

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: 76740020095007 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (796)
 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
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	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		

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 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Alksniš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (658)
 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
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	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
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	15:56	16:59	18:01	20:06	21:08	21:59	22:02	21:11	19:53	18:33	16:19	15:38
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	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	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	08:19	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	08:16		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	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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Apš u majas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (802)
 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 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	05:30 21:08	06:31 20:01	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 20:01	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	04:54 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 15:58	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 20:01	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	05:07 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 21:49		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Apšūpes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (674)
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		08:05		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		08:07		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		08:09		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)	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Atvasites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (749)
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
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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
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	16:18	17:26	18:26	20:30	21:30	22:07	21:47	20:42	19:21	18:02	15:57	15:37
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	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
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	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
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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Avenes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (763)
 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 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	04:25 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 22:07	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 22:07	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 21:45	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 21:48		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Avenaji - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (801)
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 15:43 15:43	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 16:32 15:42	07:23 15:42 20	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 16:30 15:41	07:25 15:41 21	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 16:27 15:41	07:27 16:27 22	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 16:25 15:40	07:29 16:25 22	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 16:23 15:39	07:31 16:23 22	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 16:21 15:38	07:33 16:21 23	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 16:19 15:37	07:36 16:19 23	08:33 15:37 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 16:17 15:37	07:38 16:17 24	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 16:15 15:37	07:40 16:15 24	08:36 15:37 24
11	08:43 16:01 19	10:08 (PrRR3) 10:28 (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 16:13 15:37	07:42 16:13 24	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 21:58	04:40 21:02 21:58	05:35 21:02 19:43	06:37 18:23 16:11	07:38 16:11 15:36	07:44 16:11 24	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 21:57	04:42 20:59 21:57	05:37 20:59 19:40	06:39 18:20 16:09	07:40 16:09 15:36	07:46 16:09 24	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 21:56	04:43 20:57 21:56	05:39 20:57 19:37	06:41 18:18 16:07	07:42 16:07 15:36	07:49 16:07 29	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 21:54	04:44 20:55 21:54	05:41 20:55 19:35	06:43 18:15 16:06	07:44 16:06 15:36	07:51 16:06 32	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 21:53	04:46 20:52 21:53	05:43 20:52 19:32	06:45 18:12 16:04	07:46 16:04 15:36	07:53 16:04 33	08:42 15:36 33
17	08:37 16:12 18	10:17 (PrRR3) 10:23 (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 21:52	04:47 20:50 21:52	05:45 20:50 19:29	06:47 18:10 16:02	07:48 16:02 15:36	07:55 16:02 34	08:43 15:36 34
18	08:35 16:14 19	10:18 (PrRR3) 10:24 (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 21:50	04:49 20:47 21:50	05:47 20:47 19:27	06:49 18:07 16:01	07:50 16:01 15:36	07:57 16:01 35	08:44 15:36 35
19	08:34 16:16 20	10:19 (PrRR3) 10:24 (PrRR3) 17:23	07:33 18:24 07:01	06:00 18:24 20:28	04:53 21:29 22:07	04:23 22:07 21:49	04:51 20:45 21:49	05:49 20:45 19:24	06:51 18:05 15:59	07:52 15:59 15:36	07:59 15:59 36	08:45 15:36 36
20	08:33 16:18 21	10:20 (PrRR3) 10:24 (PrRR3) 17:26	07:31 18:26 07:01	05:57 18:26 20:30	04:52 21:31 22:07	04:23 22:07 21:47	04:52 20:43 21:47	05:51 20:43 19:21	06:53 18:02 15:57	07:55 15:57 15:37	08:01 15:57 35	08:46 15:37 35
21	08:31 16:20 22	10:21 (PrRR3) 10:24 (PrRR3) 17:28	07:29 18:28 07:01	05:55 18:28 20:33	04:50 21:33 22:08	04:23 22:08 21:46	04:54 20:40 21:46	05:53 20:40 19:18	06:55 18:00 15:56	07:57 15:56 15:37	08:03 15:56 36	08:46 15:37 36
22	08:30 16:22 23	10:22 (PrRR3) 10:24 (PrRR3) 17:30	07:26 18:30 07:01	05:52 18:30 20:35	04:48 21:34 22:08	04:24 22:08 21:44	04:56 20:38 21:44	05:55 20:38 19:16	06:57 17:58 15:54	07:59 15:54 15:38	08:05 15:54 36	08:47 15:38 36
23	08:28 16:24 24	10:23 (PrRR3) 10:24 (PrRR3) 17:32	07:24 18:32 07:01	05:50 20:37 21:36	04:46 21:36 22:08	04:24 22:08 21:42	04:57 20:35 21:42	05:57 20:35 19:13	06:59 17:55 15:53	08:01 15:53 15:38	08:07 15:53 36	08:47 15:38 36
24	08:27 16:26 25	10:24 (PrRR3) 10:24 (PrRR3) 17:35	07:21 18:34 07:01	05:47 20:39 21:38	04:45 21:38 22:08	04:24 22:08 21:41	04:59 20:33 21:41	05:59 20:33 19:10	07:01 17:53 15:51	08:03 15:51 15:39	08:09 15:51 35	08:48 15:39 35
25	08:25 16:28 26	10:25 (PrRR3) 10:24 (PrRR3) 17:37	07:19 18:36 07:01	05:45 20:41 21:39	04:43 21:39 22:08	04:25 22:08 21:39	05:01 20:30 21:39	06:01 20:30 19:08	07:03 16:50 15:50	07:05 15:50 15:39	08:11 15:50 35	08:48 15:39 35
26	08:23 16:30 27	10:26 (PrRR3) 10:24 (PrRR3) 17:39	07:16 18:38 07:01	05:42 20:43 21:41	04:42 21:41 22:08	04:25 22:08 21:37	05:03 20:27 21:37	06:03 20:27 19:05	07:05 16:48 15:49	07:07 15:49 15:49	08:13 15:49 35	08:48 15:49 35
27	08:22 16:32 28	10:27 (PrRR3) 10:24 (PrRR3) 17:41	07:14 18:41 07:01	05:40 20:45 21:43	04:40 21:43 22:08	04:26 22:08 21:35	05:04 20:25 19:02	06:05 20:25 19:02	07:07 16:46 15:48	07:10 15:48 15:48	08:15 15:48 11	08:49 15:48 33
28	08:20 16:35 29	10:28 (PrRR3) 10:24 (PrRR3) 17:43	07:11 18:43 07:01	05:37 20:47 21:44	04:39 21:44 22:08	04:26 22:08 21:33	05:06 20:22 19:00	06:07 20:22 19:00	07:09 16:43 15:46	07:12 15:46 15:46	08:17 15:46 14	08:49 15:46 32
29	08:18 16:37 30	10:29 (PrRR3) 10:24 (PrRR3) 17:45	07:08 18:45 07:01	05:35 20:49 21:46	04:38 21:46 22:07	04:27 22:07 21:32	05:08 20:20 18:57	06:09 20:20 18:57	07:11 16:41 15:45	07:14 15:45 15:45	08:18 15:45 15	08:49 15:45 30
30	08:16 16:39 31	10:30 (PrRR3) 10:24 (PrRR3) 17:47	07:06 18:47 07:01	05:33 20:51 21:47	04:36 21:47 22:07	04:27 22:07 21:30	05:10 20:17 18:54	06:11 20:17 18:54	07:13 16:39 15:44	07:16 15:44 15:44	08:20 15:44 18	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Avoti - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (686)
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	21:57	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)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Avotini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (608)
 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	05:31	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	09:04	16:47 (DD3)	08:47
48	16:27	17:35	18:35	20:39	21:38	22:08	21:40	20:33	19:11	17:53	16:49 (DD3)	15:52	15:39
49	08:25	07:19	06:06	05:45	04:44	04:25	05:02	06:02	07:03	08:05	09:06	16:46 (DD3)	08:48
50	16:29	17:37	18:37	20:41	21:39	22:08	21:39	20:30	19:08	17:51	16:48 (DD3)	15:51	15:40
51	08:23	07:16	06:03	05:43	04:43	04:26	05:03	06:04	07:05	08:07	09:08	16:47 (DD3)	08:48
52	16:31	17:39	18:39	20:43	21:41	22:08	21:37	20:27	19:05	17:48	16:49 (DD3)	15:49	15:41
53	08:22	07:14	06:00	05:41	04:41	04:26	05:05	06:06	07:07	08:09	09:10	16:47 (DD3)	08:48
54	16:33	17:42	18:41	20:45	21:42	22:08	21:35	20:25	19:03	17:46	16:48 (DD3)	15:48	15:42
55	08:20	07:11	05:58	05:38	04:40	04:27	05:07	06:08	07:09	08:12	09:13	16:47 (DD3)	08:48
56	16:35	17:44	18:43	20:47	21:44	22:07	21:33	20:22	19:00	17:44	16:48 (DD3)	15:47	15:43
57	08:18		06:55	05:36	04:38	04:28	05:09	06:10	07:11	08:14	09:15	16:48 (DD3)	08:48
58	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	17:41	16:48 (DD3)	15:46	15:44
59	08:16		06:52	05:33	04:37	04:28	05:11	06:12	07:13	08:16	09:17	16:48 (DD3)	08:48
60	16:39		19:47	20:51	21:47	22:07	21:29	20:17	18:55	17:39	16:46 (DD3)	15:45	15:45
61	08:14		06:50		04:36		05:13	06:14		07:18	08:19	15:49 (DD3)	08:48
62	16:42		19:49		21:49		21:28	20:15		16:37	17:38	16:03 (DD3)	15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	15	217
Total, worst case		258								245			
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)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Bajari - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (782)
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 22:02	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 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 16:09	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 22:07	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 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Baložis - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (743)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Betiški 1 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (772)
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
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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: BetiŠ ku kapseta - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (776)
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	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 15:41
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	05:20 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	06:50 18:01	06:28 20:05	05:15 21:07	04:28 21:59	04:35 22:02	05:27 21:11	06:29 20:01	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	07:33 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 18:17	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	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 18:01	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 18:01	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 18:03	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 18:05	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	04:25 22:08	05:03 21:37	06:03 20:27	07:05 20:01	08:07 18:07	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	04:41 21:42	04:26 22:08	05:05 21:35	06:05 20:25	07:07 20:01	08:09 18:09	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 20:01	08:12 18:00	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 20:01	08:14 18:07	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 18:54	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 18:54		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		

Flickering_Nordex_N175_Prikuli_A

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 09:53/4.1.254

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

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Brieži - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (672)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Briež udarzs - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (619)
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)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Briež udarzs - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (619)
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)	15:51 (O3) 16:05 (O3)	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)	15:48 (O3) 16:10 (O3)	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)	15:44 (O3) 16:12 (O3)	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)	15:41 (O3) 16:14 (O3)	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)	15:39 (O3) 16:15 (O3)	07:42 16:14 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)	15:37 (O3) 16:16 (O3)	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)	15:35 (O3) 16:17 (O3)	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)	15:34 (O3) 16:18 (O3)	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)	15:33 (O3) 16:19 (O3)	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)	15:32 (O3) 16:19 (O3)	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)	15:31 (O3) 16:19 (O3)	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)	15:30 (O3) 16:20 (O3)	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)	15:30 (O3) 16:20 (O3)	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)	15:29 (O3) 16:20 (O3)	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)	15:28 (O3) 16:20 (O3)	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)	15:28 (O3) 16:20 (O3)	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)	15:28 (O3) 16:21 (O3)	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)	15:28 (O3) 16:20 (O3)	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)	14:27 (O3) 15:20 (O3)	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)	14:28 (O3) 15:20 (O3)	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)	14:28 (O3) 15:19 (O3)	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)	14:28 (O3) 15:19 (O3)	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)	14:29 (O3) 15:19 (O3)	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)	14:29 (O3) 15:18 (O3)	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Bruveri - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (630) 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	08:13 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	07:15 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 20:09	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 20:57	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	08:47 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 21:20	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	06:36 19:59	05:22 21:02	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 15:40
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	06:53 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	08:31 15:39
8	08:45 15:57	07:58 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 18:09	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 18:20	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 21:56	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 16:04	08:42 15:37
17	08:37 16:12	07:38 17:20	06:27 18:20	06:05 20:24	04:57 21:25	04:24 22:06	04:48 21:52	05:46 20:50	06:48 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 22:07	04:50 21:50	05:48 20:48	06:49 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 20:28	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 20:31	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	04:55 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	06:08 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	08:48 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 19:08	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 19:05	08:08 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 19:03	08:10 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 22:08	05:07 21:33	06:08 20:22	07:09 19:00	08:12 17:44	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	05:09 21:32	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	08:15 16:42		06:50 19:49		04:36 21:49		05:12 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Bucinieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (769)
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 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Burtnieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (762)
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	20:07	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	22:03	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	04:37	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	07:34	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	19:35	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	04:58	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	04:24	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	05:43	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	21:46	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Berzainites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (787)
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	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)	
	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			
3	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			
	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			
4	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			
	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			
5	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			
	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			
6	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			
	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			
7	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			
	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			
8	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			
	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			
9	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			
	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			
10	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			
	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			
11	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			
	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			
12	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			
	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			
13	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			
	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			
14	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			
	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			
15	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			
	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			
16	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			
	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			
17	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			
	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			
18	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			
	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			
19	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			
	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			
20	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			
	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			
21	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			
	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			
22	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			
	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			
23	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			
	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			
24	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			
	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			
25	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			
	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			
26	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			
	08:23		12:49 (DD3)	07:16		16:13 (DD1)	06:03			05:43		18:29 (O3)	04:43		19:35 (O2)	04:26			
27	16:31	102	15:15 (O5)	17:39	32	16:45 (DD1)	18:39			20:43	46	19:59 (O2)	21:41	25	20:00 (O2)	22:08			
	08:22		12:49 (DD3)	07:14		16:11 (DD1)	06:00			05:41		18:32 (O3)	04:41		19:37 (O2)	04:26			
28	16:33	102	15:15 (O5)	17:42	35	16:46 (DD1)	18:41			20:45	45	20:01 (O2)	21:43	23	20:00 (O2)	22:08			
	08:20		12:49 (DD3)	07:11		16:10 (DD1)	05:58			05:38		18:34 (O3)	04:40		19:38 (O2)	04:27			
29	16:35	102	15:15 (O5)	17:44	50	17:10 (O4)	18:43			20:47	43	20:02 (O2)	21:44	21	19:59 (O2)	22:07			
	08:18		12:49 (DD3)				06:55		18:43 (O3)	05:36		18:39 (O3)	04:39		19:39 (O2)	04:28			
30	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			
	08:16		12:49 (DD3)				06:52		18:38 (O3)	05:34		19:32 (O2)	04:37		19:41 (O2)	04:28			
31	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			
	08:14		12:49 (DD3)				06:50		18:36 (O3)				04:36		19:43 (O2)				
	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

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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Berzainites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (787)
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		05:16	19:38 (O2)	06:18	18:21 (O3)	07:18	16:40 (DD1)	07:23	12:58 (O1.b)	15:44	92 14:45 (O5)
3	04:31		05:18	19:38 (O2)	06:20	18:21 (O3)	07:20	16:39 (DD1)	07:25	12:21 (DD3)	08:24	12:34 (DD3)
4	22:05		05:20	19:37 (O2)	06:22	18:21 (O3)	07:22	16:39 (DD1)	07:27	15:57 (O1.b)	15:43	91 14:45 (O5)
5	04:33		05:22	19:38 (O2)	06:24	18:21 (O3)	07:24	16:39 (DD1)	07:29	12:20 (DD3)	08:25	12:35 (DD3)
6	22:04		05:24	19:38 (O2)	06:26	18:21 (O3)	07:26	16:39 (DD1)	07:31	15:55 (O1.b)	15:42	89 14:44 (O5)
7	04:35		05:26	19:38 (O2)	06:28	18:22 (O3)	07:28	16:38 (DD1)	07:34	12:21 (DD3)	08:27	12:36 (DD3)
8	22:02		05:28	19:39 (O2)	06:30	18:23 (O3)	07:30	16:39 (DD1)	07:36	15:53 (O1.b)	15:41	87 14:44 (O5)
9	04:37		05:30	19:38 (O2)	06:32	18:23 (O3)	07:32	16:40 (DD1)	07:38	12:20 (DD3)	08:28	12:36 (DD3)
10	22:01		05:32	19:39 (O2)	06:34	18:25 (O3)	07:34	16:40 (DD1)	07:40	15:49 (O1.b)	15:41	85 14:42 (O5)
11	04:40		05:34	19:39 (O2)	06:36	18:25 (O3)	07:36	16:40 (DD1)	07:42	12:20 (DD3)	08:30	12:37 (DD3)
12	21:59	6	20:00 (O2)	19:52 (O2)	05:36	18:25 (O3)	07:38	16:41 (DD1)	07:44	14:44 (O5)	15:40	82 14:42 (O5)
13	04:41		05:36	19:40 (O2)	06:38	18:27 (O3)	07:40	16:41 (DD1)	07:46	12:20 (DD3)	08:31	12:39 (DD3)
14	21:58	11	20:03 (O2)	19:50 (O2)	05:38	18:53 (O3)	18:23	16:41 (DD1)	07:46	14:45 (O5)	15:39	78 14:41 (O5)
15	04:42		05:38	19:41 (O2)	06:40	18:29 (O3)	07:42	16:42 (DD1)	07:49	12:20 (DD3)	08:33	12:39 (DD3)
16	21:57	15	20:05 (O2)	19:49 (O2)	05:40	18:50 (O3)	18:21	16:42 (DD1)	07:49	14:46 (O5)	15:38	72 14:38 (O5)
17	04:44		05:40	19:49 (O2)	06:42	18:52 (O3)	07:42	16:42 (DD1)	07:51	12:20 (DD3)	08:34	12:40 (DD3)
18	21:55	17	20:06 (O2)	19:47 (O2)	05:42	18:46 (O3)	18:18	16:44 (DD1)	07:51	14:46 (O5)	15:37	67 14:30 (JV1)
19	04:45		05:42	19:47 (O2)	06:44	18:15	07:44	16:44 (DD1)	07:51	12:20 (DD3)	08:36	12:41 (DD3)
20	21:54	20	20:07 (O2)	19:47 (O2)	05:44	18:38 (O3)	07:46	16:46 (DD1)	07:53	14:46 (O5)	15:38	65 14:30 (JV1)
21	04:47		05:44	19:47 (O2)	06:46	18:35 (O3)	07:48	16:47 (DD1)	07:55	12:21 (DD3)	08:37	12:42 (DD3)
22	21:53	22	20:09 (O2)	19:45 (O2)	05:46	18:35 (O3)	07:48	16:47 (DD1)	07:55	14:47 (O5)	15:37	65 14:31 (JV1)
23	04:48		05:46	19:45 (O2)	06:48	18:35 (O3)	07:48	16:47 (DD1)	07:55	12:22 (DD3)	08:38	12:43 (DD3)
24	21:51	25	20:10 (O2)	19:45 (O2)	05:48	18:34 (O3)	06:50	17:05 (DD1)	07:51	14:47 (O5)	15:37	65 14:32 (JV1)
25	04:50		05:48	19:45 (O2)	06:50	18:34 (O3)	06:50	17:05 (DD1)	07:51	12:23 (DD3)	08:39	12:44 (DD3)
26	21:50	26	20:11 (O2)	19:44 (O2)	05:50	18:32 (O3)	06:52	17:17 (DD1)	18:08	14:47 (O5)	15:37	64 14:32 (JV1)
27	04:51		05:50	19:44 (O2)	06:52	18:32 (O3)	06:52	17:17 (DD1)	18:08	12:21 (DD3)	08:40	12:44 (DD3)
28	21:49	27	20:11 (O2)	19:44 (O2)	05:52	18:31 (O3)	06:54	17:17 (DD1)	18:08	14:48 (O5)	15:37	60 14:34 (JV1)
29	04:53		05:52	19:44 (O2)	06:54	18:31 (O3)	06:54	17:17 (DD1)	18:08	12:23 (DD3)	08:43	12:47 (DD3)
30	21:47	29	20:13 (O2)	19:43 (O2)	05:54	18:29 (O3)	06:55	17:21 (DD1)	18:05	14:48 (O5)	15:37	61 14:35 (JV1)
31	04:55		05:54	19:43 (O2)	06:54	18:29 (O3)	06:55	17:21 (DD1)	18:05	12:24 (DD3)	08:45	12:48 (DD3)
1	21:47	29	20:13 (O2)	19:43 (O2)	06:54	18:29 (O3)	06:55	17:23 (DD1)	18:03	14:48 (O5)	15:38	61 14:35 (JV1)
2	04:55		05:54	19:43 (O2)	06:54	18:29 (O3)	06:55	17:23 (DD1)	18:03	12:24 (DD3)	08:45	12:48 (DD3)
3	21:46	30	20:13 (O2)	19:42 (O2)	05:56	18:27 (O3)	06:57	17:25 (DD1)	18:00	14:48 (O5)	15:38	60 14:36 (JV1)
4	04:56		05:56	19:42 (O2)	06:58	18:27 (O3)	06:57	17:25 (DD1)	18:00	12:25 (DD3)	08:46	12:49 (DD3)
5	21:44	32	20:14 (O2)	19:41 (O2)	05:58	18:26 (O3)	06:59	17:26 (DD1)	17:58	12:25 (DD3)	08:47	12:50 (DD3)
6	04:58		06:00	19:41 (O2)	06:00	18:26 (O3)	06:59	17:26 (DD1)	17:58	14:48 (O5)	15:38	60 14:36 (JV1)
7	21:42	33	20:14 (O2)	19:41 (O2)	06:05	18:25 (O3)	07:01	17:27 (DD1)	17:56	12:26 (DD3)	08:47	12:50 (DD3)
8	05:00		06:00	19:41 (O2)	06:05	18:25 (O3)	07:01	17:27 (DD1)	17:56	14:47 (O5)	15:39	60 14:37 (JV1)
9	21:41	34	20:15 (O2)	19:40 (O2)	06:03	18:25 (O3)	07:03	17:27 (DD1)	17:56	12:27 (DD3)	08:48	12:50 (DD3)
10	05:02		06:02	19:40 (O2)	06:02	18:25 (O3)	07:03	17:27 (DD1)	17:56	14:48 (O5)	15:40	61 14:37 (JV1)
11	21:39	35	20:15 (O2)	19:40 (O2)	06:04	18:24 (O3)	07:05	17:28 (DD1)	17:53	12:28 (DD3)	08:11	12:28 (DD3)
12	05:03		06:04	19:40 (O2)	06:04	18:24 (O3)	07:05	17:28 (DD1)	17:53	14:48 (O5)	15:40	61 14:37 (JV1)
13	21:37	36	20:16 (O2)	19:40 (O2)	06:06	18:23 (O3)	07:07	17:29 (DD1)	16:51	12:27 (DD3)	08:13	12:27 (DD3)
14	05:05		06:06	19:40 (O2)	06:06	18:23 (O3)	07:07	17:29 (DD1)	16:51	14:47 (O5)	15:41	60 14:38 (JV1)
15	21:35	37	20:17 (O2)	19:39 (O2)	06:08	18:23 (O3)	07:09	17:29 (DD1)	16:51	12:29 (DD3)	08:15	12:29 (DD3)
16	05:07		06:08	19:39 (O2)	06:08	18:23 (O3)	07:09	17:29 (DD1)	16:51	14:47 (O5)	15:41	60 14:38 (JV1)
17	21:33	37	20:16 (O2)	19:39 (O2)	06:10	18:22 (O3)	07:11	17:30 (DD1)	16:52	12:30 (DD3)	08:16	12:30 (DD3)
18	05:09		06:10	19:39 (O2)	06:10	18:22 (O3)	07:11	17:30 (DD1)	16:52	14:46 (O5)	15:43	61 14:39 (JV1)
19	21:31	38	20:17 (O2)	19:39 (O2)	06:12	18:22 (O3)	07:14	17:31 (DD1)	16:53	12:31 (DD3)	08:18	12:31 (DD3)
20	05:11		06:12	19:39 (O2)	06:12	18:22 (O3)	07:14	17:31 (DD1)	16:53	14:46 (O5)	15:44	63 14:39 (JV1)
21	21:30	38	20:17 (O2)	19:38 (O2)	06:14	18:21 (O3)	07:15	17:32 (DD1)	16:54	12:32 (DD3)	08:19	12:32 (DD3)
22	05:13		06:14	19:38 (O2)	06:14	18:21 (O3)	07:15	17:32 (DD1)	16:54	14:46 (O5)	15:45	63 14:40 (JV1)
23	21:28	39	20:17 (O2)	19:37 (O2)	06:16	18:20 (O3)	07:16	17:33 (DD1)	16:55	12:33 (DD3)	08:20	12:33 (DD3)
24	05:15		06:16	19:37 (O2)	06:16	18:20 (O3)	07:16	17:33 (DD1)	16:55	14:47 (O5)	15:46	64 14:41 (JV1)
25	21:26	40	20:18 (O2)	19:37 (O2)	06:18	18:19 (O3)	07:18	17:34 (DD1)	16:56	12:34 (DD3)	08:22	12:34 (DD3)
26	05:17		06:18	19:37 (O2)	06:18	18:19 (O3)	07:18	17:34 (DD1)	16:56	14:48 (O5)	15:47	65 14:42 (JV1)
27	21:24	40	20:18 (O2)	19:37 (O2)	06:20	18:18 (O3)	07:20	17:35 (DD1)	16:57	12:35 (DD3)	08:24	12:35 (DD3)
28	05:19		06:20	19:37 (O2)	06:20	18:18 (O3)	07:20	17:35 (DD1)	16:57	14:49 (O5)	15:48	66 14:43 (JV1)
29	21:22	40	20:18 (O2)	19:37 (O2)	06:22	18:17 (O3)	07:22	17:36 (DD1)	16:58	12:36 (DD3)	08:26	12:36 (DD3)
30	05:21		06:22	19:37 (O2)	06:22	18:17 (O3)	07:22	17:36 (DD1)	16:58	14:50 (O5)	15:49	67 14:44 (JV1)
31	21:19	40	20:17 (O2)	19:37 (O2)	06:24	18:16 (O3)	07:24	17:37 (DD1)	16:59	12:37 (DD3)	08:28	12:37 (DD3)
1	04:33		05:22	19:38 (O2)	06:24	18:16 (O3)	07:24	17:37 (DD1)	16:59	14:51 (O5)	15:50	68 14:45 (JV1)
2	22:04		05:24	19:38 (O2)	06:26	18:15 (O3)	07:26	17:38 (DD1)	16:60	12:38 (DD3)	08:30	12:38 (DD3)
3	04:34		05:24	19:38 (O2)	06:26	18:15 (O3)	07:26	17:38 (DD1)	16:60	14:52 (O5)	15:51	69 14:46 (JV1)
4	22:03		05:26	19:38 (O2)	06:28	18:14 (O3)	07:28	17:39 (DD1)	16:61	12:39 (DD3)	08:32	12:39 (DD3)
5	04:35		05:26	19:38 (O2)	06:28	18:14 (O3)	07:28	17:39 (DD1)	16:61	14:53 (O5)	15:52	70 14:47 (JV1)
6	22:03		05:28	19:39 (O2)	06:30	18:13 (O3)	07:30	17:40 (DD1)	16:62	12:40 (DD3)	08:34	12:40 (DD3)
7	04:36		05:28	19:39 (O2)	06:30	18:13 (O3)	07:30	17:40 (DD1)	16:62	14:54 (O5)	15:53	71 14:48 (JV1)
8	22:02		05:30	19:38 (O2)	06:32	18:12 (O3)	07:32	17:41 (DD1)	16:63	12:41 (DD3)	08:36	12:41 (DD3)
9	04:37		05:30	19:38 (O2)	06:32	18:12 (O3)	07:32	17:41 (DD1)	16:63	14:55 (O5)	15:54	72 14:49 (JV1)
10	22:01		05:32	19:39 (O2)	06:34	18:11 (O3)	07:34	17:42 (DD1)	16:64	12:42 (DD3)	08:38	12:42 (DD3)
11	04:38		05:32	19:39 (O2)	06:34	18:11 (O3)	07:34	17:42 (DD1)	16:64	14:56 (O5)	15:55	73 14:50 (JV1)
12	22:00		05:34	19:40 (O2)	06:36	18:10 (O3)	07:36	17:43 (DD1)	16:65	12:43 (DD3)	08:40	12:43 (DD3)
13	04:40		05:34	19:39 (O2)	06:36	18:10 (O3)	07:36	17:43 (DD1)	16:65	14:57 (O5)	15:56	74 14:51 (JV1)
14	21:59	6	20:00 (O2)	19:40 (O2)	06:38	18:09 (O3)	07:38	17:44 (DD1)	16:66	12:44 (DD3)	08:42	12:44 (DD3)
15	04:41		05:36	19:40 (O2)	06:38	18:09 (O3)	07:38	17:44 (DD1)	16:66	14:58 (O5)	15:57	75 14:52 (JV1)
16	21:58	11	20:03 (O2)	19:41 (O2)	06:40	18:08 (O3)	07:40	17:45 (DD1)	16:67	12:45 (DD3)	08:44	12:45 (DD3)
17	04:42		05:38	19:41 (O2)	06:40	18:08 (O3)	07:40	17:45 (DD1)	16:67	14:59 (O5)	15:58	76 14:53 (JV1)
18	21:57	15	20:05 (O2)	19:42 (O2)	06:42	18:07 (O3)	07:42	17:46 (DD1)	16:68	12:46 (DD3)	08:46	12:46 (DD3)
19	04:44		05:40	19:42 (O2)	06:42	18:07 (O3)	07:42	17:46 (DD1)	16:68	14:60 (O5)	15:59	77 14:54 (JV1)
20	21:55	17	20:06 (O2)	19:43 (O2)	06:44	18:06 (O3)	07:44	17:47 (DD1)	16:69	12:47 (DD3)	08:48	12:47 (DD3)
21	04:45		05:42	19:43 (O2)	06:44	18:06 (O3)	07:44	17:47 (DD1)	16:69	14:61 (O5)	16:00	78 14:55 (JV1)
22	21:54	20	20:07 (O2)	19:44 (O2)	06:46	18:05 (O3)	07:46	17:48 (DD1)	16:70	12:48 (DD3)	08:50	12:48 (DD3)
23	04:47		05:44	19:44 (O2)	06:46	18:05 (O3)	07:46	17:48 (DD1)	16:70	14:62 (O5)	16:01	79 14:56 (JV1)
24	21:53	22	20:09 (O2)	19:45 (O2)	06:48	18:04 (O3)	07:48	17:49 (DD1)	16:71	12:49 (DD3)	08:52	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)

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Celinmajas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (770)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Celmalas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (751)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Celtekas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (714)
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	15:37
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	04:25	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		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		

Flickering_Nordex_N175_Prikuli_A

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 09:53/4.1.254

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

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Dadziš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (681)
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		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Dauguli - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (689)
 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)	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Driveniški - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (645)
 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	08:13	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		
	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Driveniški - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (645)
 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	05:49 (P19.2b)	05:15	05:48 (P19.2b)	06:16	07:16	07:21	08:22
	22:06	9 05:58 (P19.2b)	21:26	15 06:03 (P19.2b)	20:12	18:52	16:35	15:44
2	04:30	05:47 (P19.2b)	05:17	05:50 (P19.2b)	06:18	07:18	07:23	08:24
	22:06	11 05:58 (P19.2b)	21:24	12 06:02 (P19.2b)	20:10	18:49	16:33	15:43
3	04:31	05:47 (P19.2b)	05:19	05:53 (P19.2b)	06:20	07:20	07:25	08:25
	22:05	12 05:59 (P19.2b)	21:22	6 05:59 (P19.2b)	20:07	18:47	16:30	15:42
4	04:32	05:47 (P19.2b)	05:20		06:22	07:22	07:27	08:27
	22:05	13 06:00 (P19.2b)	21:19		20:04	18:44	16:28	15:42
5	04:33	05:46 (P19.2b)	05:22		06:24	07:24	07:29	08:28
	22:04	15 06:01 (P19.2b)	21:17		20:02	18:42	16:26	15:41
6	04:34	05:46 (P19.2b)	05:24		06:26	07:26	07:31	08:30
	22:03	16 06:02 (P19.2b)	21:15		19:59	18:39	16:24	15:40
7	04:35	05:46 (P19.2b)	05:26		06:28	07:28	07:34	08:31
	22:03	16 06:02 (P19.2b)	21:13		19:56	18:36	16:22	15:40
8	04:36	05:45 (P19.2b)	05:28		06:30	07:30	07:36	08:33
	22:02	18 06:03 (P19.2b)	21:11		19:54	18:34	16:20	15:39
9	04:37	05:45 (P19.2b)	05:30		06:32	07:32	07:38	08:34
	22:01	19 06:04 (P19.2b)	21:09		19:51	18:31	16:18	15:39
10	04:39	05:45 (P19.2b)	05:32		06:34	07:34	07:40	08:35
	22:00	19 06:04 (P19.2b)	21:06		19:48	18:28	16:16	15:38
11	04:40	05:45 (P19.2b)	05:34		06:36	07:36	07:42	08:37
	21:59	21 06:06 (P19.2b)	21:04		19:46	18:26	16:14	15:38
12	04:41	05:45 (P19.2b)	05:36		06:38	07:38	07:44	08:38
	21:58	21 06:06 (P19.2b)	21:02		19:43	18:23	16:12	15:37
13	04:43	05:44 (P19.2b)	05:38		06:40	07:40	07:46	08:39
	21:57	22 06:06 (P19.2b)	20:59		19:40	18:21	16:10	15:37
14	04:44	05:44 (P19.2b)	05:40		06:42	07:42	07:49	08:40
	21:55	22 06:06 (P19.2b)	20:57		19:38	18:18	16:08	15:37
15	04:46	05:44 (P19.2b)	05:42		06:44	07:44	07:51	08:41
	21:54	23 06:07 (P19.2b)	20:55		19:35	18:16	16:07	15:37
16	04:47	05:44 (P19.2b)	05:44		06:46	07:46	07:53	08:42
	21:53	23 06:07 (P19.2b)	20:52		19:32	18:13	16:05	15:37
17	04:49	05:43 (P19.2b)	05:46		06:48	07:48	07:55	08:43
	21:51	24 06:07 (P19.2b)	20:50		19:30	18:11	16:03	15:37
18	04:50	05:44 (P19.2b)	05:48		06:50	07:51	07:57	08:44
	21:50	24 06:08 (P19.2b)	20:48		19:27	18:08	16:01	15:37
19	04:52	05:43 (P19.2b)	05:50		06:52	07:53	07:59	08:45
	21:49	25 06:08 (P19.2b)	20:45		19:24	18:06	16:00	15:38
20	04:53	05:44 (P19.2b)	05:52		06:54	07:55	08:01	08:45
	21:47	25 06:09 (P19.2b)	20:43		19:22	18:03	15:58	15:38
21	04:55	05:43 (P19.2b)	05:54		06:56	07:57	08:03	08:46
	21:45	25 06:08 (P19.2b)	20:40		19:19	18:01	15:57	15:38
22	04:57	05:44 (P19.2b)	05:56		06:58	07:59	08:05	08:47
	21:44	25 06:09 (P19.2b)	20:38		19:16	17:58	15:55	15:39
23	04:58	05:43 (P19.2b)	05:58		07:00	08:01	08:07	08:47
	21:42	25 06:08 (P19.2b)	20:35		19:13	17:56	15:54	15:39
24	05:00	05:44 (P19.2b)	06:00		07:02	08:03	08:09	08:47
	21:41	25 06:09 (P19.2b)	20:33		19:11	17:53	15:52	15:40
25	05:02	05:44 (P19.2b)	06:02		07:04	07:05	08:11	08:48
	21:39	25 06:09 (P19.2b)	20:30		19:08	16:51	15:51	15:41
26	05:04	05:44 (P19.2b)	06:04		07:06	07:08	08:13	08:48
	21:37	24 06:08 (P19.2b)	20:28		19:05	16:49	15:50	15:41
27	05:05	05:45 (P19.2b)	06:06		07:08	07:10	08:15	08:48
	21:35	23 06:08 (P19.2b)	20:25		19:03	16:46	15:49	15:42
28	05:07	05:45 (P19.2b)	06:08		07:10	07:12	08:16	08:48
	21:33	22 06:07 (P19.2b)	20:22		19:00	16:44	15:47	15:43
29	05:09	05:46 (P19.2b)	06:10		07:12	07:14	08:18	08:49
	21:31	21 06:07 (P19.2b)	20:20		18:57	16:42	15:46	15:44
30	05:11	05:47 (P19.2b)	06:12		07:14	07:16	08:20	08:49
	21:30	19 06:06 (P19.2b)	20:17		18:55	16:39	15:45	15:45
31	05:13	05:48 (P19.2b)	06:14			07:18		08:48
	21:28	17 06:05 (P19.2b)	20:15			16:37		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)	Minutes with flicker	Last time (hh:mm) with flicker
			(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Dubultnieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (752)
 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	15:41
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	21:10	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	16:00	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
	16:35	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)

