	21:46	22:08	21:32	20:20	18:57	16:41	15:45
30	08:16				06:52	05:33	04:36	04:28	05:10	06:11	07:13	07:16	08:20
	16:39				19:47	20:51	21:47	22:07	21:30	20:17	18:54	16:39	15:44
31	08:15				06:49		04:35		05:12	06:13		07:18	08:23
	16:41				19:49		21:49		21:28	20:15		16:36	15:45
Potential sun hours	235		266	366	426	508	528	529	469	384	324	248	216
Total, worst case	602											387	408
Sun reduction	0,13											0,08	0,08
Oper. time red.	1,00											1,00	1,00
Wind dir. red.	1,00											1,00	1,00
Total reduction	0,13											0,08	0,08
Total, real	81											29	34

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Vilcani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (562)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:46	08:12 16:43	07:08 17:45	06:47 19:51	05:30 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:51	07:20 16:34	08:22 15:43
2	08:48 15:47	08:10 16:45	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:17 21:21	06:19 20:06	07:19 18:46	07:25 16:29	08:25 15:41
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	07:27 16:27	08:27 15:40
5	08:47 15:51	08:04 16:52	06:58 17:54	06:36 19:59	05:21 21:01	04:30 21:55	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:23 21:15	06:25 19:58	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:35	07:33 16:21	08:31 15:38
8	08:45 15:56	07:58 16:59	06:50 18:00	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:57	07:56 17:01	06:48 18:03	06:25 20:07	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 19:50	07:31 18:30	07:38 16:17	08:34 15:37
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:37 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:11	05:08 21:13	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:35 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:06 21:15	04:25 22:03	04:40 21:58	05:35 21:01	06:37 19:42	07:38 18:22	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:04 21:17	04:24 22:03	04:41 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	05:02 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17	07:48 16:07	08:40 15:36
15	08:39 16:08	07:43 17:14	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:17	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:19	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:00	08:44 15:36
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:50 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:36
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:51 21:30	04:23 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:23 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:56 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:55 21:44	05:55 20:37	06:57 19:16	07:59 17:57	08:05 15:54	08:47 15:37
23	08:28 16:24	07:23 17:32	06:11 18:32	05:50 20:36	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:34	06:08 18:34	05:47 20:38	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:52	08:09 15:51	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:39	04:24 22:08	05:01 21:39	06:01 20:30	07:03 19:07	07:05 16:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:02 21:37	06:03 20:27	07:05 19:05	07:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	04:40 21:42	04:25 22:08	05:04 21:35	06:05 20:25	07:07 19:02	07:09 16:45	08:14 15:47	08:48 15:41
28	08:20 16:34	07:11 17:43	05:57 18:42	05:37 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 18:59	07:11 16:43	08:16 15:46	08:48 15:42
29	08:18 16:37		06:55 19:44	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:19	07:11 18:57	07:14 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 18:54	07:16 16:38	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Vilniš i (kad. apz. 76740020245001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (554)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:46	08:12 16:43	07:08 17:45	06:47 19:51	05:30 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:51	07:20 16:34	08:22 15:43
2	08:48 15:47	08:10 16:45	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:06	07:19 18:46	07:25 16:30	08:25 15:41
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	07:27 16:27	08:27 15:40
5	08:47 15:51	08:04 16:52	06:58 17:54	06:36 19:59	05:21 21:01	04:30 21:55	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:23 21:15	06:25 19:58	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:38
8	08:45 15:56	07:58 16:59	06:50 18:00	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:25 20:07	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 19:51	07:31 18:30	07:38 16:17	08:34 15:37
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:37 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:11	05:09 21:13	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:35 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:03	04:40 21:58	05:35 21:01	06:37 19:42	07:38 18:23	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:41 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17	07:48 16:07	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:17	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:00	08:44 15:36
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:36
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:51 21:30	04:23 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:23 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:56 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:57	08:05 15:54	08:47 15:38
23	08:28 16:24	07:23 17:32	06:11 18:32	05:50 20:36	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:34	06:08 18:34	05:47 20:39	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:53	08:09 15:51	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:07	08:05 16:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	04:40 21:42	04:25 22:08	05:04 21:35	06:05 20:25	07:07 19:02	08:09 16:45	08:14 15:47	08:48 15:41
28	08:20 16:34	07:11 17:43	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 18:59	08:12 16:43	08:16 15:46	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:19	07:11 18:57	08:14 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:38	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Vilniš i (kad. apz. 76740020245004) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (596)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:46	08:12 16:43	07:08 17:45	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:51	07:20 16:34	08:22 15:43
2	08:48 15:47	08:10 16:45	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:06	07:19 18:46	07:25 16:30	08:25 15:41
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	07:27 16:27	08:27 15:40
5	08:47 15:51	08:04 16:52	06:58 17:54	06:36 19:59	05:21 21:01	04:30 21:55	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:23 21:15	06:25 19:59	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:38
8	08:45 15:56	07:58 16:59	06:50 18:00	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:25 20:07	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 19:51	07:31 18:30	07:38 16:17	08:34 15:37
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:37 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:11	05:09 21:13	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:35 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:03	04:40 21:58	05:35 21:01	06:37 19:42	07:38 18:23	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17	07:48 16:07	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:17	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:00	08:44 15:36
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:36
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:51 21:30	04:23 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:23 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:56 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:57	08:05 15:54	08:47 15:38
23	08:28 16:24	07:23 17:32	06:11 18:32	05:50 20:36	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:34	06:08 18:34	05:47 20:39	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:53	08:09 15:51	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:07	07:05 16:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	07:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	04:40 21:42	04:26 22:08	05:04 21:35	06:05 20:25	07:07 19:02	07:09 16:45	08:14 15:47	08:48 15:41
28	08:20 16:34	07:11 17:43	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 18:59	07:12 16:43	08:16 15:46	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:19	07:11 18:57	07:14 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 18:54	07:16 16:38	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Vindeks - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (543)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Vinci - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (595)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:24	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:10	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:25	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:38
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:18	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Virsaiš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (454)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:13 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:29 22:07	05:14 21:26	06:16 20:12	07:15 18:52	07:20 16:34	08:22 15:44
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:29 20:55	04:33 21:52	04:29 22:06	05:16 21:24	06:18 20:09	07:17 18:49	07:23 16:32	08:24 15:43
3	08:48 15:49	08:09 16:48	07:04 17:50	06:42 19:55	05:26 20:57	04:32 21:53	04:30 22:06	05:18 21:22	06:20 20:07	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:22 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:53	06:59 17:54	06:36 19:59	05:22 21:02	04:30 21:56	04:32 22:04	05:22 21:17	06:24 20:01	07:24 18:41	07:29 16:26	08:28 15:40
6	08:47 15:53	08:03 16:55	06:56 17:57	06:34 20:01	05:20 21:04	04:29 21:57	04:33 22:04	05:24 21:15	06:26 20:01	07:26 18:39	07:31 16:24	08:30 15:39
7	08:46 15:55	08:01 16:57	06:53 17:59	06:31 20:04	05:17 21:06	04:29 21:58	04:34 22:03	05:26 21:13	06:28 19:56	07:28 18:36	07:34 16:21	08:32 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:06	05:15 21:08	04:28 21:59	04:36 22:02	05:28 21:11	06:30 19:54	07:30 18:33	07:36 16:19	08:33 15:38
9	08:45 15:58	07:56 17:01	06:48 18:03	06:26 20:08	05:13 21:10	04:27 22:00	04:37 22:01	05:30 21:09	06:32 19:51	07:32 18:31	07:38 16:17	08:34 15:38
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:11 21:12	04:27 22:01	04:38 22:00	05:32 21:06	06:33 19:48	07:34 18:28	07:40 16:15	08:36 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:14	04:26 22:02	04:39 21:59	05:34 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:16	04:25 22:03	04:41 21:58	05:36 21:02	06:37 19:43	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 17:10	06:38 18:11	06:15 20:16	05:05 21:17	04:25 22:04	04:42 21:57	05:38 20:59	06:39 19:40	07:40 18:20	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:19	04:25 22:04	04:43 21:56	05:40 20:57	06:41 19:37	07:42 18:18	07:49 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:42 20:55	06:43 19:35	07:44 18:15	07:51 16:06	08:41 15:36
16	08:38 16:10	07:41 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:06	04:46 21:53	05:44 20:52	06:45 19:32	07:46 18:13	07:53 16:04	08:42 15:36
17	08:37 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:52	05:46 20:50	06:47 19:29	07:48 18:10	07:55 16:03	08:43 15:36
18	08:35 16:14	07:36 17:22	06:24 18:22	06:03 20:26	04:55 21:27	04:24 22:07	04:49 21:50	05:48 20:47	06:49 19:27	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:49	05:50 20:45	06:51 19:24	07:53 18:05	07:59 15:59	08:45 15:37
20	08:33 16:18	07:31 17:26	06:19 18:26	05:58 20:30	04:52 21:31	04:24 22:07	04:53 21:47	05:52 20:43	06:53 19:21	07:55 18:03	08:01 15:58	08:46 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:33	04:50 21:32	04:24 22:08	04:54 21:46	05:54 20:40	06:55 19:19	07:57 18:00	08:03 15:56	08:46 15:38
22	08:30 16:22	07:26 17:30	06:14 18:30	05:53 20:35	04:48 21:34	04:24 22:08	04:56 21:44	05:56 20:38	06:57 19:16	07:59 17:58	08:05 15:55	08:47 15:38
23	08:28 16:24	07:24 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:24 22:08	04:58 21:42	05:58 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:39
24	08:27 16:26	07:21 17:35	06:08 18:34	05:48 20:39	04:45 21:38	04:25 22:08	04:59 21:41	06:00 20:33	07:01 19:11	08:03 17:53	08:09 15:52	08:48 15:39
25	08:25 16:28	07:19 17:37	06:06 18:37	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:02 20:30	07:03 19:08	08:05 16:51	08:11 15:50	08:48 15:40
26	08:23 16:31	07:16 17:39	06:03 18:39	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:04 20:27	07:05 19:05	08:08 16:48	08:13 15:49	08:48 15:41
27	08:22 16:33	07:14 17:41	06:00 18:41	05:40 20:45	04:41 21:43	04:26 22:08	05:05 21:35	06:06 20:25	07:07 19:02	08:10 16:46	08:15 15:48	08:48 15:41
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:39 21:44	04:27 22:08	05:07 21:33	06:08 20:22	07:09 19:00	08:12 16:43	08:17 15:47	08:49 15:42
29	08:18 16:37		06:55 19:45	05:36 20:49	04:38 21:46	04:27 22:07	05:08 21:32	06:10 20:20	07:11 18:57	08:14 16:41	08:18 15:46	08:49 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:30	06:12 20:17	07:13 18:54	08:16 16:39	08:20 15:45	08:49 15:44
31	08:14 16:41		06:50 19:49		04:36 21:49		05:12 21:28	06:14 20:15		07:18 16:37		08:49 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Valodzites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (582)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:47	16:43	17:46	19:51	20:53	21:50	22:06	21:25	20:12	18:52	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:48	16:46	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:30	15:42
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:41
5	08:47	08:04	06:58	06:36	05:22	04:30	04:32	05:22	06:23	07:23	07:29	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:24	06:25	07:25	07:31	08:30
	15:53	16:55	17:56	20:01	21:03	21:56	22:03	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:26	06:27	07:27	07:33	08:31
	15:55	16:57	17:58	20:03	21:05	21:58	22:02	21:13	19:56	18:36	16:21	15:39
8	08:45	07:58	06:51	06:28	05:15	04:28	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:01	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:26	05:13	04:27	04:37	05:29	06:31	07:31	07:38	08:34
	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:38
10	08:43	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:33	07:40	08:35
	15:59	17:04	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:02	21:58	21:01	19:43	18:23	16:11	15:37
13	08:41	07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:05	17:10	18:11	20:16	21:17	22:03	21:56	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:13	05:03	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:18	16:08	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:45	05:41	06:43	07:44	07:50	08:41
	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:24	04:48	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:24	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:01	15:36
19	08:34	07:33	06:21	06:00	04:53	04:24	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:37
20	08:32	07:31	06:19	05:57	04:52	04:24	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:24	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:46
	16:22	17:30	18:30	20:34	21:34	22:07	21:44	20:37	19:16	17:58	15:54	15:38
23	08:28	07:24	06:11	05:50	04:47	04:24	04:58	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:25	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:35	18:34	20:39	21:37	22:08	21:40	20:32	19:10	17:53	15:52	15:39
25	08:25	07:19	06:05	05:45	04:44	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	16:50	15:50	15:40
26	08:23	07:16	06:03	05:43	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:41	04:26	05:05	06:05	07:07	08:09	08:14	08:48
	16:33	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:46	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:16	08:48
	16:35	17:43	18:43	20:47	21:44	22:07	21:33	20:22	19:00	16:43	15:47	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:45	20:49	21:45	22:07	21:31	20:20	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:37	04:28	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:39	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:48		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Vejojtnes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (601)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:43	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:05	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:18	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Verdini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (445)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:13 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:06	05:15 21:26	06:16 20:12	07:16 18:52	07:20 16:35	08:22 15:44
2	08:48 15:49	08:11 16:46	07:06 17:48	06:45 19:53	05:29 20:55	04:34 21:51	04:30 22:06	05:17 21:24	06:18 20:09	07:18 18:49	07:23 16:33	08:23 15:43
3	08:48 15:50	08:09 16:49	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:05	05:19 21:21	06:20 20:07	07:20 18:47	07:25 16:30	08:25 15:42
4	08:47 15:51	08:07 16:51	07:01 17:53	06:39 19:57	05:25 20:59	04:32 21:54	04:32 22:05	05:20 21:19	06:22 20:04	07:22 18:44	07:27 16:28	08:27 15:42
5	08:47 15:53	08:05 16:53	06:59 17:55	06:37 19:59	05:22 21:01	04:31 21:55	04:33 22:04	05:22 21:17	06:24 20:02	07:24 18:41	07:29 16:26	08:28 15:41
6	08:46 15:54	08:03 16:55	06:56 17:57	06:34 20:02	05:20 21:03	04:30 21:56	04:34 22:03	05:24 21:15	06:26 19:59	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:56	08:01 16:57	06:54 17:59	06:31 20:04	05:18 21:05	04:29 21:58	04:35 22:03	05:26 21:13	06:28 19:56	07:28 18:36	07:33 16:22	08:31 15:40
8	08:45 15:57	07:58 17:00	06:51 18:01	06:29 20:06	05:16 21:07	04:29 21:59	04:36 22:02	05:28 21:11	06:30 19:54	07:30 18:34	07:36 16:20	08:33 15:39
9	08:44 15:59	07:56 17:02	06:48 18:03	06:26 20:08	05:14 21:09	04:28 22:00	04:37 22:01	05:30 21:08	06:32 19:51	07:32 18:31	07:38 16:18	08:34 15:38
10	08:44 16:00	07:54 17:04	06:46 18:05	06:24 20:10	05:12 21:11	04:27 22:01	04:39 22:00	05:32 21:06	06:34 19:48	07:34 18:28	07:40 16:16	08:35 15:38
11	08:43 16:02	07:52 17:06	06:43 18:08	06:21 20:12	05:10 21:13	04:27 22:02	04:40 21:59	05:34 21:04	06:36 19:46	07:36 18:26	07:42 16:14	08:37 15:38
12	08:42 16:04	07:50 17:09	06:40 18:10	06:18 20:14	05:08 21:15	04:26 22:02	04:41 21:58	05:36 21:02	06:38 19:43	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:47 17:11	06:38 18:12	06:16 20:16	05:06 21:17	04:26 22:03	04:43 21:57	05:38 20:59	06:40 19:40	07:40 18:21	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:04 21:19	04:25 22:04	04:44 21:55	05:40 20:57	06:42 19:38	07:42 18:18	07:48 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:33 18:16	06:11 20:20	05:02 21:21	04:25 22:05	04:46 21:54	05:42 20:55	06:44 19:35	07:44 18:16	07:51 16:07	08:41 15:37
16	08:38 16:11	07:41 17:18	06:30 18:18	06:08 20:22	05:00 21:23	04:25 22:05	04:47 21:53	05:44 20:52	06:46 19:32	07:46 18:13	07:53 16:05	08:42 15:37
17	08:36 16:13	07:38 17:20	06:27 18:20	06:06 20:24	04:58 21:25	04:25 22:06	04:49 21:51	05:46 20:50	06:48 19:30	07:48 18:11	07:55 16:03	08:43 15:37
18	08:35 16:15	07:36 17:22	06:25 18:22	06:03 20:26	04:56 21:27	04:25 22:06	04:50 21:50	05:48 20:47	06:50 19:27	07:51 18:08	07:57 16:01	08:44 15:37
19	08:34 16:17	07:34 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:25 22:07	04:52 21:48	05:50 20:45	06:52 19:24	07:53 18:06	07:59 16:00	08:45 15:38
20	08:32 16:19	07:31 17:26	06:19 18:26	05:58 20:31	04:53 21:30	04:25 22:07	04:53 21:47	05:52 20:43	06:54 19:21	07:55 18:03	08:01 15:58	08:45 15:38
21	08:31 16:21	07:29 17:29	06:17 18:28	05:55 20:33	04:51 21:32	04:25 22:07	04:55 21:45	05:54 20:40	06:56 19:19	07:57 18:01	08:03 15:57	08:46 15:38
22	08:30 16:23	07:26 17:31	06:14 18:31	05:53 20:35	04:49 21:34	04:25 22:08	04:57 21:44	05:56 20:38	06:58 19:16	07:59 17:58	08:05 15:55	08:46 15:39
23	08:28 16:25	07:24 17:33	06:11 18:33	05:51 20:37	04:48 21:36	04:25 22:08	04:58 21:42	05:58 20:35	07:00 19:13	08:01 17:56	08:07 15:54	08:47 15:39
24	08:26 16:27	07:21 17:35	06:09 18:35	05:48 20:39	04:46 21:38	04:25 22:08	05:00 21:40	06:00 20:33	07:02 19:11	08:03 17:53	08:09 15:52	08:47 15:40
25	08:25 16:29	07:19 17:37	06:06 18:37	05:46 20:41	04:44 21:39	04:26 22:08	05:02 21:39	06:02 20:30	07:04 19:08	07:05 16:51	08:11 15:51	08:48 15:41
26	08:23 16:31	07:16 17:40	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:04 21:37	06:04 20:28	07:06 19:05	07:08 16:49	08:13 15:50	08:48 15:41
27	08:22 16:33	07:14 17:42	06:01 18:41	05:41 20:45	04:42 21:42	04:27 22:08	05:05 21:35	06:06 20:25	07:08 19:03	07:10 16:46	08:15 15:49	08:48 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:10 19:00	07:12 16:44	08:16 15:47	08:48 15:43
29	08:18 16:38		06:55 19:45	05:36 20:49	04:39 21:46	04:28 22:07	05:09 21:31	06:10 20:20	07:12 18:57	07:14 16:42	08:18 15:46	08:48 15:44
30	08:16 16:40		06:53 19:47	05:34 20:51	04:38 21:47	04:29 22:07	05:11 21:29	06:12 20:17	07:14 18:55	07:16 16:39	08:20 15:45	08:48 15:45
31	08:14 16:42		06:50 19:49		04:36 21:49		05:13 21:28	06:14 20:15		07:18 16:37		08:48 15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Veris - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (492)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B
Assumptions for shadow calculations

Shadow receptor: Vetras - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (539)
Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:09	06:47								
	15:46	16:43	17:45	19:51	18:39 (Pr3b)	20:53	21:50	22:06	21:25			
2	08:48	08:10	07:06	06:44	11	18:50 (Pr3b)	20:53	20:12	20:12	11	19:39 (PrRR3)	18:51
	15:48	16:45	17:48	19:53			20:55	21:51	22:06			16:34
3	08:48	08:08	07:03	06:41			05:26	04:32	04:30	05:18		15:43
	15:49	16:48	17:50	19:55			20:57	21:53	22:05	21:21		15:42
4	08:47	08:06	07:01	06:39			05:24	04:31	04:31	05:19		15:41
	15:50	16:50	17:52	19:57			20:59	21:54	22:05	21:19		15:40
5	08:47	08:04	06:58	06:36			05:21	04:30	04:32	05:21		15:39
	15:51	16:52	17:54	19:59			21:01	21:55	22:04	21:17		15:38
6	08:46	08:02	06:56	06:33			05:19	04:29	04:33	05:23		15:37
	15:53	16:54	17:56	20:01			21:03	21:57	22:03	21:15		15:36
7	08:46	08:00	06:53	06:31			05:17	04:28	04:34	05:25		15:35
	15:54	16:57	17:58	20:03			21:05	21:58	22:03	21:13		15:34
8	08:45	07:58	06:50	06:28			05:15	04:27	04:35	05:27		15:33
	15:56	16:59	18:01	20:05			21:07	21:59	22:02	21:11		15:32
9	08:44	07:56	06:48	06:25			05:13	04:27	04:36	05:29		15:31
	15:58	17:01	18:03	20:07			21:09	22:00	22:01	21:08		15:30
10	08:44	07:54	06:45	06:23			05:11	04:26	04:38	05:31		15:29
	15:59	17:03	18:05	20:09			21:11	22:01	22:00	21:06		15:28
11	08:43	07:52	06:43	06:20			19:28 (PrRR3)	05:09	04:25	04:39	05:33	18:28
	16:01	17:06	18:07	20:12	12	19:40 (PrRR3)	21:13	22:02	21:59	21:04		18:31 (Pr3b)
12	08:42	07:49	06:40	06:18			19:25 (PrRR3)	05:07	04:25	04:40	05:35	18:29 (Pr3b)
	16:03	17:08	18:09	20:14	17	19:42 (PrRR3)	21:15	22:03	21:58	21:01	4	19:36 (PrRR3)
13	08:41	07:47	06:37	06:15			19:24 (PrRR3)	05:05	04:25	04:42	05:37	18:29 (Pr3b)
	16:04	17:10	18:11	20:16	20	19:44 (PrRR3)	21:17	22:03	21:57	20:59	12	19:44 (PrRR3)
14	08:40	07:45	06:35	06:12			19:22 (PrRR3)	05:03	04:24	04:43	05:39	18:27 (Pr3b)