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Dzeniš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (607)
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			16:24 (O5)		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			16:21 (O5)	18:07	19	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			16:20 (O5)	18:09	22	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			16:19 (O5)	18:12	24	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			16:15 (DD3)	18:15	25	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			16:13 (DD3)	18:16	26	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			16:10 (DD3)	18:18	27	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			16:09 (DD3)	18:20	26	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			16:07 (DD3)	18:24	27	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			16:06 (DD3)	18:24	25	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			16:05 (DD3)	18:26	24	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			16:05 (DD3)	18:28	23	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			16:04 (DD3)	18:30	20	17:15 (DD1)	05:53		19:27 (O2)	04:49		04:25		
	16:23	21	15:15 (P19.2b)	17:31	35		16:39 (DD3)	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			16:04 (DD3)	18:32	17	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			16:03 (DD3)	18:35	12	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			16:02 (DD3)	18:37			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			16:03 (DD3)	18:41			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			16:02 (DD3)	18:41	11	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			16:03 (DD3)	18:43	16	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	19:45	19	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	19:47	21	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	19:49	23	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)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Dzeniš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (607)
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	18:46 (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	18:47 (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	19:07 (O3) 07:44	16:35 (DD3) 07:51	14:38 (P19.2b) 08:40
16	04:47 21:53	05:44 20:52	06:46 19:32	18:48 (O3) 07:46	16:35 (DD3) 07:53	14:40 (P19.2b) 08:41
17	04:48 21:51	05:46 20:50	06:48 19:29	19:05 (O3) 07:48	16:35 (DD3) 07:55	14:44 (P19.2b) 08:42
18	04:50 21:50	05:48 20:47	06:49 19:27	18:55 (O3) 07:50	16:35 (DD3) 07:57	14:31 (P19.2b) 08:43
19	04:51 21:49	05:50 20:45	06:51 19:24	18:57 (O3) 07:52	16:34 (DD3) 07:59	14:47 (P19.2b) 08:44
20	04:53 21:47	05:52 20:43	06:53 19:21	18:06 (DD1) 07:53	16:35 (DD3) 08:01	14:48 (P19.2b) 08:45
21	04:55 21:45	05:54 20:40	06:55 19:19	18:03 (DD1) 07:55	16:35 (DD3) 08:03	14:49 (P19.2b) 08:45
22	04:56 21:44	05:56 20:38	06:57 19:16	18:19 (DD1) 07:57	16:35 (DD3) 08:05	14:51 (P19.2b) 08:46
23	04:58 21:42	05:58 20:35	06:59 19:13	18:20 (DD1) 08:00	16:35 (DD3) 08:07	14:51 (P19.2b) 08:47
24	05:00 21:41	06:00 20:33	07:01 19:11	17:58 (DD1) 08:01	16:37 (DD3) 08:07	14:52 (P19.2b) 08:47
25	05:02 21:39	06:02 20:30	07:03 19:08	17:57 (DD1) 08:03	16:38 (DD3) 08:09	14:52 (P19.2b) 08:47
26	05:03 21:37	06:04 20:27	07:05 19:05	18:22 (DD1) 07:53	17:10 (O5) 15:52	14:53 (P19.2b) 08:48
27	05:05 21:35	06:06 20:25	07:07 19:03	18:22 (DD1) 07:55	16:10 (O5) 15:51	14:53 (P19.2b) 08:48
28	05:07 21:33	06:08 20:22	07:09 19:00	18:21 (DD1) 07:56	15:43 (DD3) 08:15	14:54 (P19.2b) 08:48
29	05:09 21:31	06:10 20:20	07:11 18:57	17:55 (DD1) 07:14	16:09 (O5) 15:48	14:54 (P19.2b) 08:48
30	05:11 21:30	06:12 20:17	07:13 18:55	18:21 (DD1) 07:16	15:45 (DD3) 08:16	14:54 (P19.2b) 08:48
31	05:13 21:28	06:14 20:15	07:15 19:44 (O2)	18:20 (DD1) 07:17	16:08 (O5) 15:47	14:54 (P19.2b) 08:48
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Dzeni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (709)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Dzintarnieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (755)
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	05:31 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 16:46	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 15:41
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	05:20 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	05:22 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 15:55	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 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 21:11	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	07:36 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 15:36
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	04:45 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 18:17	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	04:48 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	04:23 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 17:23	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 15:37
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	04:52 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	04:47 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	08:26 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 15:51	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 19:08	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	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	04:41 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	04:28 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Dzirnava - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (764)
 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 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 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		

Flickering_Nordex_N175_Prikuli_A

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 09:53/4.1.254

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	08:12	07:09	06:47		05:31	19:55 (AP2)	04:34	04:28	05:14	20:03 (AP2)	06:15	07:15	07:20	08:22			
15:46	16:43	17:46	19:51		20:53	22	20:17 (AP2)	21:50	21:25	25	20:28 (AP2)	20:12	18:52	16:34	15:43		
08:48	08:10	07:06	06:44		05:28		19:54 (AP2)	04:33	04:29		20:03 (AP2)	06:17	07:17	07:22	08:23		
15:48	16:46	17:48	19:53		20:55	24	20:18 (AP2)	21:51	21:23	25	20:28 (AP2)	20:09	18:49	16:32	15:42		
08:48	08:08	07:03	06:41		05:26		19:53 (AP2)	04:32	04:30		20:03 (AP2)	06:19	07:19	07:25	08:25		
15:49	16:48	17:50	19:55		20:57	26	20:19 (AP2)	21:53	22:05		20:29 (AP2)	20:06	18:46	16:30	15:41		
08:47	08:06	07:01	06:39		05:24		19:53 (AP2)	04:31	04:31		20:03 (AP2)	06:21	07:21	07:27	08:27		
15:50	16:50	17:52	19:57		20:59	26	20:19 (AP2)	21:54	22:05		20:29 (AP2)	20:04	18:44	16:27	15:41		
08:47	08:04	06:58	06:36		05:22		19:53 (AP2)	04:30	04:32		20:03 (AP2)	06:23	07:23	07:29	08:28		
15:52	16:52	17:54	19:59		21:01	26	20:19 (AP2)	21:55	22:04		20:30 (AP2)	20:01	18:41	16:25	15:40		
08:46	08:02	06:56	06:33		05:19		19:53 (AP2)	04:29	04:33		20:02 (AP2)	06:25	07:25	07:31	08:30		
15:53	16:54	17:56	20:01		21:03	26	20:19 (AP2)	21:56	22:03		20:29 (AP2)	19:59	18:38	16:23	15:39		
08:46	08:00	06:53	06:31		05:17		19:52 (AP2)	04:28	04:34		20:02 (AP2)	06:27	07:27	07:33	08:31		
15:55	16:57	17:58	20:03		21:05	27	20:19 (AP2)	21:58	22:03		20:29 (AP2)	19:56	18:36	16:21	15:39		
08:45	07:58	06:51	06:28		05:15		19:52 (AP2)	04:28	04:35		20:02 (AP2)	06:29	07:29	07:35	08:33		
15:56	16:59	18:01	20:05		21:07	27	20:19 (AP2)	21:59	22:02		20:29 (AP2)	19:53	18:33	16:19	15:38		
08:44	07:56	06:48	06:26		05:13		19:52 (AP2)	04:27	04:36		20:03 (AP2)	06:31	07:31	07:38	08:34		
15:58	17:01	18:03	20:07		21:09	27	20:19 (AP2)	22:00	22:01		20:28 (AP2)	19:51	18:30	16:17	15:38		
08:44	07:54	06:45	06:23		05:11		19:53 (AP2)	04:26	04:38		20:03 (AP2)	06:33	07:33	07:40	08:35		
15:59	17:03	18:05	20:09		21:11	26	20:19 (AP2)	22:01	22:00		20:28 (AP2)	19:48	18:28	16:15	15:37		
08:43	07:52	06:43	06:20		05:09		19:53 (AP2)	04:26	04:39		20:03 (AP2)	06:35	07:36	07:42	08:37		
16:01	17:06	18:07	20:12		21:13	25	20:18 (AP2)	22:02	21:59		20:24	23	20:26 (AP2)	19:45	18:25	16:13	15:37
08:42	07:49	06:40	06:18		05:07		19:53 (AP2)	04:25	04:40		20:03 (AP2)	06:37	07:38	07:44	08:38		
16:03	17:08	18:09	20:14		21:15	24	20:17 (AP2)	22:03	21:58		20:21	23	20:26 (AP2)	19:43	18:23	16:11	15:36
08:41	07:47	06:38	06:15		05:03		19:54 (AP2)	22:03	21:42		20:04 (AP2)	20:42	18:46	16:46	15:37	15:39	
16:05	17:10	18:11	20:16		21:17	24	20:18 (AP2)	22:05	21:57		20:59	21	20:25 (AP				

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Darzini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (667)
 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
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	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
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	16:06	17:12	18:13	20:18	21:20	22:04	21:56	20:57	19:37	18:18	16:07	15:36
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	16:08	17:15	18:15	20:20	21:21	22:05	21:54	20:55	19:35	18:15	16:06	15:36
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	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
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	16:20	17:28	18:28	20:33	21:33	22:08	21:46	20:40	19:18	18:00	15:56	15:37
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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
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	16:28	17:37	18:36	20:41	21:40	22:08	21:39	20:30	19:08	17:50	15:50	15:39
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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

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Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Darznieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (631) 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	08:13	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	06:44	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	20:10	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
	15:49	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	19:59	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	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	18:10	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	06:32	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	16:05	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
	16:12	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	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	06:17	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	21:33	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	06:57	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	06:09	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	05:01	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	08:49
	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	07:09	08:12	08:17	08:49
	16:35	17:44	18:43	20:47	21:44	22:08	21:34	20:22	19:00	17:44	15:47	15:43
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	07:14	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A
 Assumptions for shadow calculations

Shadow receptor: Elsti - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (703)
 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)	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Elviras - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (774)
 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	04:29	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	20:07	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	06:34	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	04:29	04:34	05:26	06:27	07:27	07:33	08:31
	15:55	16:57	17:59	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	05:28	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
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	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:51	18:30	16:17	15:38
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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
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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
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	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
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	16:33	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:46	15:48	15:41
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	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	21:46	22:07	21:31	20:20	18:57	16:41	15:46	15:43
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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Fridrisgofa - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (632)
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 20:01	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
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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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A
Assumptions for shadow calculations

Shadow receptor: Gabri - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (747)
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	05:31 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 16:46	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 15:41
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	05:20 21:19	06:21 20:04	07:21 18:44	07:27 16:27	08:27 15:41
5	08:47 15:52	08:04 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 16:54	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 15:55	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 19:56	07:27 18:36	07:33 16:21	08:31 15:39
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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
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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 15:51	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 19:08	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	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	04:41 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 20:20	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	04:37 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)	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Gaitnieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (642)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Grovani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (679)
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	16:48 (Pr3a)	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	17:09 (Pr3a)	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	16:48 (Pr3a)	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	17:09 (Pr3a)	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	16:47 (Pr3a)	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	17:08 (Pr3a)	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	16:49 (Pr3a)	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	17:07 (Pr3a)	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	16:49 (Pr3a)	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	17:06 (Pr3a)	19:59	21:01	21:55	22:04	21:17	20:01	18:41	18:04 (PrRR3)	16:25	15:40
6	08:46	08:02	06:56	16:50 (Pr3a)	06:33	05:19	04:29	04:33	05:23	06:25	07:25		07:31	08:30
	15:53	16:54	17:56	17:03 (Pr3a)	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	16:54 (Pr3a)	06:31	05:17	04:28	04:34	05:25	06:27	07:27	17:28 (Pr3a)	07:33	08:31
	15:54	16:57	17:58	17:01 (Pr3a)	20:03	21:05	21:58	22:03	21:13	19:56	18:36	17:38 (Pr3a)	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	17:25 (PrRR3)	07:35	08:33
	15:56	16:59	18:01	17:25 (PrRR3)	20:05	21:07	21:59	22:02	21:11	19:53	18:33	17:40 (PrRR3)	16:19	15:38
9	08:44	07:56	06:48	17:14 (PrRR3)	20:05	21:03	04:27	04:36	05:29	06:31	07:31	17:24 (Pr3a)	07:38	08:34
	15:58	17:01	18:03	17:29 (PrRR3)	20:07	21:09	22:00	22:01	21:08	19:51	18:30	17:41 (Pr3a)	16:17	15:37
10	08:44	07:54	06:45	17:12 (PrRR3)	20:03	21:05	04:26	04:37	05:31	06:33	07:33	17:22 (Pr3a)	07:40	08:35
	15:59	17:03	18:05	17:31 (PrRR3)	20:09	21:11	22:01	22:00	21:06	19:48	18:28	17:41 (Pr3a)	16:15	15:37
11	08:43	07:52	06:43	17:10 (PrRR3)	20:00	21:02	04:25	04:39	05:33	06:35	07:36	17:22 (Pr3a)	07:42	08:37
	16:01	17:06	18:07	17:33 (PrRR3)	20:12	21:13	22:02	21:59	21:04	19:45	18:25	17:43 (Pr3a)	16:13	15:37
12	08:42	07:49	06:40	17:08 (PrRR3)	20:18	21:19	04:25	04:40	05:35	06:37	07:38	17:21 (Pr3a)	07:44	08:38
	16:03	17:08	18:09	17:33 (PrRR3)	20:14	21:15	22:03	21:58	21:02	19:43	18:23	17:43 (Pr3a)	16:11	15:36
13	08:41	07:47	06:37	17:08 (PrRR3)	20:15	21:16	04:25	04:41	05:37	06:39	07:40	17:21 (Pr3a)	07:46	08:39
	16:04	17:10	18:11	17:35 (PrRR3)	20:16	21:17	22:03	21:57	20:59	19:40	18:20	17:42 (Pr3a)	16:09	15:36
14	08:40	07:45	06:35	17:06 (PrRR3)	20:12	21:13	04:24	04:43	05:39	06:41	07:42	17:20 (Pr3a)	07:48	08:40
	16:06	17:12	18:13	17:35 (PrRR3)	20:18	21:19	22:04	21:55	20:57	19:37	18:17	17:42 (Pr3a)	16:07	15:36
15	08:39	07:43	06:32	17:05 (PrRR3)	20:10	21:11	04:24	04:44	05:41	06:43	07:44	17:20 (Pr3a)	07:50	08:41
	16:08	17:15	18:15	17:47 (Pr25)	20:20	21:21	22:05	21:54	20:54	19:34	18:15	17:41 (Pr3a)	16:06	15:36
16	08:38	07:40	06:29	17:05 (PrRR3)	20:07	21:08	04:24	04:46	05:43	06:45	07:46	17:21 (Pr3a)	07:53	08:42
	16:10	17:17	18:17	17:50 (Pr25)	20:22	21:23	22:05	21:53	20:52	19:32	18:12	17:41 (Pr3a)	16:04	15:36
17	08:36	07:38	06:27	17:04 (PrRR3)	20:05	21:06	04:23	04:47	05:45	06:47	07:48	17:22 (Pr3a)	07:55	08:43
	16:12	17:19	18:20	17:52 (Pr25)	20:24	21:25	22:06	21:51	20:50	19:29	18:10	17:38 (Pr3a)	16:02	15:36
18	08:35	07:36	06:24	17:04 (PrRR3)	20:02	21:03	04:23	04:49	05:47	06:49	07:50	17:22 (Pr3a)	07:57	08:44
	16:14	17:21	18:22	17:53 (Pr25)	20:26	21:27	22:06	21:50	20:47	19:26	18:07	17:35 (Pr3a)	16:00	15:36
19	08:34	07:33	06:21	17:04 (PrRR3)	20:00	21:01	04:23	04:51	05:49	06:51	07:52	17:24 (Pr3a)	07:59	08:45
	16:16	17:23	18:24	17:56 (Pr25)	20:28	21:29	22:07	21:49	20:45	19:24	18:05	17:32 (Pr3a)	15:59	15:36
20	08:32	07:31	06:19	17:04 (PrRR3)	20:57	21:58	04:23	04:52	05:51	06:53	07:54	17:27 (Pr3a)	08:01	08:45
	16:18	17:26	18:26	17:57 (Pr25)	20:30	21:31	22:07	21:47	20:42	19:21	18:02	17:30 (Pr3a)	15:57	15:37
21	08:31	07:28	06:16	17:04 (PrRR3)	20:55	21:56	04:23	04:54	05:53	06:55	07:56	17:50 (PrRR3)	08:03	08:46
	16:20	17:28	18:28	17:56 (Pr25)	20:32	21:32	22:07	21:45	20:40	19:18	18:00	17:49 (PrRR3)	08:05	08:47
22	08:30	07:26	06:13	17:04 (PrRR3)	20:52	21:53	04:24	04:56	05:55	06:57	07:59	17:49 (PrRR3)	08:05	08:47
	16:22	17:30	18:30	17:56 (Pr25)	20:34	21:34	22:08	21:44	20:37	19:16	18:00	17:49 (PrRR3)	08:05	08:47
23	08:28	07:24	06:11	17:05 (PrRR3)	20:50	21:51	04:24	04:57	05:57	06:59	07:59	17:48 (PrRR3)	08:01	08:47
	16:24	17:32	18:32	17:56 (Pr25)	20:36	21:36	22:08	21:42	20:35	19:13	18:00	17:48 (PrRR3)	08:03	08:48
24	08:26	07:21	06:08	17:06 (PrRR3)	20:47	21:48	04:24	04:59	05:59	07:01	08:01	17:47 (PrRR3)	08:03	08:48
	16:26	17:35	18:34	17:55 (Pr25)	20:39	21:38	22:08	21:40	20:32	19:10	18:00	17:48 (PrRR3)	08:03	08:48
25	08:25	07:19	06:05	16:49 (Pr3a)	20:05	21:06	04:25	05:01	06:01	07:03	08:03	17:47 (PrRR3)	08:05	08:48
	16:28	17:37	18:36	17:07 (PrRR3)	20:41	21:39	22:08	21:39	20:30	19:08	18:00	17:46 (PrRR3)	08:03	08:48
26	08:23	07:16	06:03	16:49 (Pr3a)	20:03	21:04	04:25	05:03	06:03	07:05	08:05	17:46 (PrRR3)	08:03	08:48
	16:30	17:39	18:38	17:09 (PrRR3)	20:43	21:41	22:08	21:37	20:27	19:05	18:00	17:46 (PrRR3)	08:03	08:48
27	08:21	07:14	06:00	16:48 (Pr3a)	20:00	21:01	04:25	05:04	06:05	07:07	08:07	17:46 (PrRR3)	08:03	08:48
	16:32	17:41	18:40	17:09 (PrRR3)	20:45	21:43	22:08	21:35	20:25	19:02	18:00	17:46 (PrRR3)	08:03	08:48
28	08:20	07:11	05:57	16:47 (Pr3a)	20:03	21:04	04:26	05:06	06:07	07:09	08:09	17:46 (PrRR3)	08:03	08:48
	16:34	17:43	18:42	17:09 (PrRR3)	20:47	21:44	22:08	21:33	20:22	18:59	18:00	17:46 (PrRR3)	08:03	08:48
29	08:18		06:55		20:47	21:44	04:27	05:08	06:09	07:11	08:11	17:46 (PrRR3)	08:03	08:48
	16:37		19:45		20:49	21:46	22:07	21:31	20:20	18:57	18:00	17:46 (PrRR3)	08:03	08:48
30	08:16		06:52		20:49	21:46	04:27	05:10	06:11	07:13	08:13	17:46 (PrRR3)	08:03	08:48
	16:39		19:47		20:51	21:47	22:07	21:29	20:17	18:54	18:00	17:46 (PrRR3)	08:03	08:48
31	08:14		06:49		20:49	21:47	04:27	05:12	06:13		08:14	17:46 (PrRR3)	08:03	08:48
	16:41		19:49		20:51	21:49	22:07	21:27	20:14		08:14	17:46 (PrRR3)	08:03	08:48
Potential sun hours	236	266	366		426	507	528	529	469	384	324		248	217
Total, worst case														
Sun reduction		110	816							604	326			
Oper. time red.		0,23	0,39							0,43	0,29			
Wind dir. red.		1,00	1,00							1,00	1,00			
Total reduction		0,23	0,39							0,43	0,29			
Total, real		25	319							261	95			

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)

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Ievaiši - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (648)
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	52	16:06 (Pr12)	17:52	55	15:44 (Pr11)	19:57	20:59	21:54						
5	08:47	10:28 (AP6.1)	08:05	15:21 (Pr11)	06:58	07:24 (PrRR3)	06:36	05:22	04:30									
	15:52	53	12:08 (JU1)	16:52	60	16:06 (Pr12)	17:54	47	15:37 (Pr11)	19:59	21:01	21:56						
6	08:47	10:29 (AP6.1)	08:03	15:20 (Pr11)	06:56	07:22 (PrRR3)	06:34	05:19	04:29									
	15:53	53	12:09 (JU1)	16:55	65	16:07 (Pr12)	17:56	47	08:09 (Pr25)	20:01	21:04	21:57						
7	08:46	10:30 (AP6.1)	08:01	15:19 (Pr11)	06:53	07:21 (PrRR3)	06:31	05:17	04:28									
	15:55	51	12:09 (JU1)	16:57	70	16:08 (Pr12)	17:59	48	08:09 (Pr25)	20:03	21:06	21:58						
8	08:45	10:31 (AP6.1)	07:58	15:18 (Pr11)	06:51	07:20 (PrRR3)	06:28	05:15	04:28									
	15:56	48	12:08 (JU1)	16:59	73	16:09 (Pr12)	18:01	49	08:09 (Pr25)	20:06	21:08	21:59						
9	08:45	10:32 (AP6.1)	07:56	15:17 (Pr11)	06:48	07:20 (PrRR3)	06:26	05:13	04:27									
	15:58	46	12:08 (JU1)	17:01	76	16:08 (Pr12)	18:03	50	08:10 (Pr25)	20:08	21:10	22:00						
10	08:44	10:33 (AP6.1)	07:54	15:16 (Pr11)	06:45	07:19 (PrRR3)	06:23	05:11	04:26									
	15:59	44	12:08 (JU1)	17:04	79	16:09 (Pr12)	18:05	50	08:09 (Pr25)	20:10	21:12	22:01						
11	08:43	10:33 (AP6.1)	07:52	15:15 (Pr11)	06:43	07:18 (PrRR3)	06:20	05:09	04:26									
	16:01	40	12:07 (JU1)	17:06	80	16:08 (Pr12)	18:07	56	17:28 (O6)	20:12	21:14	22:02						
12	08:42	10:35 (AP6.1)	07:50	15:14 (Pr11)	06:40	07:19 (PrRR3)	06:18	05:07	04:25									
	16:03	37	12:07 (JU1)	17:08	80	16:08 (Pr12)	18:09	64	17:33 (O6)	20:14	21:16	22:03						
13	08:41	10:37 (AP6.1)	07:47	15:13 (Pr11)	06:38	07:19 (PrRR3)	06:15	05:05	04:25									
	16:05	31	12:06 (JU1)	17:10	80	16:08 (Pr12)	18:11	68	17:35 (O6)	20:16	21:18	22:04						
14	08:40	10:40 (AP6.1)	07:45	15:12 (Pr11)	06:35	07:19 (PrRR3)	06:13	05:03	04:24									
	16:06	24	12:05 (JU1)	17:12	80	16:07 (Pr12)	18:13	72	17:37 (O6)	20:18	21:19	22:04						
15	08:39	11:51 (JU1)	07:43	15:11 (Pr11)	06:32	07:20 (PrRR3)	06:10	05:01	04:24									
	16:08	12	12:03 (JU1)	17:15	80	16:07 (Pr12)	18:16	72	17:38 (O6)	20:20	21:21	22:05						
16	08:38	11:54 (JU1)	07:41	15:10 (Pr11)	06:30	07:22 (PrRR3)	06:07	04:59	04:24									
	16:10	7	12:01 (JU1)	17:17	80	16:06 (Pr12)	18:18	67	17:39 (O6)	20:22	21:23	22:06						
17	08:37		07:38	15:09 (Pr11)	06:27	07:24 (PrRR3)	06:05	04:57	04:24									
	16:12		17:19	77	16:05 (Pr12)	18:20	61	17:39 (O6)	20:24	21:25	22:06							
18	08:35		07:36	15:08 (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	15:07 (Pr11)	06:22	07:42 (Pr25)	06:00	04:53	04:23									
	16:16		17:24	69	16:01 (Pr12)	18:24	48	17:40 (O6)	20:28	21:29	22:07							
20	08:33		07:31	15:06 (Pr11)	06:19	07:46 (Pr25)	05:57	04:52	04:24									
	16:18		17:26	66	15:59 (Pr11)	18:26	40	17:40 (O6)	20:30	21:31	22:07							
21	08:31		07:29	15:05 (Pr11)	06:16	17:06 (O6)	05:55	04:50	04:24									
	16:20		17:28	61	15:59 (Pr11)	18:28	33	17:39 (O6)	20:33	21:33	22:08							
22	08:30		07:26	15:04 (Pr11)	06:14	17:07 (O6)	05:52	04:48	04:24									
	16:22		17:30	54	15:58 (Pr11)	18:30	33	17:40 (O6)	20:35	21:34	22:08							
23	08:28		07:24	15:03 (Pr11)	06:11	17:06 (O6)	05:50	04:47	04:24									
	16:24		17:32	44	15:58 (Pr11)	18:32	33	17:39 (O6)	20:37	21:36	22:08							
24	08:27		07:21	15:02 (Pr11)	06:08	17:06 (O6)	05:47	04:45	04:24									
	16:26		17:35	43	15:57 (Pr11)	18:34	32	17:38 (O6)	20:39	21:38	22:08							
25	08:25		07:19	15:01 (Pr11)	06:06	17:07 (O6)	05:45	04:43	04:25									
	16:28		17:37	42	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	14:59 (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	14:58 (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			1723		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			388		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)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Ievaiši - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (648)
 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)	08:03 (Pr3a)
	22:07	21:26	20:12	18:52	18:14 (O6)	16:34
2	04:29	05:16	06:17	07:17	07:57 (PrRR3)	08:03 (Pr3a)
	22:06	21:24	20:09	18:49	18:10 (O6)	16:32
3	04:30	05:18	06:19	07:19	07:57 (PrRR3)	08:05 (Pr3a)
	22:06	21:22	20:07	18:46	08:47 (Pr25)	16:30
4	04:31	05:20	06:21	07:21	07:57 (PrRR3)	08:05 (Pr3a)
	22:05	21:19	20:04	18:44	08:47 (Pr25)	16:28
5	04:32	05:22	06:23	07:23	07:56 (PrRR3)	08:06 (Pr3a)
	22:04	21:17	20:01	18:41	08:46 (Pr25)	16:25
6	04:33	05:24	06:25	07:25	07:57 (PrRR3)	08:09 (Pr3a)
	22:04	21:15	19:59	18:38	08:46 (Pr25)	16:23
7	04:34	05:25	06:27	07:28	07:57 (PrRR3)	08:12 (Pr3a)
	22:03	21:13	19:56	18:36	08:45 (Pr25)	16:21
8	04:35	05:27	06:29	07:30	07:58 (PrRR3)	08:11
	22:02	21:11	19:53	18:33	08:44 (Pr25)	16:19
9	04:36	05:29	06:31	07:32	08:01 (PrRR3)	08:11
	22:01	21:09	19:51	18:31	16:17 (Pr11)	16:17
10	04:38	05:31	06:33	07:34	08:04 (PrRR3)	08:11
	22:00	21:06	19:48	18:28	16:20 (Pr11)	16:15
11	04:39	05:33	06:35	07:36	08:17 (Pr25)	08:12
	21:59	21:04	19:45	18:25	16:22 (Pr11)	16:13
12	04:40	05:35	06:37	18:07 (O6)	08:18 (Pr25)	08:11
	21:58	21:02	19:43	18:23	16:24 (Pr11)	16:11
13	04:42	05:37	06:39	18:03 (O6)	08:20 (Pr25)	08:11
	21:57	20:59	19:40	18:20 (O6)	16:25 (Pr11)	16:09
14	04:43	05:39	06:41	18:01 (O6)	08:23 (Pr25)	08:11
	21:56	20:57	19:37	18:22 (O6)	16:26 (Pr11)	16:08
15	04:45	05:41	06:43	17:59 (O6)	15:49 (Pr11)	08:11
	21:54	20:55	19:35	18:23 (O6)	16:27 (Pr11)	16:06
16	04:46	05:43	06:45	17:57 (O6)	15:47 (Pr11)	08:11
	21:53	20:52	19:32	18:24 (O6)	16:28 (Pr11)	16:04
17	04:48	05:45	06:47	17:56 (O6)	15:46 (Pr11)	08:11
	21:52	20:50	19:29	18:25 (O6)	16:28 (Pr11)	16:02
18	04:49	05:47	06:49	17:55 (O6)	15:45 (Pr11)	08:11
	21:50	20:47	19:27	18:25 (O6)	16:28 (Pr11)	16:01
19	04:51	05:49	06:51	17:54 (O6)	15:44 (Pr11)	08:11
	21:49	20:45	19:24	18:25 (O6)	16:29 (Pr11)	15:59
20	04:52	05:51	06:53	17:53 (O6)	09:10 (Pr3a)	08:01
	21:47	20:43	19:21	18:25 (O6)	16:29 (Pr11)	15:57
21	04:54	05:53	06:55	17:53 (O6)	09:07 (Pr3a)	08:03
	21:46	20:40	19:18	18:25 (O6)	16:29 (Pr11)	15:56
22	04:56	05:55	06:57	17:52 (O6)	09:05 (Pr3a)	08:05
	21:44	20:38	19:16	18:25 (O6)	16:29 (Pr11)	15:54
23	04:57	05:57	06:59	17:52 (O6)	09:05 (Pr3a)	08:07
	21:42	20:35	19:13	18:24 (O6)	16:32 (Pr12)	15:53
24	04:59	05:59	07:01	08:27 (Pr25)	09:03 (Pr3a)	08:09
	21:41	20:33	19:10	18:24 (O6)	16:34 (Pr12)	15:52
25	05:01	06:01	07:03	08:24 (Pr25)	08:02 (Pr3a)	08:11
	21:39	20:30	19:08	18:23 (O6)	15:35 (Pr12)	15:50
26	05:03	06:03	07:05	08:09 (PrRR3)	08:03 (Pr3a)	08:13
	21:37	20:27	19:05	18:22 (O6)	15:36 (Pr12)	15:49
27	05:05	06:05	07:07	08:04 (PrRR3)	08:02 (Pr3a)	08:15
	21:35	20:25	19:02	18:21 (O6)	15:37 (Pr12)	15:48
28	05:06	06:07	07:09	08:02 (PrRR3)	08:01 (Pr3a)	08:17
	21:33	20:22	19:00	18:20 (O6)	15:37 (Pr12)	15:46
29	05:08	06:09	07:11	08:00 (PrRR3)	08:02 (Pr3a)	08:18
	21:32	20:20	18:57	18:18 (O6)	15:38 (Pr12)	15:45
30	05:10	06:11	07:13	07:59 (PrRR3)	08:02 (Pr3a)	08:20
	21:30	20:17	18:54	18:16 (O6)	15:38 (Pr12)	15:44
31	05:12	06:13			08:02 (Pr3a)	
	21:28	20:15			15:38 (Pr12)	
Potential sun hours	529	469	384	324	248	217
Total, worst case			748	1818	717	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	527	54	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A
Assumptions for shadow calculations

Shadow receptor: Irbeni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (693)
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	21 20:59	20:14 (Pr25) 21:54
5	08:47 15:52	08:04 16:52	06:58 17:54	06:36 19:59	19 21:01	20:13 (Pr25) 21:55
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	19 21:03	20:13 (Pr25) 21:57
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	18 21:05	20:12 (Pr25) 21:58
8	08:45 15:56	07:58 16:59	06:50 18:01	06:28 20:05	26 21:07	20:12 (Pr25) 21:59
9	08:44 15:58	07:56 17:01	06:48 18:03	06:25 20:07	30 21:09	20:12 (Pr25) 22:00
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:09	29 21:11	20:11 (Pr25) 22:01
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	26 21:13	20:11 (Pr25) 22:02
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	25 21:15	20:11 (Pr25) 22:03
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	24 21:17	20:11 (Pr25) 22:03
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	23 21:19	20:11 (Pr25) 22:04
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	20 21:21	20:11 (Pr25) 22:04
16	08:38 16:10	07:40 17:17	06:29 18:17	06:07 20:22	18 21:23	20:11 (Pr25) 22:05
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	14 21:25	20:11 (Pr25) 22:06
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	9 21:27	20:11 (Pr25) 22:06
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	31 21:29	20:11 (Pr25) 22:07
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	32 21:30	20:11 (Pr25) 22:07
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	33 21:32	20:11 (Pr25) 22:07
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	33 21:34	20:11 (Pr25) 22:08
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	33 21:36	20:11 (Pr25) 22:08
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	33 21:38	20:11 (Pr25) 22:08
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	33 21:39	20:11 (Pr25) 22:08
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	33 21:41	20:11 (Pr25) 22:08
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	33 21:42	20:11 (Pr25) 22:08
28	08:20 16:35	07:11 17:43	05:57 18:42	05:38 20:47	32 21:44	20:11 (Pr25) 22:07
29	08:18 16:37	07:09 17:45	05:55 18:45	05:35 20:49	32 21:46	20:11 (Pr25) 22:07
30	08:16 16:39	07:07 17:47	05:52 18:47	05:33 20:51	32 21:48	20:11 (Pr25) 22:07
31	08:14 16:41	07:05 17:49	05:50 18:49	05:31 20:53	31 21:49	20:11 (Pr25) 22:07
Potential sun hours	236	266	366	426	507	528
Total, worst case				439	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				194	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A
 Assumptions for shadow calculations

Shadow receptor: Irbeni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (693)
 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	19:04 (Pr3a)
2	04:29	20:14 (PrRR3)	05:16	20:18 (PrRR3)	06:17	19:04 (Pr3a)
3	04:30	20:15 (PrRR3)	05:18	20:10 (Pr25)	06:19	19:03 (Pr3a)
4	04:31	20:15 (PrRR3)	05:20	20:08 (Pr25)	06:21	19:03 (Pr3a)
5	04:32	20:14 (PrRR3)	05:21	20:05 (Pr25)	06:23	19:02 (Pr3a)
6	04:33	20:14 (PrRR3)	05:23	20:04 (Pr25)	06:25	19:02 (Pr3a)
7	04:34	20:14 (PrRR3)	05:25	20:03 (Pr25)	06:27	19:03 (Pr3a)
8	04:35	20:14 (PrRR3)	05:27	20:03 (Pr25)	06:29	19:04 (Pr3a)
9	04:36	20:14 (PrRR3)	05:29	20:02 (Pr25)	06:31	19:05 (Pr3a)
10	04:38	20:13 (PrRR3)	05:31	20:02 (Pr25)	06:33	19:07 (Pr3a)
11	04:39	20:13 (PrRR3)	05:33	20:01 (Pr25)	06:35	19:18 (Pr3a)
12	04:40	20:14 (PrRR3)	05:35	20:01 (Pr25)	06:37	19:18 (Pr3a)
13	04:42	20:14 (PrRR3)	05:37	20:01 (Pr25)	06:39	19:18 (Pr3a)
14	04:43	20:13 (PrRR3)	05:39	20:01 (Pr25)	06:41	19:18 (Pr3a)
15	04:44	20:14 (PrRR3)	05:41	20:01 (Pr25)	06:43	19:18 (Pr3a)
16	04:46	20:13 (PrRR3)	05:43	20:02 (Pr25)	06:45	19:18 (Pr3a)
17	04:47	20:13 (PrRR3)	05:45	20:03 (Pr25)	06:47	19:18 (Pr3a)
18	04:49	20:13 (PrRR3)	05:47	20:03 (Pr25)	06:49	19:18 (Pr3a)
19	04:51	20:13 (PrRR3)	05:49	20:04 (Pr25)	06:51	19:18 (Pr3a)
20	04:52	20:13 (PrRR3)	05:51	20:07 (Pr25)	06:53	19:18 (Pr3a)
21	04:54	20:13 (PrRR3)	05:53	20:11 (Pr25)	06:55	19:18 (Pr3a)
22	04:56	20:14 (PrRR3)	05:55		06:57	19:18 (Pr3a)
23	04:57	20:13 (PrRR3)	05:57		06:59	19:18 (Pr3a)
24	04:59	20:14 (PrRR3)	05:59		07:01	19:18 (Pr3a)
25	05:01	20:14 (PrRR3)	06:01		07:03	19:18 (Pr3a)
26	05:03	20:14 (PrRR3)	06:03		07:05	19:18 (Pr3a)
27	05:04	20:15 (PrRR3)	06:05		07:07	19:18 (Pr3a)
28	05:06	20:15 (PrRR3)	06:07		07:09	19:18 (Pr3a)
29	05:08	20:15 (PrRR3)	06:09		07:11	19:18 (Pr3a)
30	05:10	20:16 (PrRR3)	06:11		07:13	19:18 (Pr3a)
31	05:12	20:17 (PrRR3)	06:13		07:15	19:18 (Pr3a)
Potential sun hours	529	469	384	324	248	217
Total, worst case	936	514	210			
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	268	91			

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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A
Assumptions for shadow calculations

Shadow receptor: Irš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (744)
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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Ivaš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (682)
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
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	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
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	16:32	17:41	18:40	20:45	21:42	22:08	21:35	20:25	19:02	16:45	15:48	15:41
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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Ivdri - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (673)
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 21:26	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	05:16 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	08:05 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 17:06	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 16:03	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 21:02	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	05:04 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	08:38 16:10	07:40 17:17	06:29 18:17	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	08:36 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	04:24 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	07:24 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 17:53	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 21:39	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	05:02 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 18:40	05:40 20:45	04:40 21:43	04:25 22:08	05:04 21:35	06:05 20:25	07:07 19:02	08:09 16:45	08:15 15:47	08:48 15:41
28	08:20 16:34	07:11 17:43	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:08	05:06 21:33	06:07 20:22	07:09 18:59	08:11 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	08:13 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	08:16 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)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Jasmini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (726)
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
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	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
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	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:11	19:53	18:33	16:19	15:38
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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
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	16:10	17:17	18:17	20:22	21:23	22:05	21:53	20:52	19:32	18:12	16:04	15:36
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	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
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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
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	16:28	17:37	18:36	20:41	21:39	22:08	21:39	20:30	19:07	16:50	15:50	15:39
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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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Jaunbruveri - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (788)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Jaundzelzava - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (647)
 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	05:28 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 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	05:33 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	06:38 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 16:06	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 18:16	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 17:21	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 18:08	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 22:07	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	06:14 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	08:26 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 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 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	05:10 21:30	06:11 20:17	07:13 18:54	08:16 17:39	08:20 15:44	08:49 15:44
31	08:14 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Jaundzitari - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,6° (712) 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 17:46	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 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) 20:25 (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) 20:22 (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	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	20:12 (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	20:13 (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	04:56 21:44	05:55 20:37	20:14 (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) 20:09 (AP2)	04:24 22:08	04:57 21:42	05:57 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) 20:10 (AP2)	04:24 22:08	04:59 21:40	05:59 20:32	20:22 (AP2) 20:10 (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	20:11 (AP2) 20:11 (AP2)	04:25 22:08	05:01 21:39	06:01 20:30	20:24 (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	20:12 (AP2) 20:12 (AP2)	04:25 22:08	05:03 21:37	06:03 20:27	20:26 (AP2) 20:23 (AP2)	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	04:41 21:42	20:13 (AP2) 20:13 (AP2)	04:26 22:08	05:05 21:35	06:05 20:24	20:27 (AP2) 20:24 (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	04:39 21:44	20:14 (AP2) 20:14 (AP2)	04:26 22:07	05:06 21:33	06:07 20:22	20:26 (AP2) 20:26 (AP2)	07:09 19:00	07:12 16:43	08:16 15:46	08:48 15:42
29	08:18 16:37	07:09 17:45	05:55 18:40	05:35 20:49	04:38 21:46	20:15 (AP2) 20:15 (AP2)	04:27 22:07	05:08 21:31	06:09 20:20	20:27 (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	07:06 17:46	05:52 18:39	05:33 20:51	04:37 21:47	20:16 (AP2) 20:16 (AP2)	04:28 22:07	05:10 21:29	06:11 20:17	20:04 (AP2) 20:27 (AP2)	06:11 20:17	07:13 18:54	08:20 16:36	08:48 15:44
31	08:14 16:41	07:04 17:49	05:49 18:40	05:31 20:52	04:35 21:49	20:17 (AP2) 20:17 (AP2)	04:29 22:07	05:12 21:27	06:13 20:14	20:04 (AP2) 20:28 (AP2)	06:13 20:14	07:18 18:56	08:22 16:36	08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	372	384	324	248	217	
Total, worst case				66	436		139		0,52					
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	245		66		194					

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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Jaunie Grantkalni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (634)
 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	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	08:21	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	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	21:45	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Jaunie Mozuli - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (610) 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	05:14 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 18:01	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 20:11	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 20:08	08:05 18:08	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 20:05	08:07 18:05	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 20:03	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 20:00	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 20:04	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)	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Jaunkaleji - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (779)
 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	05:31	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Jaunkaleji 1 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (777)
 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)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Jaunlauki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (700) 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	07:24	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	07:37	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	04:38	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	18:22	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	04:23	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	17:53	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	04:26	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	08:11	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	21:45	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		21:48		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)

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Jaunozoli - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (737)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Jaunstikani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (617)
 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 16:35	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	07:22 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 18:46	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	08:04 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 20:00	07:25 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 21:57	04:35 22:02	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 20:05	05:16 21:07	04:28 21:59	04:36 22:02	05:28 21:11	06:30 20:00	07:30 18:33	07:35 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	08:43 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 20:00	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 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	05:38 20:59	06:39 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	06:41 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	07:50 16:06	08:41 15:37
16	08:37 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 20:00	07:46 18:13	07:53 16:04	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 21:48	05:50 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	05:58 20:30	04:52 21:30	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 20:32	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	08:29 16:22	07:26 17:31	06:14 18:30	05:53 20:34	04:49 21:34	04:24 22:07	04:56 21:44	05:56 20:37	06:57 20:00	07:59 18:00	08:05 15:55	08:46 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 18:34	05:48 20:39	04:46 21:37	04:25 22:08	05:00 21:40	06:00 20:32	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	05:02 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	08:21 16:33	07:14 17:42	06:00 18:41	05:41 20:45	04:41 21:42	04:26 22:07	05:05 21:35	06:06 20:25	07:07 20:00	08:09 18:00	08:14 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 21:45	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 15:44
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 15:45	08:48 15:45
31	08:14 16:42		06:50 19:49		04:36 21:48		05:12 21:27	06:14 20:14	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Jaunstikani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (785)
 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	07:23	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Jaunares - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (633)
 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	08:13	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
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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
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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
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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Jaurini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (768)
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 20:00	07:25 18:41	07:31 16:25	08:30 15:40
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 20:00	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	05:29 21:08	06:31 20:00	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 20:00	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	04:53 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 15:57	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 20:00	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	05:06 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	08:18 18:00		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Jumiš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (706)
 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
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	15:56	16:59	18:00	20:05	21:07	21:59	22:02	21:10	19:53	18:33	16:19	15:38
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	15:58	17:01	18:03	20:07	21:09	22:00	22:01	21:08	19:50	18:30	16:17	15:37
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	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
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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
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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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Kalna Driva - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (790)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Kalnbirzes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (767)
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 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	04:36 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 17:03	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	07:34 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	04:57 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 17:35	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Kalnieš i 2 (kad. apz. 76740010016001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (661) 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)	17:14		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)	17:11		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Kalnieš i 2 (kad. apz. 76740010016001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (661) 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) 08:47 (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	13	08:36 (Pr25) 08:49 (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	17	08:34 (Pr25) 08:51 (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	18	08:34 (Pr25) 08:52 (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	32	08:32 (Pr25) 16:02 (O6)	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	40	08:32 (Pr25) 16:05 (O6)	07:55 16:02	12:13 (Pr11) 15:00 (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	45	08:31 (Pr25) 16:07 (O6)	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	51	08:31 (Pr25) 16:10 (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	54	08:31 (Pr25) 16:11 (O6)	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	55	08:31 (Pr25) 16:12 (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	56	08:31 (Pr25) 16:12 (O6)	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	55	08:33 (Pr25) 16:14 (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) 16:14 (O6)	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	52	07:36 (Pr25) 15:14 (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	47	07:39 (Pr25) 15:15 (O6)	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	43	14:32 (O6) 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) 15:15 (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	44	14:32 (O6) 15:16 (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	43	14:32 (O6) 15:15 (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	44	14:31 (O6) 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Kalnieš i 2 (kad. apz. 76740030024001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (652)

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	04:34
	15:46	108	14:13 (Pr12)	16:43	24	12:52 (Pr11)	17:46	66	16:04 (O6)	19:51	21:50
2	08:48		10:12 (JU1)	08:11		12:31 (Pr11)	07:06		07:42 (Pr25)	06:44	04:33
	15:48	108	14:13 (Pr12)	16:46	19	12:50 (Pr11)	17:48	65	16:02 (O6)	19:53	21:52
3	08:48		10:13 (JU1)	08:09		12:35 (Pr11)	07:04		07:43 (Pr25)	06:42	04:32
	15:49	108	14:14 (Pr12)	16:48	11	12:46 (Pr11)	17:50	63	16:02 (O6)	19:55	21:53
4	08:48		10:13 (JU1)	08:07			07:01		07:43 (Pr25)	06:39	04:31
	15:50	109	14:14 (Pr12)	16:50			17:52	59	16:00 (O6)	19:57	21:54
5	08:47		10:13 (JU1)	08:05		15:34 (O6)	06:59		07:43 (Pr25)	06:36	04:30
	15:52	108	14:14 (Pr12)	16:52	14	15:48 (O6)	17:54	55	15:58 (O6)	19:59	21:56
6	08:47		10:15 (JU1)	08:03		15:31 (O6)	06:56		07:44 (Pr25)	06:34	04:29
	15:53	106	14:15 (Pr12)	16:55	21	15:52 (O6)	17:56	50	15:57 (O6)	20:01	21:57
7	08:46		10:15 (JU1)	08:01		15:29 (O6)	06:53		07:45 (Pr25)	06:31	04:28
	15:55	106	14:15 (Pr12)	16:57	26	15:55 (O6)	17:59	43	15:55 (O6)	20:03	21:58
8	08:45		10:16 (JU1)	07:58		15:27 (O6)	06:51		07:47 (Pr25)	06:28	04:28
	15:56	106	14:16 (Pr12)	16:59	30	15:57 (O6)	18:01	33	15:52 (O6)	20:06	21:59
9	08:45		10:17 (JU1)	07:56		15:25 (O6)	06:48		15:32 (O6)	06:26	04:27
	15:58	104	14:16 (Pr12)	17:01	33	15:58 (O6)	18:03	17	15:49 (O6)	20:08	22:00
10	08:44		10:18 (JU1)	07:54		15:24 (O6)	06:45			06:23	04:26
	15:59	103	14:16 (Pr12)	17:04	36	16:00 (O6)	18:05			20:10	22:01
11	08:43		10:19 (JU1)	07:52		15:23 (O6)	06:43			06:20	04:26
	16:01	101	14:17 (Pr12)	17:06	39	16:02 (O6)	18:07			20:12	22:02
12	08:42		10:19 (JU1)	07:50		15:22 (O6)	06:40			06:18	04:25
	16:03	101	14:16 (Pr12)	17:08	40	16:02 (O6)	18:09			20:14	22:03
13	08:41		10:21 (JU1)	07:47		15:21 (O6)	06:38			06:15	04:25
	16:05	97	14:17 (Pr12)	17:10	42	16:03 (O6)	18:11			20:16	22:04
14	08:40		10:23 (JU1)	07:45		15:20 (O6)	06:35			06:13	04:24
	16:06	94	14:17 (Pr12)	17:13	44	16:04 (O6)	18:13			20:18	22:04
15	08:39		10:24 (JU1)	07:43		15:20 (O6)	06:32			06:10	04:24
	16:08	89	14:16 (Pr12)	17:15	45	16:05 (O6)	18:16			20:20	22:05
16	08:38		10:27 (JU1)	07:41		15:19 (O6)	06:30			06:08	04:24
	16:10	84	14:17 (Pr12)	17:17	46	16:05 (O6)	18:18			20:22	22:06
17	08:37		12:12 (Pr11)	07:38		15:18 (O6)	06:27			06:05	04:24
	16:12	76	14:16 (Pr12)	17:19	48	16:06 (O6)	18:20			20:24	22:06
18	08:35		12:13 (Pr11)	07:36		15:17 (O6)	06:24			06:02	04:24
	16:14	74	14:16 (Pr12)	17:21	49	16:06 (O6)	18:22			20:26	22:07
19	08:34		12:13 (Pr11)	07:33		15:18 (O6)	06:22			06:00	04:24
	16:16	71	14:15 (Pr12)	17:24	49	16:07 (O6)	18:24			20:28	22:07
20	08:33		12:13 (Pr11)	07:31		15:17 (O6)	06:19			05:57	04:24
	16:18	69	14:14 (Pr12)	17:26	49	16:06 (O6)	18:26			20:31	22:07
21	08:31		12:15 (Pr11)	07:29		15:17 (O6)	06:16			05:55	04:24
	16:20	66	14:14 (Pr12)	17:28	50	16:07 (O6)	18:28			20:33	22:08
22	08:30		12:15 (Pr11)	07:26		15:17 (O6)	06:14			05:52	04:24
	16:22	63	14:13 (Pr12)	17:30	49	16:06 (O6)	18:30			20:35	22:08
23	08:28		12:16 (Pr11)	07:24		07:51 (Pr25)	06:11			05:50	04:47
	16:24	58	14:11 (Pr12)	17:33	59	16:07 (O6)	18:32			20:37	22:08
24	08:27		12:16 (Pr11)	07:21		07:48 (Pr25)	06:08			05:47	04:45
	16:26	51	14:08 (Pr12)	17:35	62	16:06 (O6)	18:34			20:39	22:08
25	08:25		12:17 (Pr11)	07:19		07:45 (Pr25)	06:06			05:45	04:44
	16:28	42	12:59 (Pr11)	17:37	65	16:05 (O6)	18:36			20:41	22:10
26	08:23		12:19 (Pr11)	07:16		07:45 (Pr25)	06:03			05:43	04:42
	16:30	40	12:59 (Pr11)	17:39	68	16:06 (O6)	18:39			20:43	22:08
27	08:22		12:20 (Pr11)	07:14		07:43 (Pr25)	06:00			05:40	04:41
	16:33	39	12:59 (Pr11)	17:41	69	16:05 (O6)	18:41			20:45	22:08
28	08:20		12:21 (Pr11)	07:11		07:43 (Pr25)	05:58			05:38	04:39
	16:35	37	12:58 (Pr11)	17:43	69	16:05 (O6)	18:43			20:47	22:08
29	08:18		12:23 (Pr11)				06:55			05:35	04:38
	16:37	34	12:57 (Pr11)				19:45			20:49	22:08
30	08:16		12:23 (Pr11)				06:52			05:33	04:37
	16:39	32	12:55 (Pr11)				19:47			20:51	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)	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

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Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Kalnieši 2 (kad. apz. 76740030024001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (652) 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 16:28	15:41 14:59 (O6)
5	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 16:25	15:41 15:01 (O6)
6	04:33 22:04	05:24 21:15	06:25 19:59	07:25 18:38	07:31 16:23	15:40 15:05 (O6)
7	04:34 22:03	05:26 21:13	06:27 19:56	07:28 18:36	07:34 16:21	15:39 15:01 (O6)
8	04:35 22:02	05:27 21:11	06:29 19:53	07:30 18:33	07:36 16:19	15:38 12:05 (Pr11)
9	04:36 22:01	05:29 21:09	06:31 19:51	07:32 18:31	07:38 16:17	15:38 12:21 (Pr11)
10	04:38 22:00	05:31 21:06	06:33 19:48	07:34 18:28	07:40 16:15	15:38 12:23 (Pr11)
11	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	15:37 12:26 (Pr11)
12	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23	07:44 16:11	15:37 12:27 (Pr11)
13	04:42 21:57	05:37 20:59	06:39 19:40	07:40 18:20	07:46 16:09	15:37 12:29 (Pr11)
14	04:43 21:56	05:39 20:57	06:41 19:37	07:42 18:18	07:49 16:08	15:36 12:30 (Pr11)
15	04:45 21:54	05:41 20:55	06:43 19:35	07:44 18:15	07:51 16:06	15:36 12:31 (Pr11)
16	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:13	07:53 16:04	15:36 12:32 (Pr11)
17	04:48 21:52	05:45 20:50	06:47 19:29	07:48 18:10	07:55 16:02	15:36 12:33 (Pr11)
18	04:49 21:50	05:47 20:47	06:49 19:27	07:50 18:08	07:57 16:01	15:36 13:42 (Pr12)
19	04:51 21:49	05:49 20:45	06:51 19:24	07:53 18:05	07:59 15:59	15:36 13:46 (Pr12)
20	04:52 21:47	05:51 20:43	06:53 19:21	07:55 18:03	08:01 15:57	15:37 13:48 (Pr12)
21	04:54 21:46	05:53 20:40	06:55 19:19	07:57 18:00	08:03 15:56	15:37 13:49 (Pr12)
22	04:56 21:44	05:55 20:38	06:57 19:16	07:59 17:58	08:05 15:54	15:37 13:51 (Pr12)
23	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55	08:07 15:53	15:38 13:52 (Pr12)
24	04:59 21:41	05:59 20:33	07:01 19:10	08:03 17:53	08:09 15:52	15:38 13:53 (Pr12)
25	05:01 21:39	06:01 20:30	07:03 19:08	08:05 16:50	08:11 15:50	15:38 13:54 (Pr12)
26	05:03 21:37	06:03 20:27	07:05 19:05	08:08 16:48	08:13 15:49	15:40 10:05 (Pr12)
27	05:05 21:35	06:05 20:25	07:07 19:02	08:10 16:46	08:15 15:48	15:40 10:03 (Pr12)
28	05:06 21:34	06:07 20:22	07:09 19:00	08:12 16:43	08:17 15:47	15:41 10:02 (Pr12)
29	05:08 21:32	06:09 20:20	07:11 18:57	08:14 16:41	08:18 15:45	15:41 10:02 (Pr12)
30	05:10 21:30	06:11 20:17	07:13 18:54	08:16 16:39	08:20 15:44	15:43 10:02 (Pr12)
31	05:12 21:28	06:13 20:15		08:18 16:36	08:22 15:42	15:44 10:02 (Pr12)
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)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

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Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Kalvani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (665)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
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 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Kamenes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (732)
 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)	05:28 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	06:39 19:57	18:45 (PrRR3) 19:16 (PrRR3)	05:24 20:59
5	08:47 15:51	08:04 16:52	06:58 17:54	06:36 19:59	18:45 (PrRR3) 19:15 (PrRR3)	05:21 21:01
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	18:45 (PrRR3) 19:15 (PrRR3)	05:19 21:03
7	08:46 15:54	08:00 16:57	06:53 17:58	17:27 (Pr3a) 17:30 (Pr3a)	18:44 (PrRR3) 19:15 (PrRR3)	05:17 21:05
8	08:45 15:56	07:58 16:59	06:50 18:01	17:23 (Pr3a) 17:32 (Pr3a)	18:44 (PrRR3) 19:13 (PrRR3)	05:15 21:07
9	08:44 15:58	07:56 17:01	06:48 18:03	17:21 (Pr3a) 17:34 (Pr3a)	18:45 (PrRR3) 19:13 (PrRR3)	05:13 21:09
10	08:44 15:59	07:54 17:03	06:45 18:05	17:20 (Pr3a) 17:37 (Pr3a)	18:45 (PrRR3) 19:12 (PrRR3)	05:11 21:11
11	08:43 16:01	07:52 17:06	06:43 18:07	17:19 (Pr3a) 17:39 (Pr3a)	18:46 (PrRR3) 19:11 (PrRR3)	05:09 21:13
12	08:42 16:03	07:49 17:08	06:40 18:09	17:17 (Pr3a) 17:39 (Pr3a)	18:46 (PrRR3) 19:09 (PrRR3)	05:07 21:15
13	08:41 16:04	07:47 17:10	06:37 18:11	17:18 (Pr3a) 17:39 (Pr3a)	18:48 (PrRR3) 19:08 (PrRR3)	05:05 21:17
14	08:40 16:06	07:45 17:12	06:35 18:13	17:17 (Pr3a) 17:39 (Pr3a)	18:50 (PrRR3) 19:06 (PrRR3)	05:03 21:19
15	08:39 16:08	07:43 17:15	06:32 18:15	17:17 (Pr3a) 17:38 (Pr3a)	18:53 (PrRR3) 19:03 (PrRR3)	05:01 21:21
16	08:38 16:10	07:40 17:17	06:29 18:17	17:18 (Pr3a) 17:38 (Pr3a)	06:07 20:22	04:59 21:23
17	08:36 16:12	07:38 17:19	06:27 18:20	17:18 (Pr3a) 17:36 (Pr3a)	06:05 20:24	04:57 21:25
18	08:35 16:14	07:36 17:21	06:24 18:22	17:18 (Pr3a) 17:35 (Pr3a)	06:02 20:26	04:55 21:27
19	08:34 16:16	07:33 17:23	06:21 18:24	17:20 (Pr3a) 17:33 (Pr3a)	06:00 20:28	04:53 21:29
20	08:32 16:18	07:31 17:26	06:19 18:26	17:23 (Pr3a) 17:30 (Pr3a)	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	04:23 22:07
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
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
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
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
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
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	04:27 22:07
Potential sun hours	236	266	366	426	507	528
Total, worst case			315	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			123	170		

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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Kamenes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (732)
 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 18:19 (Pr3a)	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 18:18 (Pr3a)	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 18:16 (Pr3a)	07:25 16:30
4	04:31 22:05	05:19 21:19	06:21 20:04	18:42 (PrRR3) 19:12 (PrRR3)	07:21 18:13 (Pr3a)	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 18:10 (Pr3a)	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 18:07 (Pr3a)	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 18:36	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 18:33	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 18:30	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	08:43 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	18:08 (Pr3a) 18:12 (Pr3a)	08:01 17:55	08:47 15:38
24	04:59 21:40	05:59 20:32	07:01 19:10	18:04 (Pr3a) 18:16 (Pr3a)	08:03 17:53	08:47 15:39
25	05:01 21:39	06:01 20:30	07:03 19:08	18:02 (Pr3a) 18:17 (Pr3a)	07:05 16:50	08:11 15:50
26	05:03 21:37	06:03 20:27	07:05 19:05	18:00 (Pr3a) 18:18 (Pr3a)	07:07 16:48	08:13 15:49
27	05:04 21:35	06:05 20:25	07:07 19:02	17:59 (Pr3a) 18:18 (Pr3a)	07:09 16:45	08:15 15:47
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 15:43
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 15:44
31	05:12 21:27	06:13 20:14	18:46 (PrRR3) 19:09 (PrRR3)	07:18 16:36	07:18 16:36	08:48 15:45
Potential sun hours	529	469	384	324	248	217
Total, worst case		71	544	93		
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	235	27		

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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Kamiš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (781)
 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	15:38
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

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0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Karklini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (660)
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	21:00	21:54	22:05	21:20	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	22:05	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	07:28	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	18:30	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	04:25	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	06:38	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	21:20	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	08:42
	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
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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
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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
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	16:37		19:45	20:49	21:46	22:08	21:32	20:20	18:57	17:41	15:45	15:43
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	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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Klavinas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (711)
 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 15:38
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	08:12 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Klavu Sala - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (640)
 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
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	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
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	15:57	17:00	18:01	20:06	21:08	21:59	22:02	21:11	19:54	18:34	16:20	15:39
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	16:11	17:18	18:18	20:22	21:23	22:05	21:53	20:52	19:32	18:13	16:05	15:37
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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
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	16:27	17:35	18:35	20:39	21:38	22:08	21:41	20:33	19:11	17:53	15:53	15:40
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	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
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	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_A

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 09:53/4.1.254

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

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Lapegles - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (710)
 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	17:05	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Latini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (636)
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	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	08:22	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	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	21:46	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Laucini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (669)
 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	16:45	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
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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
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	15:53	16:54	17:56	20:01	21:04	21:57	22:04	21:15	19:59	18:38	16:23	15:39
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	15:54	16:57	17:58	20:03	21:06	21:58	22:03	21:13	19:56	18:36	16:21	15:38
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	15:56	16:59	18:01	20:05	21:08	21:59	22:02	21:11	19:53	18:33	16:19	15:38
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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
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	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	15:37
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	17:35	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	08:14		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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Lielo Orišu 2 maju zeme - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (678)

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	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	05:16 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	07:03 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 17:06	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	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 21:02	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	05:04 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 17:15	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	08:38 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	07:53 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 22:07	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 21:45	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	04:24 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	07:24 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 17:53	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 21:39	04:24 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
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	05:38 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	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
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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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Linu Diki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (657)
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 20:01	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 20:01	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 20:01	07:30 18:33	07:36 16:19	08:33 15:38	
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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 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 21:16	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 15:36	
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 21:01	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 21:56	05:39 21:01	06:41 20:01	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 21:01	06:43 20:01	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 21:01	06:45 20:01	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 21:01	06:47 20:01	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 21:01	06:49 20:01	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 21:01	06:51 20:01	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 21:01	06:53 20:01	07:55 18:02	08:01 15:57	08:46 15:37	12 11:10 (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 21:01	06:55 20:01	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 21:01	06:57 20:01	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 21:01	06:59 20:01	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 21:01	07:01 20:01	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 21:01	07:03 20:01	08:05 17:50	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	08:07 16:48	08:13 15:49	08:48 15:40	10 11:12 (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 21:01	07:07 20:01	08:09 17:46	08:15 15:48	08:49 15:41	9 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	08:12 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 18:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:32	06:09 21:01	07:11 20:01	08:14 17:41	08:18 15:45	08:49 15:43	6 11:11 (Pr25)
30	08:16 16:39	07:07 17:47	05:52 18:47	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	3 11:10 (Pr25)
31	08:14 16:41	07:05 17:49	05:49 18:49	05:35 21:49	04:35 21:49	04:25 21:28	05:12 21:28	06:13 20:15	07:18 20:01	08:18 16:36	08:22 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)	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Ludvigova - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (643)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Lidumi (kad. apz. 76740020172001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (746)

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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Lidumi (kad. apz. 76740020238001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (753)