	16:06	17:12	18:13	20:18	22	19:44 (PrRR3)	21:19	22:04	21:55	20:57	16	19:46 (PrRR3)
15	08:39	07:43	06:32	06:10			19:21 (PrRR3)	05:01	04:24	04:44	05:41	18:25 (Pr3b)
	16:08	17:15	18:15	20:20	25	19:46 (PrRR3)	21:21	22:05	21:54	20:54	20	19:48 (PrRR3)
16	08:38	07:40	06:29	06:07			19:19 (PrRR3)	04:59	04:24	04:46	05:43	18:24 (Pr3b)
	16:10	17:17	18:17	20:22	27	19:46 (PrRR3)	21:23	22:05	21:53	20:52	22	19:49 (PrRR3)
17	08:36	07:38	06:27	06:05			19:19 (PrRR3)	04:57	04:23	04:47	05:45	18:23 (Pr3b)
	16:12	17:19	18:20	20:24	27	19:46 (PrRR3)	21:25	22:06	21:51	20:50	24	19:49 (PrRR3)
18	08:35	07:36	06:24	17:42 (Pr3b)	06:02		19:18 (PrRR3)	04:55	04:23	04:49	05:47	18:22 (Pr3b)
	16:14	17:21	18:22	11	17:53 (Pr3b)	20:26	19:18 (PrRR3)	21:27	22:06	21:50	20:47	18:21 (Pr3b)
19	08:34	07:33	06:21	17:40 (Pr3b)	06:00		19:18 (PrRR3)	04:53	04:23	04:51	05:49	18:20 (Pr3b)
	16:16	17:23	18:24	16	17:56 (Pr3b)	20:28	19:17 (PrRR3)	21:29	22:07	21:49	20:45	18:19 (Pr3b)
20	08:32	07:31	06:19	17:38 (Pr3b)	05:57		19:17 (PrRR3)	04:51	04:23	04:52	05:51	18:18 (Pr3b)
	16:18	17:26	18:26	19	17:57 (Pr3b)	20:30	19:17 (PrRR3)	21:30	22:07	21:47	20:42	18:17 (Pr3b)
21	08:31	07:28	06:16	17:36 (Pr3b)	05:55		19:17 (PrRR3)	04:50	04:23	04:54	05:53	18:16 (Pr3b)
	16:20	17:28	18:28	22	17:58 (Pr3b)	20:32	19:17 (PrRR3)	21:32	22:07	21:45	20:40	18:15 (Pr3b)
22	08:29	07:26	06:13	17:35 (Pr3b)	05:52		19:17 (PrRR3)	04:48	04:24	04:56	05:55	18:14 (Pr3b)
	16:22	17:30	18:30	23	17:58 (Pr3b)	20:34	19:17 (PrRR3)	21:34	22:08	21:44	20:37	18:13 (Pr3b)
23	08:28	07:24	06:11	17:35 (Pr3b)	05:50		19:17 (PrRR3)	04:46	04:24	04:57	05:57	18:12 (Pr3b)
	16:24	17:32	18:32	24	17:59 (Pr3b)	20:36	19:17 (PrRR3)	21:36	22:08	21:42	20:35	18:11 (Pr3b)
24	08:26	07:21	06:08	17:34 (Pr3b)	05:47		19:18 (PrRR3)	04:45	04:24	04:59	05:59	18:10 (Pr3b)
	16:26	17:35	18:34	25	17:59 (Pr3b)	20:39	19:18 (PrRR3)	21:38	22:08	21:40	20:32	18:09 (Pr3b)
25	08:25	07:19	06:05	17:33 (Pr3b)	05:45		19:18 (PrRR3)	04:43	04:25	05:01	06:01	18:08 (Pr3b)
	16:28	17:37	18:36	25	17:58 (Pr3b)	20:41	19:18 (PrRR3)	21:39	22:08	21:39	20:30	18:07 (Pr3b)
26	08:23	07:16	06:03	17:34 (Pr3b)	05:42		19:18 (PrRR3)	04:42	04:25	05:03	06:03	18:06 (Pr3b)
	16:30	17:39	18:38	24	17:58 (Pr3b)	20:43	19:18 (PrRR3)	21:41	22:08	21:37	20:27	18:05 (Pr3b)
27	08:21	07:14	06:00	17:33 (Pr3b)	05:40		19:19 (PrRR3)	04:40	04:26	05:04	06:05	18:04 (Pr3b)
	16:32	17:41	18:40	24	17:57 (Pr3b)	20:45	19:19 (PrRR3)	21:42	22:08	21:35	20:25	18:03 (Pr3b)
28	08:20	07:11	05:57	17:33 (Pr3b)	05:38		19:21 (PrRR3)	04:39	04:26	05:06	06:07	18:02 (Pr3b)
	16:34	17:43	18:42	23	17:56 (Pr3b)	20:47	19:20 (PrRR3)	21:44	22:07	21:33	20:22	18:01 (Pr3b)
29	08:18		06:55	18:35 (Pr3b)	05:35		19:23 (PrRR3)	04:38	04:27	05:08	06:09	18:00 (Pr3b)
	16:37		19:45	21	18:56 (Pr3b)	20:49	19:23 (PrRR3)	21:46	22:07	21:31	20:20	17:59 (Pr3b)
30	08:16		06:52	18:35 (Pr3b)	05:33		19:24 (PrRR3)	04:36	04:27	05:10	06:11	17:58 (Pr3b)
	16:39		19:47	19	18:54 (Pr3b)	20:51	19:24 (PrRR3)	21:47	22:07	21:29	20:17	17:57 (Pr3b)
31	08:14		06:49	18:36 (Pr3b)			19:35 (PrRR3)	04:35		05:12	06:13	17:56 (Pr3b)
	16:41		19:49	16	18:52 (Pr3b)			21:49		21:27	20:14	17:55 (Pr3b)
Potential sun hours	236	266	366	426	507	528	529	469	384	325	248	217
Total, worst case				292	474				453	325		
Sun reduction				0,39	0,44				0,52	0,43		
Oper. time red.				1,00	1,00				1,00	1,00		
Wind dir. red.				1,00	1,00				1,00	1,00		
Total reduction				0,39	0,44				0,52	0,43		
Total, real				114	209			236	140			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Veveru majas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (460)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:49	08:13	07:09	06:47	05:31	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:46	19:51	20:53	21:50	22:07	21:26	20:12	18:52	16:34	15:43
2	08:48	08:11	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:23	08:24
	15:48	16:46	17:48	19:53	20:55	21:52	22:06	21:24	20:09	18:49	16:32	15:42
3	08:48	08:09	07:04	06:41	05:26	04:32	04:30	05:18	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:06	21:22	20:07	18:46	16:30	15:41
4	08:48	08:07	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:27	15:41
5	08:47	08:05	06:58	06:36	05:22	04:30	04:32	05:21	06:23	07:23	07:29	08:29
	15:52	16:52	17:54	19:59	21:02	21:56	22:04	21:17	20:01	18:41	16:25	15:40
6	08:47	08:03	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:04	21:57	22:04	21:15	19:59	18:38	16:23	15:39
7	08:46	08:01	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:34	08:32
	15:54	16:57	17:59	20:03	21:06	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:51	06:28	05:15	04:27	04:35	05:27	06:29	07:30	07:36	08:33
	15:56	16:59	18:01	20:05	21:08	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:45	07:56	06:48	06:26	05:13	04:27	04:36	05:29	06:31	07:32	07:38	08:34
	15:58	17:01	18:03	20:08	21:10	22:00	22:01	21:09	19:51	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:34	07:40	08:36
	15:59	17:03	18:05	20:10	21:12	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:26	04:39	05:33	06:35	07:36	07:42	08:37
	16:01	17:06	18:07	20:12	21:14	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:50	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:16	22:03	21:58	21:02	19:43	18:23	16:11	15:36
13	08:41	07:47	06:38	06:15	05:05	04:25	04:42	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:18	22:04	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:13	05:03	04:24	04:43	05:39	06:41	07:42	07:49	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:56	20:57	19:37	18:18	16:08	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:51	08:41
	16:08	17:15	18:16	20:20	21:21	22:05	21:54	20:55	19:35	18:15	16:06	15:36
16	08:38	07:41	06:30	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:53	08:42
	16:10	17:17	18:18	20:22	21:23	22:06	21:53	20:52	19:32	18:12	16:04	15:36
17	08:37	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:20	20:24	21:25	22:06	21:52	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:07	21:50	20:47	19:27	18:07	16:01	15:36
19	08:34	07:33	06:22	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:24	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59	15:36
20	08:33	07:31	06:19	05:57	04:52	04:23	04:52	05:51	06:53	07:55	08:01	08:46
	16:18	17:26	18:26	20:30	21:31	22:07	21:47	20:43	19:21	18:02	15:57	15:37
21	08:31	07:29	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:57	08:03	08:46
	16:20	17:28	18:28	20:33	21:33	22:08	21:46	20:40	19:18	18:00	15:56	15:37
22	08:30	07:26	06:14	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:35	21:34	22:08	21:44	20:38	19:16	17:58	15:54	15:38
23	08:28	07:24	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:27	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:48
	16:26	17:35	18:34	20:39	21:38	22:08	21:41	20:33	19:10	17:53	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	17:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	17:48	15:49	15:40
27	08:22	07:14	06:00	05:40	04:40	04:26	05:04	06:05	07:07	08:09	08:15	08:49
	16:32	17:41	18:41	20:45	21:43	22:08	21:35	20:25	19:02	17:46	15:48	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:17	08:49
	16:35	17:43	18:43	20:47	21:44	22:08	21:34	20:22	19:00	17:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:49
	16:37		19:45	20:49	21:46	22:08	21:32	20:20	18:57	17:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:49
	16:39		19:47	20:51	21:47	22:07	21:30	20:17	18:54	17:39	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:49
	16:41		19:49		21:49		21:28	20:15		16:36		15:45
Potential sun hours	235	266	366	426	508	528	529	469	384	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Zarini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (457)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:49 15:46	08:13 16:43	07:09 17:46	06:47 19:51	05:31 20:54	04:34 21:51	04:28 22:07	05:14 21:26	06:16 20:12	07:15 18:52	07:21 16:34	08:22 15:43
2	08:49 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:28 20:56	04:33 21:52	04:29 22:07	05:16 21:24	06:18 20:09	07:17 18:49	07:23 16:32	08:24 15:42
3	08:48 15:49	08:09 16:48	07:04 17:50	06:42 19:55	05:26 20:58	04:32 21:53	04:30 22:06	05:18 21:22	06:20 20:07	07:19 18:46	07:25 16:30	08:26 15:41
4	08:48 15:50	08:07 16:50	07:01 17:52	06:39 19:57	05:24 21:00	04:31 21:55	04:31 22:05	05:20 21:20	06:21 20:04	07:22 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:52	06:59 17:54	06:36 19:59	05:22 21:02	04:30 21:56	04:32 22:05	05:22 21:18	06:23 20:02	07:24 18:41	07:29 16:25	08:29 15:40
6	08:47 15:53	08:03 16:55	06:56 17:57	06:34 20:02	05:19 21:04	04:29 21:57	04:33 22:04	05:24 21:15	06:25 19:59	07:26 18:39	07:32 16:23	08:30 15:39
7	08:46 15:55	08:01 16:57	06:53 17:59	06:31 20:04	05:17 21:06	04:28 21:58	04:34 22:03	05:26 21:13	06:27 19:56	07:28 18:36	07:34 16:21	08:32 15:39
8	08:46 15:56	07:59 16:59	06:51 18:01	06:28 20:06	05:15 21:08	04:28 21:59	04:35 22:02	05:28 21:11	06:29 19:54	07:30 18:33	07:36 16:19	08:33 15:38
9	08:45 15:58	07:56 17:01	06:48 18:03	06:26 20:08	05:13 21:10	04:27 22:00	04:36 22:01	05:29 21:09	06:31 19:51	07:32 18:31	07:38 16:17	08:35 15:38
10	08:44 15:59	07:54 17:04	06:46 18:05	06:23 20:10	05:11 21:12	04:26 22:01	04:38 22:00	05:31 21:07	06:33 19:48	07:34 18:28	07:40 16:15	08:36 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:14	04:26 22:02	04:39 21:59	05:33 21:04	06:35 19:46	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:16	04:25 22:03	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23	07:45 16:11	08:38 15:36
13	08:41 16:05	07:48 17:10	06:38 18:11	06:15 20:16	05:05 21:18	04:25 22:04	04:42 21:57	05:37 21:00	06:39 19:40	07:40 18:20	07:47 16:09	08:40 15:36
14	08:40 16:06	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:20	04:24 22:05	04:43 21:56	05:39 20:57	06:41 19:38	07:42 18:18	07:49 16:08	08:41 15:36
15	08:39 16:08	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:22	04:24 22:05	04:45 21:55	05:41 20:55	06:43 19:35	07:44 18:15	07:51 16:06	08:42 15:36
16	08:38 16:10	07:41 17:17	06:30 18:18	06:08 20:22	04:59 21:24	04:24 22:06	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:13	07:53 16:04	08:43 15:36
17	08:37 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:52	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:44 15:36
18	08:36 16:14	07:36 17:22	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:07	04:49 21:50	05:47 20:48	06:49 19:27	07:51 18:08	07:57 16:01	08:44 15:36
19	08:34 16:16	07:34 17:24	06:22 18:24	06:00 20:29	04:53 21:29	04:23 22:07	04:51 21:49	05:49 20:45	06:51 19:24	07:53 18:05	07:59 15:59	08:45 15:37
20	08:33 16:18	07:31 17:26	06:19 18:26	05:57 20:31	04:52 21:31	04:23 22:08	04:52 21:47	05:51 20:43	06:53 19:21	07:55 18:03	08:01 15:57	08:46 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:33	04:50 21:33	04:24 22:08	04:54 21:46	05:53 20:40	06:55 19:19	07:57 18:00	08:03 15:56	08:47 15:37
22	08:30 16:22	07:26 17:30	06:14 18:30	05:52 20:35	04:48 21:35	04:24 22:08	04:56 21:44	05:55 20:38	06:57 19:16	07:59 17:58	08:05 15:54	08:47 15:38
23	08:28 16:24	07:24 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:24 22:08	04:57 21:43	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:48 15:38
24	08:27 16:26	07:21 17:35	06:08 18:35	05:47 20:39	04:45 21:38	04:24 22:08	04:59 21:41	05:59 20:33	07:01 19:11	08:03 17:53	08:09 15:52	08:48 15:39
25	08:25 16:28	07:19 17:37	06:06 18:37	05:45 20:41	04:43 21:40	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:08	07:05 16:50	08:11 15:50	08:48 15:40
26	08:24 16:30	07:16 17:39	06:03 18:39	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:28	07:05 19:05	07:08 16:48	08:13 15:49	08:49 15:40
27	08:22 16:33	07:14 17:41	06:00 18:41	05:40 20:45	04:41 21:43	04:26 22:08	05:05 21:36	06:05 20:25	07:07 19:02	07:10 16:46	08:15 15:48	08:49 15:41