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)	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Lidums - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (687)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Lipenas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (696)
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	16:57	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	05:08	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	19:42	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	08:38	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	18:20	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	04:23	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	21:40	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	05:37	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	22:08	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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Madaras - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (715)
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		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Magones - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (748)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Maksimova - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (662)
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	15:43
2	08:48		14:15 (06)	08:11	07:06	06:44	05:28	04:33	04:29	05:16	06:17	07:17	07:23	08:24
	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	15:42
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	08:25
	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	15:41
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	08:27
	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	15:41
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	08:29
	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	15:40
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	08:30
	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	15:39
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	08:32
	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	15:39
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	08:33
	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	15:38
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	08:34
	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	15:38
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	08:36
	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	15:37
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	08:37
	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	15:37
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	08:38
	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	15:36
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	08:39
	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	15:36
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	08:40
	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	15:36
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	08:42
	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	15:36
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	08:42
	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	15:36
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	08:43
	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	15:36
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	08:44
	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	15:36
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	08:45
	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	15:37
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	08:46
	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	15:37
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	08:46
	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	15:37
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	08:47
	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	15:38
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	08:47
	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	15:38
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	08:48
	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	15:39
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	08:48
	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	15:39
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	08:48
	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	15:40
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	08:49
	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	15:41
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	08:49
	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	15:42
29	08:18		14:29 (06)		06:55	05:35	04:38	04:27	05:08	06:09	07:11	07:14	08:19	08:49
	16:37	20	14:49 (06)		19:45	20:49	21:46	22:08	21:32	20:20	18:57	16:41	15:45	15:43
30	08:16		14:31 (06)		06:52	05:33	04:37	04:28	05:10	06:11	07:13	07:16	08:20	08:49
	16:39	17	14:48 (06)		19:47	20:51	21:47	22:07	21:30	20:17	18:54	16:39	15:44	15:44
31	08:15		14:33 (06)		06:50		04:35		05:12	06:13		07:18		08:49
	16:41	12	14:45 (06)		19:49		21:49		21:28	20:15		16:36		15:45
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)	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Malova - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (668)
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	09:32 (Pr3a)	07:09	07:53 (PrRR3)	06:47	05:31	04:34
	15:46	28 13:34 (JU1)	16:43	29 10:01 (Pr3a)	17:46	89 16:28 (Pr11)	19:51	20:53	21:50
2	08:48	13:07 (JU1)	08:11	09:33 (Pr3a)	07:06	07:53 (PrRR3)	06:44	05:28	04:33
	15:48	26 13:33 (JU1)	16:46	28 10:01 (Pr3a)	17:48	81 16:25 (Pr11)	19:53	20:55	21:52
3	08:48	13:08 (JU1)	08:09	09:34 (Pr3a)	07:04	07:53 (PrRR3)	06:41	05:26	04:32
	15:49	26 13:34 (JU1)	16:48	26 10:00 (Pr3a)	17:50	67 16:19 (Pr11)	19:55	20:57	21:53
4	08:48	13:08 (JU1)	08:07	09:35 (Pr3a)	07:01	07:53 (PrRR3)	06:39	05:24	04:31
	15:50	26 13:34 (JU1)	16:50	25 10:00 (Pr3a)	17:52	62 09:21 (Pr25)	19:57	20:59	21:54
5	08:47	13:09 (JU1)	08:05	09:35 (Pr3a)	06:58	07:53 (PrRR3)	06:36	05:22	04:30
	15:52	24 13:33 (JU1)	16:52	23 09:58 (Pr3a)	17:54	59 09:19 (Pr25)	19:59	21:01	21:56
6	08:47	13:11 (JU1)	08:03	09:02 (Pr25)	06:56	07:55 (PrRR3)	06:34	05:19	04:29
	15:53	23 13:34 (JU1)	16:55	30 16:21 (Pr12)	17:56	52 09:17 (Pr25)	20:01	21:04	21:57
7	08:46	09:37 (Pr3a)	08:01	08:57 (Pr25)	06:53	07:55 (PrRR3)	06:31	05:17	04:28
	15:55	28 13:34 (JU1)	16:57	42 16:24 (Pr12)	17:59	46 09:15 (Pr25)	20:03	21:06	21:58
8	08:45	09:35 (Pr3a)	07:58	08:55 (Pr25)	06:51	07:56 (PrRR3)	06:28	05:15	04:28
	15:56	31 13:34 (JU1)	16:59	45 16:27 (Pr12)	18:01	39 17:30 (O6)	20:05	21:08	21:59
9	08:45	09:34 (Pr3a)	07:56	08:52 (Pr25)	06:48	07:59 (PrRR3)	06:26	05:13	04:27
	15:58	31 13:33 (JU1)	17:01	44 16:28 (Pr12)	18:03	32 17:35 (O6)	20:08	21:10	22:00
10	08:44	09:33 (Pr3a)	07:54	08:51 (Pr25)	06:45	08:03 (PrRR3)	06:23	05:11	04:26
	15:59	33 13:33 (JU1)	17:03	49 16:30 (Pr12)	18:05	19 17:37 (O6)	20:10	21:12	22:01
11	08:43	09:31 (Pr3a)	07:52	08:49 (Pr25)	06:43	17:19 (O6)	06:20	05:09	04:26
	16:01	33 13:31 (JU1)	17:06	53 16:30 (Pr12)	18:07	19 17:38 (O6)	20:12	21:14	22:02
12	08:42	09:31 (Pr3a)	07:50	08:48 (Pr25)	06:40	17:19 (O6)	06:18	05:07	04:25
	16:03	32 13:31 (JU1)	17:08	57 16:31 (Pr12)	18:09	21 17:40 (O6)	20:14	21:16	22:03
13	08:41	09:31 (Pr3a)	07:47	08:47 (Pr25)	06:38	17:17 (O6)	06:15	05:05	04:25
	16:05	29 13:29 (JU1)	17:10	62 16:32 (Pr12)	18:11	23 17:40 (O6)	20:16	21:17	22:04
14	08:40	09:31 (Pr3a)	07:45	08:46 (Pr25)	06:35	17:16 (O6)	06:13	05:03	04:24
	16:06	22 09:53 (Pr3a)	17:12	64 16:32 (Pr11)	18:13	24 17:40 (O6)	20:18	21:19	22:04
15	08:39	09:30 (Pr3a)	07:43	08:45 (Pr25)	06:32	17:16 (O6)	06:10	05:01	04:24
	16:08	24 09:54 (Pr3a)	17:15	69 16:33 (Pr11)	18:16	23 17:39 (O6)	20:20	21:21	22:05
16	08:38	09:30 (Pr3a)	07:40	08:44 (Pr25)	06:30	17:16 (O6)	06:07	04:59	04:24
	16:10	25 09:55 (Pr3a)	17:17	71 16:33 (Pr11)	18:18	24 17:40 (O6)	20:22	21:23	22:06
17	08:37	09:29 (Pr3a)	07:38	08:44 (Pr25)	06:27	17:16 (O6)	06:05	04:57	04:24
	16:12	27 09:56 (Pr3a)	17:19	73 16:34 (Pr11)	18:20	23 17:39 (O6)	20:24	21:25	22:06
18	08:35	09:29 (Pr3a)	07:36	08:43 (Pr25)	06:24	17:15 (O6)	06:02	04:55	04:23
	16:14	28 09:57 (Pr3a)	17:21	75 16:34 (Pr11)	18:22	23 17:38 (O6)	20:26	21:27	22:07
19	08:34	09:29 (Pr3a)	07:33	08:43 (Pr25)	06:22	17:17 (O6)	06:00	04:53	04:23
	16:16	29 09:58 (Pr3a)	17:24	76 16:35 (Pr11)	18:24	21 17:38 (O6)	20:28	21:29	22:07
20	08:33	09:28 (Pr3a)	07:31	08:04 (PrRR3)	06:19	17:17 (O6)	05:57	04:52	04:23
	16:18	30 09:58 (Pr3a)	17:26	86 16:35 (Pr11)	18:26	19 17:36 (O6)	20:30	21:31	22:07
21	08:31	09:29 (Pr3a)	07:29	08:01 (PrRR3)	06:16	17:18 (O6)	05:55	04:50	04:24
	16:20	30 09:59 (Pr3a)	17:28	92 16:35 (Pr11)	18:28	16 17:34 (O6)	20:33	21:32	22:08
22	08:30	09:29 (Pr3a)	07:26	07:59 (PrRR3)	06:14	17:20 (O6)	05:52	04:48	04:24
	16:22	31 10:00 (Pr3a)	17:30	95 16:34 (Pr11)	18:30	12 17:32 (O6)	20:35	21:34	22:08
23	08:28	09:29 (Pr3a)	07:24	07:58 (PrRR3)	06:11	17:25 (O6)	05:50	04:47	04:24
	16:24	31 10:00 (Pr3a)	17:32	99 16:35 (Pr11)	18:32	2 17:27 (O6)	20:37	21:36	22:08
24	08:27	09:29 (Pr3a)	07:21	07:56 (PrRR3)	06:08		05:47	04:45	04:24
	16:26	31 10:00 (Pr3a)	17:35	100 16:34 (Pr11)	18:34		20:39	21:38	22:08
25	08:25	09:29 (Pr3a)	07:19	07:55 (PrRR3)	06:06		05:45	04:43	04:25
	16:28	32 10:01 (Pr3a)	17:37	99 16:33 (Pr11)	18:36		20:41	21:39	22:08
26	08:23	09:29 (Pr3a)	07:16	07:54 (PrRR3)	06:03		05:43	04:42	04:25
	16:30	32 10:01 (Pr3a)	17:39	99 16:32 (Pr11)	18:38		20:43	21:41	22:08
27	08:22	09:30 (Pr3a)	07:14	07:53 (PrRR3)	06:00		05:40	04:41	04:26
	16:32	32 10:02 (Pr3a)	17:41	97 16:31 (Pr11)	18:41		20:45	21:43	22:08
28	08:20	09:30 (Pr3a)	07:11	07:54 (PrRR3)	05:57		05:38	04:39	04:26
	16:35	32 10:02 (Pr3a)	17:43	93 16:30 (Pr11)	18:43		20:47	21:44	22:08
29	08:18	09:30 (Pr3a)			06:55		05:35	04:38	04:27
	16:37	31 10:01 (Pr3a)			19:45		20:49	21:46	22:07
30	08:16	09:30 (Pr3a)			06:52		05:33	04:37	04:28
	16:39	31 10:01 (Pr3a)			19:47		20:51	21:47	22:07
31	08:14	09:31 (Pr3a)			06:49			04:35	
	16:41	30 10:01 (Pr3a)			19:49			21:49	
Potential sun hours	236		266		366		426	507	528
Total, worst case	898		1801		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	121		405		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Malova - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (668)
 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	09:13 (Pr3a)			
	22:07	21:26	20:12	18:52	22	18:19 (06)	16:34	48	16:00 (Pr12)	15:43	33	13:13 (JU1)
2	04:29	05:16	06:17	07:17	17:58 (06)	07:23	08:22 (Pr25)	08:24	09:15 (Pr3a)			
	22:06	21:24	20:09	18:49	20	18:18 (06)	16:32	43	15:58 (Pr12)	15:42	33	13:15 (JU1)
3	04:30	05:18	06:19	07:19	17:59 (06)	07:25	08:24 (Pr25)	08:25	09:17 (Pr3a)			
	22:06	21:22	20:07	18:46	17	18:16 (06)	16:30	44	15:55 (Pr12)	15:41	32	13:16 (JU1)
4	04:31	05:20	06:21	07:21	08:37 (PrRR3)	07:27	08:28 (Pr25)	08:27	09:19 (Pr3a)			
	22:05	21:19	20:04	18:44	24	18:13 (06)	16:28	40	15:53 (Pr12)	15:41	31	13:18 (JU1)
5	04:32	05:22	06:23	07:23	08:34 (PrRR3)	07:29	08:33 (Pr25)	08:29	09:22 (Pr3a)			
	22:04	21:17	20:01	18:41	39	18:10 (06)	16:25	25	15:50 (Pr12)	15:40	27	13:19 (JU1)
6	04:33	05:24	06:25	07:25	08:32 (PrRR3)	07:31	09:06 (Pr3a)	08:30	12:56 (JU1)			
	22:04	21:15	19:59	18:38	41	09:49 (Pr25)	16:23	23	09:29 (Pr3a)	15:39	23	13:19 (JU1)
7	04:34	05:25	06:27	07:27	08:30 (PrRR3)	07:33	09:04 (Pr3a)	08:32	12:56 (JU1)			
	22:03	21:13	19:56	18:36	50	09:52 (Pr25)	16:21	25	09:29 (Pr3a)	15:39	25	13:21 (JU1)
8	04:35	05:27	06:29	07:30	08:29 (PrRR3)	07:36	09:03 (Pr3a)	08:33	12:56 (JU1)			
	22:02	21:11	19:53	18:33	55	09:53 (Pr25)	16:19	27	09:30 (Pr3a)	15:38	26	13:22 (JU1)
9	04:36	05:29	06:31	07:32	08:28 (PrRR3)	07:38	09:03 (Pr3a)	08:34	12:56 (JU1)			
	22:01	21:09	19:51	18:30	60	09:55 (Pr25)	16:17	28	09:31 (Pr3a)	15:37	26	13:22 (JU1)
10	04:38	05:31	06:33	07:34	08:28 (PrRR3)	07:40	09:02 (Pr3a)	08:36	12:57 (JU1)			
	22:00	21:06	19:48	18:28	64	09:57 (Pr25)	16:15	30	09:32 (Pr3a)	15:37	26	13:23 (JU1)
11	04:39	05:33	06:35	07:36	08:27 (PrRR3)	07:42	09:03 (Pr3a)	08:37	12:56 (JU1)			
	21:59	21:04	19:45	18:25	76	16:57 (Pr11)	16:13	30	09:33 (Pr3a)	15:37	28	13:24 (JU1)
12	04:40	05:35	06:37	07:38	08:26 (PrRR3)	07:44	09:02 (Pr3a)	08:38	12:56 (JU1)			
	21:58	21:02	19:43	18:23	86	17:00 (Pr11)	16:11	31	09:33 (Pr3a)	15:36	28	13:24 (JU1)
13	04:42	05:37	06:39	07:40	08:26 (PrRR3)	07:46	09:02 (Pr3a)	08:39	12:56 (JU1)			
	21:57	20:59	19:40	18:20	90	17:01 (Pr11)	16:09	31	09:33 (Pr3a)	15:36	28	13:24 (JU1)
14	04:43	05:39	06:41	07:42	08:26 (PrRR3)	07:49	09:02 (Pr3a)	08:40	12:58 (JU1)			
	21:56	20:57	19:37	18:18	94	17:02 (Pr11)	16:08	32	09:34 (Pr3a)	15:36	28	13:26 (JU1)
15	04:45	05:41	06:43	07:44	08:27 (PrRR3)	07:51	09:02 (Pr3a)	08:41	12:58 (JU1)			
	21:54	20:55	19:35	18:15	98	17:04 (Pr11)	16:06	32	09:34 (Pr3a)	15:36	28	13:26 (JU1)
16	04:46	05:43	06:45	07:46	08:27 (PrRR3)	07:53	09:03 (Pr3a)	08:42	12:58 (JU1)			
	21:53	20:52	19:32	18:12	100	17:05 (Pr11)	16:04	32	09:35 (Pr3a)	15:36	29	13:27 (JU1)
17	04:48	05:45	06:47	07:48	08:27 (PrRR3)	07:55	09:03 (Pr3a)	08:43	12:59 (JU1)			
	21:52	20:50	19:29	18:10	100	17:05 (Pr11)	16:02	32	09:35 (Pr3a)	15:36	29	13:28 (JU1)
18	04:49	05:47	06:49	07:50	08:27 (PrRR3)	07:57	09:03 (Pr3a)	08:44	12:58 (JU1)			
	21:50	20:47	19:27	18:07	99	17:05 (Pr11)	16:01	31	09:34 (Pr3a)	15:36	29	13:27 (JU1)
19	04:51	05:49	06:51	07:52	08:28 (PrRR3)	07:59	09:04 (Pr3a)	08:45	12:59 (JU1)			
	21:49	20:45	19:24	18:05	98	17:05 (Pr11)	15:59	31	09:35 (Pr3a)	15:37	29	13:28 (JU1)
20	04:52	05:51	06:53	07:55	08:30 (PrRR3)	08:01	09:04 (Pr3a)	08:46	13:00 (JU1)			
	21:47	20:43	19:21	18:02	97	17:06 (Pr11)	15:57	31	09:35 (Pr3a)	15:37	29	13:29 (JU1)
21	04:54	05:53	06:55	07:57	08:32 (PrRR3)	08:03	09:04 (Pr3a)	08:46	12:59 (JU1)			
	21:46	20:40	19:18	18:17 (06)	90	17:05 (Pr11)	15:56	30	09:34 (Pr3a)	15:37	30	13:29 (JU1)
22	04:56	05:55	06:57	07:59	08:37 (PrRR3)	08:05	09:04 (Pr3a)	08:47	13:00 (JU1)			
	21:44	20:38	19:16	18:19 (06)	79	17:05 (Pr11)	15:54	30	09:34 (Pr3a)	15:38	30	13:30 (JU1)
23	04:57	05:57	06:59	08:01	09:14 (Pr25)	08:07	09:06 (Pr3a)	08:47	13:00 (JU1)			
	21:42	20:35	19:13	18:20 (06)	76	17:05 (Pr11)	15:53	29	09:35 (Pr3a)	15:38	30	13:30 (JU1)
24	04:59	05:59	07:01	08:03	09:13 (Pr25)	08:09	09:06 (Pr3a)	08:48	13:02 (JU1)			
	21:41	20:33	19:10	18:21 (06)	75	17:04 (Pr11)	15:51	28	09:34 (Pr3a)	15:39	29	13:31 (JU1)
25	05:01	06:01	07:03	07:59 (06)	07:05	08:14 (Pr25)	08:11		09:07 (Pr3a)	08:48		13:02 (JU1)
	21:39	20:30	19:08	18:21 (06)	72	16:03 (Pr11)	15:50	27	09:34 (Pr3a)	15:39	29	13:31 (JU1)
26	05:03	06:03	07:05	07:59 (06)	07:07	08:15 (Pr25)	08:13		09:08 (Pr3a)	08:48		13:02 (JU1)
	21:37	20:27	19:05	18:22 (06)	70	16:03 (Pr11)	15:49	26	09:34 (Pr3a)	15:40	30	13:32 (JU1)
27	05:05	06:05	07:07	07:58 (06)	07:10	08:15 (Pr25)	08:15		09:09 (Pr3a)	08:49		13:03 (JU1)
	21:35	20:25	19:02	18:21 (06)	67	16:02 (Pr11)	15:48	24	09:33 (Pr3a)	15:41	29	13:32 (JU1)
28	05:06	06:07	07:09	07:57 (06)	07:12	08:15 (Pr25)	08:17		09:10 (Pr3a)	08:49		13:03 (JU1)
	21:33	20:22	19:00	18:21 (06)	65	16:01 (Pr12)	15:46	23	09:33 (Pr3a)	15:42	29	13:32 (JU1)
29	05:08	06:09	07:11	07:57 (06)	07:14	08:17 (Pr25)	08:18		09:11 (Pr3a)	08:49		13:04 (JU1)
	21:32	20:20	18:57	18:21 (06)	60	16:01 (Pr12)	15:45	29	13:09 (JU1)	15:43	29	13:33 (JU1)
30	05:10	06:11	07:13	07:57 (06)	07:16	08:18 (Pr25)	08:20		09:12 (Pr3a)	08:49		13:05 (JU1)
	21:30	20:17	18:54	18:20 (06)	57	16:01 (Pr12)	15:44	33	13:12 (JU1)	15:44	28	13:33 (JU1)
31	05:12	06:13		07:18		08:19 (Pr25)				08:49		13:05 (JU1)
	21:28	20:15		16:36	53	16:00 (Pr12)				15:45	28	13:33 (JU1)
Potential sun hours	529	469	384	324			248			217		
Total, worst case			202	2094			925			888		
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	607			69			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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Maurini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (705)
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	16:50 (AP2) 17:12 (AP2)	06:47 19:51	05:31 20:53	19:15 (Pr3a) 19:18 (Pr3a)	04:34 21:50	20:13 (Pr25) 20:34 (Pr25)
2	08:48 15:48	08:10 16:46	07:06 17:48	16:49 (AP2) 17:12 (AP2)	06:44 19:53	05:28 20:55		04:33 21:51	20:14 (Pr25) 20:33 (Pr25)
3	08:48 15:49	08:08 16:48	07:03 17:50	16:48 (AP2) 17:12 (AP2)	06:41 19:55	05:26 20:57		04:32 21:53	20:15 (Pr25) 20:33 (Pr25)
4	08:47 15:50	08:07 16:50	07:01 17:52	16:49 (AP2) 17:12 (AP2)	06:39 19:57	05:24 20:59		04:31 21:54	20:16 (Pr25) 20:33 (Pr25)
5	08:47 15:52	08:04 16:52	06:58 17:54	16:48 (AP2) 17:12 (AP2)	06:36 19:59	05:21 21:01		04:30 21:55	20:17 (Pr25) 20:32 (Pr25)
6	08:46 15:53	08:02 16:54	06:56 17:56	16:49 (AP2) 17:12 (AP2)	06:33 20:01	05:19 21:03	20:18 (Pr25) 20:28 (Pr25)	04:29 21:57	20:18 (Pr25) 20:31 (Pr25)
7	08:46 15:54	08:00 16:57	06:53 17:58	16:49 (AP2) 17:10 (AP2)	06:31 20:03	05:17 21:05	20:15 (Pr25) 20:30 (Pr25)	04:28 21:58	20:19 (Pr25) 20:31 (Pr25)
8	08:45 15:56	07:58 16:59	06:51 18:01	16:50 (AP2) 17:09 (AP2)	06:28 20:05	05:15 21:07	20:14 (Pr25) 20:32 (Pr25)	04:27 21:59	20:20 (Pr25) 20:30 (Pr25)
9	08:44 15:58	07:56 17:01	06:48 18:03	16:51 (AP2) 17:07 (AP2)	06:26 20:07	05:13 21:09	20:12 (Pr25) 20:33 (Pr25)	04:27 22:00	20:21 (Pr25) 20:29 (Pr25)
10	08:44 15:59	07:54 17:03	06:45 18:05	16:53 (AP2) 17:05 (AP2)	06:23 20:09	05:11 21:11	20:11 (Pr25) 20:34 (Pr25)	04:26 22:01	20:23 (Pr25) 20:28 (Pr25)
11	08:43 16:01	07:52 17:06	06:43 18:07	16:57 (AP2) 17:01 (AP2)	06:20 20:12	05:09 21:13	20:10 (Pr25) 20:34 (Pr25)	04:26 22:02	
12	08:42 16:03	07:49 17:08	06:40 18:09		06:18 20:14	05:07 21:15	20:09 (Pr25) 20:35 (Pr25)	04:25 22:03	
13	08:41 16:04	07:47 17:10	06:37 18:11		06:15 20:16	05:05 21:17	20:10 (Pr25) 20:36 (Pr25)	04:25 22:03	
14	08:40 16:06	07:45 17:12	06:35 18:13		06:12 20:18	05:03 21:19	20:09 (Pr25) 20:36 (Pr25)	04:24 22:04	
15	08:39 16:08	07:43 17:15	06:32 18:15		06:10 20:20	05:01 21:21	20:08 (Pr25) 20:36 (Pr25)	04:24 22:05	
16	08:38 16:10	07:40 17:17	06:29 18:18		06:07 20:22	04:59 21:23	20:08 (Pr25) 20:36 (Pr25)	04:24 22:05	
17	08:36 16:12	07:38 17:19	06:27 18:20		06:05 20:24	04:57 21:25	20:08 (Pr25) 20:37 (Pr25)	04:24 22:06	
18	08:35 16:14	07:36 17:21	06:24 18:22		06:02 20:26	04:55 21:27	20:08 (Pr25) 20:37 (Pr25)	04:23 22:06	
19	08:34 16:16	07:33 17:24	06:21 18:24		06:00 20:28	04:53 21:29	20:08 (Pr25) 20:37 (Pr25)	04:23 22:07	
20	08:32 16:18	07:31 17:26	06:19 18:26		05:57 20:30	04:52 21:31	20:08 (Pr25) 20:37 (Pr25)	04:23 22:07	
21	08:31 16:20	07:28 17:28	06:16 18:28		05:55 20:32	04:50 21:32	20:08 (Pr25) 20:36 (Pr25)	04:24 22:07	
22	08:30 16:22	07:26 17:30	06:13 18:30		05:52 20:34	04:48 21:34	20:08 (Pr25) 20:37 (Pr25)	04:24 22:08	
23	08:28 16:24	07:24 17:32	06:11 18:32		05:50 20:37	04:47 21:36	20:09 (Pr25) 20:37 (Pr25)	04:24 22:08	
24	08:26 16:26	07:21 17:35	16:58 (AP2) 17:05 (AP2)	06:08 18:34	05:47 20:39	19:03 (Pr3a) 19:33 (Pr3a)	04:45 21:38	20:09 (Pr25) 20:36 (Pr25)	04:24 22:08
25	08:25 16:28	07:19 17:37	16:54 (AP2) 17:07 (AP2)	06:05 18:36	05:45 20:41	19:04 (Pr3a) 19:32 (Pr3a)	04:43 21:39	20:09 (Pr25) 20:36 (Pr25)	04:25 22:08
26	08:23 16:30	07:16 17:39	16:53 (AP2) 17:10 (AP2)	06:03 18:38	05:42 20:43	19:04 (Pr3a) 19:30 (Pr3a)	04:42 21:41	20:10 (Pr25) 20:36 (Pr25)	04:25 22:08
27	08:21 16:32	07:14 17:41	16:51 (AP2) 17:11 (AP2)	06:00 18:40	05:40 20:45	19:05 (Pr3a) 19:29 (Pr3a)	04:40 21:43	20:11 (Pr25) 20:36 (Pr25)	04:26 22:08
28	08:20 16:35	07:11 17:43	16:50 (AP2) 17:11 (AP2)	05:57 18:43	05:38 20:47	19:06 (Pr3a) 19:28 (Pr3a)	04:39 21:44	20:11 (Pr25) 20:35 (Pr25)	04:26 22:07
29	08:18 16:37			06:55 19:45	05:35 20:49	19:08 (Pr3a) 19:26 (Pr3a)	04:38 21:46	20:11 (Pr25) 20:35 (Pr25)	04:27 22:07
30	08:16 16:39			06:52 19:47	05:33 20:51	19:10 (Pr3a) 19:23 (Pr3a)	04:36 21:47	20:12 (Pr25) 20:35 (Pr25)	04:27 22:07
31	08:14 16:41			06:49 19:49			04:35 21:49	20:13 (Pr25) 20:34 (Pr25)	
Potential sun hours	236	266	366	426	507	528			
Total, worst case		78	211	622	647	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	275	364	78			

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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Maurini - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (705)
 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	20:20 (Pr25) 20:45 (Pr25)	06:15 20:12	19:07 (Pr3a) 19:32 (Pr3a)	07:15 18:52
2	04:29 22:06	20:29 (Pr25) 21:23	05:16 20:44 (Pr25)	25 20:09	19:32 (Pr3a) 19:31 (Pr3a)	18:52 18:49
3	04:30 22:05	20:27 (Pr25) 21:21	05:18 20:44 (Pr25)	23 20:07	19:10 (Pr3a) 19:29 (Pr3a)	07:19 18:46
4	04:31 22:05	20:26 (Pr25) 21:19	05:20 20:43 (Pr25)	19 20:04	10 17:42 (AP2)	17:29 (AP2)
5	04:32 22:04	20:25 (Pr25) 21:17	20:04 20:24 (Pr25)	13 20:23	15 17:44 (AP2)	16:27 17:27 (AP2)
6	04:33 22:03	20:36 (Pr25) 21:17	20:01 20:25 (Pr25)	19 20:01	19 17:46 (AP2)	16:25 17:26 (AP2)
7	04:34 22:03	20:37 (Pr25) 21:15	20:25 20:39 (Pr25)	20 19:59	20 17:46 (AP2)	16:23 17:27 (AP2)
8	04:35 22:02	20:38 (Pr25) 21:13	20:28 (Pr25) 20:36 (Pr25)	22 19:56	22 17:47 (AP2)	16:21 17:28 (AP2)
9	04:36 22:01	20:39 (Pr25) 21:11	19:53 19:51	23 17:47 (AP2)	23 17:24 (AP2)	16:19 17:29 (AP2)
10	04:38 22:00	20:40 (Pr25) 21:08	19:48 19:45	24 17:47 (AP2)	24 17:23 (AP2)	16:15 17:30 (AP2)
11	04:39 21:59	20:42 (Pr25) 21:04	19:48 19:45	24 17:47 (AP2)	24 17:23 (AP2)	16:15 17:30 (AP2)
12	04:40 21:58	20:43 (Pr25) 21:02	19:43 19:43	23 17:46 (AP2)	23 17:23 (AP2)	16:11 17:31 (AP2)
13	04:42 21:57	20:44 (Pr25) 21:01	19:43 19:43	22 17:45 (AP2)	22 17:23 (AP2)	16:09 17:32 (AP2)
14	04:43 21:55	20:45 (Pr25) 21:00	19:43 19:43	21 17:44 (AP2)	21 17:23 (AP2)	16:07 17:33 (AP2)
15	04:44 21:54	20:46 (Pr25) 20:59	19:43 19:43	20 17:43 (AP2)	20 17:23 (AP2)	16:06 17:34 (AP2)
16	04:46 21:53	20:47 (Pr25) 20:58	19:43 19:43	19 17:42 (AP2)	19 17:23 (AP2)	16:04 17:35 (AP2)
17	04:47 21:51	20:48 (Pr25) 20:57	19:43 19:43	18 17:41 (AP2)	18 17:23 (AP2)	16:02 17:36 (AP2)
18	04:49 21:50	20:49 (Pr25) 20:56	19:43 19:43	17 17:40 (AP2)	17 17:23 (AP2)	16:01 17:37 (AP2)
19	04:51 21:49	20:50 (Pr25) 20:55	19:43 19:43	16 17:39 (AP2)	16 17:23 (AP2)	16:00 17:38 (AP2)
20	04:52 21:47	20:51 (Pr25) 20:54	19:43 19:43	15 17:38 (AP2)	15 17:23 (AP2)	15:59 17:39 (AP2)
21	04:54 21:45	20:52 (Pr25) 20:53	19:43 19:43	14 17:37 (AP2)	14 17:23 (AP2)	15:57 17:40 (AP2)
22	04:56 21:44	20:53 (Pr25) 20:54	19:43 19:43	13 17:36 (AP2)	13 17:23 (AP2)	15:56 17:41 (AP2)
23	04:57 21:42	20:54 (Pr25) 20:55	19:43 19:43	12 17:35 (AP2)	12 17:23 (AP2)	15:54 17:42 (AP2)
24	04:59 21:40	20:55 (Pr25) 20:56	19:43 19:43	11 17:34 (AP2)	11 17:23 (AP2)	15:53 17:43 (AP2)
25	05:01 21:39	20:56 (Pr25) 20:57	19:43 19:43	10 17:33 (AP2)	10 17:23 (AP2)	15:51 17:44 (AP2)
26	05:03 21:37	20:57 (Pr25) 20:58	19:43 19:43	9 17:32 (AP2)	9 17:23 (AP2)	15:50 17:45 (AP2)
27	05:04 21:35	20:58 (Pr25) 20:59	19:43 19:43	8 17:31 (AP2)	8 17:23 (AP2)	15:48 17:46 (AP2)
28	05:06 21:33	20:59 (Pr25) 21:00	19:43 19:43	7 17:30 (AP2)	7 17:23 (AP2)	15:46 17:47 (AP2)
29	05:08 21:31	21:00 (Pr25) 21:01	19:43 19:43	6 17:29 (AP2)	6 17:23 (AP2)	15:44 17:48 (AP2)
30	05:10 21:29	21:01 (Pr25) 21:02	19:43 19:43	5 17:28 (AP2)	5 17:23 (AP2)	15:43 17:49 (AP2)
31	05:12 21:27	21:02 (Pr25) 21:03	19:43 19:43	4 17:27 (AP2)	4 17:23 (AP2)	15:41 17:50 (AP2)
Potential sun hours	529	469	384	324	248	217
Total, worst case	657	688	80	294		
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	310	359	35	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)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Maurinmajas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (773)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Meldri - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (722)
 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	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	05:02 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	04:25 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Mež noras - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (620)
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		
	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		
3	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		
	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		
4	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		
	08:47	08:07	07:01			06:39	05:24	04:32	04:32	05:20	06:22	07:22	07:27	08:27		
5	15:51	16:51	17:52			19:57	20:59	21:54	22:05	21:19	20:04	18:44	16:28	15:41		
	08:47	08:05	06:59			06:36	05:22	04:31	04:33	05:22	06:24	07:24	07:29	08:28		
6	15:52	16:53	17:55			19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:26	15:41		
	08:46	08:03	06:56			06:34	05:20	04:30	04:34	05:24	06:26	07:26	07:31	08:30		
7	15:54	16:55	17:57			20:01	21:03	21:56	22:03	21:15	19:59	18:39	16:24	15:40		
	08:46	08:00	06:53			06:31	05:18	04:29	04:35	05:26	06:28	07:28	07:33	08:31		
8	15:55	16:57	17:59			20:04	21:05	21:58	22:03	21:13	19:56	18:36	16:22	15:39		
	08:45	07:58	06:51			06:29	05:16	04:28	04:36	05:28	06:30	07:30	07:36	08:33		
9	15:57	16:59	18:01			20:06	21:07	21:59	22:02	21:11	19:54	18:33	16:20	15:39		
	08:44	07:56	06:48			06:26	05:13	04:28	04:37	05:30	06:32	07:32	07:38	08:34		
10	15:58	17:02	18:03			20:08	21:09	22:00	22:01	21:08	19:51	18:31	16:18	15:38		
	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	
11	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
	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	
12	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
	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	
13	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
	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	
14	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
	08:40	07:45	16:32 (DD3)	06:35	06:13	05:03	04:25	04:44	05:40	06:42	07:42	16:55 (DD3)	07:48	08:40		
15	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	
	08:39	07:43	16:29 (DD3)	06:32	06:10	05:01	04:25	04:45	05:42	06:44	07:44	16:55 (DD3)	07:51	08:41		
16	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	
	08:38	07:41	16:26 (DD3)	06:30	06:08	04:59	04:25	04:47	05:44	06:46	07:46	16:54 (DD3)	07:53	08:42		
17	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	
	08:36	07:38	16:25 (DD3)	06:27	06:05	04:58	04:24	04:48	05:46	06:47	07:48	16:53 (DD3)	07:55	08:43		
18	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	
	08:35	07:36	16:24 (DD3)	06:24	06:03	04:56	04:24	04:50	05:48	06:49	07:50	16:53 (DD3)	07:57	08:44		
19	16:14	17:22	22	16:46 (DD3)	20:26	21:27	22:06	21:50	20:47	19:27	18:08	26	17:19 (DD3)	16:01	15:37	
	08:34	07:33	16:23 (DD3)	06:22	06:00	04:54	04:24	04:51	05:50	06:51	07:53	16:52 (DD3)	07:59	08:45		
20	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	
	08:32	07:31	16:22 (DD3)	06:19	05:58	04:52	04:24	04:53	05:52	06:53	07:55	16:53 (DD3)	08:01	08:45		
21	16:18	17:26	26	16:48 (DD3)	20:30	21:31	22:07	21:47	20:43	19:21	18:03	26	17:19 (DD3)	15:58	15:38	
	08:31	07:29	16:22 (DD3)	06:16	05:55	04:51	04:24	04:55	05:54	06:55	07:57	16:53 (DD3)	08:03	08:46		
22	16:20	17:28	27	16:49 (DD3)	20:33	21:32	22:07	21:45	20:40	19:19	18:00	26	17:19 (DD3)	15:56	15:38	
	08:30	07:26	16:22 (DD3)	06:14	05:53	04:49	04:25	04:56	05:56	06:57	07:59	16:53 (DD3)	08:05	08:47		
23	16:23	17:31	26	16:48 (DD3)	20:35	21:34	22:08	21:44	20:38	19:16	17:58	25	17:18 (DD3)	15:55	15:38	
	08:28	07:24	16:22 (DD3)	06:11	05:50	04:47	04:25	04:58	05:58	06:59	08:01	16:54 (DD3)	08:07	08:47		
24	16:25	17:33	27	16:49 (DD3)	20:37	21:36	22:08	21:42	20:35	19:13	17:56	24	17:18 (DD3)	15:53	15:39	
	08:26	07:21	16:22 (DD3)	06:08	05:48	04:46	04:25	05:00	06:00	07:01	08:03	16:54 (DD3)	08:09	08:47		
25	16:27	17:35	26	16:48 (DD3)	20:39	21:38	22:08	21:40	20:33	19:11	17:53	22	17:16 (DD3)	15:52	15:40	
	08:25	07:19	16:21 (DD3)	06:06	05:45	04:44	04:25	05:02	06:02	07:03	08:05	15:55 (DD3)	08:11	08:48		
26	16:29	17:37	26	16:47 (DD3)	20:41	21:39	22:08	21:39	20:30	19:08	16:51	20	16:15 (DD3)	15:51	15:40	
	08:23	07:16	16:22 (DD3)	06:03	05:43	04:43	04:26	05:03	06:04	07:05	08:07	15:57 (DD3)	08:13	08:48		
27	16:31	17:39	25	16:47 (DD3)	20:43	21:41	22:08	21:37	20:27	19:05	16:48	17	16:14 (DD3)	15:49	15:41	
	08:22	07:14	16:22 (DD3)	06:00	05:41	04:41	04:26	05:05	06:06	07:07	08:09	15:59 (DD3)	08:15	08:48		
28	16:33	17:42	24	16:46 (DD3)	20:45	21:42	22:08	21:35	20:25	19:03	16:46	12	16:11 (DD3)	15:48	15:42	
	08:20	07:11	16:24 (DD3)	05:58	05:38	04:40	04:27	05:07	06:08	07:09	08:12	16:03 (DD3)	08:16	08:48		
29	16:35	17:44	22	16:46 (DD3)	20:47	21:44	22:07	21:33	20:22	19:00	16:44	4	16:07 (DD3)	15:47	15:43	
	08:18			06:55	05:36	04:38	04:28	05:09	06:10	07:11	08:14		08:18	08:48		
30	16:37			19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41		15:46	15:44		
	08:16			06:52	05:33	04:37	04:28	05:11	06:12	07:13	08:16		08:20	08:48		
31	16:40			19:47	20:51	21:47	22:07	21:29	20:17	18:55	16:39		15:45	15:45		
	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		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Mež otnes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (627)
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	18:49 (DD3)	05:31	04:35	04:29	05:14	06:16	07:15	07:20	08:22	
2	15:47	16:44	17:46	19:51	3 18:52 (DD3)	20:53	21:50	22:06	21:25	20:12	18:52	16:35	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	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	15:43	
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	07:21	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	20:03		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	19:53	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	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	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	07:42	08:37	
22	16:02	17:06	18:07	20:12		21:13	22:02	21:59	21:04	19:45	18:26	16:14	15:37	
23	08:42	07:50	06:40	06:18		05:07	04:26	04:41	05:36	06:38	18:37 (DD3)	07:38	07:44	08:38
24	16:03	17:08	18:09	20:14		21:15	22:02	21:58	21:02	19:43	11 18:48 (DD3)	18:23	16:12	15:37
25	08:41	07:47	06:38	06:16		05:05	04:25	04:42	05:38	06:40	18:35 (DD3)	07:40	07:46	08:39
26	16:05	17:11	18:12	20:16		21:17	22:03	21:56	20:59	19:40	15 18:50 (DD3)	18:20	16:10	15:37
27	08:40	07:45	06:35	06:13		05:03	04:25	04:44	05:40	06:42	18:33 (DD3)	07:42	07:48	08:40
28	16:07	17:13	18:14	20:18		21:19	22:04	21:55	20:57	19:37	18 18:51 (DD3)	18:18	16:08	15:37
29	08:39	07:43	06:32	06:10		05:01	04:25	04:45	05:42	06:43	18:32 (DD3)	07:44	07:50	08:41
30	16:09	17:15	18:16	20:20		21:21	22:05	21:54	20:55	19:35	19 18:51 (DD3)	18:15	16:06	15:37
31	08:38	07:40	06:30	06:08		04:59	04:25	04:47	05:44	06:45	18:31 (DD3)	07:46	07:53	08:42
32	16:11	17:17	18:18	20:22		21:23	22:05	21:53	20:52	19:32	20 18:51 (DD3)	18:13	16:05	15:37
33	08:36	07:38	06:27	06:05		04:58	04:24	04:48	05:46	06:47	18:30 (DD3)	07:48	07:55	08:43
34	16:13	17:20	18:20	20:24		21:25	22:06	21:51	20:50	19:29	21 18:51 (DD3)	18:10	16:03	15:37
35	08:35	07:36	06:24	06:03		04:56	04:24	04:50	05:48	06:49	18:30 (DD3)	07:50	07:57	08:44
36	16:14	17:22	18:22	20:26		21:27	22:06	21:50	20:47	19:27	21 18:51 (DD3)	18:08	16:01	15:37
37	08:34	07:33	06:22	17:50 (DD3)	06:00	04:54	04:24	04:51	05:50	06:51	18:29 (DD3)	07:53	07:59	08:45
38	16:16	17:24	18:24	6 17:56 (DD3)	20:28	21:29	22:07	21:48	20:45	19:24	22 18:51 (DD3)	18:05	16:00	15:37
39	08:32	07:31	06:19	17:47 (DD3)	05:58	04:52	04:24	04:53	05:52	06:53	18:29 (DD3)	07:55	08:01	08:45
40	16:18	17:26	18:26	11 17:58 (DD3)	20:30	21:30	22:07	21:47	20:42	19:21	21 18:50 (DD3)	18:03	15:58	15:38
41	08:31	07:29	06:16	17:45 (DD3)	05:55	04:51	04:24	04:55	05:54	06:55	18:30 (DD3)	07:57	08:03	08:46
42	16:20	17:28	18:28	15 18:00 (DD3)	20:32	21:32	22:07	21:45	20:40	19:19	19 18:49 (DD3)	18:00	15:56	15:38
43	08:29	07:26	06:14	17:44 (DD3)	05:53	04:49	04:25	04:56	05:56	06:57	18:30 (DD3)	07:59	08:05	08:46
44	16:23	17:31	18:30	19 18:03 (DD3)	20:35	21:34	22:08	21:44	20:38	19:16	16 18:46 (DD3)	17:58	15:55	15:38
45	08:28	07:24	06:11	17:43 (DD3)	05:50	04:47	04:25	04:58	05:58	06:59	18:31 (DD3)	08:01	08:07	08:47
46	16:25	17:33	18:32	20 18:03 (DD3)	20:37	21:36	22:08	21:42	20:35	19:13	12 18:43 (DD3)	17:55	15:53	15:39
47	08:26	07:21	06:08	17:42 (DD3)	05:48	04:46	04:25	05:00	06:00	07:01	18:33 (DD3)	08:03	08:09	08:47
48	16:27	17:35	18:35	21 18:03 (DD3)	20:39	21:37	22:08	21:40	20:32	19:11	8 18:41 (DD3)	17:53	15:52	15:40
49	08:25	07:19	06:06	17:42 (DD3)	05:45	04:44	04:25	05:02	06:02	07:03		07:05	08:11	08:48
50	16:29	17:37	18:37	22 18:04 (DD3)	20:41	21:39	22:08	21:39	20:30	19:08		16:51	15:51	15:40
51	08:23	07:16	06:03	17:42 (DD3)	05:43	04:43	04:26	05:03	06:04	07:05		07:07	08:13	08:48
52	16:31	17:39	18:39	21 18:03 (DD3)	20:43	21:41	22:08	21:37	20:27	19:05		16:48	15:49	15:41
53	08:21	07:14	06:00	17:41 (DD3)	05:41	04:41	04:26	05:05	06:06	07:07		07:10	08:15	08:48
54	16:33	17:42	18:41	21 18:02 (DD3)	20:45	21:42	22:08	21:35	20:25	19:03		16:46	15:48	15:42
55	08:20	07:11	05:58	17:42 (DD3)	05:38	04:40	04:27	05:07	06:08	07:09		07:12	08:16	08:48
56	16:35	17:44	18:43	20 18:02 (DD3)	20:47	21:44	22:07	21:33	20:22	19:00		16:44	15:47	15:43
57	08:18		06:55	18:42 (DD3)	05:36	04:38	04:28	05:09	06:10	07:11		07:14	08:18	08:48
58	16:37		19:45	18 19:00 (DD3)	20:49	21:46	22:07	21:31	20:20	18:57		16:41	15:46	15:44
59	08:16		06:52	18:43 (DD3)	05:33	04:37	04:28	05:11	06:12	07:13		07:16	08:20	08:48
60	16:40		19:47	15 18:58 (DD3)	20:51	21:47	22:07	21:29	20:17	18:55		16:39	15:45	15:45
61	08:14		06:50	18:45 (DD3)		04:36		05:13	06:14			07:18	08:18	08:48
62	16:42		19:49	12 18:57 (DD3)		21:49		21:27	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			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)	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Mež rozites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (731)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Mež viteni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (707)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Mež abele - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (677)
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	16:46 (Pr3a)	06:47	18:03 (PrRR3)
	15:46	16:43	17:45	24	17:10 (Pr3a)	19:51
2	08:48	08:10	07:06	16:45 (Pr3a)	06:44	18:03 (PrRR3)
	15:48	16:45	17:48	25	17:10 (Pr3a)	19:53
3	08:48	08:09	07:03	16:44 (Pr3a)	06:41	18:03 (PrRR3)
	15:49	16:48	17:50	26	17:10 (Pr3a)	19:55
4	08:47	08:07	07:01	16:44 (Pr3a)	06:39	18:03 (PrRR3)
	15:50	16:50	17:52	27	17:11 (Pr3a)	19:57
5	08:47	08:04	06:58	16:44 (Pr3a)	06:36	18:03 (PrRR3)
	15:52	16:52	17:54	27	17:11 (Pr3a)	19:59
6	08:46	08:02	06:56	16:44 (Pr3a)	06:33	18:04 (PrRR3)
	15:53	16:54	17:56	27	17:11 (Pr3a)	20:01
7	08:46	08:00	06:53	16:44 (Pr3a)	06:31	18:04 (PrRR3)
	15:54	16:57	17:58	26	17:10 (Pr3a)	20:03
8	08:45	07:58	06:51	16:44 (Pr3a)	06:28	18:04 (PrRR3)
	15:56	16:59	18:01	25	17:09 (Pr3a)	20:05
9	08:44	07:56	06:48	16:44 (Pr3a)	06:25	18:06 (PrRR3)
	15:58	17:01	18:03	24	17:08 (Pr3a)	20:07
10	08:44	07:54	06:45	16:46 (Pr3a)	06:23	18:07 (PrRR3)
	15:59	17:03	18:05	21	17:07 (Pr3a)	20:09
11	08:43	07:52	06:43	16:47 (Pr3a)	06:20	18:09 (PrRR3)
	16:01	17:06	18:07	18	17:05 (Pr3a)	20:12
12	08:42	07:49	06:40	16:49 (Pr3a)	06:18	18:10 (PrRR3)
	16:03	17:08	18:09	13	17:02 (Pr3a)	20:14
13	08:41	07:47	06:37	16:53 (Pr3a)	06:15	18:13 (PrRR3)
	16:04	17:10	18:11	6	16:59 (Pr3a)	20:16
14	08:40	07:45	06:35		06:12	18:16 (PrRR3)
	16:06	17:12	18:13		20:18	11
15	08:39	07:43	06:32		06:10	18:27 (PrRR3)
	16:08	17:15	18:15		20:20	
16	08:38	07:40	06:29		06:07	
	16:10	17:17	18:17		20:22	
17	08:36	07:38	06:27		06:05	
	16:12	17:19	18:20		20:24	
18	08:35	07:36	06:24	17:24 (PrRR3)	06:02	
	16:14	17:21	18:22	9	17:33 (PrRR3)	
19	08:34	07:33	06:21	17:20 (PrRR3)	06:00	
	16:16	17:23	18:24	18	17:38 (PrRR3)	
20	08:32	07:31	06:19	17:16 (PrRR3)	05:57	
	16:18	17:26	18:26	25	17:41 (PrRR3)	
21	08:31	07:28	06:16	17:14 (PrRR3)	05:55	
	16:20	17:28	18:28	28	17:42 (PrRR3)	
22	08:30	07:26	06:13	17:11 (PrRR3)	05:52	
	16:22	17:30	18:30	32	17:43 (PrRR3)	
23	08:28	07:24	06:11	17:10 (PrRR3)	05:50	
	16:24	17:32	18:32	46	18:03 (Pr25)	
24	08:26	07:21	16:58 (Pr3a)	06:08	17:09 (PrRR3)	
	16:26	17:35	17:00 (Pr3a)	18:34	18:05 (Pr25)	
25	08:25	07:19	16:52 (Pr3a)	06:05	17:07 (PrRR3)	
	16:28	17:37	17:05 (Pr3a)	18:36	18:06 (Pr25)	
26	08:23	07:16	16:50 (Pr3a)	06:03	17:07 (PrRR3)	
	16:30	17:39	17:07 (Pr3a)	18:38	18:07 (Pr25)	
27	08:21	07:14	16:48 (Pr3a)	06:00	17:06 (PrRR3)	
	16:32	17:41	17:08 (Pr3a)	18:40	18:08 (Pr25)	
28	08:20	07:11	16:47 (Pr3a)	05:57	17:05 (PrRR3)	
	16:35	17:43	17:09 (Pr3a)	18:43	18:08 (Pr25)	
29	08:18			06:55	18:05 (PrRR3)	
	16:37			19:45	19:08 (Pr25)	
30	08:16			06:52	18:04 (PrRR3)	
	16:39			19:47	19:08 (Pr25)	
31	08:14			06:49	18:03 (PrRR3)	
	16:41			19:49	19:07 (Pr25)	
Potential sun hours	236	266	366	426	507	528
Total, worst case		74	934	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		17	366	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Mež abele - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (677)
 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) 28 18:35 (PrRR3)	07:15 11 17:41 (Pr3a)	07:20 16:34	08:22 15:43
2	04:29 22:06	05:16 21:23	06:17 20:09	18:06 (PrRR3) 31 18:37 (PrRR3)	07:17 16 17:43 (Pr3a)	07:22 16:32	08:23 15:42
3	04:30 22:06	05:18 21:21	06:19 20:07	18:04 (PrRR3) 34 18:38 (PrRR3)	07:19 19 17:44 (Pr3a)	07:25 16:30	08:25 15:41
4	04:31 22:05	05:19 21:19	06:21 20:04	18:03 (PrRR3) 39 18:52 (Pr25)	07:21 22 17:45 (Pr3a)	07:27 16:27	08:27 15:40
5	04:32 22:04	05:21 21:17	06:23 20:01	18:00 (PrRR3) 51 18:55 (Pr25)	07:23 24 17:46 (Pr3a)	07:29 16:25	08:28 15:40
6	04:33 22:03	05:23 21:15	06:25 19:59	17:59 (PrRR3) 56 18:57 (Pr25)	07:25 25 17:46 (Pr3a)	07:31 16:23	08:30 15:39
7	04:34 22:03	05:25 21:13	06:27 19:56	17:58 (PrRR3) 60 18:58 (Pr25)	07:27 26 17:46 (Pr3a)	07:33 16:21	08:31 15:38
8	04:35 22:02	05:27 21:11	06:29 19:53	17:57 (PrRR3) 62 18:59 (Pr25)	07:29 27 17:46 (Pr3a)	07:35 16:19	08:33 15:38
9	04:36 22:01	05:29 21:08	06:31 19:51	17:57 (PrRR3) 62 18:59 (Pr25)	07:31 26 17:45 (Pr3a)	07:38 16:17	08:34 15:37
10	04:38 22:00	05:31 21:06	06:33 19:48	17:56 (PrRR3) 64 19:00 (Pr25)	07:34 27 17:45 (Pr3a)	07:40 16:15	08:35 15:37
11	04:39 21:59	05:33 21:04	06:35 19:45	17:56 (PrRR3) 64 19:00 (Pr25)	07:36 26 17:45 (Pr3a)	07:42 16:13	08:37 15:37
12	04:40 21:58	05:35 21:02	06:37 19:43	17:55 (PrRR3) 65 19:00 (Pr25)	07:38 25 17:44 (Pr3a)	07:44 16:11	08:38 15:36
13	04:42 21:57	05:37 20:59	06:39 19:40	17:55 (PrRR3) 64 18:59 (Pr25)	07:40 23 17:43 (Pr3a)	07:46 16:09	08:39 15:36
14	04:43 21:55	05:39 20:57	06:41 19:37	17:55 (PrRR3) 64 18:59 (Pr25)	07:42 22 17:42 (Pr3a)	07:48 16:07	08:40 15:36
15	04:44 21:54	05:41 20:54	06:43 19:34	17:55 (PrRR3) 63 18:58 (Pr25)	07:44 19 17:40 (Pr3a)	07:50 16:06	08:41 15:36
16	04:46 21:53	05:43 20:52	06:45 19:32	17:55 (PrRR3) 62 18:57 (Pr25)	07:46 16 17:39 (Pr3a)	07:53 16:04	08:42 15:36
17	04:47 21:51	05:45 20:50	06:47 19:29	17:55 (PrRR3) 61 18:56 (Pr25)	07:48 11 17:36 (Pr3a)	07:55 16:02	08:43 15:36
18	04:49 21:50	05:47 20:47	06:49 19:26	17:56 (PrRR3) 58 18:55 (Pr25)	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	17:55 (PrRR3) 54 18:52 (Pr25)	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	17:56 (PrRR3) 47 18:49 (Pr25)	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	17:57 (PrRR3) 34 18:44 (Pr25)	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	17:58 (PrRR3) 29 18:27 (PrRR3)	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	17:59 (PrRR3) 26 18:25 (PrRR3)	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	18:02 (PrRR3) 20 18:22 (PrRR3)	08:03 17:53	08:09 15:51	08:48 15:39
25	05:01 21:39	06:01 20:30	07:03 19:08	18:05 (PrRR3) 13 18:18 (PrRR3)	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	18:05 (PrRR3) 07:07	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	18:06 (PrRR3) 16:45	07:09 16:45	08:15 15:48	08:48 15:41
28	05:06 21:33	06:07 20:22	07:09 19:00	18:07 (PrRR3) 16:43	07:12 16:43	08:16 15:46	08:48 15:42
29	05:08 21:31	06:09 20:20	07:11 18:28 (PrRR3)	18:08 (PrRR3) 18:57	07:14 16:41	08:18 15:45	08:49 15:43
30	05:10 21:29	06:11 20:17	07:13 18:32 (PrRR3)	18:09 (PrRR3) 18:54	07:16 16:39	08:20 15:44	08:49 15:44
31	05:12 21:27	06:13 20:14	07:15 18:34 (PrRR3)	18:10 (PrRR3) 16:36	07:18 16:36	08:21 15:45	08:48 15:45
Potential sun hours	529	469	384	324	248	217	
Total, worst case		55	1211	365			
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	106			

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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

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Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Mež ares - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (702)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Miežiš i (kad. apz. 76740020200001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (704)

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	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	19:05 (PrRR3) 19:32 (PrRR3)	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	19:05 (PrRR3) 19:31 (PrRR3)	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	19:05 (PrRR3) 19:31 (PrRR3)	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	19:16 (PrRR3) 20:59	05:24 21:54	04:31 22:05	05:19 21:19	06:21 20:04	19:05 (PrRR3) 19:30 (PrRR3)	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	19:12 (PrRR3) 21:01	05:21 21:55	04:30 22:04	05:21 21:17	06:23 20:01	19:05 (PrRR3) 19:28 (PrRR3)	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	19:11 (PrRR3) 21:03	05:19 21:57	04:29 22:03	05:23 21:15	06:25 19:59	19:06 (PrRR3) 19:26 (PrRR3)	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	19:09 (PrRR3) 21:05	05:17 21:58	04:28 22:03	05:25 21:13	06:27 19:56	19:07 (PrRR3) 19:24 (PrRR3)	07:27 18:36	07:33 16:21	08:31 15:38
8	08:45 15:56	07:58 16:59	06:50 18:01	06:28 20:05	19:07 (PrRR3) 21:07	05:15 21:59	04:27 22:02	05:27 21:11	06:29 19:53	19:09 (PrRR3) 19:21 (PrRR3)	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	19:07 (PrRR3) 21:09	05:13 22:00	04:27 22:01	05:29 21:08	06:31 19:51	19:21 (PrRR3) 19:31 (PrRR3)	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	19:06 (PrRR3) 21:11	05:11 22:01	04:26 22:00	05:31 21:06	06:33 19:48	19:32 (PrRR3) 19:33 (PrRR3)	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	19:06 (PrRR3) 21:13	05:09 22:02	04:25 21:59	05:33 21:04	06:35 19:45	19:33 (PrRR3) 19:34 (PrRR3)	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	19:05 (PrRR3) 21:15	05:07 22:03	04:25 21:58	05:35 21:01	06:37 19:43	19:34 (PrRR3) 19:35 (PrRR3)	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	19:05 (PrRR3) 21:17	05:05 22:03	04:25 21:57	05:37 20:59	06:39 19:40	19:35 (PrRR3) 19:36 (PrRR3)	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	19:05 (PrRR3) 21:19	05:03 22:04	04:24 21:55	05:39 20:57	06:41 19:37	19:36 (PrRR3) 19:37 (PrRR3)	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	19:05 (PrRR3) 21:21	05:01 22:05	04:24 21:54	05:41 20:54	06:43 19:34	19:38 (PrRR3) 19:39 (PrRR3)	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	19:05 (PrRR3) 21:23	04:59 22:05	04:24 21:53	05:43 20:52	06:45 19:32	19:40 (PrRR3) 19:41 (PrRR3)	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	19:06 (PrRR3) 21:25	04:57 22:06	04:23 21:51	05:45 20:50	06:47 19:29	19:42 (PrRR3) 19:43 (PrRR3)	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	19:06 (PrRR3) 21:27	04:55 22:06	04:23 21:50	05:47 20:47	06:49 19:26	19:44 (PrRR3) 19:45 (PrRR3)	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	19:08 (PrRR3) 21:29	04:53 22:07	04:23 21:49	05:49 20:45	06:51 19:24	19:46 (PrRR3) 19:47 (PrRR3)	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	19:08 (PrRR3) 21:30	04:51 22:07	04:23 21:47	05:51 20:42	06:53 19:21	19:48 (PrRR3) 19:49 (PrRR3)	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	19:11 (PrRR3) 21:32	04:50 22:07	04:23 21:45	05:53 20:40	06:55 19:23	19:50 (PrRR3) 19:51 (PrRR3)	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	19:22 (PrRR3) 21:34	04:48 22:08	04:24 21:44	05:55 20:37	06:57 19:27	19:15 (PrRR3) 19:27 (PrRR3)	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	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:29	19:13 (PrRR3) 19:29 (PrRR3)	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 19:31	19:11 (PrRR3) 19:31 (PrRR3)	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 19:32	19:10 (PrRR3) 19:32 (PrRR3)	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 19:32	19:08 (PrRR3) 19:32 (PrRR3)	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 19:32	19:07 (PrRR3) 19:32 (PrRR3)	08:09 16:45	08:15 15:47	08:48 15:41
28	08:20 16:34	07:11 17:43	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 19:32	19:06 (PrRR3) 19:32 (PrRR3)	08:11 16:43	08:16 15:46	08:48 15:42
29	08:18 16:37	07:08 17:45	06:55 18:45	05:35 20:49	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 19:33	19:05 (PrRR3) 19:33 (PrRR3)	08:13 16:41	08:18 15:45	08:48 15:43
30	08:16 16:39	07:06 17:47	06:52 18:47	05:33 20:51	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 19:32	19:05 (PrRR3) 19:32 (PrRR3)	08:15 16:38	08:20 15:44	08:48 15:44
31	08:14 16:41	07:04 17:49	06:49 18:49	05:31 20:51	04:35 21:49	04:28 22:07	05:12 21:27	06:13 20:14	07:15 19:32	19:05 (PrRR3) 19:32 (PrRR3)	08:17 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				401				230	176				
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				177				120	76				

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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Miežiš i (kad. apz. 76740020200004) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (798)

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	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	19:06 (PrRR3) 19:33 (PrRR3)	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	19:06 (PrRR3) 19:32 (PrRR3)	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	19:06 (PrRR3) 19:31 (PrRR3)	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	19:07 (PrRR3) 19:30 (PrRR3)	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	19:07 (PrRR3) 19:28 (PrRR3)	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 22:03	05:23 21:15	06:25 19:59	19:08 (PrRR3) 19:26 (PrRR3)	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	19:10 (PrRR3) 19:24 (PrRR3)	07:27 18:36	07:33 16:21	08:31 15:38
8	08:45 15:56	07:58 16:59	06:50 18:01	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	19:13 (PrRR3) 19:20 (PrRR3)	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	19:13 (PrRR3) 19:20 (PrRR3)	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	04:38 22:00	05:31 21:06	06:33 19:48	19:17 (PrRR3) 19:24 (PrRR3)	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	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	19:10 (PrRR3) 19:30 (PrRR3)	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 21:01	06:37 19:43	19:30 (PrRR3) 19:36 (PrRR3)	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	19:36 (PrRR3) 19:42 (PrRR3)	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	19:42 (PrRR3) 19:48 (PrRR3)	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	19:48 (PrRR3) 19:54 (PrRR3)	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	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	19:54 (PrRR3) 20:00 (PrRR3)	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	20:06 (PrRR3) 20:12 (PrRR3)	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	20:18 (PrRR3) 20:24 (PrRR3)	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 21:49	05:49 20:45	06:51 19:24	20:30 (PrRR3) 20:36 (PrRR3)	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	20:48 (PrRR3) 20:54 (PrRR3)	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	20:60 (PrRR3) 20:66 (PrRR3)	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	20:72 (PrRR3) 20:78 (PrRR3)	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	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	20:84 (PrRR3) 20:90 (PrRR3)	07:59 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	20:96 (PrRR3) 21:02 (PrRR3)	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 19:08	21:08 (PrRR3) 21:14 (PrRR3)	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	21:20 (PrRR3) 21:26 (PrRR3)	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	21:32 (PrRR3) 21:38 (PrRR3)	08:09 16:45	08:15 15:47	08:48 15:41
28	08:20 16:34	07:11 17:43	05:57 18:42	05:38 20:47	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 18:59	21:44 (PrRR3) 21:50 (PrRR3)	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 20:20	07:11 18:57	21:56 (PrRR3) 22:02 (PrRR3)	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	22:08 (PrRR3) 22:14 (PrRR3)	08:15 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		22:20 (PrRR3) 22:26 (PrRR3)	08:17 16:36		08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384		324	248	217
Total, worst case				412				254	161				
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				182				133	69				

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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

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Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Mikili - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (670) 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	21:56	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		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Mozuli - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (614)
 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	08:13	07:09	16:26 (DD3)	06:47	18:55 (O3)
	15:47	16:44	17:46	30	16:56 (DD3)	19:51
2	08:48	08:11	07:06	16:25 (DD3)	06:44	18:54 (O3)
	15:48	16:46	17:48	31	16:56 (DD3)	19:53
3	08:48	08:09	07:04	16:26 (DD3)	06:42	18:55 (O3)
	15:50	16:48	17:50	30	16:56 (DD3)	19:55
4	08:47	08:07	07:01	16:26 (DD3)	06:39	18:55 (O3)
	15:51	16:51	17:52	29	16:55 (DD3)	19:57
5	08:47	08:05	06:59	16:26 (DD3)	06:37	18:57 (O3)
	15:52	16:53	17:55	28	16:54 (DD3)	19:59
6	08:46	08:03	06:56	16:27 (DD3)	06:34	18:58 (O3)
	15:54	16:55	17:57	26	16:53 (DD3)	20:01
7	08:46	08:00	06:53	16:28 (DD3)	06:31	19:00 (O3)
	15:55	16:57	17:59	23	16:51 (DD3)	20:04
8	08:45	07:58	06:51	16:29 (DD3)	06:29	19:07 (O3)
	15:57	17:00	18:01	20	16:49 (DD3)	20:06
9	08:44	07:56	06:48	16:32 (DD3)	06:26	19:07 (O3)
	15:58	17:02	18:03	16	16:48 (DD3)	20:08
10	08:44	07:54	06:46	16:35 (DD3)	06:23	19:09
	16:00	17:04	18:05	17	17:37 (DD1)	20:10
11	08:43	07:52	06:43	17:26 (DD1)	06:21	19:11
	16:02	17:06	18:07	13	17:39 (DD1)	20:12
12	08:42	07:50	06:40	17:25 (DD1)	06:18	19:13
	16:03	17:08	18:09	17	17:42 (DD1)	20:14
13	08:41	07:47	06:38	17:23 (DD1)	06:16	19:14
	16:05	17:11	18:12	20	17:43 (DD1)	20:16
14	08:40	07:45	06:35	17:22 (DD1)	06:13	19:15
	16:07	17:13	18:14	21	17:43 (DD1)	20:18
15	08:39	07:43	06:32	17:22 (DD1)	06:10	19:16
	16:09	17:15	18:16	22	17:44 (DD1)	20:20
16	08:38	07:41	06:30	17:21 (DD1)	06:08	19:17
	16:11	17:17	18:18	23	17:44 (DD1)	20:22
17	08:36	07:38	06:27	17:20 (DD1)	06:05	19:18
	16:13	17:20	18:20	23	17:43 (DD1)	20:24
18	08:35	07:36	06:24	17:21 (DD1)	06:03	19:19
	16:15	17:22	18:22	22	17:43 (DD1)	20:26
19	08:34	07:33	16:37 (DD3)	06:22	17:21 (DD1)	06:00
	16:16	17:24	11	16:48 (DD3)	18:24	21
20	08:32	07:31	16:33 (DD3)	06:19	17:21 (DD1)	05:58
	16:18	17:26	17	16:50 (DD3)	18:26	20
21	08:31	07:29	16:32 (DD3)	06:16	17:22 (DD1)	05:55
	16:20	17:28	21	16:53 (DD3)	18:28	17
22	08:30	07:26	16:30 (DD3)	06:14	17:24 (DD1)	05:53
	16:23	17:31	23	16:53 (DD3)	18:30	14
23	08:28	07:24	16:29 (DD3)	06:11	17:26 (DD1)	05:50
	16:25	17:33	26	16:55 (DD3)	18:32	8
24	08:26	07:21	16:28 (DD3)	06:08	17:34 (DD1)	05:48
	16:27	17:35	27	16:55 (DD3)	18:35	
25	08:25	07:19	16:27 (DD3)	06:06	18:05 (O3)	05:45
	16:29	17:37	28	16:55 (DD3)	18:37	4
26	08:23	07:16	16:27 (DD3)	06:03	18:01 (O3)	05:43
	16:31	17:39	29	16:56 (DD3)	18:39	10
27	08:22	07:14	16:26 (DD3)	06:00	17:59 (O3)	05:41
	16:33	17:42	30	16:56 (DD3)	18:41	13
28	08:20	07:11	16:26 (DD3)	05:58	17:58 (O3)	05:38
	16:35	17:44	31	16:57 (DD3)	18:43	17
29	08:18			06:55	18:56 (O3)	05:36
	16:37			19:45	19:16 (O3)	20:49
30	08:16			06:52	18:55 (O3)	05:34
	16:40			19:47	19:16 (O3)	20:51
31	08:14			06:50	18:55 (O3)	
	16:42			19:49	19:17 (O3)	
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)	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
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 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Mozuli - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (614)
 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	05:14	06:16	07:15	18:03 (DD1)	07:20
	22:06	21:26	20:12	18:52	19	18:22 (DD1)
2	04:30	05:16	06:18	07:17	18:04 (DD1)	07:23
	22:06	21:24	20:09	18:49	15	18:19 (DD1)
3	04:31	05:18	06:20	07:19	18:05 (DD1)	07:25
	22:05	21:21	20:07	18:47	11	18:16 (DD1)
4	04:32	05:20	06:22	07:22	17:10 (DD3)	07:27
	22:05	21:19	20:04	18:44	18	18:13 (DD1)
5	04:33	05:22	06:24	18:57 (O3)	07:24	17:07 (DD3)
	22:04	21:17	20:01	7	19:04 (O3)	18:41
6	04:34	05:24	06:26	18:54 (O3)	07:26	17:05 (DD3)
	22:03	21:15	19:59	12	19:06 (O3)	18:39
7	04:35	05:26	06:28	18:52 (O3)	07:28	17:03 (DD3)
	22:03	21:13	19:56	16	19:08 (O3)	18:36
8	04:36	05:28	06:30	18:51 (O3)	07:30	17:02 (DD3)
	22:02	21:11	19:54	18	19:09 (O3)	18:33
9	04:37	05:30	06:32	18:49 (O3)	07:32	17:02 (DD3)
	22:01	21:08	19:51	20	19:09 (O3)	18:31
10	04:38	05:32	06:34	18:48 (O3)	07:34	17:00 (DD3)
	22:00	21:06	19:48	20	19:08 (O3)	18:28
11	04:40	05:34	06:36	18:47 (O3)	07:36	17:00 (DD3)
	21:59	21:04	19:46	21	19:08 (O3)	18:26
12	04:41	05:36	06:38	18:47 (O3)	07:38	16:59 (DD3)
	21:58	21:02	19:43	21	19:08 (O3)	18:23
13	04:42	05:38	06:40	18:47 (O3)	07:40	16:58 (DD3)
	21:57	20:59	19:40	21	19:08 (O3)	18:20
14	04:44	05:40	06:42	18:47 (O3)	07:42	16:58 (DD3)
	21:55	20:57	19:38	20	19:07 (O3)	18:18
15	04:45	05:42	06:44	18:47 (O3)	07:44	16:59 (DD3)
	21:54	20:55	19:35	18	19:05 (O3)	18:15
16	04:47	05:44	06:46	18:48 (O3)	07:46	16:59 (DD3)
	21:53	20:52	19:32	14	19:02 (O3)	18:13
17	04:48	05:46	06:47	18:49 (O3)	07:48	16:59 (DD3)
	21:51	20:50	19:29	11	19:00 (O3)	18:10
18	04:50	05:48	06:49	18:51 (O3)	07:50	16:59 (DD3)
	21:50	20:47	19:27	6	18:57 (O3)	18:08
19	04:51	05:50	06:51		07:53	17:00 (DD3)
	21:49	20:45	19:24		18:05	25
20	04:53	05:52	06:53	18:14 (DD1)	07:55	17:02 (DD3)
	21:47	20:43	19:21	6	18:20 (DD1)	18:03
21	04:55	05:54	06:55	18:10 (DD1)	07:57	17:03 (DD3)
	21:45	20:40	19:19	13	18:23 (DD1)	18:00
22	04:56	05:56	06:57	18:08 (DD1)	07:59	17:04 (DD3)
	21:44	20:38	19:16	16	18:24 (DD1)	17:58
23	04:58	05:58	06:59	18:06 (DD1)	08:01	17:08 (DD3)
	21:42	20:35	19:13	19	18:25 (DD1)	17:56
24	05:00	06:00	07:01	18:05 (DD1)	08:03	
	21:40	20:33	19:11	21	18:26 (DD1)	17:53
25	05:02	06:02	07:03	18:04 (DD1)	07:05	
	21:39	20:30	19:08	22	18:26 (DD1)	16:51
26	05:03	06:04	07:05	18:03 (DD1)	07:07	
	21:37	20:27	19:05	23	18:26 (DD1)	16:48
27	05:05	06:06	07:07	18:03 (DD1)	07:10	
	21:35	20:25	19:03	23	18:26 (DD1)	16:46
28	05:07	06:08	07:09	18:03 (DD1)	07:12	
	21:33	20:22	19:00	22	18:25 (DD1)	16:44
29	05:09	06:10	07:11	18:03 (DD1)	07:14	
	21:31	20:20	18:57	21	18:24 (DD1)	16:41
30	05:11	06:12	07:13	18:03 (DD1)	07:16	
	21:29	20:17	18:55	20	18:23 (DD1)	16:39
31	05:13	06:14			07:18	
	21:28	20:15			16:37	
Potential sun hours	528	469	384	324		248
Total, worst case			431	541		217
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)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Makoniš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (783)
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 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	06:28 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	06:45 18:05	06:23 20:10	05:11 21:11	04:27 22:01	04:38 22:00	05:32 21:06	06:34 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	06:37 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 18:11	06:15 20:16	05:05 21:17	04:25 22:03	04:42 21:56	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 17:19	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 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	08:29 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 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	08:21 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 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	08:48 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Makoni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (613)
 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 20:01	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 20:01	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 20:01	08:18 17:37		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Nadež da - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (728)
 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
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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
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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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Oriš u kapseta - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (718)
 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
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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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Ozolaine - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (786)
 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
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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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A
Assumptions for shadow calculations

Shadow receptor: OŠ i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (616)
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	18:37 (JV1) 04:34 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	18:39 (JV1) 04:33 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	18:40 (JV1) 04:32 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	18:42 (JV1) 04:31 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	18:44 (JV1) 04:30 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	18:48 (JV1) 04:29 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	18:41 (JV1) 04:28 20:20 (O1.b)
9	08:44 15:59	07:56 17:02	06:48 18:03	06:26 20:08	05:14 21:09	18:39 (JV1) 04:28 20:20 (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	18:32 (JV1) 04:25 20:25 (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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: OŠ i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (616)
 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	20:48 (O1.b)	21:26	20:48 (O1.b)	20:12	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	20:49 (O1.b)	21:24	20:47 (O1.b)	20:09	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	20:49 (O1.b)	21:21	20:44 (O1.b)	20:07	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	20:50 (O1.b)	21:19		20:04	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	20:51 (O1.b)	21:17	19:06 (JV1)	20:02	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	20:51 (O1.b)	21:15	19:11 (JV1)	19:59	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	20:51 (O1.b)	21:13	19:14 (JV1)	19:56	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	20:52 (O1.b)	21:11	19:16 (JV1)	19:54	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	20:52 (O1.b)	21:08	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	20:52 (O1.b)	21:06	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	20:52 (O1.b)	21:04	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	20:54 (O1.b)	21:02	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	20:54 (O1.b)	20:59	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	20:54 (O1.b)	20:57	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	20:54 (O1.b)	20:55	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	20:54 (O1.b)	20:52	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	20:54 (O1.b)	20:50	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	20:55 (O1.b)	20:47	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	20:55 (O1.b)	20:45	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	20:55 (O1.b)	20:43	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	20:55 (O1.b)	20:40	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	20:55 (O1.b)	20:38	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	20:54 (O1.b)	20:35	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	20:55 (O1.b)	20:33	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	20:54 (O1.b)	20:30	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	20:54 (O1.b)	20:28	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	20:54 (O1.b)	20:25	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	20:52 (O1.b)	20:22	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	20:52 (O1.b)	20:20	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	20:51 (O1.b)	20:17	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	20:49 (O1.b)	20:15	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)

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: OŠ mala - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (654)
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 21:51	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	06:22 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	06:25 20:00	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 20:00	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 20:00	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 20:00	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 20:00	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 20:00	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 20:00	07:38 18:23	07:44 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 20:00	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 20:00	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 20:00	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 20:00	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 20:00	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	04:24 22:07	04:49 21:50	05:47 20:48	06:49 20:00	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 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	05:57 20:31	04:52 21:31	04:24 22:08	04:52 21:47	05:51 20:43	06:53 20:00	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 20:00	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 20:00	07:59 18:16	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 20:00	08:01 18:13	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 20:00	08:03 18:11	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	06:01 20:30	07:03 20:00	08:05 18:08	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 20:00	08:08 18:05	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 20:00	08:10 18:02	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 20:00	08:12 18:00	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 20:00	08:14 18:00	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 20:00	08:16 18:00	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 20:00			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)	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: OŠ ulejas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (612)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Paegles - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (736)
 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
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	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
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	15:59	17:03	18:05	20:09	21:11	22:01	22:00	21:06	19:48	18:28	16:15	15:37
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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
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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
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	16:24	17:32	18:32	20:36	21:36	22:08	21:42	20:35	19:13	17:55	15:53	15:38
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	16:26	17:34	18:34	20:38	21:37	22:08	21:40	20:32	19:10	17:52	15:51	15:39
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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Palmas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (651)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Pastari - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (618)
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 22:03	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 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
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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 16:04	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 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 15:37
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 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Pastarini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (622)
 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 18:36	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 20:00	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 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	05:02 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 15:44
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 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 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Pavlani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (759)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Priednieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (683)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Purmala - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (685)
 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	15:58 (Pr3a) 16:09 (Pr3a)	07:09 17:45	15:52 (PrRR3) 17:14 (Pr25)	06:47 19:51
2	08:48 15:47	08:10 16:45	15:57 (Pr3a) 16:11 (Pr3a)	07:06 17:48	15:53 (PrRR3) 17:14 (Pr25)	06:44 19:53
3	08:48 15:49	08:09 16:48	15:56 (Pr3a) 16:13 (Pr3a)	07:03 17:50	15:56 (PrRR3) 17:15 (Pr25)	06:41 19:55
4	08:47 15:50	08:07 16:50	15:54 (Pr3a) 16:14 (Pr3a)	07:01 17:52	16:00 (PrRR3) 17:15 (Pr25)	06:39 19:57
5	08:47 15:51	08:05 16:52	15:54 (Pr3a) 16:15 (Pr3a)	06:58 17:54	16:49 (Pr25) 17:14 (Pr25)	06:36 19:59
6	08:46 15:53	08:02 16:54	15:54 (Pr3a) 16:16 (Pr3a)	06:56 17:56	16:50 (Pr25) 17:15 (Pr25)	06:33 20:01
7	08:46 15:54	08:00 16:57	15:54 (Pr3a) 16:17 (Pr3a)	06:53 17:58	16:50 (Pr25) 17:14 (Pr25)	06:31 20:03
8	08:45 15:56	07:58 16:59	15:53 (Pr3a) 16:16 (Pr3a)	06:51 18:01	16:50 (Pr25) 17:13 (Pr25)	06:28 20:05
9	08:44 15:58	07:56 17:01	15:53 (Pr3a) 16:17 (Pr3a)	06:48 18:03	16:50 (Pr25) 17:11 (Pr25)	06:25 20:07
10	08:44 15:59	07:54 17:03	15:53 (Pr3a) 16:17 (PrRR3)	06:45 18:05	16:51 (Pr25) 17:11 (Pr25)	06:23 20:09
11	08:43 16:01	07:52 17:06	15:52 (PrRR3) 16:18 (PrRR3)	06:43 18:07	16:52 (Pr25) 17:09 (Pr25)	06:20 20:12
12	08:42 16:03	07:49 17:08	15:51 (PrRR3) 16:20 (PrRR3)	06:40 18:09	16:54 (Pr25) 17:06 (Pr25)	06:18 20:14
13	08:41 16:04	07:47 17:10	15:49 (PrRR3) 16:20 (PrRR3)	06:37 18:11	16:59 (Pr25) 17:02 (Pr25)	06:15 20:16
14	08:40 16:06	07:45 17:12	15:49 (PrRR3) 16:21 (PrRR3)	06:35 18:13	06:12 20:18	05:03 21:19
15	08:39 16:08	07:43 17:15	15:49 (PrRR3) 16:23 (PrRR3)	06:32 18:15	06:10 20:20	05:01 21:21
16	08:38 16:10	07:40 17:17	15:48 (PrRR3) 16:23 (PrRR3)	06:29 18:17	06:07 20:22	04:59 21:23
17	08:36 16:12	07:38 17:19	15:48 (PrRR3) 16:23 (PrRR3)	06:27 18:20	06:05 20:24	04:57 21:25
18	08:35 16:14	07:36 17:21	15:47 (PrRR3) 16:23 (PrRR3)	06:24 18:22	06:02 20:26	04:55 21:27
19	08:34 16:16	07:33 17:23	15:47 (PrRR3) 16:24 (PrRR3)	06:21 18:24	06:00 20:28	04:53 21:29
20	08:32 16:18	07:31 17:26	15:46 (PrRR3) 16:23 (PrRR3)	06:19 18:26	05:57 20:30	04:51 21:31
21	08:31 16:20	07:28 17:28	15:47 (PrRR3) 16:24 (PrRR3)	06:16 18:28	05:55 20:32	04:50 21:32
22	08:30 16:22	07:26 17:30	15:47 (PrRR3) 16:23 (PrRR3)	06:13 18:30	05:52 20:34	04:48 21:34
23	08:28 16:24	07:24 17:32	15:46 (PrRR3) 16:22 (PrRR3)	06:11 18:32	05:50 20:37	04:46 21:36
24	08:26 16:26	07:21 17:35	15:47 (PrRR3) 16:22 (PrRR3)	06:08 18:34	05:47 20:39	04:45 21:38
25	08:25 16:28	07:19 17:37	15:47 (PrRR3) 17:04 (Pr25)	06:05 18:36	05:45 20:41	04:43 21:39
26	08:23 16:30	07:16 17:39	15:48 (PrRR3) 17:09 (Pr25)	06:03 18:38	05:42 20:43	04:42 21:41
27	08:22 16:32	07:14 17:41	15:49 (PrRR3) 17:11 (Pr25)	06:00 18:40	05:40 20:45	04:40 21:43
28	08:20 16:34	07:11 17:43	15:50 (PrRR3) 17:12 (Pr25)	05:57 18:43	05:38 20:47	04:39 21:44
29	08:18 16:37			06:55 19:45	05:35 20:49	04:38 21:46
30	08:16 16:39			06:52 19:47	05:33 20:51	04:36 21:47
31	08:14 16:41	16:01 (Pr3a) 16:06 (Pr3a)		06:49 19:49		04:35 21:49
Potential sun hours	236	266	366	426	507	528
Total, worst case	5	849	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	1	191	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Purmala - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (685)
 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	15:23 (Pr3a)	08:22	
	22:07	21:26	20:12	18:51	10	17:45 (Pr25)	16:34	24	15:47 (Pr3a)	15:43
2	04:29	05:16	06:17	07:17		17:32 (Pr25)	07:22		15:23 (Pr3a)	08:24
	22:06	21:23	20:09	18:49	15	17:47 (Pr25)	16:32	23	15:46 (Pr3a)	15:42
3	04:30	05:18	06:19	07:19		17:30 (Pr25)	07:25		15:22 (Pr3a)	08:25
	22:06	21:21	20:07	18:46	18	17:48 (Pr25)	16:30	24	15:46 (Pr3a)	15:41
4	04:31	05:19	06:21	07:21		17:28 (Pr25)	07:27		15:23 (Pr3a)	08:27
	22:05	21:19	20:04	18:44	21	17:49 (Pr25)	16:27	23	15:46 (Pr3a)	15:40
5	04:32	05:21	06:23	07:23		17:27 (Pr25)	07:29		15:23 (Pr3a)	08:28
	22:04	21:17	20:01	18:41	23	17:50 (Pr25)	16:25	22	15:45 (Pr3a)	15:40
6	04:33	05:23	06:25	07:25		17:26 (Pr25)	07:31		15:25 (Pr3a)	08:30
	22:04	21:15	19:59	18:38	24	17:50 (Pr25)	16:23	21	15:46 (Pr3a)	15:39
7	04:34	05:25	06:27	07:27		17:25 (Pr25)	07:33		15:25 (Pr3a)	08:31
	22:03	21:13	19:56	18:36	25	17:50 (Pr25)	16:21	19	15:44 (Pr3a)	15:38
8	04:35	05:27	06:29	07:29		17:25 (Pr25)	07:35		15:26 (Pr3a)	08:33
	22:02	21:11	19:53	18:33	24	17:49 (Pr25)	16:19	17	15:43 (Pr3a)	15:38
9	04:36	05:29	06:31	07:31		17:24 (Pr25)	07:38		15:28 (Pr3a)	08:34
	22:01	21:08	19:51	18:30	25	17:49 (Pr25)	16:17	14	15:42 (Pr3a)	15:37
10	04:37	05:31	06:33	07:34		16:31 (PrRR3)	07:40		15:29 (Pr3a)	08:36
	22:00	21:06	19:48	18:28	37	17:48 (Pr25)	16:15	10	15:39 (Pr3a)	15:37
11	04:39	05:33	06:35	07:36		16:29 (PrRR3)	07:42		15:33 (Pr3a)	08:37
	21:59	21:04	19:45	18:25	43	17:49 (Pr25)	16:13	5	15:38 (Pr3a)	15:37
12	04:40	05:35	06:37	07:38		16:26 (PrRR3)	07:44			08:38
	21:58	21:02	19:43	18:23	47	17:48 (Pr25)	16:11			15:36
13	04:41	05:37	06:39	07:40		16:24 (PrRR3)	07:46			08:39
	21:57	20:59	19:40	18:20	47	17:46 (Pr25)	16:09			15:36
14	04:43	05:39	06:41	07:42		16:22 (PrRR3)	07:48			08:40
	21:55	20:57	19:37	18:17	49	17:45 (Pr25)	16:07			15:36
15	04:44	05:41	06:43	07:44		16:21 (PrRR3)	07:50			08:41
	21:54	20:55	19:34	18:15	45	17:42 (Pr25)	16:06			15:36
16	04:46	05:43	06:45	07:46		16:20 (PrRR3)	07:53			08:42
	21:53	20:52	19:32	18:12	43	17:40 (Pr25)	16:04			15:36
17	04:47	05:45	06:47	07:48		16:19 (PrRR3)	07:55			08:43
	21:51	20:50	19:29	18:10	35	16:54 (PrRR3)	16:02			15:36
18	04:49	05:47	06:49	07:50		16:18 (PrRR3)	07:57			08:44
	21:50	20:47	19:26	18:07	36	16:54 (PrRR3)	16:00			15:36
19	04:51	05:49	06:51	07:52		16:17 (PrRR3)	07:59			08:45
	21:49	20:45	19:24	18:05	37	16:54 (PrRR3)	15:59			15:36
20	04:52	05:51	06:53	07:54		16:18 (PrRR3)	08:01			08:45
	21:47	20:42	19:21	18:02	36	16:54 (PrRR3)	15:57			15:37
21	04:54	05:53	06:55	07:57		16:17 (PrRR3)	08:03			08:46
	21:45	20:40	19:18	18:00	37	16:54 (PrRR3)	15:56			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		15:21 (PrRR3)	08:20			08:49
	21:29	20:17	18:54	16:38	28	15:49 (PrRR3)	15:44			15:44
31	05:12	06:13		07:18		15:22 (PrRR3)				08:48
	21:28	20:14		16:36	25	15:47 (PrRR3)				15:45
Potential sun hours	529	469	384	324			248			217
Total, worst case				1007			202			
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				292			15			