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:39 21:45	04:26 22:08	05:06 21:34	06:07 20:23	07:09 19:00	07:12 16:43	08:17 15:46	08:49 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:08	05:08 21:32	06:09 20:20	07:11 18:57	07:14 16:41	08:19 15:45	08:49 15:43
30	08:17 16:39		06:52 19:47	05:33 20:51	04:37 21:48	04:28 22:07	05:10 21:30	06:12 20:17	07:13 18:54	07:16 16:39	08:20 15:44	08:49 15:44
31	08:15 16:41		06:50 19:49		04:35 21:49		05:12 21:28	06:14 20:15		07:18 16:36		08:49 15:45
Potential sun hours	235	266	366	426	508	528	529	469	385	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Zelmeni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (593)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:06	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:55	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:24 21:15	06:25 20:59	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:02	05:25 21:13	06:27 20:56	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:50 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:27 21:11	06:29 20:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	04:27 22:00	04:37 22:01	05:29 21:08	06:31 20:51	07:31 18:30	07:38 16:17	08:34 15:38
10	08:43 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 20:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 20:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:02	04:40 21:58	05:35 21:01	06:37 20:43	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:37 20:59	06:39 20:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:13 20:18	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 20:37	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:54	06:43 20:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:18	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 20:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 20:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 20:26	07:50 18:07	07:57 16:01	08:44 15:36
19	08:34 16:16	07:33 17:24	06:21 18:24	06:00 20:28	04:53 21:29	04:24 22:07	04:51 21:48	05:49 20:45	06:51 20:24	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:30	04:24 22:07	04:52 21:47	05:51 20:42	06:53 20:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 20:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:07	04:56 21:44	05:55 20:37	06:57 20:16	07:59 17:58	08:05 15:54	08:46 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	04:47 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 20:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 20:10	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 20:08	08:05 17:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 20:05	08:07 17:48	08:13 15:49	08:48 15:40
27	08:21 16:33	07:14 17:41	06:00 18:40	05:40 20:45	04:41 21:42	04:26 22:08	05:05 21:35	06:05 20:25	07:07 20:02	08:09 17:46	08:14 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 20:00	08:12 17:43	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:45	04:27 22:07	05:08 21:31	06:09 20:20	07:11 18:57	08:14 17:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 17:39	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:48		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Zelta Dibens - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (579)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:10 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:09 16:48	07:04 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:18 21:21	06:19 20:07	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:07 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:55	06:56 17:56	06:34 20:01	05:19 21:03	04:29 21:57	04:33 22:03	05:24 21:15	06:25 20:01	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:26 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:28 21:11	06:29 19:53	07:29 18:33	07:36 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:07	05:13 21:09	04:27 22:00	04:37 22:01	05:29 21:08	06:31 19:51	07:32 18:30	07:38 16:17	08:34 15:38
10	08:44 15:59	07:54 17:04	06:45 18:05	06:23 20:10	05:11 21:11	04:26 22:01	04:38 22:00	05:31 21:06	06:33 19:48	07:34 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:03	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:13	06:35 18:13	06:13 20:18	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:55	06:43 19:35	07:44 18:15	07:50 16:06	08:41 15:36
16	08:38 16:10	07:40 17:17	06:30 18:18	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:53 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 19:27	07:50 18:07	07:57 16:01	08:44 15:36
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:53 21:29	04:24 22:07	04:51 21:49	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:31	04:24 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:55 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:30 16:22	07:26 17:30	06:14 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:58	08:05 15:54	08:47 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:37	04:47 21:36	04:24 22:08	04:58 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:38	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:53	08:09 15:52	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:08	08:05 16:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:38	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:33	07:14 17:41	06:00 18:41	05:40 20:45	04:41 21:43	04:26 22:08	05:05 21:35	06:05 20:25	07:07 19:02	08:09 16:46	08:15 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 19:00	08:12 16:43	08:16 15:47	08:48 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 18:57	08:14 16:41	08:18 15:45	08:49 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:39	08:20 15:44	08:49 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Zemesbites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (505)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June
1	08:48 15:46	08:12 16:43	07:09 17:45	06:47 19:51	18:57 (PrRR3) 19:18 (PrRR3)	05:31 20:53
2	08:48 15:47	08:10 16:45	07:06 17:48	06:44 19:53	18:55 (PrRR3) 19:19 (PrRR3)	05:28 20:55
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	18:53 (PrRR3) 19:19 (PrRR3)	05:26 20:57
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	18:53 (PrRR3) 19:21 (PrRR3)	05:24 20:59
5	08:47 15:51	08:04 16:52	06:58 17:54	06:36 19:59	18:52 (PrRR3) 19:21 (PrRR3)	05:21 21:01
6	08:46 15:53	08:02 16:54	06:56 17:56	17:21 (Pr3b) 17:25 (Pr3b)	18:51 (PrRR3) 19:21 (PrRR3)	05:19 21:03
7	08:46 15:54	08:00 16:57	06:53 17:58	17:17 (Pr3b) 17:30 (Pr3b)	18:50 (PrRR3) 19:21 (PrRR3)	05:17 21:05
8	08:45 15:56	07:58 16:59	06:50 18:01	17:14 (Pr3b) 17:31 (Pr3b)	18:49 (PrRR3) 19:20 (PrRR3)	05:15 21:07
9	08:44 15:58	07:56 17:01	06:48 18:03	17:12 (Pr3b) 17:32 (Pr3b)	18:50 (PrRR3) 19:21 (PrRR3)	05:13 21:09
10	08:44 15:59	07:54 17:03	06:45 18:05	17:12 (Pr3b) 17:34 (Pr3b)	18:49 (PrRR3) 19:20 (PrRR3)	05:11 21:11
11	08:43 16:01	07:52 17:06	06:43 18:07	17:10 (Pr3b) 17:34 (Pr3b)	18:50 (PrRR3) 19:20 (PrRR3)	05:09 21:13
12	08:42 16:03	07:49 17:08	06:40 18:09	17:09 (Pr3b) 17:34 (Pr3b)	18:49 (PrRR3) 19:19 (PrRR3)	05:07 21:15
13	08:41 16:04	07:47 17:10	06:37 18:11	17:09 (Pr3b) 17:35 (Pr3b)	18:50 (PrRR3) 19:18 (PrRR3)	05:05 21:17
14	08:40 16:06	07:45 17:12	06:35 18:13	17:08 (Pr3b) 17:34 (Pr3b)	18:50 (PrRR3) 19:17 (PrRR3)	05:03 21:19
15	08:39 16:08	07:43 17:15	06:32 18:15	17:08 (Pr3b) 17:34 (Pr3b)	18:52 (PrRR3) 19:16 (PrRR3)	05:01 21:21
16	08:38 16:10	07:40 17:17	06:29 18:17	17:09 (Pr3b) 17:34 (Pr3b)	18:52 (PrRR3) 19:14 (PrRR3)	04:59 21:23
17	08:36 16:12	07:38 17:19	06:27 18:20	17:09 (Pr3b) 17:33 (Pr3b)	18:54 (PrRR3) 19:13 (PrRR3)	04:57 21:25
18	08:35 16:14	07:36 17:21	06:24 18:22	17:09 (Pr3b) 17:32 (Pr3b)	18:56 (PrRR3) 19:10 (PrRR3)	04:55 21:27
19	08:34 16:16	07:33 17:23	06:21 18:24	17:10 (Pr3b) 17:31 (Pr3b)	19:00 (PrRR3) 19:06 (PrRR3)	04:53 21:29
20	08:32 16:18	07:31 17:26	06:19 18:26	17:11 (Pr3b) 17:29 (Pr3b)	05:57 21:30	04:51 21:30
21	08:31 16:20	07:28 17:28	06:16 18:28	17:12 (Pr3b) 17:26 (Pr3b)	05:55 21:32	04:50 21:32
22	08:29 16:22	07:26 17:30	06:13 18:30	17:15 (Pr3b) 17:22 (Pr3b)	05:52 21:34	04:48 21:34
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 21:36	04:46 21:36	04:46 21:36
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 21:38	04:45 21:38	04:45 21:38
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 21:39	04:43 21:39	04:43 21:39
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 21:41	04:42 21:41	04:42 21:41
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 21:43	04:40 21:43	04:40 21:43
28	08:20 16:34	07:11 17:43	05:57 18:42	05:38 21:44	04:39 21:44	04:39 21:44
29	08:18 16:37		06:55 19:45	05:35 21:46	04:38 21:46	04:38 21:46
30	08:16 16:39		06:52 19:47	19:03 (PrRR3) 19:13 (PrRR3)	05:33 21:47	04:36 21:47
31	08:14 16:41		06:49 19:49	18:59 (PrRR3) 19:16 (PrRR3)	05:31 21:49	04:35 21:49
Potential sun hours	236	266	366	426	507	528
Total, worst case			362	482		
Sun reduction			0,39	0,44		
Oper. time red.			1,00	1,00		
Wind dir. red.			1,00	1,00		
Total reduction			0,39	0,44		
Total, real			142	213		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Zemesbites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (505)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December
1	04:28 22:06	05:14 21:25	06:15 20:12	18:49 (PrRR3) 19:19 (PrRR3)	07:15 18:14 (Pr3b)	07:20 16:34
2	04:29 22:06	05:16 21:23	06:17 20:09	18:48 (PrRR3) 19:19 (PrRR3)	07:17 18:13 (Pr3b)	07:22 16:32
3	04:30 22:05	05:18 21:21	06:19 20:06	18:48 (PrRR3) 19:19 (PrRR3)	07:19 18:12 (Pr3b)	07:25 16:30
4	04:31 22:05	05:19 21:19	06:21 20:04	18:47 (PrRR3) 19:18 (PrRR3)	07:21 18:11 (Pr3b)	07:27 16:27
5	04:32 22:04	05:21 21:17	06:23 20:01	18:46 (PrRR3) 19:17 (PrRR3)	07:23 18:09 (Pr3b)	07:29 16:25
6	04:33 22:03	05:23 21:15	06:25 19:59	18:46 (PrRR3) 19:17 (PrRR3)	07:25 18:07 (Pr3b)	07:31 16:23
7	04:34 22:03	05:25 21:13	06:27 19:56	18:47 (PrRR3) 19:16 (PrRR3)	07:27 18:04 (Pr3b)	07:33 16:21
8	04:35 22:02	05:27 21:11	06:29 19:53	18:47 (PrRR3) 19:15 (PrRR3)	07:29 18:33	07:35 16:19
9	04:36 22:01	05:29 21:08	06:31 19:51	18:48 (PrRR3) 19:14 (PrRR3)	07:31 18:30	07:38 16:17
10	04:38 22:00	05:31 21:06	06:33 19:48	18:48 (PrRR3) 19:12 (PrRR3)	07:33 18:28	07:40 16:15
11	04:39 21:59	05:33 21:04	06:35 19:45	18:50 (PrRR3) 19:11 (PrRR3)	07:36 18:25	07:42 16:13
12	04:40 21:58	05:35 21:02	06:37 19:43	18:51 (PrRR3) 19:08 (PrRR3)	07:38 18:23	07:44 16:11
13	04:42 21:57	05:37 20:59	06:39 19:40	18:54 (PrRR3) 19:05 (PrRR3)	07:40 18:20	07:46 16:09
14	04:43 21:55	05:39 20:57	06:41 19:37	18:20 18:17	07:42 18:17	07:48 16:07
15	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 18:15	07:50 16:06
16	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:53 18:12	07:53 16:04
17	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 18:10	07:55 16:02
18	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 18:07	07:57 16:00
19	04:51 21:49	05:49 20:45	06:51 19:24	07:52 18:05	07:59 18:05	07:59 15:59
20	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 18:02	08:01 15:57
21	04:54 21:45	05:53 20:40	06:55 19:18	18:03 (Pr3b) 18:06 (Pr3b)	07:57 18:00	08:03 15:56
22	04:56 21:44	05:55 20:37	06:57 19:16	17:58 (Pr3b) 18:10 (Pr3b)	07:59 17:57	08:05 15:54
23	04:57 21:42	05:57 20:35	06:59 19:13	17:55 (Pr3b) 18:12 (Pr3b)	08:01 17:55	08:07 15:53
24	04:59 21:40	05:59 20:32	19:03 (PrRR3) 19:10 (PrRR3)	07:01 17:53 (Pr3b)	08:03 17:53	08:09 15:51
25	05:01 21:39	06:01 20:30	18:59 (PrRR3) 19:14 (PrRR3)	07:03 17:52 (Pr3b)	07:05 16:50	08:11 15:50
26	05:03 21:37	06:03 20:27	18:56 (PrRR3) 19:15 (PrRR3)	07:05 17:51 (Pr3b)	07:07 16:48	08:13 15:49
27	05:04 21:35	06:05 20:25	18:54 (PrRR3) 19:16 (PrRR3)	07:07 17:50 (Pr3b)	07:09 16:45	08:15 15:47