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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

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0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Pūrmalieši - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (754)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Purvietas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (635)
 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	04:37 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 15:37
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 19:22	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	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 20:28	07:06 19:05	08:08 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	08:10 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	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 21:46	04:28 22:07	05:09 21:31	06:10 20:20	07:12 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	07:14 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 21:49		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Purvietinas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (637)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Rapš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (684)
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	18:42 (PrRR3) 19:08 (PrRR3)	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
2	08:48 15:47	08:10 16:45	07:06 17:48	06:44 19:53	18:42 (PrRR3) 19:07 (PrRR3)	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
3	08:48 15:49	08:08 16:48	07:03 17:50	06:41 19:55	18:42 (PrRR3) 19:06 (PrRR3)	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
4	08:47 15:50	08:06 16:50	07:01 17:52	06:39 19:57	18:43 (PrRR3) 19:06 (PrRR3)	05:24 20:59	04:31 21:54	04:31 22:05	05:19 21:19	06:21 20:04	18:46 (PrRR3) 18:53 (PrRR3)	07:21 18:43
5	08:47 15:51	08:04 16:52	06:58 17:54	06:36 19:59	18:43 (PrRR3) 19:04 (PrRR3)	05:21 21:01	04:30 21:55	04:32 22:04	05:21 21:17	06:23 20:01	18:43 (PrRR3) 18:56 (PrRR3)	07:23 18:41
6	08:46 15:53	08:02 16:54	06:56 17:56	06:33 20:01	18:45 (PrRR3) 19:03 (PrRR3)	05:19 21:03	04:29 21:57	04:33 22:03	05:23 21:15	06:25 19:59	18:40 (PrRR3) 18:58 (PrRR3)	07:25 18:38
7	08:46 15:54	08:00 16:57	06:53 17:58	06:31 20:03	18:46 (PrRR3) 19:00 (PrRR3)	05:17 21:05	04:28 21:58	04:34 22:03	05:25 21:13	06:27 19:56	18:39 (PrRR3) 18:59 (PrRR3)	07:27 18:36
8	08:45 15:56	07:58 16:59	06:50 18:01	06:28 20:05	18:49 (PrRR3) 18:56 (PrRR3)	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	18:37 (PrRR3) 19:00 (PrRR3)	07:29 18:33
9	08:44 15:58	07:56 17:01	06:48 18:03	06:25 20:07	18:49 (PrRR3) 19:03 (PrRR3)	05:13 21:09	04:27 22:00	04:36 22:01	05:29 21:08	06:31 19:51	18:36 (PrRR3) 19:00 (PrRR3)	07:31 18:30
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:09	18:49 (PrRR3) 19:03 (PrRR3)	05:11 21:11	04:26 22:01	04:37 22:00	05:31 21:06	06:33 19:48	18:35 (PrRR3) 19:01 (PrRR3)	07:33 18:28
11	08:43 16:01	07:52 17:06	06:43 18:07	06:20 20:12	18:49 (PrRR3) 19:03 (PrRR3)	05:09 21:13	04:25 22:02	04:39 21:59	05:33 21:04	06:35 19:45	18:35 (PrRR3) 19:01 (PrRR3)	07:36 18:25
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	18:49 (PrRR3) 19:03 (PrRR3)	05:07 21:15	04:25 22:03	04:40 21:58	05:35 21:01	06:37 19:43	18:34 (PrRR3) 19:01 (PrRR3)	07:38 18:23
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	18:49 (PrRR3) 19:03 (PrRR3)	05:05 21:17	04:25 22:03	04:41 21:57	05:37 20:59	06:39 19:40	18:34 (PrRR3) 19:00 (PrRR3)	07:40 18:20
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	18:49 (PrRR3) 19:03 (PrRR3)	05:03 21:19	04:24 22:04	04:43 21:55	05:39 20:57	06:41 19:37	18:34 (PrRR3) 19:00 (PrRR3)	07:42 18:17
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	18:49 (PrRR3) 19:03 (PrRR3)	05:01 21:21	04:24 22:05	04:44 21:54	05:41 20:54	06:43 19:34	18:34 (PrRR3) 18:59 (PrRR3)	07:44 18:15
16	08:38 16:10	07:40 17:17	06:29 18:17	06:07 20:22	18:49 (PrRR3) 19:03 (PrRR3)	04:59 21:23	04:24 22:05	04:46 21:53	05:43 20:52	06:45 19:32	18:34 (PrRR3) 18:58 (PrRR3)	07:46 18:12
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	18:49 (PrRR3) 19:03 (PrRR3)	04:57 21:25	04:23 22:06	04:47 21:51	05:45 20:50	06:47 19:29	18:35 (PrRR3) 18:57 (PrRR3)	07:48 18:10
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	18:49 (PrRR3) 19:03 (PrRR3)	04:55 21:27	04:23 22:06	04:49 21:50	05:47 20:47	06:49 19:26	18:34 (PrRR3) 18:54 (PrRR3)	07:50 18:07
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	18:49 (PrRR3) 19:03 (PrRR3)	04:53 21:29	04:23 22:07	04:51 21:49	05:49 20:45	06:51 19:24	18:36 (PrRR3) 18:53 (PrRR3)	07:52 18:05
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	18:49 (PrRR3) 19:03 (PrRR3)	04:51 21:30	04:23 22:07	04:52 21:47	05:51 20:42	06:53 19:21	18:37 (PrRR3) 18:50 (PrRR3)	07:54 18:02
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	18:49 (PrRR3) 19:03 (PrRR3)	04:50 21:32	04:23 22:07	04:54 21:45	05:53 20:40	06:55 19:18	18:43 (PrRR3) 18:44 (PrRR3)	07:57 18:00
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	18:49 (PrRR3) 19:03 (PrRR3)	04:48 21:34	04:24 22:08	04:56 21:44	05:55 20:37	06:57 19:16	18:44 (PrRR3) 18:57 (PrRR3)	07:59 17:57
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	18:49 (PrRR3) 19:03 (PrRR3)	04:46 21:36	04:24 22:08	04:57 21:42	05:57 20:35	06:59 19:13	18:44 (PrRR3) 18:57 (PrRR3)	07:59 17:55
24	08:26 16:26	07:21 17:34	06:08 18:34	05:47 20:39	18:49 (PrRR3) 19:03 (PrRR3)	04:45 21:38	04:24 22:08	04:59 21:40	05:59 20:32	07:01 19:10	18:44 (PrRR3) 18:57 (PrRR3)	07:59 17:53
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	18:49 (PrRR3) 19:03 (PrRR3)	04:43 21:39	04:25 22:08	05:01 21:39	06:01 20:30	07:03 19:08	18:44 (PrRR3) 18:57 (PrRR3)	07:59 17:55
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	18:49 (PrRR3) 19:03 (PrRR3)	04:42 21:41	04:25 22:08	05:03 21:37	06:03 20:27	07:05 19:05	18:44 (PrRR3) 18:57 (PrRR3)	07:59 17:53
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	18:49 (PrRR3) 19:03 (PrRR3)	04:40 21:42	04:25 22:08	05:04 21:35	06:05 20:25	07:07 19:02	18:44 (PrRR3) 18:57 (PrRR3)	07:59 17:53
28	08:20 16:34	07:11 17:43	05:57 18:42	05:38 20:47	18:49 (PrRR3) 19:03 (PrRR3)	04:39 21:44	04:26 22:07	05:06 21:33	06:07 20:22	07:09 18:59	18:44 (PrRR3) 18:57 (PrRR3)	07:59 17:53
29	08:18 16:37	07:09 17:45	05:55 18:45	05:35 20:49	18:49 (PrRR3) 19:03 (PrRR3)	04:38 21:46	04:27 22:07	05:08 21:31	06:09 20:20	07:11 18:57	18:44 (PrRR3) 18:57 (PrRR3)	07:59 17:53
30	08:16 16:39	07:07 17:47	05:52 18:47	05:33 20:51	18:49 (PrRR3) 19:03 (PrRR3)	04:36 21:47	04:27 22:07	05:10 21:29	06:11 20:17	07:13 18:54	18:44 (PrRR3) 18:57 (PrRR3)	07:59 17:53
31	08:14 16:41	07:05 17:49	05:50 18:48	05:31 20:58	18:49 (PrRR3) 19:03 (PrRR3)	04:35 21:49	04:27 22:07	05:12 21:27	06:13 20:14	07:15 18:56	18:44 (PrRR3) 18:57 (PrRR3)	07:59 17:53
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217
Total, worst case			199	158					358			
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			78	70					154			

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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Riteniši - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (692)
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	16:46	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	05:24	04:31
	15:50	16:50	17:52	19:57	20:59	21:54
5	08:47	08:04	06:58	06:36	05:22	04:30
	15:52	16:52	17:54	19:59	21:01	21:55
6	08:46	08:02	06:56	06:33	05:19	04:29
	15:53	16:54	17:56	20:01	21:03	21:56
7	08:46	08:00	06:53	06:31	05:17	04:28
	15:55	16:57	17:58	20:03	21:05	21:58
8	08:45	07:58	06:50	06:28	05:15	04:28
	15:56	16:59	18:01	20:05	21:07	21:59
9	08:44	07:56	06:48	06:26	19:31 (AP2)	05:13
	15:58	17:01	18:03	20:07	8 19:39 (AP2)	21:09
10	08:44	07:54	06:45	06:23	19:27 (AP2)	05:11
	15:59	17:03	18:05	20:09	13 19:40 (AP2)	21:11
11	08:43	07:52	06:43	06:20	19:26 (AP2)	05:09
	16:01	17:06	18:07	20:12	17 19:43 (AP2)	21:13
12	08:42	07:49	06:40	06:18	19:24 (AP2)	05:07
	16:03	17:08	18:09	20:14	20 19:44 (AP2)	21:15
13	08:41	07:47	06:37	06:15	19:23 (AP2)	05:05
	16:04	17:10	18:11	20:16	22 19:45 (AP2)	21:17
14	08:40	07:45	06:35	06:13	19:22 (AP2)	05:03
	16:06	17:12	18:13	20:18	23 19:45 (AP2)	21:19
15	08:39	07:43	06:32	06:10	19:22 (AP2)	05:01
	16:08	17:15	18:15	20:20	24 19:46 (AP2)	21:21
16	08:38	07:40	06:29	06:07	19:21 (AP2)	04:59
	16:10	17:17	18:18	20:22	24 19:45 (AP2)	21:23
17	08:36	07:38	06:27	06:05	19:21 (AP2)	04:57
	16:12	17:19	18:20	20:24	24 19:45 (AP2)	21:25
18	08:35	07:36	06:24	06:02	19:20 (AP2)	04:55
	16:14	17:21	18:22	20:26	24 19:44 (AP2)	21:27
19	08:34	07:33	06:21	06:00	19:21 (AP2)	04:53
	16:16	17:24	18:24	20:28	23 19:44 (AP2)	21:29
20	08:32	07:31	06:19	05:57	19:20 (AP2)	04:52
	16:18	17:26	18:26	20:30	23 19:43 (AP2)	21:30
21	08:31	07:28	06:16	05:55	19:21 (AP2)	04:50
	16:20	17:28	18:28	20:32	21 19:42 (AP2)	21:32
22	08:29	07:26	06:13	05:52	19:22 (AP2)	04:48
	16:22	17:30	18:30	20:34	20 19:42 (AP2)	21:34
23	08:28	07:24	06:11	05:50	19:23 (AP2)	04:47
	16:24	17:32	18:32	20:36	16 19:39 (AP2)	21:36
24	08:26	07:21	06:08	05:47	19:25 (AP2)	04:45
	16:26	17:35	18:34	20:39	13 19:38 (AP2)	21:37
25	08:25	07:19	06:05	05:45	19:28 (AP2)	04:43
	16:28	17:37	18:36	20:41	7 19:35 (AP2)	21:39
26	08:23	07:16	06:03	05:42	04:42	04:25
	16:30	17:39	18:38	20:43	21:41	22:08
27	08:21	07:14	06:00	05:40	04:41	04:26
	16:32	17:41	18:40	20:45	21:42	22:08
28	08:20	07:11	05:57	05:38	04:39	04:26
	16:35	17:43	18:42	20:47	21:44	22:07
29	08:18		06:55	05:35	04:38	04:27
	16:37		19:45	20:49	21:46	22:07
30	08:16		06:52	05:33	04:37	04:28
	16:39		19:47	20:51	21:47	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				322		250
Sun reduction				0,44		0,57
Oper. time red.				1,00		1,00
Wind dir. red.				1,00		1,00
Total reduction				0,44		0,57
Total, real				142		142

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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Riteniš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (692)
 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	21:19 (Pr3a)	05:14	06:15	19:25 (AP2)	07:15
	22:06	8 21:27 (Pr3a)	21:25	20:12	16 19:41 (AP2)	18:52
2	04:29	21:19 (Pr3a)	05:16	06:17	19:26 (AP2)	07:17
	22:06	7 21:26 (Pr3a)	21:23	20:09	13 19:39 (AP2)	18:49
3	04:30	21:21 (Pr3a)	05:18	06:19	19:29 (AP2)	07:19
	22:05	4 21:25 (Pr3a)	21:21	20:06	8 19:37 (AP2)	18:46
4	04:31		05:20	06:21		07:21
	22:05		21:19	20:04		18:44
5	04:32		05:22	06:23		07:23
	22:04		21:17	20:01		18:41
6	04:33		05:23	06:25		07:25
	22:03		21:15	19:59		18:38
7	04:34		05:25	06:27		07:27
	22:03		21:13	19:56		18:36
8	04:35		05:27	06:29		07:29
	22:02		21:11	19:53		18:33
9	04:36		05:29	06:31		07:31
	22:01		21:08	19:51		18:30
10	04:38		05:31	06:33		07:33
	22:00		21:06	19:48		18:28
11	04:39		05:33	06:35		07:36
	21:59		21:04	19:45		18:25
12	04:40		05:35	06:37		07:38
	21:58		21:01	19:43		18:23
13	04:42		05:37	06:39		07:40
	21:57		20:59	19:40		18:20
14	04:43		05:39	06:41		07:42
	21:55		20:57	19:37		18:17
15	04:45		05:41	06:43		07:44
	21:54		20:54	19:34		18:15
16	04:46		05:43	06:45		07:46
	21:53		20:52	19:32		18:12
17	04:48		05:45	06:47		07:48
	21:51		20:50	19:29		18:10
18	04:49		05:47	19:33 (AP2)	06:49	07:50
	21:50		20:47	8 19:41 (AP2)	19:26	18:07
19	04:51		05:49	19:30 (AP2)	06:51	07:52
	21:48		20:45	14 19:44 (AP2)	19:24	18:05
20	04:52		05:51	19:28 (AP2)	06:53	07:54
	21:47		20:42	17 19:45 (AP2)	19:21	18:02
21	04:54		05:53	19:27 (AP2)	06:55	07:57
	21:45		20:40	19 19:46 (AP2)	19:18	18:00
22	04:56		05:55	19:26 (AP2)	06:57	07:59
	21:44		20:37	21 19:47 (AP2)	19:16	17:57
23	04:57		05:57	19:25 (AP2)	06:59	08:01
	21:42		20:35	23 19:48 (AP2)	19:13	17:55
24	04:59		05:59	19:24 (AP2)	07:01	08:03
	21:40		20:32	24 19:48 (AP2)	19:10	17:53
25	05:01		06:01	19:24 (AP2)	07:03	07:05
	21:39		20:30	24 19:48 (AP2)	19:08	16:50
26	05:03		06:03	19:23 (AP2)	07:05	07:07
	21:37		20:27	24 19:47 (AP2)	19:05	16:48
27	05:04		06:05	19:23 (AP2)	07:07	07:09
	21:35		20:25	24 19:47 (AP2)	19:02	16:45
28	05:06		06:07	19:23 (AP2)	07:09	07:12
	21:33		20:22	23 19:46 (AP2)	19:00	16:43
29	05:08		06:09	19:23 (AP2)	07:11	07:14
	21:31		20:20	23 19:46 (AP2)	18:57	16:41
30	05:10		06:11	19:23 (AP2)	07:13	07:16
	21:29		20:17	22 19:45 (AP2)	18:54	16:39
31	05:12		06:13	19:24 (AP2)		07:18
	21:27		20:14	20 19:44 (AP2)		16:36
Potential sun hours	529	469		384		324
Total, worst case	19		286	37		248
Sun reduction	0,47		0,52	0,43		217
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	9		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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Robež nieki - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (628)
 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 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	06:45 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 20:58	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 20:00	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 17:00	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 21:00	06:40 19:40	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 19:38	07:42 18:18	07:49 16:08	08:40 15:37
15	08:39 16:09	07:43 17:15	06:33 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	06:56 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 18:31	05:53 20:35	04:49 21:34	04:24 22:08	04:56 21:44	05:56 20:38	06:58 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	07:00 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	07:17 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	08:07 16:48	08:13 15:49	08:48 15:41
27	08:22 16:33	07:14 17:42	06:01 18:41	05:41 20:45	04:41 21:43	04:26 22:08	05:05 21:35	06:06 20:25	07:08 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 20:23	07:10 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	07:12 18:57	08:14 16:41	08:18 15:46	08:49 15:43
30	08:16 16:40		06:52 19:47	05:34 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Rozes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (624)
 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 (DD3)	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Rozes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (624)
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) 07:24	16:53 (DD3) 07:29	15:41 08:28
7	04:35 22:03	05:26 21:13	06:28 19:56	18:49 (O3) 07:26	16:49 (DD3) 07:31	15:40 08:30
8	04:36 22:02	05:28 21:11	06:30 19:54	19:09 (O3) 07:26	17:07 (DD3) 07:33	15:40 08:31
9	04:37 22:01	05:30 21:08	06:32 19:51	18:48 (O3) 07:28	16:47 (DD3) 07:33	15:39 08:31
10	04:38 22:00	05:32 21:06	06:34 19:48	19:09 (O3) 07:28	17:09 (DD3) 07:33	15:39 08:31
11	04:40 21:59	05:34 21:04	06:36 19:46	18:45 (O3) 07:30	16:45 (DD3) 07:36	15:38 08:33
12	04:41 21:58	05:36 21:02	06:38 19:43	18:46 (O3) 07:32	16:44 (DD3) 07:38	15:37 08:34
13	04:42 21:57	05:38 20:59	06:40 19:40	18:44 (O3) 07:38	16:40 (DD3) 07:44	15:37 08:38
14	04:44 21:55	05:40 20:57	06:42 19:38	19:08 (O3) 07:36	17:13 (DD3) 07:42	15:37 08:37
15	04:45 21:54	05:42 20:55	06:44 19:35	18:45 (O3) 07:34	16:41 (DD3) 07:42	15:37 08:37
16	04:47 21:53	05:44 20:52	06:46 19:32	18:46 (O3) 07:44	16:39 (DD3) 07:51	15:37 08:41
17	04:48 21:51	05:46 20:50	06:48 19:29	19:05 (O3) 07:46	17:14 (DD3) 07:53	15:37 08:42
18	04:50 21:50	05:48 20:47	06:49 19:27	19:02 (O3) 07:48	16:38 (DD3) 07:55	15:37 08:43
19	04:51 21:49	05:50 20:45	06:51 19:24	19:00 (O3) 07:50	16:37 (DD3) 07:57	15:37 08:44
20	04:53 21:47	05:52 20:43	06:53 19:21	18:05 (DD1) 07:55	17:12 (DD3) 08:01	15:37 08:45
21	04:55 21:45	05:54 20:40	06:55 19:19	18:16 (DD1) 08:03	16:38 (DD3) 08:09	15:38 08:46
22	04:56 21:44	05:56 20:38	06:57 19:16	18:18 (DD1) 08:00	17:11 (DD3) 08:05	15:38 08:47
23	04:58 21:42	05:58 20:35	06:59 19:13	18:00 (DD1) 07:59	16:39 (DD3) 08:05	15:38 08:47
24	05:00 21:41	06:00 20:33	07:01 19:11	17:59 (DD1) 08:01	16:40 (DD3) 08:07	15:39 08:47
25	05:02 21:39	06:02 20:30	07:03 19:08	18:20 (DD1) 07:56	17:12 (O5) 15:54	14:55 (P19.2b) 15:39
26	05:03 21:37	06:04 20:27	07:05 19:05	18:21 (DD1) 07:53	17:11 (O5) 15:52	14:55 (P19.2b) 15:40
27	05:05 21:35	06:06 20:25	07:07 19:03	18:21 (DD1) 07:53	16:41 (DD3) 08:09	14:56 (P19.2b) 15:40
28	05:07 21:33	06:08 20:22	07:09 19:00	17:57 (DD1) 07:05	15:42 (DD3) 08:11	14:56 (P19.2b) 15:40
29	05:09 21:31	06:10 20:20	07:11 18:57	18:21 (DD1) 07:07	16:11 (O5) 15:51	14:56 (P19.2b) 15:41
30	05:11 21:30	06:12 20:17	07:13 18:55	18:21 (DD1) 07:07	15:44 (DD3) 08:13	14:57 (P19.2b) 15:41
31	05:13 21:28	06:14 20:15	07:15 18:52	18:21 (DD1) 07:10	16:11 (O5) 15:50	14:57 (P19.2b) 15:41
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Rož ulejas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (621)
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 16:35	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	07:22 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	06:58 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 21:57	04:35 22:02	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 20:05	05:16 21:07	04:28 21:59	04:36 22:02	05:28 21:11	06:30 19:53	07:30 18:33	07:35 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	08:43 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	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	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	08:37 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 16:05	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 21:48	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 15:38
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	04:25 22:07	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 16:25	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 18:34	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	05:02 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 20:27	07:05 19:05	08:07 16:48	08:13 15:49	08:48 15:41
27	08:21 16:33	07:14 17:42	06:00 18:41	05:41 20:45	04:41 21:42	04:26 22:07	05:05 21:35	06:06 20:25	07:07 19:02	08:09 16:46	08:14 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 21:45	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 15:44
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 18:54	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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Rubeni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (646)
 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	04:38	05:30	06:32	07:32	07:38	08:34
	15:59	17:02	18:03	20:08	21:09	22:00	22:01	21:09	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	15:38
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	21:57	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	06:01	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	05:55	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		

Flickering_Nordex_N175_Prikuli_A

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 09:53/4.1.254

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Rubeniš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (625)
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		16:18 (DD3)	06:47	05:31	04:35	04:29	05:14	06:16		07:15		17:49 (DD1)	07:20	08:22					
15:47	16:44			17:46	17	16:35 (DD3)	19:51	20:53	21:50	22:06	21:26	20:12		18:52	20	18:09 (DD1)	16:35	15:44					
08:48	08:11			07:06		16:21 (DD3)	06:44	05:29	04:34	04:30	05:16	06:18		07:17		18:48 (DD1)	07:23	08:23					
15:48	16:46			17:48	10	16:31 (DD3)	19:53	20:55	21:51	22:06	21:24	20:09		18:49	21	17:09 (DD1)	16:32	15:43					
08:48	08:09			07:04		06:42	05:27	04:33	04:31	05:18	06:20	07:19		07:19		17:47 (DD1)	07:25	08:25					
15:50	16:48			17:50		19:55	20:57	21:53	22:05	21:21	20:07	18:47		18:47	22	18:09 (DD1)	16:30	15:42					
08:47	08:07			07:01		17:16 (DD1)	06:39	05:24	04:32	04:32	05:20	06:22		07:22		17:47 (DD1)	07:27	08:27					
15:51	16:51			17:52	8	17:24 (DD1)	19:57	20:59	21:54	22:05	21:19	20:04		18:44	22	18:09 (DD1)	16:28	15:41					
08:47	08:05			06:59		17:14 (DD1)	06:36	05:22	04:31	04:33	05:22	06:24		07:24		17:47 (DD1)	07:29	08:28					
15:52	16:53			17:55	11	17:25 (DD1)	19:59	21:01	21:55	22:04	21:17	20:01		18:41	21	18:08 (DD1)	16:26	15:41					
08:46	08:03			06:56		17:13 (DD1)	06:34	05:20	04:30	04:34	05:24	06:26		07:26		17:47 (DD1)	07:31	08:30					
15:54	16:55			17:57	15	17:28 (DD1)	20:01	21:03	21:56	22:03	21:15	19:59		18:39	20	18:07 (DD1)	16:24	15:40					
08:46	08:00			06:53		17:11 (DD1)	06:31	05:18	04:29	04:35	05:26	06:28		07:28		17:47 (DD1)	07:33	08:31					
15:55	16:57			17:59	19	17:30 (DD1)	20:04	21:05	21:58	22:03	21:13	19:56		18:36	18	18:05 (DD1)	16:22	15:39					
08:45	07:58			06:51		17:10 (DD1)	06:29	05:16	04:28	04:36	05:28	06:30		07:30		17:48 (DD1)	07:36	08:33					
15:57	16:59			18:01	21	17:31 (DD1)	20:06	21:07	21:59	22:02	21:11	19:54		18:33	14	18:02 (DD1)	16:20	15:39					
08:44	07:56			06:48		17:10 (DD1)	06:26	05:13	04:28	04:37	05:30	06:32		07:32		17:50 (DD1)	07:38	08:34					
15:58	17:02			18:03	22	17:32 (DD1)	20:08	21:09	22:00	22:01	21:08	19:51		18:31	10	18:00 (DD1)	16:18	15:38					
08:44	07:54			06:46		17:09 (DD1)	06:23	05:11	04:27	04:38	05:32	06:34		07:34		17:53 (DD1)	07:40	08:35					
16:00	17:04			18:05	22	17:31 (DD1)	20:10	21:11	22:01	22:00	21:06	19:48		18:28	4	17:57 (DD1)	16:16	15:38					
08:43	07:52			06:43		17:09 (DD1)	06:21	05:09	04:26	04:40	05:34	06:36		07:36		16:58 (DD3)	07:42	08:37					
16:02	17:06																						

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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Rudzdobes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (756)
 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	07:22	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Salas pamatskola (kad. apz. 76740020242001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (675)
 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	08:43	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	05:02	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	08:46
	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		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Salas pamatskola (kad. apz. 76740020242004) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (793)

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)	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Sauleskalni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (639)
 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	07:15	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	06:45	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	08:47	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	20:01	18:41	16:26	15:41
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
	15:56	16:57	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	04:37	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	08:43	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	05:10	04:27	04:40	05:34	06:36	07:36	07:42	08:37
	16:02	17:06	18:07	20:12	21:13	22:01	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	15:37
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	21:56	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	06:32	06:11	05:02	04:25	04:46	05:42	06:44	07:44	07:50	08:41
	16:09	17:15	18:16	20:20	21:21	22:04	21:54	20:55	19:35	18:16	16:07	15:37
16	08:37	07:40	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	04:49	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	19:29	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	07:50	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	07:33	06:22	06:00	04:54	04:25	04:52	05:50	06:52	07:53	07:59	08:44
	16:17	17:24	18:24	20:28	21:29	22:07	21:48	20:45	19:24	18:05	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	20:42	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	20:32	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	06:57	07:59	08:05	08:46
	16:23	17:31	18:30	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	05:50	04:48	04:25	04:58	05:58	06:59	08:01	08:07	08:47
	16:25	17:33	18:33	20:37	21:36	22:07	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	07:01	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	04:44	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	15:41
26	08:23	07:16	06:03	05:43	04:43	04:26	05:04	06:04	07:05	08:07	08:13	08:48
	16:31	17:40	18:39	20:43	21:41	22:08	21:37	20:27	19:05	17:49	15:50	15:41
27	08:21	07:14	06:01	05:41	04:42	04:27	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	19:03	17:46	15:49	15:42
28	08:20	07:11	05:58	05:38	04:40	04:27	05:07	06:08	07:09	08:12	08:16	08:48
	16:35	17:44	18:43	20:47	21:44	22:07	21:33	20:22	19:00	17:44	15:47	15:43
29	08:18		06:55	05:36	04:39	04:28	05:09	06:10	07:11	08:14	08:18	08:48
	16:38		19:45	20:49	21:45	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	07:13	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Saulrieti - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (609)
 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 20:01	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	08:48 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 20:01	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Saulstari - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (690)
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
	15:51	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	04:38	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	04:23	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	17:53	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		19:44	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Senci - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (760)
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
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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
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	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
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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
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	16:34	17:43	18:42	20:47	21:44	22:07	21:33	20:22	18:59	16:43	15:46	15:42
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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Siladruvas (kad. apz. 76740020177001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (761) 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	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	05:02 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 21:43	04:25 22:08	05:04 21:35	06:05 20:25	07:07 19:02	08:09 16:45	08:15 15:47	08:48 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	08:11 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	08:13 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	08:16 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Siladruvas (kad. apz. 76740020212001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (708)
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 16:30	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 21:57	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	05:06 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	05:04 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	05:03 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	04:25 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	05:38 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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Silares - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (719)
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 17:05	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 15:36
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	07:18 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	07:13 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Sirmiš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (698)
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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		17:48	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	15:46	15:42
29	08:18		06:55			05:35	04:38	04:27	05:08	06:09	07:11	08:14		17:48	08:18	08:49
	16:37		19:45			20:49	21:46	22:07	21:31	20:20	18:57	8	17:55 (PrRR3)	16:41	15:45	15:43
30	08:16		06:52			05:33	04:36	04:27	05:10	06:11	07:13	17:44 (PrRR3)		17:16	08:20	08:49
	16:39		19:47			20:51	21:47	22:07	21:29	20:17	18:54	13	17:57 (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		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)	Last time (hh:mm) with flicker	(WTG causing flicker last time)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Skalbes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (615)
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) 17:46	07:09 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) 17:48	07:06 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	07:04 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	05:24 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 15:41
5	08:47 15:52	08:05 16:53	15:30 (DD3) 17:55	07:02 19:59	05:22 21:01	04:33 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	17:57 19:01	06:56 19:57	06:34 20:01	04:30 21:03	04:34 21:57	05:24 22:03	06:26 21:15	07:26 19:59	07:31 18:39	08:30 16:24
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 22:01	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	15:16 (DD3) 17:06	07:52 18:07	06:43 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	15:15 (DD3) 17:08	07:50 18:09	06:40 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	15:14 (DD3) 17:11	07:47 18:12	06:38 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	15:13 (DD3) 17:13	07:45 18:14	06:35 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	15:12 (DD3) 17:15	07:43 18:16	06:32 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	15:11 (DD3) 17:17	07:41 18:18	06:30 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	15:12 (DD3) 17:20	07:38 18:20	06:27 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	15:11 (DD3) 17:22	07:36 18:22	06:24 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	15:11 (DD3) 17:24	07:33 18:24	06:22 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	15:11 (DD3) 17:26	07:31 18:26	06:19 20:30	05:58 21:31	04:52 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	15:11 (DD3) 17:28	07:29 18:28	06:16 20:33	05:55 21:32	04:50 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	15:11 (DD3) 17:31	07:26 18:30	06:14 20:35	05:53 21:34	04:49 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	15:11 (DD3) 17:33	07:24 18:32	06:11 20:37	05:50 21:36	04:47 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	15:11 (DD3) 17:35	07:21 18:35	06:08 20:39	05:48 21:38	04:46 22:08	04:25 21:41	05:00 20:33	06:00 19:11	07:01 17:53	08:03 15:52	08:47 15:40
25	08:25 16:29	15:11 (DD3) 17:37	07:19 18:37	06:06 20:41	05:45 21:39	04:44 22:08	04:25 21:39	05:02 20:30	06:02 19:08	07:03 16:51	07:05 15:51	08:48 15:40
26	08:23 16:31	15:12 (DD3) 17:39	07:16 18:39	06:03 20:43	05:43 21:41	04:26 22:08	05:03 21:37	06:04 20:27	07:05 19:05	07:07 16:48	07:08 15:49	08:48 15:41
27	08:22 16:33	15:12 (DD3) 17:42	07:14 18:41	06:00 20:45	05:41 21:43	04:26 22:08	05:05 21:35	06:06 20:25	07:07 19:03	07:10 16:46	07:11 15:48	08:48 15:42
28	08:20 16:35	15:12 (DD3) 17:44	07:11 18:43	05:58 20:47	05:38 21:44	04:27 22:07	05:07 21:33	06:08 20:22	07:09 19:00	07:12 16:44	07:13 15:47	08:48 15:43
29	08:18 16:37	15:13 (DD3) 17:44	07:09 18:45	06:55 20:49	05:36 21:46	04:38 22:07	05:09 21:31	06:10 20:20	07:11 18:57	07:14 16:41	07:15 15:46	08:49 15:44
30	08:16 16:40	15:14 (DD3) 17:45	07:07 18:46	06:52 20:51	05:33 21:47	04:37 22:07	05:11 21:30	06:12 20:17	07:13 18:55	07:16 16:39	07:17 15:45	08:49 15:45
31	08:14 16:42	15:15 (DD3) 17:46	07:05 18:47	06:50 20:52	05:34 21:49	04:36 22:08	05:13 21:28	06:14 20:15	07:18 18:57	07:18 16:37	07:19 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Slokas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (676)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Smelteri - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (680)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Smelteru biblioteka - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (741)

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	08:12	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)	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Smelteru kapseta - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (720) 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	05:31 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 19:59	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	08:43 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 18:23	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	08:46 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 20:39	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	04:26 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	08:12 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)	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Smedes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (638)
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)	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Sniedzini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (765)
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
	16:05	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Sporanu majas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (734)
 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 08:10 16:46	07:09 17:45 16:45 (AP2)	06:47 19:51 16:45 (AP2)	05:31 20:53 18:33 (Pr3a)	04:34 21:50 19:43 (PrRR3)
2	08:48 15:48 16:46	08:10 08:09 16:46	07:06 17:48 16:45 (AP2)	06:44 19:53 16:45 (AP2)	05:28 20:55 18:32 (Pr3a)	04:33 21:51 19:43 (PrRR3)
3	08:48 15:49 16:48	08:09 07:56 16:54	07:03 17:50 16:45 (AP2)	06:41 19:55 16:45 (AP2)	05:26 20:57 18:32 (Pr3a)	04:32 21:53 19:43 (PrRR3)
4	08:47 15:50 16:50	08:07 08:04 16:52	07:01 17:52 16:45 (AP2)	06:39 19:57 16:45 (AP2)	05:24 20:59 18:32 (Pr3a)	04:31 21:54 19:44 (PrRR3)
5	08:47 15:52 16:52	08:04 08:02 16:54	06:58 17:54 16:45 (AP2)	06:36 19:59 16:45 (AP2)	05:21 21:01 18:32 (Pr3a)	04:30 21:55 19:44 (PrRR3)
6	08:46 15:53 16:54	08:02 07:56 16:54	06:56 17:56 16:45 (AP2)	06:33 20:01 16:45 (AP2)	05:19 21:03 18:33 (Pr3a)	04:29 21:57 19:44 (PrRR3)
7	08:46 15:54 16:57	08:00 07:58 16:59	06:53 17:58 16:45 (AP2)	06:31 20:03 16:45 (AP2)	05:17 21:05 18:33 (Pr3a)	04:28 21:58 19:44 (PrRR3)
8	08:45 15:56 16:59	07:58 07:56 17:01	06:51 18:01 16:45 (AP2)	06:28 20:05 16:45 (AP2)	05:15 21:07 18:33 (Pr3a)	04:27 21:59 19:44 (PrRR3)
9	08:44 15:58 17:01	07:56 07:54 17:03	06:48 18:03 16:45 (AP2)	06:25 20:07 16:45 (AP2)	05:13 21:09 18:35 (Pr3a)	04:27 22:00 19:44 (PrRR3)
10	08:44 15:59 17:03	07:54 07:52 17:06	06:45 18:05 16:45 (AP2)	06:23 20:09 16:45 (AP2)	05:11 21:11 18:36 (Pr3a)	04:26 22:01 19:44 (PrRR3)
11	08:43 16:01 17:06	07:52 07:50 17:08	06:43 18:07 16:45 (AP2)	06:20 20:12 16:45 (AP2)	05:09 21:13 18:38 (Pr3a)	04:26 22:02 19:45 (PrRR3)
12	08:42 16:03 17:08	07:49 07:47 17:10	06:40 18:09 16:45 (AP2)	06:18 20:14 16:45 (AP2)	05:07 21:15 18:40 (Pr3a)	04:25 22:03 19:45 (PrRR3)
13	08:41 16:04 17:10	07:47 07:45 17:12	06:37 18:11 16:45 (AP2)	06:15 20:16 16:45 (AP2)	05:05 21:17 18:51 (Pr3a)	04:25 22:04 19:45 (PrRR3)
14	08:40 16:06 17:12	07:45 07:43 17:15	06:35 18:13 16:45 (AP2)	06:12 20:18 16:45 (AP2)	05:03 21:19 19:54 (PrRR3)	04:24 22:04 19:45 (PrRR3)
15	08:39 16:08 17:15	07:43 07:41 17:17	06:32 18:15 16:45 (AP2)	06:10 20:20 16:45 (AP2)	05:01 21:21 19:52 (PrRR3)	04:24 22:05 19:46 (PrRR3)
16	08:38 16:10 17:17	07:40 07:38 17:19	06:29 18:18 16:45 (AP2)	06:07 20:22 16:45 (AP2)	04:59 21:23 19:51 (PrRR3)	04:24 22:05 19:45 (PrRR3)
17	08:36 16:12 17:19	07:38 07:36 17:21	06:27 18:20 16:45 (AP2)	06:05 20:24 16:45 (AP2)	04:57 21:25 19:50 (PrRR3)	04:24 22:06 19:45 (PrRR3)
18	08:35 16:14 17:21	07:36 07:34 17:23	06:24 18:22 16:45 (AP2)	06:02 20:26 16:45 (AP2)	04:55 21:27 19:49 (PrRR3)	04:23 22:06 19:46 (PrRR3)
19	08:34 16:16 17:24	07:33 07:31 17:25	06:21 18:24 16:45 (AP2)	06:00 20:28 16:45 (AP2)	04:53 21:29 19:47 (PrRR3)	04:23 22:07 19:46 (PrRR3)
20	08:32 16:18 17:26	07:31 07:29 17:27	06:19 18:26 16:45 (AP2)	05:57 20:30 16:45 (AP2)	04:52 21:31 19:47 (PrRR3)	04:23 22:07 19:47 (PrRR3)
21	08:31 16:20 17:28	07:28 07:26 17:29	06:16 18:28 16:45 (AP2)	05:55 20:32 16:45 (AP2)	04:50 21:32 19:46 (PrRR3)	04:24 22:07 19:47 (PrRR3)
22	08:30 16:22 17:30	07:26 07:24 17:31	06:13 18:30 16:45 (AP2)	05:52 20:34 16:45 (AP2)	04:48 21:34 19:46 (PrRR3)	04:24 22:08 19:47 (PrRR3)
23	08:28 16:24 17:32	07:24 07:22 17:33	06:11 18:32 16:45 (AP2)	05:50 20:37 16:45 (AP2)	04:46 21:36 19:46 (PrRR3)	04:24 22:08 19:47 (PrRR3)
24	08:26 16:26 17:35	07:21 07:19 17:35	06:08 18:34 16:45 (AP2)	05:47 20:39 16:45 (AP2)	04:45 21:38 19:45 (PrRR3)	04:24 22:08 19:48 (PrRR3)
25	08:25 16:28 17:37	07:19 07:17 17:37	06:05 18:36 16:45 (AP2)	05:45 20:41 16:45 (AP2)	04:43 21:39 19:45 (PrRR3)	04:25 22:08 19:47 (PrRR3)
26	08:23 16:30 17:39	07:16 07:14 17:39	06:03 18:38 16:45 (AP2)	05:42 20:43 16:45 (AP2)	04:42 21:41 19:45 (PrRR3)	04:25 22:08 19:47 (PrRR3)
27	08:21 16:32 17:41	07:14 07:12 17:41	06:00 18:40 16:45 (AP2)	05:40 20:45 16:45 (AP2)	04:40 21:43 19:45 (PrRR3)	04:26 22:08 19:48 (PrRR3)
28	08:20 16:35 17:43	07:11 07:09 17:43	05:57 18:43 16:45 (AP2)	05:38 20:47 16:45 (AP2)	04:39 21:44 19:44 (PrRR3)	04:26 22:08 19:49 (PrRR3)
29	08:18 16:37 17:46	07:09 07:07 17:46	05:55 18:45 16:45 (AP2)	05:35 20:49 16:45 (AP2)	04:38 21:46 19:44 (PrRR3)	04:27 22:07 19:48 (PrRR3)
30	08:16 16:39 17:48	07:07 07:05 17:48	05:52 18:47 16:45 (AP2)	05:33 20:51 16:45 (AP2)	04:36 21:47 19:44 (PrRR3)	04:27 22:07 19:49 (PrRR3)
31	08:14 16:41 17:50	07:05 07:03 17:50	05:49 18:49 16:45 (AP2)	05:30 20:53 16:45 (AP2)	04:35 21:49 19:44 (PrRR3)	04:27 22:07 19:49 (PrRR3)
Potential sun hours	236	266	366	426	507	528
Total, worst case		249	222	545	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	87	241	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Sporanu majas - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (734)
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		18:37 (Pr3a)	07:15						07:20	08:22			
	22:06	52	20:41 (PrRR3)	21:25	31	20:25 (PrRR3)	20:12	17	18:54 (Pr3a)	18:51						16:34	15:43			
2	04:29		19:49 (PrRR3)	05:16		19:52 (Pr25)	06:17		18:35 (Pr3a)	07:17						07:22	08:23			
	22:06	51	20:40 (PrRR3)	21:23	23	20:20 (PrRR3)	20:09	21	18:56 (Pr3a)	18:49						16:32	15:42			
3	04:30		19:49 (PrRR3)	05:18		19:51 (Pr25)	06:19		18:33 (Pr3a)	07:19						07:25	08:25			
	22:05	51	20:40 (PrRR3)	21:21	20	20:11 (Pr25)	20:07	24	18:57 (Pr3a)	18:46						16:30	15:41			
4	04:31		19:49 (PrRR3)	05:20		19:50 (Pr25)	06:21		18:31 (Pr3a)	07:21						07:27	08:27			
	22:05	52	20:41 (PrRR3)	21:19	23	20:13 (Pr25)	20:04	27	18:58 (Pr3a)	18:44						16:27	15:41			
5	04:32		19:50 (PrRR3)	05:21		19:49 (Pr25)	06:23		18:29 (Pr3a)	07:23						07:29	08:28			
	22:04	51	20:41 (PrRR3)	21:17	24	20:13 (Pr25)	20:01	28	18:57 (Pr3a)	18:41						16:25	15:40			
6	04:33		19:50 (PrRR3)	05:23		19:48 (Pr25)	06:25		18:28 (Pr3a)	07:25						07:31	08:30			
	22:03	51	20:41 (PrRR3)	21:15	25	20:13 (Pr25)	19:59	30	18:58 (Pr3a)	18:38						16:23	15:39			
7	04:34		19:50 (PrRR3)	05:25		19:47 (Pr25)	06:27		18:27 (Pr3a)	07:27						07:33	08:31			
	22:03	51	20:41 (PrRR3)	21:13	27	20:14 (Pr25)	19:56	31	18:58 (Pr3a)	18:36						16:21	15:38			
8	04:35		19:50 (PrRR3)	05:27		19:47 (Pr25)	06:29		18:26 (Pr3a)	07:29						07:35	08:33			
	22:02	51	20:41 (PrRR3)	21:11	27	20:14 (Pr25)	19:53	32	18:58 (Pr3a)	18:33						16:19	15:38			
9	04:36		19:51 (PrRR3)	05:29		19:47 (Pr25)	06:31		18:26 (Pr3a)	07:31						07:38	08:34			
	22:01	50	20:41 (PrRR3)	21:08	28	20:15 (Pr25)	19:51	32	18:58 (Pr3a)	18:30						16:17	15:37			
10	04:38		19:51 (PrRR3)	05:31		19:46 (Pr25)	06:33		18:26 (Pr3a)	07:34						07:40	08:35			
	22:00	50	20:41 (PrRR3)	21:06	29	20:15 (Pr25)	19:48	32	18:58 (Pr3a)	18:28						16:15	15:37			
11	04:39		19:52 (PrRR3)	05:33		19:45 (Pr25)	06:35		18:25 (Pr3a)	07:36						07:42	08:37			
	21:59	50	20:42 (PrRR3)	21:04	29	20:14 (Pr25)	19:45	32	18:57 (Pr3a)	18:25						16:13	15:37			
12	04:40		19:52 (PrRR3)	05:35		19:45 (Pr25)	06:37		18:25 (Pr3a)	07:38			17:13 (AP2)			07:44	08:38			
	21:58	49	20:41 (PrRR3)	21:02	29	20:14 (Pr25)	19:43	32	18:57 (Pr3a)	18:23			2	17:15 (AP2)		16:11	15:36			
13	04:42		19:52 (PrRR3)	05:37		19:45 (Pr25)	06:39		18:25 (Pr3a)	07:40						07:46	08:39			
	21:57	49	20:41 (PrRR3)	20:59	29	20:14 (Pr25)	19:40	31	18:56 (Pr3a)	18:20			11	17:19 (AP2)		16:09	15:36			
14	04:43		19:52 (PrRR3)	05:39		19:46 (Pr25)	06:41		18:26 (Pr3a)	07:42						07:48	08:40			
	21:55	49	20:41 (PrRR3)	20:57	28	20:14 (Pr25)	19:37	29	18:55 (Pr3a)	18:17			15	17:21 (AP2)		16:07	15:36			
15	04:44		19:53 (PrRR3)	05:41		19:46 (Pr25)	06:43		18:26 (Pr3a)	07:44						07:50	08:41			
	21:54	48	20:41 (PrRR3)	20:54	27	20:13 (Pr25)	19:34	28	18:54 (Pr3a)	18:15			18	17:22 (AP2)		16:06	15:36			
16	04:46		19:53 (PrRR3)	05:43		19:46 (Pr25)	06:45		18:27 (Pr3a)	07:46						07:53	08:42			
	21:53	48	20:41 (PrRR3)	20:52	27	20:13 (Pr25)	19:32	26	18:53 (Pr3a)	18:12			20	17:23 (AP2)		16:04	15:36			
17	04:47		19:53 (PrRR3)	05:45		19:47 (Pr25)	06:47		18:27 (Pr3a)	07:48						07:55	08:43			
	21:51	47	20:40 (PrRR3)	20:50	25	20:12 (Pr25)	19:29	25	18:52 (Pr3a)	18:10			22	17:24 (AP2)		16:02	15:36			
18	04:49		19:54 (PrRR3)	05:47		19:47 (Pr25)	06:49		18:29 (Pr3a)	07:50						07:57	08:44			
	21:50	46	20:40 (PrRR3)	20:47	23	20:10 (Pr25)	19:26	21	18:50 (Pr3a)	18:07			22	17:24 (AP2)		16:01	15:36			
19	04:51		19:54 (PrRR3)	05:49		19:48 (Pr25)	06:51		18:29 (Pr3a)	07:52						07:59	08:45			
	21:49	46	20:40 (PrRR3)	20:45	21	20:09 (Pr25)	19:24	17	18:46 (Pr3a)	18:05			22	17:23 (AP2)		15:59	15:36			
20	04:52		19:55 (PrRR3)	05:51		19:49 (Pr25)	06:53		18:33 (Pr3a)	07:54						08:01	08:45			
	21:47	45	20:40 (PrRR3)	20:42	19	20:08 (Pr25)	19:21	9	18:42 (Pr3a)	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						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						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						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			07:01			08:03						08:09	08:48			
	21:40	39	20:37 (PrRR3)	20:32			19:10			17:53			17	17:20 (AP2)		15:51	15:39			
25	05:01		19:59 (PrRR3)	06:01			07:03			07:05						16:04 (AP2)	08:11			
	21:39	38	20:37 (PrRR3)	20:30			19:08			16:50			13	16:17 (AP2)		15:50	15:39			
26	05:03		19:59 (PrRR3)	06:03			07:05			07:07						16:05 (AP2)	08:13			
	21:37	36	20:35 (PrRR3)	20:27			19:05			16:48			9	16:14 (AP2)		15:49	15:40			
27	05:04		20:01 (PrRR3)	06:05			07:07			07:09						16:09 (AP2)	08:15			
	21:35	34	20:35 (PrRR3)	20:25			19:02			16:45			4	16:13 (AP2)		15:48	15:41			
28	05:06		20:02 (PrRR3)	06:07			07:09			07:12						08:16	08:48			
	21:33	32	20:34 (PrRR3)	20:22			19:00			16:43						15:46	15:42			
29	05:08		20:03 (PrRR3)	06:09			07:11			07:14						08:18	08:49			
	21:31	29	20:32 (PrRR3)	20:20			18:57			16:41						15:45	15:43			
30	05:10		20:00 (Pr25)	06:11			07:13			07:16						08:20	08:49			
	21:29	28	20:30 (PrRR3)	20:17			18:54			16:39						15:44	15:44			
31	05:12		19:56 (Pr25)	06:13		18:40 (Pr3a)				07:18						08:48				
	21:27	32	20:28 (PrRR3)	20:14	11	18:51 (Pr3a)				16:36						15:45				
Potential sun hours	529			469			384			324						248	217			
Total, worst case		1381			549		524			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			287		226			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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Spridiš i 3 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (771)
 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 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	08:44 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 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 21:49		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Spulgas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (623)
 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 18:41	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 20:01	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Stikani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (695)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

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Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Sturīš i (kad. apz. 76740020069001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (671)

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	08:04	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)	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)
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SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Sturīš i (kad. apz. 76740020069009) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (800)
 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_A Shadow receptor: Tebeci - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (659)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Tebeci - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (659)
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	07:23 16:32	08:24 15:42 64
3	04:30 22:06	05:18 21:22	06:19 20:07	07:19 18:46 19	07:25 16:30 12	08:25 15:41 63
4	04:31 22:05	05:20 21:20	06:21 20:04	07:21 18:44 24	07:27 16:28 19	08:27 15:41 61
5	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41 27	07:29 16:25 24	08:29 15:40 60
6	04:33 22:04	05:24 21:15	06:25 19:59	07:25 18:38 30	07:31 16:23 27	08:30 15:39 58
7	04:34 22:03	05:26 21:13	06:27 19:56	07:28 18:36 31	07:34 16:21 31	08:32 15:39 56
8	04:35 22:02	05:27 21:11	06:29 19:53	07:30 18:33 33	07:36 16:19 32	08:33 15:38 55
9	04:36 22:01	05:29 21:09	06:31 19:51	07:32 18:31 45	07:38 16:17 43	08:34 15:38 59
10	04:38 22:00	05:31 21:06	06:33 19:48	07:34 18:28 51	07:40 16:15 51	08:36 15:37 60
11	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25 55	07:42 16:13 55	08:37 15:37 61
12	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23 58	07:44 16:11 59	08:38 15:36 60
13	04:42 21:57	05:37 20:59	06:39 19:40	07:40 18:20 60	07:46 16:09 63	08:39 15:36 59
14	04:43 21:56	05:39 20:57	06:41 19:37	07:42 18:18 60	07:49 16:08 65	08:40 15:36 58
15	04:45 21:54	05:41 20:55	06:43 19:35	07:44 18:15 62	07:51 16:06 67	08:41 15:36 57
16	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:13 62	07:53 16:04 68	08:42 15:36 56
17	04:48 21:52	05:45 20:50	06:47 19:29	07:48 18:10 61	07:55 16:02 70	08:43 15:36 56
18	04:49 21:50	05:47 20:47	06:49 19:27	07:50 18:07 59	07:57 16:01 71	08:44 15:36 53
19	04:51 21:49	05:49 20:45	06:51 19:24	07:53 18:05 57	07:59 15:59 71	08:45 15:37 51
20	04:52 21:47	05:51 20:43	06:53 19:21	07:55 18:03 53	08:01 15:57 72	08:46 15:37 50
21	04:54 21:46	05:53 20:40	06:55 19:19	07:57 18:00 51	08:03 15:56 73	08:46 15:37 50
22	04:56 21:44	05:55 20:38	06:57 19:16	07:59 17:58 44	08:05 15:54 73	08:47 15:38 50
23	04:57 21:42	05:57 20:35	06:59 19:13	08:01 17:55 40	08:07 15:53 71	08:47 15:38 50
24	04:59 21:41	05:59 20:33	07:01 19:10	08:03 17:53 31	08:09 15:52 71	08:48 15:39 50
25	05:01 21:39	06:01 20:30	07:03 19:08	07:05 16:50 13	08:11 15:50 71	08:48 15:40 53
26	05:03 21:37	06:03 20:27	07:05 19:05	07:07 16:48 6	08:13 15:49 71	08:48 15:40 54
27	05:05 21:35	06:05 20:25	07:07 19:02	07:10 16:46	08:15 15:48 69	08:49 15:41 56
28	05:06 21:34	06:07 20:22	07:09 19:00	07:12 16:43	08:17 15:46 69	08:49 15:42 58
29	05:08 21:32	06:09 20:20	07:11 18:57	07:14 16:41	08:18 15:45 67	08:49 15:43 59
30	05:10 21:30	06:11 20:17	07:13 18:54	07:16 16:39	08:20 15:44 66	08:49 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)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Torna iela 10 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (740)
 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	04:55	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)	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Torna iela 11 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (724)
 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
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	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
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	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)

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Torna iela 12 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (795)
 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)

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Torna iela 2 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (721)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Torna iela 3 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (794)
 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	15:38
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
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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Torna iela 3A - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (727)
 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)
	Minutes with flicker		

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Torna iela 4 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (717)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Torna iela 5 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (738)
 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		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Torna iela 6 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (713)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Torna iela 7 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (725)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Torna iela 8 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (742)
 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		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Torna iela 9 - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (716)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Tumš upe (kad. apz. 76820020140001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (644)
 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	05:31	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	21:25	20:12	18:52	16:35	15:44
2	08:48	08:10	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	08:47	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	08:02	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
	15:56	16:57	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	21:58	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	18:07	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
	16:05	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	06:32	06:11	05:02	04:25	04:46	05:42	06:44	07:44	07:50	08:41
	16:09	17:15	18:16	20:20	21:21	22:04	21:54	20:55	19:35	18:16	16:07	15:37
16	08:37	07:40	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	19:29	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	07:50	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	07:33	06:22	06:00	04:54	04:25	04:52	05:50	06:52	07:53	07:59	08:44
	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	20:42	19:21	18:03	15:58	15:38
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	16:21	17:29	18:28	20:32	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	18:30	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	06:59	08:01	08:07	08:47
	16:25	17:33	18:33	20:37	21:36	22:07	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	07:01	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	04:44	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	16:51	15:51	15:41
26	08:23	07:16	06:03	05:43	04:43	04:26	05:04	06:04	07:05	08:07	08:13	08:48
	16:31	17:40	18:39	20:43	21:41	22:08	21:37	20:27	19:05	16:49	15:50	15:41
27	08:21	07:14	06:01	05:41	04:42	04:27	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	19:03	16:46	15:49	15:42
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	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	04:39	04:28	05:09	06:10	07:11	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	07:13	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Tumš upe (kad. apz. 76820020140006) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (784)

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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Vecie Cerini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (766)
 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	07:24 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Vecas Zemesbites - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (699)
 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	06:20	19:05 (PrRR3)	05:09
	16:01	17:06	18:07	20:12	19:36 (Pr25)	21:13
12	08:42	07:49	06:40	06:18	19:03 (PrRR3)	05:07
	16:03	17:08	18:09	20:14	19:35 (Pr25)	21:15
13	08:41	07:47	06:37	17:34 (Pr3a)	19:03 (PrRR3)	05:05
	16:04	17:10	18:11	17:43 (Pr3a)	19:35 (Pr25)	21:17
14	08:40	07:45	06:35	17:31 (Pr3a)	19:02 (PrRR3)	05:03
	16:06	17:12	18:13	17:45 (Pr3a)	19:34 (PrRR3)	21:19
15	08:39	07:43	06:32	17:29 (Pr3a)	19:02 (PrRR3)	05:01
	16:08	17:15	18:15	17:47 (Pr3a)	19:35 (PrRR3)	21:21
16	08:38	07:40	06:29	17:28 (Pr3a)	19:01 (PrRR3)	04:59
	16:10	17:17	18:17	17:49 (Pr3a)	19:34 (PrRR3)	21:23
17	08:36	07:38	06:27	17:27 (Pr3a)	19:01 (PrRR3)	04:57
	16:12	17:19	18:20	17:49 (Pr3a)	19:35 (PrRR3)	21:25
18	08:35	07:36	06:24	17:26 (Pr3a)	19:00 (PrRR3)	04:55
	16:14	17:21	18:22	17:49 (Pr3a)	19:34 (PrRR3)	21:27
19	08:34	07:33	06:21	17:26 (Pr3a)	19:00 (PrRR3)	04:53
	16:16	17:23	18:24	17:50 (Pr3a)	19:34 (PrRR3)	21:29
20	08:32	07:31	06:19	17:25 (Pr3a)	19:00 (PrRR3)	04:51
	16:18	17:26	18:26	17:49 (Pr3a)	19:33 (PrRR3)	21:30
21	08:31	07:28	06:16	17:25 (Pr3a)	19:00 (PrRR3)	04:50
	16:20	17:28	18:28	17:48 (Pr3a)	19:33 (PrRR3)	21:32
22	08:29	07:26	06:13	17:25 (Pr3a)	19:01 (PrRR3)	04:48
	16:22	17:30	18:30	17:47 (Pr3a)	19:32 (PrRR3)	21:34
23	08:28	07:24	06:11	17:26 (Pr3a)	19:01 (PrRR3)	04:46
	16:24	17:32	18:32	17:47 (Pr3a)	19:31 (PrRR3)	21:36
24	08:26	07:21	06:08	17:26 (Pr3a)	19:02 (PrRR3)	04:45
	16:26	17:35	18:34	17:45 (Pr3a)	19:30 (PrRR3)	21:38
25	08:25	07:19	06:05	17:27 (Pr3a)	19:03 (PrRR3)	04:43
	16:28	17:37	18:36	17:43 (Pr3a)	19:29 (PrRR3)	21:39
26	08:23	07:16	06:03	17:30 (Pr3a)	19:03 (PrRR3)	04:42
	16:30	17:39	18:38	17:42 (Pr3a)	19:27 (PrRR3)	21:41
27	08:21	07:14	06:00	17:34 (Pr3a)	19:05 (PrRR3)	04:40
	16:32	17:41	18:40	17:36 (Pr3a)	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			270	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			106	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

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Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Vecas Zemesbites - Shadow Receptor: $1,0 \times 1,0$ Azimuth: $3,1^\circ$ Slope: $90,0^\circ$ (699)
 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	19:04 (PrRR3)	07:15	18:16 (Pr3a)
	22:06	21:25	20:12	31 19:35 (Pr25)	18:51	5 18:21 (Pr3a)
2	04:29	05:16	06:17	19:05 (PrRR3)	07:17	16:34
	22:06	21:23	20:09	30 19:35 (Pr25)	18:49	16:32
3	04:30	05:18	06:19	19:06 (PrRR3)	07:19	16:30
	22:05	21:21	20:06	28 19:34 (Pr25)	18:46	16:30
4	04:31	05:19	06:21	19:08 (PrRR3)	07:21	16:30
	22:05	21:19	20:04	26 19:34 (Pr25)	18:43	16:27
5	04:32	05:21	06:23	19:09 (PrRR3)	07:23	16:25
	22:04	21:17	20:01	22 19:31 (Pr25)	18:41	16:25
6	04:33	05:23	06:25	19:13 (Pr25)	07:25	16:25
	22:03	21:15	19:59	15 19:28 (Pr25)	18:38	16:23
7	04:34	05:25	06:27	19:14 (Pr25)	07:27	16:21
	22:03	21:13	19:56	11 19:25 (Pr25)	18:36	16:21
8	04:35	05:27	06:29	19:16 (Pr25)	07:29	16:19
	22:02	21:11	19:53	7 19:23 (Pr25)	18:33	16:19
9	04:36	05:29	06:31		07:31	16:17
	22:01	21:08	19:51		18:30	16:17
10	04:38	05:31	06:33		07:33	16:15
	22:00	21:06	19:48		18:28	16:15
11	04:39	05:33	06:35		07:36	16:13
	21:59	21:04	19:45		18:25	16:13
12	04:40	05:35	06:37		07:38	16:11
	21:58	21:02	19:43		18:23	16:11
13	04:42	05:37	19:21 (PrRR3)	06:39	07:40	16:09
	21:57	20:59	5 19:26 (PrRR3)	19:40	18:20	16:09
14	04:43	05:39	19:16 (PrRR3)	06:41	07:42	16:07
	21:55	20:57	14 19:30 (PrRR3)	19:37	18:17	16:07
15	04:44	05:41	19:14 (PrRR3)	06:43	07:44	16:06
	21:54	20:54	18 19:32 (PrRR3)	19:34	18:15	16:06
16	04:46	05:43	19:12 (PrRR3)	06:45	07:46	16:04
	21:53	20:52	22 19:34 (PrRR3)	19:32	18:12	16:04
17	04:47	05:45	19:10 (PrRR3)	06:47	18:19 (Pr3a)	16:02
	21:51	20:50	25 19:35 (PrRR3)	19:29	11 18:30 (Pr3a)	16:02
18	04:49	05:47	19:08 (PrRR3)	06:49	18:15 (Pr3a)	16:01
	21:50	20:47	27 19:35 (PrRR3)	19:26	15 18:30 (Pr3a)	16:00
19	04:51	05:49	19:07 (PrRR3)	06:51	18:13 (Pr3a)	15:59
	21:49	20:45	29 19:36 (PrRR3)	19:24	19 18:32 (Pr3a)	15:59
20	04:52	05:51	19:06 (PrRR3)	06:53	18:12 (Pr3a)	15:57
	21:47	20:42	31 19:37 (PrRR3)	19:21	20 18:32 (Pr3a)	15:57
21	04:54	05:53	19:06 (PrRR3)	06:55	18:11 (Pr3a)	15:56
	21:45	20:40	31 19:37 (PrRR3)	19:18	22 18:33 (Pr3a)	15:56
22	04:56	05:55	19:05 (PrRR3)	06:57	18:10 (Pr3a)	15:55
	21:44	20:37	32 19:37 (PrRR3)	19:16	23 18:33 (Pr3a)	15:54
23	04:57	05:57	19:04 (PrRR3)	06:59	18:09 (Pr3a)	15:53
	21:42	20:35	34 19:38 (PrRR3)	19:13	24 18:33 (Pr3a)	15:53
24	04:59	05:59	19:04 (PrRR3)	07:01	18:09 (Pr3a)	15:51
	21:40	20:32	34 19:38 (PrRR3)	19:10	23 18:32 (Pr3a)	15:51
25	05:01	06:01	19:04 (PrRR3)	07:03	18:09 (Pr3a)	15:50
	21:39	20:30	34 19:38 (PrRR3)	19:08	23 18:32 (Pr3a)	15:50
26	05:03	06:03	19:02 (PrRR3)	07:05	18:09 (Pr3a)	15:49
	21:37	20:27	34 19:36 (PrRR3)	19:05	22 18:31 (Pr3a)	15:49
27	05:04	06:05	19:02 (PrRR3)	07:07	18:09 (Pr3a)	15:48
	21:35	20:25	34 19:36 (PrRR3)	19:02	21 18:30 (Pr3a)	15:48
28	05:06	06:07	19:02 (PrRR3)	07:09	18:09 (Pr3a)	15:46
	21:33	20:22	34 19:36 (PrRR3)	18:59	20 18:29 (Pr3a)	15:46
29	05:08	06:09	19:03 (PrRR3)	07:11	18:10 (Pr3a)	15:45
	21:31	20:20	32 19:35 (PrRR3)	18:57	16 18:26 (Pr3a)	15:45
30	05:10	06:11	19:03 (PrRR3)	07:13	18:12 (Pr3a)	15:44
	21:29	20:17	32 19:35 (Pr25)	18:54	11 18:23 (Pr3a)	15:44
31	05:12	06:13	19:03 (PrRR3)		07:18	
	21:27	20:14	32 19:35 (Pr25)		16:36	
Potential sun hours	529	469	384	324	248	217
Total, worst case		534	440	5		
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	190	1		

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)
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Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Veikals - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (757)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Veldres - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (723)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Viesani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (780)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Viktorovka - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (664)
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	08:05	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	08:07	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	08:10	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	08:12	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	08:14	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	08:16	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		08:18	
	16:41				19:49		21:49		21:28	20:15		16:36	
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Vilcani - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (758)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Vilniš i (kad. apz. 76740020245001) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (750)
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
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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)

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
Vilandes 3-6
LV-1010 Riga
0037167242411
Laura Kurzemniece / laura.kurzemniece@environment.lv
Calculated:
15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Vilniš i (kad. apz. 76740020245004) - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (792)
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
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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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Vindeks - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (739)
 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
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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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A
Assumptions for shadow calculations

Shadow receptor: Vinci - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (791)
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	07:24 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	07:38 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 22:02	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	05:04 21:17	04:25 22:03	04:41 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 17:14	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	07:18 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	04:25 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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Virsaiši - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (650)
 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 20:01	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 20:01	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 20:01	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 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	06:21 20:12	05:09 21:14	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 21:16	04:25 22:03	04:41 21:58	05:36 21:02	06:37 20:01	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 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	04:43 21:56	05:40 20:57	06:41 20:01	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 20:01	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 20:01	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 20:01	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 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	08:33 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 20:01	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 20:01	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 20:01	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	04:24 22:08	04:58 21:42	05:58 20:35	06:59 20:01	08:01 18:01	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 20:01	08:03 18:03	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 20:01	08:05 18:01	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 20:01	08:08 18:01	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 20:01	08:10 18:01	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 20:01	08:12 18:01	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 20:01	08:14 18:01	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 20:01	08:16 18:01	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 20:01	08:18 18:01		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Valodzites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (778)
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 22:02	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	05:27 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 22:07	04:56 21:44	05:55 20:37	06:57 20:01	07:59 18:01	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 18:01	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 18:03	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 18:05	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 18:07	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 18:09	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 18:00	08:16 16:43	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 20:01	08:14 18:07	08:18 16:41	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	05:10 21:29	06:11 20:17	07:13 20:01	08:16 18:07	08:20 16:39	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 18:07		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Vejojtnes - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (797)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Verdini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (641)
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
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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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A
Assumptions for shadow calculations

Shadow receptor: Veris - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (688)
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)	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Vetras - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (735)
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	05:31 20:53	04:34 21:50	04:28 22:06	05:14 21:25	06:15 20:12	19:28 (PrRR3) 19:39 (PrRR3)	07:15 18:51	07:20 16:34
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	19:39 (PrRR3)	07:17 18:49	07:22 16:32
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	19:39 (PrRR3)	07:19 18:46	07:25 16:30
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	19:39 (PrRR3)	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	19:39 (PrRR3)	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 22:03	05:23 21:15	06:25 19:59	19:39 (PrRR3)	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	19:39 (PrRR3)	07:27 18:36	07:33 16:21
8	08:45 15:56	07:58 16:59	06:50 18:01	06:28 20:05	05:15 21:07	04:27 21:59	04:35 22:02	05:27 21:11	06:29 19:53	19:39 (PrRR3)	07:29 18:33	07:35 16:19
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	19:39 (PrRR3)	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	04:38 22:00	05:31 21:06	06:33 19:48	19:39 (PrRR3)	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	19:28 (PrRR3) 19:40 (PrRR3)	05:09 21:13	04:25 22:02	05:33 21:04	06:35 19:45	19:39 (PrRR3)	07:36 18:25	07:42 16:13
12	08:42 16:03	07:49 17:08	06:40 18:09	06:18 20:14	19:25 (PrRR3) 19:42 (PrRR3)	05:07 21:15	04:25 22:03	05:35 21:01	06:37 19:43	19:39 (PrRR3)	07:38 18:23	07:44 16:11
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	19:24 (PrRR3) 19:44 (PrRR3)	05:05 21:17	04:25 22:03	05:37 20:59	06:39 19:40	19:39 (PrRR3)	07:40 18:20	07:46 16:09
14	08:40 16:06	07:45 17:12	06:35 18:13	06:12 20:18	19:22 (PrRR3) 19:44 (PrRR3)	05:03 21:19	04:24 22:04	05:39 20:57	06:41 19:37	19:39 (PrRR3)	07:42 18:17	07:48 16:07
15	08:39 16:08	07:43 17:15	06:32 18:15	06:10 20:20	19:21 (PrRR3) 19:46 (PrRR3)	05:01 21:21	04:24 22:05	05:41 20:54	06:43 19:34	19:39 (PrRR3)	07:44 18:15	07:50 16:06
16	08:38 16:10	07:40 17:17	06:29 18:17	06:07 20:22	19:19 (PrRR3) 19:46 (PrRR3)	04:59 21:23	04:24 22:05	05:43 20:52	06:45 19:32	19:39 (PrRR3)	07:46 18:12	07:53 16:04
17	08:36 16:12	07:38 17:19	06:27 18:20	06:05 20:24	19:19 (PrRR3) 19:46 (PrRR3)	04:57 21:25	04:23 22:06	05:45 20:50	06:47 19:29	19:39 (PrRR3)	07:48 18:10	07:55 16:02
18	08:35 16:14	07:36 17:21	06:24 18:22	06:02 20:26	19:18 (PrRR3) 19:46 (PrRR3)	04:55 21:27	04:23 22:06	05:47 20:47	06:49 19:26	19:39 (PrRR3)	07:50 18:07	07:57 16:00
19	08:34 16:16	07:33 17:23	06:21 18:24	06:00 20:28	19:18 (PrRR3) 19:46 (PrRR3)	04:53 21:29	04:23 22:07	05:49 20:45	06:51 19:24	19:39 (PrRR3)	07:52 18:05	07:59 15:59
20	08:32 16:18	07:31 17:26	06:19 18:26	05:57 20:30	19:17 (PrRR3) 19:46 (PrRR3)	04:51 21:30	04:23 22:07	05:51 20:42	06:53 19:21	19:39 (PrRR3)	07:54 18:02	08:01 15:57
21	08:31 16:20	07:28 17:28	06:16 18:28	05:55 20:32	19:17 (PrRR3) 19:46 (PrRR3)	04:50 21:32	04:23 22:07	05:53 20:40	06:55 19:18	19:39 (PrRR3)	07:57 18:00	08:03 15:56
22	08:29 16:22	07:26 17:30	06:13 18:30	05:52 20:34	19:17 (PrRR3) 19:46 (PrRR3)	04:48 21:34	04:24 22:08	05:55 20:37	06:57 19:16	19:39 (PrRR3)	07:59 17:57	08:05 15:54
23	08:28 16:24	07:24 17:32	06:11 18:32	05:50 20:36	19:17 (PrRR3) 19:44 (PrRR3)	04:46 21:36	04:24 22:08	05:57 20:35	06:59 19:13	19:39 (PrRR3)	08:01 17:55	08:07 15:53
24	08:26 16:26	07:21 17:35	06:08 18:34	05:47 20:39	19:18 (PrRR3) 19:44 (PrRR3)	04:45 21:38	04:24 22:08	05:59 20:32	07:01 19:10	19:39 (PrRR3)	08:03 17:53	08:09 15:51
25	08:25 16:28	07:19 17:37	06:05 18:36	05:45 20:41	19:18 (PrRR3) 19:44 (PrRR3)	04:43 21:39	04:25 22:08	06:01 20:30	07:03 19:08	19:39 (PrRR3)	08:05 16:50	08:11 15:50
26	08:23 16:30	07:16 17:39	06:03 18:38	05:42 20:43	19:18 (PrRR3) 19:42 (PrRR3)	04:42 21:41	04:25 22:08	06:03 20:27	07:05 19:05	19:39 (PrRR3)	08:07 16:48	08:13 15:49
27	08:21 16:32	07:14 17:41	06:00 18:40	05:40 20:45	19:19 (PrRR3) 19:41 (PrRR3)	04:40 21:42	04:26 22:08	06:05 20:25	07:07 19:02	19:39 (PrRR3)	08:09 16:45	08:15 15:47
28	08:20 16:34	07:11 17:43	05:57 18:42	05:38 20:47	19:21 (PrRR3) 19:40 (PrRR3)	04:39 21:44	04:26 22:07	06:06 20:22	07:09 18:59	19:39 (PrRR3)	08:11 16:43	08:16 15:46
29	08:18 16:37		06:55 19:45	05:35 20:49	19:23 (PrRR3) 19:38 (PrRR3)	04:38 21:46	04:27 22:07	06:09 20:20	07:11 18:57	19:39 (PrRR3)	08:13 16:41	08:18 15:45
30	08:16 16:39		06:52 19:47	05:33 20:51	19:24 (PrRR3) 19:35 (PrRR3)	04:36 21:47	04:27 22:07	06:11 20:17	07:13 18:54	19:39 (PrRR3)	08:15 16:38	08:20 15:44
31	08:14 16:41		06:49 19:49			04:35 21:49		06:13 20:14		19:39 (PrRR3)	08:18 16:36	08:48 15:45
Potential sun hours	236	266	366	426	507	528	529	469	384		324	248
Total, worst case				463				453	11			217
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				204				236	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)	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Veveru majas - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (656)
 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 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
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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
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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
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31	08:14 16:41		06:49 19:49		04:35 21:49		05:12 21:28	06:13 20:15	07:18 18:54	08:18 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)	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A
Assumptions for shadow calculations