28	05:06 21:33	06:07 20:22	18:52 (PrRR3) 19:17 (PrRR3)	07:09 17:49 (Pr3b)	07:12 16:43	08:16 15:46
29	05:08 21:31	06:09 20:20	18:51 (PrRR3) 19:18 (PrRR3)	07:11 17:48 (Pr3b)	07:14 16:41	08:18 15:45
30	05:10 21:29	06:11 20:17	18:50 (PrRR3) 19:18 (PrRR3)	07:13 17:48 (Pr3b)	07:16 16:38	08:20 15:44
31	05:12 21:27	06:13 20:14	18:49 (PrRR3) 19:19 (PrRR3)	07:18 16:36	07:18 16:36	08:20 15:44
Potential sun hours	529	469	384	324	248	217
Total, worst case		173	541	136		
Sun reduction		0,52	0,43	0,29		
Oper. time red.		1,00	1,00	1,00		
Wind dir. red.		1,00	1,00	1,00		
Total reduction		0,52	0,43	0,29		
Total, real		90	233	39		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Zemnieka seta - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (453)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:12 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:29 22:07	05:14 21:26	06:15 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:29 20:55	04:33 21:52	04:29 22:06	05:16 21:24	06:17 20:09	07:17 18:49	07:23 16:32	08:24 15:43
3	08:48 15:49	08:09 16:48	07:04 17:50	06:42 19:55	05:26 20:57	04:32 21:53	04:30 22:06	05:18 21:21	06:19 20:07	07:19 18:46	07:25 16:30	08:25 15:42
4	08:47 15:50	08:07 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:52	06:58 17:54	06:36 19:59	05:22 21:01	04:30 21:55	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:26	08:28 15:40
6	08:46 15:53	08:03 16:55	06:56 17:56	06:34 20:01	05:20 21:03	04:29 21:57	04:33 22:04	05:24 21:15	06:25 20:01	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:55	08:00 16:57	06:53 17:59	06:31 20:03	05:17 21:05	04:29 21:58	04:34 22:03	05:26 21:13	06:27 20:01	07:27 18:36	07:33 16:21	08:31 15:39
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:28 21:11	06:29 20:01	07:30 18:33	07:36 16:19	08:33 15:38
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:08	05:13 21:09	04:27 22:00	04:37 22:01	05:30 21:08	06:31 20:01	07:32 18:31	07:38 16:17	08:34 15:38
10	08:44 16:00	07:54 17:04	06:45 18:05	06:23 20:10	05:11 21:11	04:26 22:01	04:38 22:00	05:32 21:06	06:33 20:01	07:34 18:28	07:40 16:15	08:36 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:13	04:26 22:02	04:39 21:59	05:34 21:04	06:35 20:01	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:15	04:25 22:03	04:40 21:58	05:36 21:02	06:37 20:01	07:38 18:23	07:44 16:11	08:38 15:37
13	08:41 16:05	07:47 17:10	06:38 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:57	05:37 20:59	06:39 20:01	07:40 18:20	07:46 16:10	08:39 15:36
14	08:40 16:07	07:45 17:13	06:35 18:13	06:13 20:18	05:03 21:19	04:25 22:04	04:43 21:55	05:39 20:57	06:41 20:01	07:42 18:18	07:48 16:08	08:40 15:36
15	08:39 16:08	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:24 22:05	04:45 21:54	05:41 20:55	06:43 20:01	07:44 18:15	07:51 16:06	08:41 15:36
16	08:38 16:10	07:40 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 20:01	07:46 18:13	07:53 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:51	05:45 20:50	06:47 20:01	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:22	06:24 18:22	06:02 20:26	04:55 21:27	04:24 22:06	04:49 21:50	05:47 20:47	06:49 20:01	07:50 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:54 21:29	04:24 22:07	04:51 21:49	05:49 20:45	06:51 20:01	07:52 18:05	07:59 15:59	08:45 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:31	04:24 22:07	04:53 21:47	05:51 20:42	06:53 20:01	07:55 18:03	08:01 15:58	08:45 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:08	04:54 21:46	05:53 20:40	06:55 20:01	07:57 18:00	08:03 15:56	08:46 15:37
22	08:30 16:22	07:26 17:30	06:14 18:30	05:52 20:35	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 20:01	07:59 17:58	08:05 15:55	08:47 15:38
23	08:28 16:24	07:24 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:24 22:08	04:58 21:42	05:57 20:35	06:59 20:01	08:01 17:55	08:07 15:53	08:47 15:38
24	08:27 16:26	07:21 17:35	06:08 18:34	05:48 20:39	04:45 21:38	04:25 22:08	04:59 21:41	05:59 20:32	07:01 20:01	08:03 17:53	08:09 15:52	08:48 15:39
25	08:25 16:28	07:19 17:37	06:06 18:36	05:45 20:41	04:44 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 20:01	08:05 17:50	08:11 15:50	08:48 15:40
26	08:23 16:30	07:16 17:39	06:03 18:39	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 20:01	08:07 17:48	08:13 15:49	08:48 15:40
27	08:22 16:33	07:14 17:41	06:00 18:41	05:40 20:45	04:41 21:43	04:26 22:08	05:05 21:35	06:05 20:25	07:07 20:01	08:09 17:46	08:15 15:48	08:48 15:41
28	08:20 16:35	07:11 17:43	05:58 18:43	05:38 20:47	04:39 21:44	04:26 22:08	05:07 21:33	06:07 20:22	07:09 20:01	08:12 17:43	08:16 15:47	08:49 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 20:01	08:14 17:41	08:18 15:46	08:49 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:10 21:30	06:11 20:17	07:13 20:01	08:16 17:39	08:20 15:44	08:49 15:44
31	08:14 16:41		06:50 19:49		04:36 21:49		05:12 21:28	06:13 20:14		07:18 17:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Zirnekliši - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (549)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June
1	08:48	08:12	07:09	16:29 (PrRR3)	06:47	04:34
	15:46	16:43	17:45	32 17:01 (PrRR3)	19:51	21:50
2	08:48	08:10	07:06	16:28 (PrRR3)	06:44	04:33
	15:47	16:45	17:48	33 17:01 (PrRR3)	19:53	21:52
3	08:48	08:09	07:03	16:27 (PrRR3)	06:41	04:32
	15:49	16:48	17:50	33 17:00 (PrRR3)	19:55	21:53
4	08:47	08:07	16:06 (Pr3b) 07:01	16:28 (PrRR3)	06:39	04:31
	15:50	16:50	16:15 (Pr3b) 17:52	33 17:01 (PrRR3)	19:57	21:54
5	08:47	08:04	16:04 (Pr3b) 06:58	16:27 (PrRR3)	06:36	04:30
	15:51	16:52	16:18 (Pr3b) 17:54	33 17:00 (PrRR3)	19:59	21:55
6	08:46	08:02	16:02 (Pr3b) 06:56	16:28 (PrRR3)	06:33	04:29
	15:53	16:54	16:20 (Pr3b) 17:56	40 17:28 (Pr25)	20:01	21:57
7	08:46	08:00	16:02 (Pr3b) 06:53	16:28 (PrRR3)	06:31	04:28
	15:54	16:57	16:22 (Pr3b) 17:58	44 17:30 (Pr25)	20:03	21:58
8	08:45	07:58	16:00 (Pr3b) 06:50	16:28 (PrRR3)	06:28	04:27
	15:56	16:59	16:22 (Pr3b) 18:01	47 17:32 (Pr25)	20:05	21:59
9	08:44	07:56	16:00 (Pr3b) 06:48	16:28 (PrRR3)	06:25	04:27
	15:58	17:01	16:23 (Pr3b) 18:03	49 17:34 (Pr25)	20:07	22:00
10	08:44	07:54	16:00 (Pr3b) 06:45	16:29 (PrRR3)	06:23	04:26
	15:59	17:03	16:24 (Pr3b) 18:05	50 17:35 (Pr25)	20:09	22:01
11	08:43	07:52	15:59 (Pr3b) 06:43	16:30 (PrRR3)	06:20	04:25
	16:01	17:06	16:24 (Pr3b) 18:07	48 17:35 (Pr25)	20:12	22:02
12	08:42	07:49	15:59 (Pr3b) 06:40	16:31 (PrRR3)	06:18	04:25
	16:03	17:08	16:24 (Pr3b) 18:09	44 17:34 (Pr25)	20:14	22:03
13	08:41	07:47	15:58 (Pr3b) 06:37	16:34 (PrRR3)	06:15	04:25
	16:04	17:10	16:24 (Pr3b) 18:11	40 17:35 (Pr25)	20:16	22:03
14	08:40	07:45	15:59 (Pr3b) 06:35	16:37 (PrRR3)	06:12	04:24
	16:06	17:12	16:24 (Pr3b) 18:13	32 17:34 (Pr25)	20:18	22:04
15	08:39	07:43	15:59 (Pr3b) 06:32	17:12 (Pr25)	06:10	04:24
	16:08	17:15	16:24 (Pr3b) 18:15	21 17:33 (Pr25)	20:20	22:05
16	08:38	07:40	15:59 (Pr3b) 06:29	17:13 (Pr25)	06:07	04:24
	16:10	17:17	16:24 (Pr3b) 18:17	19 17:32 (Pr25)	20:22	22:05
17	08:36	07:38	16:00 (Pr3b) 06:27	17:14 (Pr25)	06:05	04:23
	16:12	17:19	16:23 (Pr3b) 18:20	17 17:31 (Pr25)	20:24	22:06
18	08:35	07:36	16:01 (Pr3b) 06:24	17:15 (Pr25)	06:02	04:23
	16:14	17:21	16:22 (Pr3b) 18:22	13 17:28 (Pr25)	20:26	22:06
19	08:34	07:33	16:02 (Pr3b) 06:21	17:18 (Pr25)	06:00	04:23
	16:16	17:23	16:21 (Pr3b) 18:24	8 17:26 (Pr25)	20:28	22:07
20	08:32	07:31	16:03 (Pr3b) 06:19		05:57	04:23
	16:18	17:26	16:19 (Pr3b) 18:26		20:30	22:07
21	08:31	07:28	16:06 (Pr3b) 06:16		05:55	04:23
	16:20	17:28	16:18 (Pr3b) 18:28		20:32	22:08
22	08:30	07:26	16:39 (PrRR3) 06:13		05:52	04:24
	16:22	17:30	16:52 (PrRR3) 18:30		20:34	22:08
23	08:28	07:24	16:36 (PrRR3) 06:11		05:50	04:24
	16:24	17:32	16:54 (PrRR3) 18:32		20:37	22:08
24	08:26	07:21	16:34 (PrRR3) 06:08		05:47	04:24
	16:26	17:35	16:57 (PrRR3) 18:34		20:39	22:08
25	08:25	07:19	16:32 (PrRR3) 06:05		05:45	04:25
	16:28	17:37	16:57 (PrRR3) 18:36		20:41	22:08
26	08:23	07:16	16:32 (PrRR3) 06:03		05:42	04:25
	16:30	17:39	16:59 (PrRR3) 18:38		20:43	22:08
27	08:21	07:14	16:30 (PrRR3) 06:00		05:40	04:25
	16:32	17:41	16:59 (PrRR3) 18:40		20:45	22:08
28	08:20	07:11	16:29 (PrRR3) 05:57		05:38	04:26
	16:34	17:43	17:00 (PrRR3) 18:42		20:47	22:08
29	08:18		06:55		05:35	04:27
	16:37		19:45		20:49	22:07
30	08:16		06:52		05:33	04:27
	16:39		19:47		20:51	22:07
31	08:14		06:49			04:35
	16:41		19:49			21:49
Potential sun hours	236	266	366	426	507	528
Total, worst case		538	636			
Sun reduction		0,23	0,39			
Oper. time red.		1,00	1,00			
Wind dir. red.		1,00	1,00			
Total reduction		0,23	0,39			
Total, real		121	249			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Zirnekliš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (549)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December
1	04:28 22:07	05:14 21:25	06:15 20:12	07:15 18:51	17:12 (PrRR3) 18:14 (Pr25)	07:20 16:34
2	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	17:10 (PrRR3) 18:14 (Pr25)	24 16:32
3	04:30 22:06	05:18 21:21	06:19 20:07	07:19 18:46	17:08 (PrRR3) 18:13 (Pr25)	23 16:30
4	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	17:07 (PrRR3) 18:12 (Pr25)	21 16:27
5	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	17:05 (PrRR3) 18:10 (Pr25)	20 16:25
6	04:33 22:04	05:23 21:15	06:25 19:59	07:25 18:38	17:04 (PrRR3) 18:07 (Pr25)	17 16:23
7	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	17:03 (PrRR3) 18:05 (Pr25)	13 16:21
8	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	17:03 (PrRR3) 18:02 (Pr25)	9 16:19
9	04:36 22:01	05:29 21:08	06:31 19:51	07:31 18:30	17:02 (PrRR3) 17:35 (PrRR3)	8 16:17
10	04:37 22:00	05:31 21:06	06:33 19:48	07:33 18:28	17:02 (PrRR3) 17:35 (PrRR3)	7 16:15
11	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	17:02 (PrRR3) 17:35 (PrRR3)	6 16:13
12	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23	17:02 (PrRR3) 17:34 (PrRR3)	5 16:11
13	04:41 21:57	05:37 20:59	06:39 19:40	07:40 18:20	17:02 (PrRR3) 17:33 (PrRR3)	4 16:09
14	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17	17:02 (PrRR3) 17:32 (PrRR3)	3 16:07
15	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	17:03 (PrRR3) 17:31 (PrRR3)	2 16:06
16	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	17:04 (PrRR3) 17:31 (PrRR3)	1 16:04
17	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	17:05 (PrRR3) 17:29 (PrRR3)	0 16:02
18	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	17:06 (PrRR3) 17:27 (PrRR3)	0 16:00
19	04:51 21:49	05:49 20:45	06:51 19:24	07:52 18:05	17:08 (PrRR3) 17:24 (PrRR3)	0 15:59
20	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	16:40 (Pr3b) 17:22 (PrRR3)	0 15:57
21	04:54 21:45	05:53 20:40	06:55 19:18	07:57 18:00	16:36 (Pr3b) 16:49 (Pr3b)	0 15:56
22	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:57	16:33 (Pr3b) 16:50 (Pr3b)	0 15:54
23	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	16:31 (Pr3b) 16:51 (Pr3b)	0 15:53
24	04:59 21:41	05:59 20:32	07:01 19:10	08:03 18:07 (Pr25)	16:31 (Pr3b) 16:53 (Pr3b)	0 15:51
25	05:01 21:39	06:01 20:30	07:03 19:08	07:05 18:10 (Pr25)	15:30 (Pr3b) 15:53 (Pr3b)	0 15:50
26	05:03 21:37	06:03 20:27	07:05 19:05	07:07 18:12 (Pr25)	15:29 (Pr3b) 15:53 (Pr3b)	0 15:49
27	05:04 21:35	06:05 20:25	07:07 19:02	07:09 18:13 (Pr25)	15:29 (Pr3b) 15:54 (Pr3b)	0 15:47
28	05:06 21:33	06:07 20:22	07:09 18:59	07:12 18:13 (Pr25)	15:28 (Pr3b) 15:54 (Pr3b)	0 15:46
29	05:08 21:31	06:09 20:20	07:11 18:57	07:14 18:14 (Pr25)	15:28 (Pr3b) 15:53 (Pr3b)	0 15:45
30	05:10 21:29	06:11 20:17	07:13 18:54	07:16 18:13 (Pr25)	15:28 (Pr3b) 15:54 (Pr3b)	0 15:44
31	05:12 21:27	06:13 20:14		07:18 16:36	15:28 (Pr3b) 15:53 (Pr3b)	0 15:45
Potential sun hours	529	469	384	324	248	217
Total, worst case			134	927	127	
Sun reduction			0,43	0,29	0,08	
Oper. time red.			1,00	1,00	1,00	
Wind dir. red.			1,00	1,00	1,00	
Total reduction			0,43	0,29	0,08	
Total, real			58	269	10	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Zvaigznites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (459)
 Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:49 15:46	08:13 16:43	07:09 17:46	06:47 19:51	05:31 20:54	04:34 21:51	04:28 22:07	05:14 21:26	06:16 20:12	07:15 18:52	07:21 16:34	08:22 15:43
2	08:49 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:28 20:56	04:33 21:52	04:29 22:07	05:16 21:24	06:18 20:10	07:17 18:49	07:23 16:32	08:24 15:42
3	08:48 15:49	08:09 16:48	07:04 17:50	06:42 19:55	05:26 20:58	04:32 21:53	04:30 22:06	05:18 21:22	06:20 20:07	07:20 18:46	07:25 16:30	08:26 15:41
4	08:48 15:50	08:07 16:50	07:01 17:52	06:39 19:57	05:24 21:00	04:31 21:55	04:31 22:05	05:20 21:20	06:22 20:04	07:22 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:52	06:59 17:54	06:36 19:59	05:22 21:02	04:30 21:56	04:32 22:05	05:22 21:18	06:24 20:02	07:24 18:41	07:29 16:26	08:29 15:40
6	08:47 15:53	08:03 16:55	06:56 17:57	06:34 20:02	05:19 21:04	04:29 21:57	04:33 22:04	05:24 21:15	06:26 19:59	07:26 18:39	07:32 16:23	08:30 15:39
7	08:46 15:55	08:01 16:57	06:53 17:59	06:31 20:04	05:17 21:06	04:28 21:58	04:34 22:03	05:26 21:13	06:28 19:56	07:28 18:36	07:34 16:21	08:32 15:39
8	08:46 15:56	07:59 16:59	06:51 18:01	06:28 20:06	05:15 21:08	04:28 21:59	04:35 22:02	05:28 21:11	06:29 19:54	07:30 18:33	07:36 16:19	08:33 15:38
9	08:45 15:58	07:56 17:01	06:48 18:03	06:26 20:08	05:13 21:10	04:27 22:00	04:36 22:01	05:30 21:09	06:31 19:51	07:32 18:31	07:38 16:17	08:35 15:38
10	08:44 15:59	07:54 17:04	06:46 18:05	06:23 20:10	05:11 21:12	04:26 22:01	04:38 22:00	05:31 21:07	06:33 19:48	07:34 18:28	07:40 16:15	08:36 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:14	04:26 22:02	04:39 21:59	05:33 21:04	06:35 19:46	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:16	04:25 22:03	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23	07:45 16:11	08:38 15:37
13	08:41 16:05	07:48 17:10	06:38 18:11	06:15 20:16	05:05 21:18	04:25 22:04	04:42 21:57	05:37 21:00	06:39 19:40	07:40 18:20	07:47 16:10	08:40 15:36
14	08:40 16:06	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:20	04:24 22:05	04:43 21:56	05:39 20:57	06:41 19:38	07:42 18:18	07:49 16:08	08:41 15:36
15	08:39 16:08	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:22	04:24 22:05	04:45 21:55	05:41 20:55	06:43 19:35	07:44 18:15	07:51 16:06	08:42 15:36
16	08:38 16:10	07:41 17:17	06:30 18:18	06:08 20:22	04:59 21:24	04:24 22:06	04:46 21:53	05:43 20:53	06:45 19:32	07:46 18:13	07:53 16:04	08:43 15:36
17	08:37 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:07	04:48 21:52	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:44 15:36
18	08:36 16:14	07:36 17:22	06:24 18:22	06:02 20:27	04:55 21:27	04:24 22:07	04:49 21:51	05:47 20:48	06:49 19:27	07:51 18:08	07:57 16:01	08:44 15:36
19	08:34 16:16	07:34 17:24	06:22 18:24	06:00 20:29	04:53 21:29	04:23 22:07	04:51 21:49	05:49 20:45	06:51 19:24	07:53 18:05	07:59 15:59	08:45 15:37
20	08:33 16:18	07:31 17:26	06:19 18:26	05:57 20:31	04:52 21:31	04:24 22:08	04:52 21:48	05:51 20:43	06:53 19:21	07:55 18:03	08:01 15:57	08:46 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:33	04:50 21:33	04:24 22:08	04:54 21:46	05:53 20:40	06:55 19:19	07:57 18:00	08:03 15:56	08:47 15:37
22	08:30 16:22	07:26 17:30	06:14 18:30	05:52 20:35	04:48 21:35	04:24 22:08	04:56 21:44	05:55 20:38	06:57 19:16	07:59 17:58	08:05 15:54	08:47 15:38
23	08:28 16:24	07:24 17:33	06:11 18:32	05:50 20:37	04:47 21:36	04:24 22:08	04:57 21:43	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:48 15:38
24	08:27 16:26	07:21 17:35	06:08 18:35	05:48 20:39	04:45 21:38	04:24 22:08	04:59 21:41	05:59 20:33	07:01 19:11	08:03 17:53	08:09 15:52	08:48 15:39
25	08:25 16:28	07:19 17:37	06:06 18:37	05:45 20:41	04:44 21:40	04:25 22:08	05:01 21:39	06:02 20:30	07:03 19:08	07:06 16:50	08:11 15:50	08:48 15:40
26	08:24 16:30	07:16 17:39	06:03 18:39	05:43 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:04 20:28	07:05 19:05	07:08 16:48	08:13 15:49	08:49 15:40
27	08:22 16:33	07:14 17:41	06:00 18:41	05:40 20:45	04:41 21:43	04:26 22:08	05:05 21:36	06:06 20:25	07:07 19:03	07:10 16:46	08:15 15:48	08:49 15:41
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:39 21:45	04:26 22:08	05:06 21:34	06:08 20:23	07:09 19:00	07:12 16:43	08:17 15:47	08:49 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:08	05:08 21:32	06:10 20:20	07:11 18:57	07:14 16:41	08:19 15:45	08:49 15:43
30	08:17 16:39		06:52 19:47	05:33 20:51	04:37 21:48	04:28 22:07	05:10 21:30	06:12 20:17	07:13 18:54	07:16 16:39	08:21 15:44	08:49 15:44
31	08:15 16:41		06:50 19:49		04:35 21:49		05:12 21:28	06:14 20:15		07:19 16:36		08:49 15:45
Potential sun hours	235	266	366	426	508	528	529	469	385	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Zagiš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (534)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:36	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:51	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:14	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Abolini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (537)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:06	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:37
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:03	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:19	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Ciekuri - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (433)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:47	08:13 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 21:50	04:29 22:07	05:14 21:26	06:16 20:12	07:16 18:52	07:21 16:35	08:22 15:44
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:29 20:55	04:34 21:52	04:30 22:06	05:16 21:24	06:18 20:10	07:18 18:49	07:23 16:32	08:24 15:43
3	08:48 15:50	08:09 16:48	07:04 17:50	06:42 19:55	05:27 20:57	04:33 21:53	04:31 22:06	05:18 21:22	06:20 20:07	07:20 18:47	07:25 16:30	08:25 15:42
4	08:48 15:51	08:07 16:51	07:01 17:52	06:39 19:57	05:24 21:00	04:32 21:54	04:32 22:05	05:20 21:20	06:22 20:04	07:22 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:53	06:59 17:55	06:37 19:59	05:22 21:02	04:31 21:56	04:33 22:04	05:22 21:17	06:24 20:02	07:24 18:41	07:29 16:26	08:29 15:40
6	08:47 15:54	08:03 16:55	06:56 17:57	06:34 20:02	05:20 21:04	04:30 21:57	04:34 22:04	05:24 21:15	06:26 19:59	07:26 18:39	07:31 16:24	08:30 15:40
7	08:46 15:55	08:01 16:57	06:54 17:59	06:31 20:04	05:18 21:06	04:29 21:58	04:35 22:03	05:26 21:13	06:28 19:56	07:28 18:36	07:34 16:22	08:32 15:39
8	08:45 15:57	07:59 16:59	06:51 18:01	06:29 20:06	05:16 21:08	04:28 21:59	04:36 22:02	05:28 21:11	06:30 19:54	07:30 18:33	07:36 16:20	08:33 15:39
9	08:45 15:58	07:56 17:02	06:48 18:03	06:26 20:08	05:13 21:10	04:27 22:00	04:37 22:01	05:30 21:09	06:32 19:51	07:32 18:31	07:38 16:18	08:34 15:38
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10	05:11 21:12	04:27 22:01	04:38 22:00	05:32 21:06	06:34 19:48	07:34 18:28	07:40 16:16	08:36 15:38
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	05:09 21:14	04:26 22:02	04:40 21:59	05:34 21:04	06:36 19:46	07:36 18:26	07:42 16:14	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:10	06:18 20:14	05:07 21:16	04:26 22:03	04:41 21:58	05:36 21:02	06:38 19:43	07:38 18:23	07:44 16:12	08:38 15:37
13	08:41 16:05	07:48 17:11	06:38 18:12	06:16 20:16	05:05 21:18	04:25 22:04	04:42 21:57	05:38 20:59	06:40 19:40	07:40 18:21	07:46 16:10	08:39 15:37
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	05:03 21:19	04:25 22:04	04:44 21:56	05:40 20:57	06:42 19:38	07:42 18:18	07:49 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:25 22:05	04:45 21:54	05:42 20:55	06:44 19:35	07:44 18:15	07:51 16:06	08:41 15:37
16	08:38 16:11	07:41 17:17	06:30 18:18	06:08 20:22	04:59 21:23	04:24 22:06	04:47 21:53	05:44 20:52	06:46 19:32	07:46 18:13	07:53 16:05	08:42 15:37
17	08:37 16:13	07:38 17:20	06:27 18:20	06:05 20:24	04:58 21:25	04:24 22:06	04:48 21:52	05:46 20:50	06:48 19:30	07:48 18:10	07:55 16:03	08:43 15:37
18	08:35 16:14	07:36 17:22	06:25 18:22	06:03 20:26	04:56 21:27	04:24 22:07	04:50 21:50	05:48 20:48	06:50 19:27	07:51 18:08	07:57 16:01	08:44 15:37
19	08:34 16:16	07:34 17:24	06:22 18:24	06:00 20:29	04:54 21:29	04:24 22:07	04:51 21:49	05:50 20:45	06:52 19:24	07:53 18:05	07:59 16:00	08:45 15:37
20	08:33 16:18	07:31 17:26	06:19 18:26	05:58 20:31	04:52 21:31	04:24 22:07	04:53 21:47	05:52 20:43	06:54 19:21	07:55 18:03	08:01 15:58	08:46 15:37
21	08:31 16:20	07:29 17:28	06:17 18:28	05:55 20:33	04:50 21:33	04:24 22:08	04:55 21:46	05:54 20:40	06:55 19:19	07:57 18:00	08:03 15:56	08:46 15:38
22	08:30 16:22	07:26 17:31	06:14 18:30	05:53 20:35	04:49 21:34	04:24 22:08	04:56 21:44	05:56 20:38	06:57 19:16	07:59 17:58	08:05 15:55	08:47 15:38
23	08:28 16:25	07:24 17:33	06:11 18:33	05:50 20:37	04:47 21:36	04:25 22:08	04:58 21:42	05:58 20:35	06:59 19:13	08:01 17:56	08:07 15:53	08:47 15:39
24	08:27 16:27	07:21 17:35	06:09 18:35	05:48 20:39	04:46 21:38	04:25 22:08	05:00 21:41	06:00 20:33	07:01 19:11	08:03 17:53	08:09 15:52	08:48 15:39
25	08:25 16:29	07:19 17:37	06:06 18:37	05:45 20:41	04:44 21:39	04:25 22:08	05:02 21:39	06:02 20:30	07:03 19:08	08:05 16:51	08:11 15:51	08:48 15:40
26	08:23 16:31	07:16 17:39	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08	05:03 21:37	06:04 20:28	07:05 19:05	08:08 16:48	08:13 15:49	08:48 15:41
27	08:22 16:33	07:14 17:42	06:00 18:41	05:41 20:45	04:41 21:43	04:26 22:08	05:05 21:35	06:06 20:25	07:07 19:03	08:10 16:46	08:15 15:48	08:49 15:42
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:08	05:07 21:34	06:08 20:22	07:09 19:00	08:12 16:44	08:17 15:47	08:49 15:43
29	08:18 16:37		06:55 19:45	05:36 20:49	04:38 21:46	04:28 22:07	05:09 21:32	06:10 20:20	07:11 18:57	08:14 16:41	08:18 15:46	08:49 15:43
30	08:16 16:40		06:52 19:47	05:33 20:51	04:37 21:47	04:28 22:07	05:11 21:30	06:12 20:17	07:14 18:55	08:16 16:39	08:20 15:45	08:49 15:44
31	08:15 16:42		06:50 19:49		04:36 21:49		05:13 21:28	06:14 20:15		07:18 16:37		08:49 15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Cinguli - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (467)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	10:20 (PrRR3)	08:13	07:09	06:47	05:31	04:34	04:28	05:14	06:15	07:15	08:22
15:46	19	10:39 (PrRR3)	16:43	17:46	19:51	20:53	21:50	22:07	21:26	20:12	18:52	16:34
2	08:48	10:20 (PrRR3)	08:11	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	08:24
15:48	19	10:39 (PrRR3)	16:46	17:48	19:53	20:55	21:52	22:06	21:24	20:09	18:49	16:32
3	08:48	10:21 (PrRR3)	08:09	07:04	06:41	05:26	04:32	04:30	05:18	06:19	07:19	08:25
15:49	19	10:40 (PrRR3)	16:48	17:50	19:55	20:57	21:53	22:06	21:22	20:07	18:46	16:30
4	08:48	10:22 (PrRR3)	08:07	07:01	06:39	05:24	04:31	04:31	05:20	06:21	07:21	08:27
15:50	17	10:39 (PrRR3)	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:27
5	08:47	10:23 (PrRR3)	08:05	06:58	06:36	05:22	04:30	04:32	05:21	06:23	07:23	08:29
15:52	16	10:39 (PrRR3)	16:52	17:54	19:59	21:01	21:56	22:04	21:17	20:01	18:41	16:25
6	08:47	10:24 (PrRR3)	08:03	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	08:30
15:53	15	10:39 (PrRR3)	16:54	17:56	20:01	21:04	21:57	22:04	21:15	19:59	18:38	16:23
7	08:46	10:25 (PrRR3)	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	08:32
15:54	14	10:39 (PrRR3)	16:57	17:58	20:03	21:06	21:58	22:03	21:13	19:56	18:36	16:21
8	08:45	10:27 (PrRR3)	07:58	06:51	06:28	05:15	04:27	04:35	05:27	06:29	07:30	08:33
15:56	11	10:38 (PrRR3)	16:59	18:01	20:05	21:08	21:59	22:02	21:11	19:53	18:33	16:19
9	08:45	10:29 (PrRR3)	07:56	06:48	06:26	05:13	04:27	04:36	05:29	06:31	07:32	08:34
15:58	8	10:37 (PrRR3)	17:01	18:03	20:08	21:10	22:00	22:01	21:09	19:51	18:30	16:17
10	08:44	10:32 (PrRR3)	07:54	06:45	06:23	05:11	04:26	04:38	05:31	06:33	07:34	08:36
15:59	3	10:35 (PrRR3)	17:03	18:05	20:10	21:12	22:01	22:00	21:06	19:48	18:28	16:15
11	08:43		07:52	06:43	06:20	05:09	04:25	04:39	05:33	06:35	07:36	08:37
16:01			17:06	18:07	20:12	21:14	22:02	21:59	21:04	19:45	18:25	16:13
12	08:42		07:50	06:40	06:18	05:07	04:25	04:40	05:35	06:37	07:38	08:38
16:03			17:08	18:09	20:14	21:16	22:03	21:58	21:02	19:43	18:23	16:11
13	08:41		07:47	06:37	06:15	05:05	04:25	04:42	05:37	06:39	07:40	08:39
16:04			17:10	18:11	20:16	21:17	22:04	21:57	20:59	19:40	18:20	16:09
14	08:40		07:45	06:35	06:13	05:03	04:24	04:43	05:39	06:41	07:42	08:39
16:06			17:12	18:13	20:18	21:19	22:04	21:56	20:57	19:37	18:18	16:07
15	08:39		07:43	06:32	06:10	05:01	04:24	04:44	05:41	06:43	07:44	08:41
16:08			17:15	18:15	20:20	21:21	22:05	21:54	20:55	19:35	18:15	16:06
16	08:38		07:40	06:30	06:07	04:59	04:24	04:46	05:43	06:45	07:46	08:42
16:10			17:17	18:18	20:22	21:23	22:06	21:53	20:52	19:32	18:12	16:04
17	08:37		07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	08:43
16:12			17:19	18:20	20:24	21:25	22:06	21:52	20:50	19:29	18:10	16:02
18	08:35		07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	08:44
16:14			17:21	18:22	20:26	21:27	22:07	21:50	20:47	19:27	18:07	16:01
19	08:34		07:33	06:22	06:00	04:53	04:23	04:51	05:49	06:51	07:52	08:45
16:16			17:24	18:24	20:28	21:29	22:07	21:49	20:45	19:24	18:05	15:59
20	08:33		07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:55	08:46
16:18			17:26	18:26	20:30	21:31	22:07	21:47	20:42	19:21	18:02	15:57
21	08:31		07:29	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:57	08:46
16:20			17:28	18:28	20:33	21:33	22:08	21:46	20:40	19:18	18:00	15:56
22	08:30		07:26	06:13	05:52	04:48	04:24	04:56	05:55	06:57	07:59	08:47
16:22			17:30	18:30	20:35	21:34	22:08	21:44	20:38	19:16	17:57	15:54
23	08:28		07:24	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:47
16:24			17:32	18:32	20:37	21:36	22:08	21:42	20:35	19:13	17:55	15:53
24	08:27		07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:48
16:26			17:35	18:34	20:39	21:38	22:08	21:41	20:32	19:10	17:53	15:51
25	08:25		07:19	06:05	05:45	04:43	04:25	05:01	06:01	07:03	08:05	08:48
16:28			17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:08	17:50	15:49
26	08:23		07:16	06:03	05:42	04:42	04:25	05:03	06:03	07:05	08:07	08:48
16:30			17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	17:48	15:49
27	08:22		07:14	06:00	05:40	04:40	04:26	05:04	06:05	07:07	08:09	08:49
16:32			17:41	18:41	20:45	21:43	22:08	21:35	20:25	19:02	17:46	15:48
28	08:20		07:11	05:57	05:38	04:39	04:26	05:06	06:07	07:09	08:12	08:49
16:35			17:43	18:43	20:47	21:44	22:08	21:33	20:22	19:00	17:43	15:46
29	08:18			06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:49
16:37				19:45	20:49	21:46	22:07	21:32	20:20	18:57	17:41	15:43
30	08:16			06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:49
16:39				19:47	20:51	21:47	22:07	21:30	20:17	18:54	17:39	15:44
31	08:14			06:49		04:35		05:12	06:13		07:18	08:49
16:41				19:49		21:49		21:28	20:15		16:36	15:45
Potential sun hours	235	266	366	426	508	528	529	469	384	324	248	216
Total, worst case	141											566
Sun reduction	0,13											0,08
Oper. time red.	1,00											1,00
Wind dir. red.	1,00											1,00
Total reduction	0,13											0,08
Total, real	19											48

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Eveles - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (498)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 15:46	08:12 16:43	07:08 17:45	06:47 19:51	05:30 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:51	07:20 16:34	08:22 15:43
2	08:48 15:47	08:10 16:45	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:51	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	07:22 16:32	08:23 15:42
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:05	05:17 21:21	06:19 20:06	07:19 18:46	07:25 16:29	08:25 15:41
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	07:27 16:27	08:27 15:40
5	08:47 15:51	08:04 16:52	06:58 17:54	06:36 19:59	05:21 21:01	04:30 21:55	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:28 15:40
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:56	04:33 22:03	05:23 21:15	06:25 19:58	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	07:33 16:21	08:31 15:38
8	08:45 15:56	07:58 16:59	06:50 18:00	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	07:35 16:19	08:33 15:38
9	08:44 15:57	07:56 17:01	06:48 18:03	06:25 20:07	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 19:50	07:31 18:30	07:38 16:17	08:34 15:37
10	08:43 15:59	07:54 17:03	06:45 18:05	06:23 20:09	05:11 21:11	04:26 22:01	04:37 22:00	05:31 21:06	06:33 19:48	07:33 18:28	07:40 16:15	08:35 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:11	05:09 21:13	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:35 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	05:06 21:15	04:25 22:03	04:40 21:58	05:35 21:01	06:37 19:42	07:38 18:22	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:04 21:17	04:24 22:03	04:41 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	05:02 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17	07:48 16:07	08:40 15:36
15	08:39 16:08	07:43 17:14	06:32 18:15	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15	07:50 16:06	08:41 15:36
16	08:37 16:10	07:40 17:17	06:29 18:17	06:07 20:22	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:52 16:04	08:42 15:36
17	08:36 16:12	07:38 17:19	06:27 18:19	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:06	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07	07:57 16:00	08:44 15:36
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:51 21:48	05:49 20:45	06:51 19:24	07:52 18:05	07:59 15:59	08:45 15:36
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:51 21:30	04:23 22:07	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02	08:01 15:57	08:45 15:37
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:23 22:07	04:54 21:45	05:53 20:40	06:55 19:18	07:56 18:00	08:03 15:56	08:46 15:37
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:57	08:05 15:54	08:46 15:38
23	08:28 16:24	07:23 17:32	06:11 18:32	05:50 20:36	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:26 16:26	07:21 17:34	06:08 18:34	05:47 20:38	04:45 21:37	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:52	08:09 15:51	08:47 15:39
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	04:43 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:07	08:05 16:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:40
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	04:40 21:42	04:25 22:08	05:04 21:35	06:05 20:25	07:07 19:02	08:09 16:45	08:14 15:47	08:48 15:41
28	08:20 16:34	07:11 17:43	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 18:59	08:11 16:43	08:16 15:46	08:48 15:42
29	08:18 16:37		06:55 19:44	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:19	07:11 18:57	08:13 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 18:54	08:16 16:38	08:20 15:44	08:48 15:44
31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:27	06:13 20:14		07:18 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B
Assumptions for shadow calculations

Shadow receptor: Irisi - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (470)
Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:49 15:46	08:13 16:43	07:09 17:46	06:47 19:51	05:31 20:53	04:34 21:50	04:28 22:07	05:14 21:26	06:15 20:12	07:15 18:52	07:21 16:34	08:22 15:43
2	08:48 15:48	08:11 16:46	07:06 17:48	06:44 19:53	05:28 20:55	04:33 21:52	04:29 22:06	05:16 21:24	06:17 20:09	07:17 18:49	07:23 16:32	08:24 15:42
3	08:48 15:49	08:09 16:48	07:04 17:50	06:41 19:55	05:26 20:57	04:32 21:53	04:30 22:06	05:18 21:22	06:19 20:07	07:19 18:46	07:25 16:30	08:25 15:41
4	08:48 15:50	08:07 16:50	07:01 17:52	06:39 19:57	05:24 21:00	04:31 21:54	04:31 22:05	05:20 21:20	06:21 20:04	07:21 18:44	07:27 16:28	08:27 15:41
5	08:47 15:52	08:05 16:52	06:58 17:54	06:36 19:59	05:22 21:02	04:30 21:56	04:32 22:05	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	08:29 15:40
6	08:47 15:53	08:03 16:54	06:56 17:56	06:34 20:01	05:19 21:04	04:29 21:57	04:33 22:04	05:23 21:15	06:25 19:59	07:25 18:38	07:31 16:23	08:30 15:39
7	08:46 15:54	08:01 16:57	06:53 17:59	06:31 20:03	05:17 21:06	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	07:28 18:36	07:34 16:21	08:32 15:38
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:06	05:15 21:08	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	07:30 18:33	07:36 16:19	08:33 15:38
9	08:45 15:58	07:56 17:01	06:48 18:03	06:26 20:08	05:13 21:10	04:27 22:00	04:36 22:01	05:29 21:09	06:31 19:51	07:32 18:31	07:38 16:17	08:34 15:37
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:10	05:11 21:12	04:26 22:01	04:38 22:00	05:31 21:06	06:33 19:48	07:34 18:28	07:40 16:15	08:36 15:37
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	05:09 21:14	04:26 22:02	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	08:42 16:03	07:50 17:08	06:40 18:09	06:18 20:14	05:07 21:16	04:25 22:03	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23	07:44 16:11	08:38 15:36
13	08:41 16:04	07:47 17:10	06:38 18:11	06:15 20:16	05:05 21:18	04:25 22:04	04:42 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	08:39 15:36
14	08:40 16:06	07:45 17:12	06:35 18:13	06:13 20:18	05:03 21:20	04:24 22:04	04:43 21:56	05:39 20:57	06:41 19:37	07:42 18:18	07:49 16:08	08:41 15:36
15	08:39 16:08	07:43 17:15	06:32 18:16	06:10 20:20	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:55	06:43 19:35	07:44 18:15	07:51 16:06	08:42 15:36
16	08:38 16:10	07:41 17:17	06:30 18:18	06:07 20:22	04:59 21:23	04:24 22:06	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12	07:53 16:04	08:43 15:36
17	08:37 16:12	07:38 17:19	06:27 18:20	06:05 20:24	04:57 21:25	04:23 22:06	04:47 21:52	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	08:43 15:36
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	04:55 21:27	04:23 22:07	04:49 21:50	05:47 20:47	06:49 19:27	07:50 18:07	07:57 16:01	08:44 15:36
19	08:34 16:16	07:33 17:24	06:22 18:24	06:00 20:28	04:53 21:29	04:23 22:07	04:51 21:49	05:49 20:45	06:51 19:24	07:53 18:05	07:59 15:59	08:45 15:36
20	08:33 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 21:31	04:23 22:08	04:52 21:47	05:51 20:43	06:53 19:21	07:55 18:02	08:01 15:57	08:46 15:37
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:33	04:50 21:33	04:24 22:08	04:54 21:46	05:53 20:40	06:55 19:18	07:57 18:00	08:03 15:56	08:46 15:37
22	08:30 16:22	07:26 17:30	06:14 18:30	05:52 20:35	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:38	06:57 19:16	07:59 17:58	08:05 15:54	08:47 15:38
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:37	04:47 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	08:47 15:38
24	08:27 16:26	07:21 17:35	06:08 18:34	05:47 20:39	04:45 21:38	04:24 22:08	04:59 21:41	05:59 20:33	07:01 19:10	08:03 17:53	08:09 15:51	08:48 15:39
25	08:25 16:28	07:19 17:37	06:06 18:36	05:45 20:41	04:43 21:40	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:08	08:05 17:50	08:11 15:50	08:48 15:39
26	08:23 16:30	07:16 17:39	06:03 18:39	05:42 20:43	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	08:07 17:48	08:13 15:49	08:48 15:40
27	08:22 16:32	07:14 17:41	06:00 18:41	05:40 20:45	04:40 21:43	04:26 22:08	05:04 21:35	06:05 20:25	07:07 19:02	08:09 17:46	08:15 15:48	08:49 15:41
28	08:20 16:35	07:11 17:43	05:57 18:43	05:38 20:47	04:39 21:44	04:26 22:08	05:06 21:34	06:07 20:22	07:09 19:00	08:12 17:43	08:17 15:46	08:49 15:42
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:08	05:08 21:32	06:09 20:20	07:11 18:57	08:14 17:41	08:19 15:45	08:49 15:43
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:30	06:11 20:17	07:13 18:54	08:16 17:39	08:20 15:44	08:49 15:44
31	08:15 16:41		06:49 19:49		04:35 21:49		05:12 21:28	06:13 20:15		07:18 16:36		08:49 15:45
Potential sun hours	235	266	366	426	508	528	529	469	384	324	248	216
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Uzuli - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (533)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48	08:12	07:08	06:47	05:30	04:34	04:28	05:14	06:15	07:15	07:20	08:22
	15:46	16:43	17:45	19:51	20:53	21:50	22:06	21:25	20:12	18:51	16:34	15:43
2	08:48	08:10	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:22	08:23
	15:47	16:45	17:48	19:53	20:55	21:51	22:06	21:23	20:09	18:49	16:32	15:42
3	08:48	08:08	07:03	06:41	05:26	04:32	04:30	05:17	06:19	07:19	07:25	08:25
	15:49	16:48	17:50	19:55	20:57	21:53	22:05	21:21	20:06	18:46	16:29	15:41
4	08:47	08:06	07:01	06:39	05:24	04:31	04:31	05:19	06:21	07:21	07:27	08:27
	15:50	16:50	17:52	19:57	20:59	21:54	22:05	21:19	20:04	18:43	16:27	15:40
5	08:47	08:04	06:58	06:36	05:21	04:30	04:32	05:21	06:23	07:23	07:29	08:28
	15:51	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:25	15:40
6	08:46	08:02	06:56	06:33	05:19	04:29	04:33	05:23	06:25	07:25	07:31	08:30
	15:53	16:54	17:56	20:01	21:03	21:56	22:03	21:15	19:58	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:28	04:34	05:25	06:27	07:27	07:33	08:31
	15:54	16:57	17:58	20:03	21:05	21:58	22:03	21:13	19:56	18:35	16:21	15:38
8	08:45	07:58	06:50	06:28	05:15	04:27	04:35	05:27	06:29	07:29	07:35	08:33
	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
9	08:44	07:56	06:48	06:25	05:13	04:27	04:36	05:29	06:31	07:31	07:38	08:34
	15:57	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
10	08:44	07:54	06:45	06:23	05:11	04:26	04:37	05:31	06:33	07:33	07:40	08:35
	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
11	08:43	07:52	06:43	06:20	05:08	04:25	04:39	05:33	06:35	07:35	07:42	08:37
	16:01	17:05	18:07	20:11	21:13	22:02	21:59	21:04	19:45	18:25	16:13	15:36
12	08:42	07:49	06:40	06:18	05:06	04:25	04:40	05:35	06:37	07:38	07:44	08:38
	16:02	17:08	18:09	20:14	21:15	22:03	21:58	21:01	19:42	18:22	16:11	15:36
13	08:41	07:47	06:37	06:15	05:04	04:24	04:41	05:37	06:39	07:40	07:46	08:39
	16:04	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:09	15:36
14	08:40	07:45	06:35	06:12	05:02	04:24	04:43	05:39	06:41	07:42	07:48	08:40
	16:06	17:12	18:13	20:18	21:19	22:04	21:55	20:57	19:37	18:17	16:07	15:36
15	08:39	07:43	06:32	06:10	05:00	04:24	04:44	05:41	06:43	07:44	07:50	08:41
	16:08	17:14	18:15	20:20	21:21	22:05	21:54	20:54	19:34	18:15	16:06	15:36
16	08:37	07:40	06:29	06:07	04:59	04:24	04:46	05:43	06:45	07:46	07:52	08:42
	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
17	08:36	07:38	06:27	06:05	04:57	04:23	04:47	05:45	06:47	07:48	07:55	08:43
	16:12	17:19	18:19	20:24	21:25	22:06	21:51	20:50	19:29	18:10	16:02	15:36
18	08:35	07:36	06:24	06:02	04:55	04:23	04:49	05:47	06:49	07:50	07:57	08:44
	16:14	17:21	18:22	20:26	21:27	22:06	21:50	20:47	19:26	18:07	16:00	15:36
19	08:34	07:33	06:21	06:00	04:53	04:23	04:50	05:49	06:51	07:52	07:59	08:45
	16:16	17:23	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	15:59	15:36
20	08:32	07:31	06:19	05:57	04:51	04:23	04:52	05:51	06:53	07:54	08:01	08:45
	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
21	08:31	07:28	06:16	05:55	04:50	04:23	04:54	05:53	06:55	07:56	08:03	08:46
	16:20	17:28	18:28	20:32	21:32	22:07	21:45	20:40	19:18	18:00	15:56	15:37
22	08:29	07:26	06:13	05:52	04:48	04:24	04:55	05:55	06:57	07:59	08:05	08:47
	16:22	17:30	18:30	20:34	21:34	22:08	21:44	20:37	19:16	17:57	15:54	15:37
23	08:28	07:23	06:11	05:50	04:46	04:24	04:57	05:57	06:59	08:01	08:07	08:47
	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
24	08:26	07:21	06:08	05:47	04:45	04:24	04:59	05:59	07:01	08:03	08:09	08:47
	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
25	08:25	07:18	06:05	05:45	04:43	04:24	05:01	06:01	07:03	08:05	08:11	08:48
	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
26	08:23	07:16	06:03	05:42	04:42	04:25	05:02	06:03	07:05	08:07	08:13	08:48
	16:30	17:39	18:38	20:43	21:41	22:08	21:37	20:27	19:05	16:48	15:49	15:40
27	08:21	07:13	06:00	05:40	04:40	04:25	05:04	06:05	07:07	08:09	08:14	08:48
	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:47	15:41
28	08:20	07:11	05:57	05:37	04:39	04:26	05:06	06:07	07:09	08:11	08:16	08:48
	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
29	08:18		06:55	05:35	04:38	04:27	05:08	06:09	07:11	08:14	08:18	08:48
	16:37		19:44	20:49	21:46	22:07	21:31	20:19	18:57	16:41	15:45	15:43
30	08:16		06:52	05:33	04:36	04:27	05:10	06:11	07:13	08:16	08:20	08:48
	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:54	16:38	15:44	15:44
31	08:14		06:49		04:35		05:12	06:13		07:18		08:48
	16:41		19:49		21:49		21:27	20:14		16:36		15:45
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Uzulini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (603)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	3,03	0,62	0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	January	February	March	April	May	June
1	08:48	08:12	07:09	17:06 (PrRR3)	06:47	05:30
	15:46	16:43	17:45	11 17:17 (PrRR3)	19:51	20:53
2	08:48	08:10	07:06	17:04 (PrRR3)	06:44	05:28
	15:47	16:45	17:48	14 17:18 (PrRR3)	19:53	20:55
3	08:48	08:08	07:03	17:02 (PrRR3)	06:41	05:26
	15:49	16:48	17:50	18 17:20 (PrRR3)	19:55	20:57
4	08:47	08:06	07:01	17:02 (PrRR3)	06:39	05:24
	15:50	16:50	17:52	20 17:22 (PrRR3)	19:57	20:59
5	08:47	08:04	06:58	17:00 (PrRR3)	06:36	05:21
	15:51	16:52	17:54	22 17:22 (PrRR3)	19:59	21:01
6	08:46	08:02	06:56	17:00 (PrRR3)	06:33	05:19
	15:53	16:54	17:56	22 17:22 (PrRR3)	20:01	21:03
7	08:46	08:00	06:53	17:00 (PrRR3)	06:31	05:17
	15:54	16:57	17:58	23 17:23 (PrRR3)	20:03	21:05
8	08:45	07:58	06:50	16:59 (PrRR3)	06:28	05:15
	15:56	16:59	18:00	23 17:22 (PrRR3)	20:05	21:07
9	08:44	07:56	06:48	16:59 (PrRR3)	06:25	05:13
	15:57	17:01	18:03	22 17:21 (PrRR3)	20:07	21:09
10	08:44	07:54	06:45	17:00 (PrRR3)	06:23	05:11
	15:59	17:03	18:05	21 17:21 (PrRR3)	20:09	21:11
11	08:43	07:52	06:43	17:00 (PrRR3)	06:20	05:09
	16:01	17:06	18:07	20 17:20 (PrRR3)	20:12	21:13
12	08:42	07:49	06:40	17:01 (PrRR3)	06:18	05:06
	16:03	17:08	18:09	17 17:18 (PrRR3)	20:14	21:15
13	08:41	07:47	06:37	17:03 (PrRR3)	06:15	05:04
	16:04	17:10	18:11	14 17:17 (PrRR3)	20:16	21:17
14	08:40	07:45	06:35	17:06 (PrRR3)	06:12	05:02
	16:06	17:12	18:13	7 17:13 (PrRR3)	20:18	21:19
15	08:39	07:43	06:32		06:10	05:01
	16:08	17:15	18:15		20:20	21:21
16	08:38	07:40	06:29		06:07	04:59
	16:10	17:17	18:17		20:22	21:23
17	08:36	07:38	06:27		06:05	04:57
	16:12	17:19	18:20		20:24	21:25
18	08:35	07:36	06:24		06:02	04:55
	16:14	17:21	18:22		20:26	21:27
19	08:34	07:33	06:21		06:00	04:53
	16:16	17:23	18:24		20:28	21:29
20	08:32	07:31	06:19		05:57	04:51
	16:18	17:26	18:26		20:30	21:30
21	08:31	07:28	06:16		05:55	04:50
	16:20	17:28	18:28		20:32	21:32
22	08:29	07:26	06:13		05:52	04:48
	16:22	17:30	18:30		20:34	21:34
23	08:28	07:24	06:11		05:50	04:46
	16:24	17:32	18:32		20:36	21:36
24	08:26	07:21	06:08		05:47	04:45
	16:26	17:34	18:34		20:39	21:38
25	08:25	07:19	06:05		05:45	04:43
	16:28	17:37	18:36		20:41	21:39
26	08:23	07:16	06:03		05:42	04:42
	16:30	17:39	18:38		20:43	21:41
27	08:21	07:14	06:00		05:40	04:40
	16:32	17:41	18:40		20:45	21:43
28	08:20	07:11	17:09 (PrRR3) 05:57		05:38	04:39
	16:34	17:43	5 17:14 (PrRR3) 18:42		20:47	21:44
29	08:18		06:55		05:35	04:38
	16:37		19:45		20:49	21:46
30	08:16		06:52		05:33	04:36
	16:39		19:47		20:51	21:47
31	08:14		06:49			04:35
	16:41		19:49			21:49
Potential sun hours	236	266	366	426	507	528
Total, worst case		5	254			
Sun reduction		0,23	0,39			
Oper. time red.		1,00	1,00			
Wind dir. red.		1,00	1,00			
Total reduction		0,23	0,39			
Total, real		1	99			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	(WTG causing flicker first time)	(WTG causing flicker last time)
--------------	------------------	-----------------	----------------------	---------------------------------	--------------------------------	----------------------------------	---------------------------------

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 16:18/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_B Shadow receptor: Uzulini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (603)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 3,03 0,62 0,59

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

	July	August	September	October	November	December	
1	04:28 22:06	05:14 21:25	06:15 20:12	07:15 18:51	17:42 (PrRR3) 17:57 (PrRR3)	07:20 16:34	08:22 15:43
2	04:29 22:06	05:16 21:23	06:17 20:09	07:17 18:49	17:40 (PrRR3) 17:58 (PrRR3)	07:22 16:32	08:23 15:42
3	04:30 22:05	05:17 21:21	06:19 20:06	07:19 18:46	17:38 (PrRR3) 17:59 (PrRR3)	07:25 16:30	08:25 15:41
4	04:31 22:05	05:19 21:19	06:21 20:04	07:21 18:43	17:37 (PrRR3) 17:59 (PrRR3)	07:27 16:27	08:27 15:40
5	04:32 22:04	05:21 21:17	06:23 20:01	07:23 18:41	17:37 (PrRR3) 17:59 (PrRR3)	07:29 16:25	08:28 15:40
6	04:33 22:03	05:23 21:15	06:25 19:59	07:25 18:38	17:36 (PrRR3) 17:59 (PrRR3)	07:31 16:23	08:30 15:39
7	04:34 22:03	05:25 21:13	06:27 19:56	07:27 18:36	17:36 (PrRR3) 17:58 (PrRR3)	07:33 16:21	08:31 15:38
8	04:35 22:02	05:27 21:11	06:29 19:53	07:29 18:33	17:35 (PrRR3) 17:58 (PrRR3)	07:35 16:19	08:33 15:38
9	04:36 22:01	05:29 21:08	06:31 19:51	07:31 18:30	17:36 (PrRR3) 17:57 (PrRR3)	07:38 16:17	08:34 15:37
10	04:37 22:00	05:31 21:06	06:33 19:48	07:33 18:28	17:36 (PrRR3) 17:56 (PrRR3)	07:40 16:15	08:35 15:37
11	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	17:37 (PrRR3) 17:54 (PrRR3)	07:42 16:13	08:37 15:37
12	04:40 21:58	05:35 21:01	06:37 19:43	07:38 18:23	17:38 (PrRR3) 17:51 (PrRR3)	07:44 16:11	08:38 15:36
13	04:41 21:57	05:37 20:59	06:39 19:40	07:40 18:20	17:40 (PrRR3) 17:48 (PrRR3)	07:46 16:09	08:39 15:36
14	04:43 21:55	05:39 20:57	06:41 19:37	07:42 18:17		07:48 16:07	08:40 15:36
15	04:44 21:54	05:41 20:54	06:43 19:34	07:44 18:15		07:50 16:06	08:41 15:36
16	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:12		07:53 16:04	08:42 15:36
17	04:47 21:51	05:45 20:50	06:47 19:29	07:48 18:10		07:55 16:02	08:43 15:36
18	04:49 21:50	05:47 20:47	06:49 19:26	07:50 18:07		07:57 16:00	08:44 15:36
19	04:51 21:49	05:49 20:45	06:51 19:24	07:52 18:05		07:59 15:59	08:45 15:36
20	04:52 21:47	05:51 20:42	06:53 19:21	07:54 18:02		08:01 15:57	08:45 15:37
21	04:54 21:45	05:53 20:40	06:55 19:18	07:57 18:00		08:03 15:56	08:46 15:37
22	04:56 21:44	05:55 20:37	06:57 19:16	07:59 17:57		08:05 15:54	08:47 15:38
23	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55		08:07 15:53	08:47 15:38
24	04:59 21:40	05:59 20:32	07:01 19:10	08:03 17:53		08:09 15:51	08:47 15:39
25	05:01 21:39	06:01 20:30	07:03 19:08	07:05 16:50		08:11 15:50	08:48 15:39
26	05:03 21:37	06:03 20:27	07:05 19:05	07:07 16:48		08:13 15:49	08:48 15:40
27	05:04 21:35	06:05 20:25	07:07 19:02	07:09 16:45		08:15 15:47	08:48 15:41
28	05:06 21:33	06:07 20:22	07:09 18:59	07:12 16:43		08:16 15:46	08:48 15:42
29	05:08 21:31	06:09 20:20	07:11 18:57	17:49 (PrRR3) 17:50 (PrRR3)	07:14 16:41	08:18 15:45	08:49 15:43
30	05:10 21:29	06:11 20:17	07:13 18:54	17:43 (PrRR3) 17:55 (PrRR3)	07:16 16:38	08:20 15:44	08:49 15:44
31	05:12 21:27	06:13 20:14		07:18 16:36			08:48 15:45
Potential sun hours	529	469	384	324		248	217
Total, worst case			13	245			
Sun reduction			0,43	0,29			
Oper. time red.			1,00	1,00			
Wind dir. red.			1,00	1,00			
Total reduction			0,43	0,29			
Total, real			6	71			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Last time (hh:mm) with flicker	(WTG causing flicker last time)