Shadow receptor: Zarini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (653)
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
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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 20:00	07:51 18:08	07:57 16:01	08:44 15:36
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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 20:00	07:59 18:16	08:05 15:54	08:47 15:38
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31	08:15 16:41		06:50 19:49		04:35 21:49		05:12 21:28	06:14 20:15	07:18 20:00	08:18 18:00		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)	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Zelmeni - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (789)
 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
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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	04:57 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 17:35	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 18:42	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Zelta Dibens - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (775)
 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	07:36 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 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 18:16	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	07:50 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	07:55 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 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 20:34	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	08:49 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 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Zemesbites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (701)
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		18:57 (PrRR3)	05:31
	15:46	16:43	17:45		19:51	21	19:18 (PrRR3)	20:53
2	08:48	08:10	07:06		06:44		18:55 (PrRR3)	05:28
	15:47	16:45	17:48		19:53	24	19:19 (PrRR3)	20:55
3	08:48	08:08	07:03		06:41		18:53 (PrRR3)	05:26
	15:49	16:48	17:50		19:55	26	19:19 (PrRR3)	20:57
4	08:47	08:06	07:01		06:39		18:53 (PrRR3)	05:24
	15:50	16:50	17:52		19:57	28	19:21 (PrRR3)	20:59
5	08:47	08:04	06:58		06:36		18:52 (PrRR3)	05:21
	15:51	16:52	17:54		19:59	29	19:21 (PrRR3)	21:01
6	08:46	08:02	06:56		06:33		18:51 (PrRR3)	05:19
	15:53	16:54	17:56		20:01	30	19:21 (PrRR3)	21:03
7	08:46	08:00	06:53		06:31		18:50 (PrRR3)	05:17
	15:54	16:57	17:58		20:03	31	19:21 (PrRR3)	21:05
8	08:45	07:58	06:50		06:28		18:49 (PrRR3)	05:15
	15:56	16:59	18:01		20:05	31	19:20 (PrRR3)	21:07
9	08:44	07:56	06:48		06:25		18:50 (PrRR3)	05:13
	15:58	17:01	18:03	6	17:28 (Pr3a)	06:25	18:50 (PrRR3)	05:13
10	08:44	07:54	06:45		06:23	31	19:21 (PrRR3)	21:09
	15:59	17:03	18:05	11	17:37 (Pr3a)	20:09	18:49 (PrRR3)	05:11
11	08:43	07:52	06:43		06:20	31	19:20 (PrRR3)	21:11
	16:01	17:06	18:07	15	17:39 (Pr3a)	20:12	18:50 (PrRR3)	05:09
12	08:42	07:49	06:40		06:18	30	19:20 (PrRR3)	21:13
	16:03	17:08	18:09	18	17:40 (Pr3a)	20:14	18:49 (PrRR3)	05:07
13	08:41	07:47	06:37		06:15	30	19:19 (PrRR3)	21:15
	16:04	17:10	18:11	21	17:42 (Pr3a)	20:16	18:50 (PrRR3)	05:05
14	08:40	07:45	06:35		06:12	28	19:18 (PrRR3)	21:17
	16:06	17:12	18:13	21	17:43 (Pr3a)	20:16	18:50 (PrRR3)	05:03
15	08:39	07:43	06:32		06:10	27	18:52 (PrRR3)	05:01
	16:08	17:15	18:15	22	17:42 (Pr3a)	20:18	19:17 (PrRR3)	21:19
16	08:38	07:40	06:29		06:07	22	18:52 (PrRR3)	04:59
	16:10	17:17	18:17	21	17:40 (Pr3a)	20:18	18:52 (PrRR3)	04:59
17	08:36	07:38	06:27		06:05	19	19:14 (PrRR3)	21:23
	16:12	17:19	18:20	22	17:42 (Pr3a)	20:24	18:54 (PrRR3)	04:57
18	08:35	07:36	06:24		06:02	19	19:13 (PrRR3)	21:25
	16:14	17:21	18:22	20	17:40 (Pr3a)	20:26	18:56 (PrRR3)	04:55
19	08:34	07:33	06:21		06:00	14	19:10 (PrRR3)	21:27
	16:16	17:23	18:24	19	17:41 (Pr3a)	20:28	19:00 (PrRR3)	21:27
20	08:32	07:31	06:19		05:57	6	19:06 (PrRR3)	21:29
	16:18	17:26	18:26	16	17:38 (Pr3a)	20:30		21:29
21	08:31	07:28	06:16		05:55			21:30
	16:20	17:28	18:28	13	17:36 (Pr3a)	20:32		21:30
22	08:29	07:26	06:13		05:52			21:32
	16:22	17:30	18:30	6	17:32 (Pr3a)	20:34		21:32
23	08:28	07:24	06:11		05:50			21:34
	16:24	17:32	18:32		05:47			21:34
24	08:26	07:21	06:08		05:47			21:36
	16:26	17:35	18:34		20:39			21:36
25	08:25	07:19	06:05		05:45			21:38
	16:28	17:37	18:36		20:41			21:38
26	08:23	07:16	06:03		05:42			21:39
	16:30	17:39	18:38		20:43			21:41
27	08:21	07:14	06:00		05:40			21:41
	16:32	17:41	18:40		20:45			21:43
28	08:20	07:11	05:57		05:38			21:43
	16:34	17:43	18:42		20:47			21:44
29	08:18		06:55		05:35			21:44
	16:37		19:45		20:49			21:46
30	08:16		06:52		05:33			21:46
	16:39		19:47	10	19:13 (PrRR3)	20:51		21:47
31	08:14		06:49		18:59 (PrRR3)			21:47
	16:41		19:49	17	19:16 (PrRR3)			21:49
Potential sun hours	236	266	366		426		507	528
Total, worst case				258		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				101		213		

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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Zemesbites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (701)
 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	18:49 (PrRR3)	07:15	18:02 (Pr3a)
	22:06	21:25	20:12	30 19:19 (PrRR3)	18:51	19 18:21 (Pr3a)
2	04:29	05:16	06:17	18:48 (PrRR3)	07:17	18:02 (Pr3a)
	22:06	21:23	20:09	31 19:19 (PrRR3)	18:49	17 18:19 (Pr3a)
3	04:30	05:18	06:19	18:48 (PrRR3)	07:19	18:03 (Pr3a)
	22:05	21:21	20:06	31 19:19 (PrRR3)	18:46	13 18:16 (Pr3a)
4	04:31	05:19	06:21	18:47 (PrRR3)	07:21	18:05 (Pr3a)
	22:05	21:19	20:04	31 19:18 (PrRR3)	18:43	8 18:13 (Pr3a)
5	04:32	05:21	06:23	18:46 (PrRR3)	07:23	18:09 (Pr3a)
	22:04	21:17	20:01	31 19:17 (PrRR3)	18:41	1 18:10 (Pr3a)
6	04:33	05:23	06:25	18:46 (PrRR3)	07:25	18:10 (Pr3a)
	22:03	21:15	19:59	31 19:17 (PrRR3)	18:38	16:23
7	04:34	05:25	06:27	18:47 (PrRR3)	07:27	16:33
	22:03	21:13	19:56	29 19:16 (PrRR3)	18:36	16:21
8	04:35	05:27	06:29	18:47 (PrRR3)	07:29	16:19
	22:02	21:11	19:53	28 19:15 (PrRR3)	18:33	16:19
9	04:36	05:29	06:31	18:48 (PrRR3)	07:31	16:17
	22:01	21:08	19:51	26 19:14 (PrRR3)	18:30	16:17
10	04:38	05:31	06:33	18:48 (PrRR3)	07:33	16:17
	22:00	21:06	19:48	24 19:12 (PrRR3)	18:28	16:15
11	04:39	05:33	06:35	18:50 (PrRR3)	07:36	16:15
	21:59	21:04	19:45	21 19:11 (PrRR3)	18:25	16:13
12	04:40	05:35	06:37	18:51 (PrRR3)	07:38	16:11
	21:58	21:02	19:43	17 19:08 (PrRR3)	18:23	16:11
13	04:42	05:37	06:39	18:54 (PrRR3)	07:40	16:09
	21:57	20:59	19:40	11 19:05 (PrRR3)	18:20	16:09
14	04:43	05:39	06:41	18:55 (PrRR3)	07:42	16:08
	21:55	20:57	19:37	18:57 (PrRR3)	07:44	16:07
15	04:44	05:41	06:43	18:58 (PrRR3)	07:46	16:06
	21:54	20:54	19:34	18:59 (PrRR3)	07:48	16:04
16	04:46	05:43	06:45	18:59 (PrRR3)	07:50	16:03
	21:53	20:52	19:32	18:59 (PrRR3)	07:52	16:02
17	04:47	05:45	06:47	18:59 (PrRR3)	07:54	16:01
	21:51	20:50	19:29	18:59 (PrRR3)	07:56	16:00
18	04:49	05:47	06:49	18:59 (PrRR3)	07:58	15:59
	21:50	20:47	19:26	18:59 (PrRR3)	08:00	15:57
19	04:51	05:49	06:51	18:59 (PrRR3)	08:02	15:56
	21:49	20:45	19:24	18:59 (PrRR3)	08:04	15:54
20	04:52	05:51	06:53	18:59 (PrRR3)	08:06	15:53
	21:47	20:42	19:21	18:59 (PrRR3)	08:08	15:51
21	04:54	05:53	06:55	18:59 (PrRR3)	08:10	15:50
	21:45	20:40	19:18	3 18:16 (Pr3a)	08:12	15:48
22	04:56	05:55	06:57	18:59 (PrRR3)	08:14	15:47
	21:44	20:37	19:16	12 18:20 (Pr3a)	08:16	15:45
23	04:57	05:57	06:59	18:59 (PrRR3)	08:18	15:44
	21:42	20:35	19:13	16 18:22 (Pr3a)	08:20	15:42
24	04:59	05:59	19:03 (PrRR3)	07:01	18:04 (Pr3a)	08:22
	21:40	20:32	19:10 (PrRR3)	19 18:23 (Pr3a)	08:24	15:40
25	05:01	06:01	18:59 (PrRR3)	07:03	18:03 (Pr3a)	08:26
	21:39	20:30	19:14 (PrRR3)	20 18:23 (Pr3a)	08:28	15:38
26	05:03	06:03	18:56 (PrRR3)	07:05	18:02 (Pr3a)	08:30
	21:37	20:27	19:15 (PrRR3)	21 18:23 (Pr3a)	08:32	15:36
27	05:04	06:05	18:54 (PrRR3)	07:07	18:01 (Pr3a)	08:34
	21:35	20:25	19:16 (PrRR3)	22 18:23 (Pr3a)	08:36	15:34
28	05:06	06:07	18:52 (PrRR3)	07:09	18:01 (Pr3a)	08:36
	21:33	20:22	19:17 (PrRR3)	22 18:23 (Pr3a)	08:38	15:32
29	05:08	06:09	18:51 (PrRR3)	07:11	18:01 (Pr3a)	08:38
	21:31	20:20	19:18 (PrRR3)	21 18:22 (Pr3a)	08:40	15:30
30	05:10	06:11	18:50 (PrRR3)	07:13	18:01 (Pr3a)	08:40
	21:29	20:17	19:18 (PrRR3)	21 18:22 (Pr3a)	08:42	15:28
31	05:12	06:13	18:49 (PrRR3)	07:15	18:01 (Pr3a)	08:42
	21:27	20:14	19:19 (PrRR3)	16:36	18:01 (Pr3a)	08:44
Potential sun hours	529	469	384	324	248	217
Total, worst case		173	518	58		
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	224	17		

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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Zemnieka seta - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (649)
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	04:29	05:14	06:15	07:15	07:20	08:22
	15:47	16:44	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	05:29	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	15:43
3	08:48	08:09	07:04	06:42	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	21:21	20:07	18:46	16:30	15:42
4	08:47	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	16:28	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	08:28
	15:52	16:52	17:54	19:59	21:01	21:55	22:04	21:17	20:01	18:41	16:26	15:40
6	08:46	08:03	06:56	06:34	05:20	04:29	04:33	05:24	06:25	07:25	07:31	08:30
	15:53	16:55	17:56	20:01	21:03	21:57	22:04	21:15	19:59	18:38	16:23	15:39
7	08:46	08:00	06:53	06:31	05:17	04:29	04:34	05:26	06:27	07:27	07:33	08:31
	15:55	16:57	17:59	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	05:28	06:29	07:30	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	08:44	07:56	06:48	06:26	05:13	04:27	04:37	05:30	06:31	07:32	07:38	08:34
	15:58	17:01	18:03	20:08	21:09	22:00	22:01	21:08	19:51	18:31	16:17	15:38
10	08:44	07:54	06:45	06:23	05:11	04:26	04:38	05:32	06:33	07:34	07:40	08:36
	16:00	17:04	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	05:09	04:26	04:39	05:34	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	07:50	06:40	06:18	05:07	04:25	04:40	05:36	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	15:37
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
	16:05	17:10	18:11	20:16	21:17	22:03	21:57	20:59	19:40	18:20	16:10	15:36
14	08:40	07:45	06:35	06:13	05:03	04:25	04:43	05:39	06:41	07:42	07:48	08:40
	16:07	17:13	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	07:51	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	07:40	06:30	06:08	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	22:05	21:53	20:52	19:32	18:13	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	17:22	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	05:49	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	15:37
20	08:32	07:31	06:19	05:57	04:52	04:24	04:53	05:51	06:53	07:55	08:01	08:45
	16:18	17:26	18:26	20:30	21:31	22:07	21:47	20:42	19:21	18:03	15:58	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	20:32	21:32	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	20:37	19:16	17:58	15:55	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	17:33	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	05:48	04:45	04:25	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	20:32	19:10	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	18:36	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	18:39	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	04:41	04:26	05:05	06:05	07:07	08:09	08:15	08:48
	16:33	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	05:58	05:38	04:39	04:26	05:07	06:07	07:09	08:12	08:16	08:49
	16:35	17:43	18:43	20:47	21:44	22:08	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	08:49
	16:37		19:45	20:49	21:46	22:07	21:31	20:20	18:57	16:41	15:46	15:43
30	08:16		06:52	05:33	04:37	04:28	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	08:14		06:50		04:36		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	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Zirnekliši - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (745)
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 08:48	08:12 16:43 08:10	07:09 17:45 07:06	32 16:29 (PrRR3) 17:01 (PrRR3)	06:47 19:51 06:44	05:31 20:53 05:28	04:34 21:50 04:33	04:28 22:07 04:29	05:14 21:25 05:16	06:15 20:12 06:17	07:15 18:14 (Pr25) 17:10 (PrRR3)	07:20 16:34 07:22	
2	15:47 08:48	16:45 08:09	17:48 07:03	33 17:01 (PrRR3) 16:27 (PrRR3)	19:53 06:41 05:26	20:55 21:52 04:32	22:06 21:53 04:30	21:23 22:06 05:18	20:09 18:49 07:19	20:09 18:46 07:19	46 18:14 (Pr25) 17:08 (PrRR3)	16:32 15:42 07:25	
3	15:49 08:47	16:48 08:07	17:50 07:01	33 17:00 (PrRR3) 16:28 (PrRR3)	19:55 06:39 05:24	20:57 21:53 04:31	22:06 21:53 04:31	21:21 22:07 05:19	20:07 06:21 06:21	18:46 07:21 18:12 (Pr25)	48 18:13 (Pr25) 17:05 (PrRR3)	16:30 15:41 07:27	
4	15:50 08:47	16:50 08:04	17:52 06:58	33 17:01 (PrRR3) 16:27 (PrRR3)	19:57 06:36 05:21	20:59 21:54 04:30	22:05 21:54 04:32	21:19 22:04 05:21	20:04 06:23 06:23	18:43 07:23 18:10 (Pr25)	49 18:12 (Pr25) 17:04 (PrRR3)	16:27 15:40 07:29	
5	15:51 08:46	16:52 08:02	17:54 06:56	33 17:00 (PrRR3) 16:28 (PrRR3)	19:59 06:33 05:19	21:01 21:55 04:29	22:04 21:57 04:33	21:17 22:04 05:23	20:01 06:25 06:25	18:41 07:25 18:07 (Pr25)	48 18:10 (Pr25) 17:03 (PrRR3)	16:25 15:40 07:31	
6	15:53 08:46	16:54 08:00	17:56 06:53	40 17:28 (Pr25) 16:28 (PrRR3)	20:01 21:03 05:17	21:03 21:57 04:28	22:04 21:57 04:34	21:15 21:59 05:25	19:59 06:27 06:27	18:38 07:27 18:05 (Pr25)	45 18:07 (Pr25) 17:03 (PrRR3)	16:23 15:39 07:33	
7	15:54 08:45	16:57 07:58	17:58 06:50	44 17:30 (Pr25) 16:28 (PrRR3)	20:03 21:05 05:15	21:05 21:58 04:27	22:03 21:58 04:35	21:13 21:56 05:27	19:56 06:29 06:29	18:36 07:29 18:02 (Pr25)	43 18:05 (Pr25) 17:03 (PrRR3)	16:21 15:38 07:35	
8	15:56 08:44	16:59 07:56	18:01 06:48	47 17:32 (Pr25) 16:28 (PrRR3)	20:05 21:07 05:13	21:07 21:59 04:27	22:02 21:59 04:36	21:11 21:53 05:29	19:53 06:31 06:31	18:33 07:31 18:02 (PrRR3)	37 18:02 (Pr25) 17:02 (PrRR3)	16:19 15:38 07:38	
9	15:58 08:44	17:01 07:54	18:03 06:45	49 17:34 (Pr25) 16:29 (PrRR3)	20:07 21:09 05:11	22:00 22:01 04:26	22:01 21:08 04:37	21:08 19:51 05:31	19:51 06:33 06:33	18:30 07:33 18:02 (PrRR3)	33 17:35 (PrRR3) 17:02 (PrRR3)	16:17 15:37 07:40	
10	15:59 08:43	17:03 07:52	18:05 06:43	50 17:35 (Pr25) 16:30 (PrRR3)	20:09 21:11 05:09	22:01 22:01 04:25	22:00 21:06 04:39	21:06 19:48 05:33	19:48 06:35 06:35	18:28 07:36 18:02 (PrRR3)	33 17:35 (PrRR3) 17:02 (PrRR3)	16:15 15:37 07:42	
11	16:01 08:42	17:06 07:49	18:07 06:40	48 17:35 (Pr25) 16:31 (PrRR3)	20:12 21:13 05:07	22:02 22:02 04:25	21:59 21:04 04:40	21:04 19:45 05:35	19:45 06:37 06:37	18:25 07:38 18:02 (PrRR3)	33 17:35 (PrRR3) 17:02 (PrRR3)	16:13 15:37 07:44	
12	16:03 08:41	17:08 07:47	18:09 06:37	44 17:34 (Pr25) 16:34 (PrRR3)	20:14 21:15 05:05	22:03 22:03 04:25	21:58 21:02 04:41	21:02 19:43 05:37	19:43 06:39 06:39	18:23 07:40 18:02 (PrRR3)	32 17:34 (PrRR3) 17:02 (PrRR3)	16:11 15:36 07:46	
13	16:04 08:40	17:10 07:45	18:11 06:35	40 17:35 (Pr25) 16:37 (PrRR3)	20:16 21:17 05:03	22:03 22:03 04:24	21:57 20:59 04:43	20:59 06:41 05:39	19:40 06:41 06:41	18:20 07:42 18:02 (PrRR3)	31 17:33 (PrRR3) 17:02 (PrRR3)	16:09 15:36 07:48	
14	16:06 08:39	17:12 07:43	18:13 06:32	32 17:34 (Pr25) 17:12 (Pr25)	20:18 21:19 05:01	22:04 22:04 04:24	21:55 20:57 04:44	20:57 19:37 05:41	19:37 06:43 06:43	18:17 07:44 18:03 (PrRR3)	30 17:32 (PrRR3) 17:03 (PrRR3)	16:07 15:36 07:50	
15	16:08 08:38	17:15 07:40	18:15 06:29	21 17:33 (Pr25) 17:13 (Pr25)	20:20 21:21 05:04	22:05 22:05 04:24	21:54 20:54 04:46	20:54 19:34 05:43	19:34 06:45 06:45	18:15 07:46 18:02 (PrRR3)	28 17:35 (PrRR3) 17:01 (Pr3a)	16:06 15:36 07:53	
16	16:10 08:36	17:17 07:38	18:17 06:27	19 17:32 (Pr25) 17:14 (Pr25)	20:22 21:23 05:05	22:05 22:05 04:57	21:53 20:52 04:47	20:52 19:32 05:45	19:32 06:47 06:47	18:12 07:48 18:03 (PrRR3)	30 17:35 (PrRR3) 17:02 (PrRR3)	16:04 15:36 07:55	
17	16:12 08:35	17:19 07:36	18:20 06:24	17 17:31 (Pr25) 17:15 (Pr25)	20:24 21:25 05:02	22:06 22:06 04:55	21:51 20:50 04:49	20:50 19:29 05:47	19:29 06:49 06:49	18:10 07:50 18:02 (PrRR3)	31 17:29 (PrRR3) 16:55 (Pr3a)	16:02 15:36 07:57	
18	16:14 08:34	17:21 07:33	18:22 06:21	13 17:28 (Pr25) 17:18 (Pr25)	20:26 21:27 05:04	22:06 22:06 04:53	21:50 20:47 04:51	20:47 19:26 05:49	19:26 06:51 06:51	18:07 07:52 18:02 (PrRR3)	32 17:27 (PrRR3) 16:54 (Pr3a)	16:00 15:36 07:59	
19	16:16 08:32	17:23 07:31	18:24 06:19	8 17:26 (Pr25) 17:12 (Pr25)	20:28 21:29 05:07	22:07 22:07 04:51	21:49 20:45 04:52	20:45 19:24 05:51	19:24 06:53 06:53	18:05 07:54 18:02 (PrRR3)	30 17:24 (PrRR3) 16:53 (Pr3a)	15:59 15:36 08:01	
20	16:18 08:31	17:26 07:28	18:26 06:16	20 17:25 (Pr25) 17:13 (Pr25)	20:30 21:31 05:05	22:07 22:07 04:50	21:47 20:42 04:53	20:42 19:21 05:53	19:21 06:55 06:55	18:02 07:57 18:02 (PrRR3)	29 17:22 (PrRR3) 16:52 (Pr3a)	15:57 15:37 08:03	
21	16:20 08:30	17:28 07:26	18:28 06:13	21 16:43 (Pr3a) 16:22 (PrRR3)	20:32 21:32 05:02	22:08 22:08 04:48	21:45 20:40 04:56	20:40 19:18 05:55	19:18 06:57 06:57	18:00 07:59 18:02 (PrRR3)	21 17:13 (Pr3a) 16:51 (Pr3a)	15:56 15:37 08:05	
22	16:22 08:28	17:30 07:24	18:30 06:11	30 16:52 (PrRR3) 16:23 (PrRR3)	20:34 21:34 05:00	22:08 22:08 04:46	21:44 20:37 04:57	20:37 19:16 05:57	19:16 06:59 06:59	17:57 08:01 18:01 (PrRR3)	22 17:13 (Pr3a) 16:51 (Pr3a)	15:54 15:38 08:07	
23	16:24 08:26	17:32 07:21	18:32 06:08	31 16:54 (PrRR3) 16:25 (Pr3a)	20:37 21:36 05:04	22:08 22:08 04:45	21:42 20:35 04:59	20:35 19:13 05:59	19:13 07:01 07:01	17:55 08:03 18:07 (Pr25)	22 17:13 (Pr3a) 16:51 (Pr3a)	15:53 15:38 08:09	
24	16:26 08:25	17:35 07:19	18:34 06:05	32 16:57 (PrRR3) 16:26 (PrRR3)	20:39 21:38 05:05	22:08 22:08 04:43	21:41 20:32 05:01	20:32 19:10 06:01	19:10 07:03 07:03	18:07 (Pr25) 17:58 (Pr25) 18:10 (Pr25)	4 18:03 (Pr25) 17:58 (Pr25) 18:10 (Pr25)	23 17:14 (Pr3a) 16:51 (Pr3a)	15:51 15:39 08:11
25	16:28 08:23	17:37 07:16	18:36 06:03	31 16:57 (PrRR3) 16:32 (PrRR3)	20:41 21:39 05:02	22:08 22:08 04:42	21:39 20:30 05:03	20:30 19:08 06:03	19:08 07:05 07:05	18:12 (Pr25) 17:56 (Pr25) 18:12 (Pr25)	12 18:10 (Pr25) 17:56 (Pr25)	22 16:13 (Pr3a) 16:13 (Pr3a)	15:50 15:39 08:13
26	16:30 08:21	17:39 07:14	18:38 06:00	27 16:59 (PrRR3) 16:30 (PrRR3)	20:43 21:41 05:04	22:08 22:08 04:40	21:37 21:35 05:04	20:27 19:05 06:05	19:05 07:07 07:07	18:12 (Pr25) 17:54 (Pr25) 18:13 (Pr25)	16 18:12 (Pr25) 17:54 (Pr25)	21 16:12 (Pr3a) 16:12 (Pr3a)	15:49 15:48 08:15
27	16:32 08:20	17:41 07:11	18:40 05:57	29 16:59 (PrRR3) 16:29 (PrRR3)	20:45 21:43 05:08	22:08 22:08 04:39	21:35 20:25 05:06	20:25 19:02 06:07	19:02 07:09 07:09	18:13 (Pr25) 17:53 (Pr25) 18:13 (Pr25)	19 18:13 (Pr25) 17:53 (Pr25)	20 16:12 (Pr3a) 16:10 (Pr3a)	15:47 15:48 08:16
28	16:34 08:18	17:43 07:09	18:42 05:55	31 17:00 (PrRR3) 16:55 (PrRR3)	20:47 21:44 05:05	22:08 22:08 04:38	21:33 20:22 05:08	20:22 18:59 06:09	18:59 07:11 07:11	18:13 (Pr25) 17:20 (PrRR3) 18:14 (Pr25)	20 18:13 (Pr25) 17:20 (PrRR3)	17 16:10 (Pr3a) 16:07 (Pr3a)	15:46 15:48 08:18
29	16:37 08:16	17:46 07:06	18:49 05:52	19 17:00 (PrRR3) 16:52 (PrRR3)	20:49 21:46 05:03	22:07 22:07 04:36	21:31 20:20 05:10	20:20 18:57 06:11	18:57 07:13 07:13	18:14 (Pr25) 17:14 (PrRR3) 18:13 (Pr25)	26 18:14 (Pr25) 17:14 (PrRR3)	13 16:07 (Pr3a) 16:05 (Pr3a)	15:45 15:48 08:19
30	16:39 08:14	17:49 07:05	18:51 05:52	19 17:00 (PrRR3) 16:54 (PrRR3)	20:51 21:47 05:03	22:07 22:07 04:35	21:29 20:17 05:12	20:17 18:54 06:13	18:54 07:18 07:18	18:13 (Pr25) 17:14 (PrRR3) 18:13 (Pr25)	37 18:13 (Pr25) 17:14 (PrRR3)	9 16:05 (Pr3a) 16:02 (Pr3a)	15:44 15:48 08:20
31	16:41 08:14	17:51 07:05	18:54 05:52	19 17:00 (PrRR3) 16:54 (PrRR3)	20:51 21:47 05:03	22:07 22:07 04:35	21:29 20:17 05:12	20:17 18:54 06:13	18:54 07:18 07:18	18:13 (Pr25) 17:14 (PrRR3) 18:13 (Pr25)	37 18:13 (Pr25) 17:14 (PrRR3)	9 16:05 (Pr3a) 16:02 (Pr3a)	15:44 15:48 08:20
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	217	
Total, worst case													
Sun reduction		408	636						134	924			
Oper. time red.		0,23	0,39						0,43	0,29			
Wind dir. red.		1,00	1,00						1,00	1,00			
Total reduction		0,23	0,39						0,43	0,29			
Total, real		92	249						58	268			

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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Zvaigznites - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (655)
 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	20:54	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	20:10	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	07:20	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	06:26	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	06:28	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	16:21	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	05:30	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	07:45	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	20:53	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	22:07	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	20:27	21:27	22:07	21:51	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	21:48	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	05:48	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	06:02	07:03	08:06	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	06:04	07:05	08:08	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	08:10	08:15	08:49
	16:33	17:41	18:41	20:45	21:43	22:08	21:36	20:25	19:03	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	08:21	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		07:19		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Zagiš i - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (730)
 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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Abolini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (733)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Ciekuri - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (629)
 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	07:16	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	06:44	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	20:10	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	20:57	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	19:59	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	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	18:10	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	07:46	08:39
	16:05	17:11	18:12	20:16	21:18	22:04	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	07:49	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	16:05	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	06:55	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	15:38
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	06:09	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	07:16	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	08:49
	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	07:09	08:12	08:17	08:49
	16:35	17:44	18:43	20:47	21:44	22:08	21:34	20:22	19:00	17:44	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	08:49
	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	07:14	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		

Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Cinguli - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (663) 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	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	15:50
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	15:45
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
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Eveles - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (694)
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	08:43	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	05:02	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	08:46
	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		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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A
Assumptions for shadow calculations

Shadow receptor: Irisi - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (666)
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	20:30	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	04:24	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	19:18	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	04:47	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	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	08:19	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	08:16		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	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)
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Project:

Flickering_Nordex_N175_Prikuli_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Uzuli - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (729)
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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Uzulini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (799)
 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 15:46	08:12 16:43	07:09 17:45	17:06 (PrRR3) 17:17 (PrRR3)	06:47 19:51	04:34 21:50
2	08:48 15:47	08:10 16:45	07:06 17:48	17:04 (PrRR3) 17:18 (PrRR3)	06:44 19:53	04:33 21:51
3	08:48 15:49	08:08 16:48	07:03 17:50	17:02 (PrRR3) 17:20 (PrRR3)	06:41 19:55	04:32 21:53
4	08:47 15:50	08:06 16:50	07:01 17:52	17:02 (PrRR3) 17:22 (PrRR3)	06:39 19:57	04:31 21:54
5	08:47 15:51	08:04 16:52	06:58 17:54	17:00 (PrRR3) 17:22 (PrRR3)	06:36 19:59	04:30 21:55
6	08:46 15:53	08:02 16:54	06:56 17:56	17:00 (PrRR3) 17:22 (PrRR3)	06:33 20:01	04:29 21:57
7	08:46 15:54	08:00 16:57	06:53 17:58	17:00 (PrRR3) 17:23 (PrRR3)	06:31 20:03	04:28 21:58
8	08:45 15:56	07:58 16:59	06:50 18:00	16:59 (PrRR3) 17:22 (PrRR3)	06:28 20:05	04:27 21:59
9	08:44 15:57	07:56 17:01	06:48 18:03	16:59 (PrRR3) 17:21 (PrRR3)	06:25 20:07	04:27 22:00
10	08:44 15:59	07:54 17:03	06:45 18:05	17:00 (PrRR3) 17:21 (PrRR3)	06:23 20:09	04:26 22:01
11	08:43 16:01	07:52 17:06	06:43 18:07	17:00 (PrRR3) 17:20 (PrRR3)	06:20 20:12	04:25 22:02
12	08:42 16:03	07:49 17:08	06:40 18:09	17:01 (PrRR3) 17:18 (PrRR3)	06:18 20:14	04:25 22:03
13	08:41 16:04	07:47 17:10	06:37 18:11	17:03 (PrRR3) 17:17 (PrRR3)	06:15 20:16	04:24 22:03
14	08:40 16:06	07:45 17:12	06:35 18:13	17:06 (PrRR3) 17:13 (PrRR3)	06:12 20:18	04:24 22:04
15	08:39 16:08	07:43 17:15	06:32 18:15		06:10 20:20	04:24 22:05
16	08:38 16:10	07:40 17:17	06:29 18:17		06:07 20:22	04:24 22:05
17	08:36 16:12	07:38 17:19	06:27 18:20		06:05 20:24	04:23 22:06
18	08:35 16:14	07:36 17:21	06:24 18:22		06:02 20:26	04:23 22:06
19	08:34 16:16	07:33 17:23	06:21 18:24		06:00 20:28	04:23 22:07
20	08:32 16:18	07:31 17:26	06:19 18:26		05:57 20:30	04:23 22:07
21	08:31 16:20	07:28 17:28	06:16 18:28		05:55 20:32	04:23 22:07
22	08:29 16:22	07:26 17:30	06:13 18:30		05:52 20:34	04:24 22:08
23	08:28 16:24	07:24 17:32	06:11 18:32		05:50 20:36	04:24 22:08
24	08:26 16:26	07:21 17:34	06:08 18:34		05:47 20:39	04:24 22:08
25	08:25 16:28	07:19 17:37	06:05 18:36		05:45 20:41	04:24 22:08
26	08:23 16:30	07:16 17:39	06:03 18:38		05:42 20:43	04:25 22:08
27	08:21 16:32	07:14 17:41	06:00 18:40		05:40 20:45	04:25 22:08
28	08:20 16:34	07:11 17:43	17:09 (PrRR3) 17:14 (PrRR3)	05:57 20:47	05:38 20:49	04:26 22:07
29	08:18 16:37		06:55 19:45	05:35 20:49	04:38 21:46	04:27 22:07
30	08:16 16:39		06:52 19:47	05:33 20:51	04:36 21:47	04:27 22:07
31	08:14 16:41		06:49 19:49		04:35 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)	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_A

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
 Vilandes 3-6
 LV-1010 Riga
 0037167242411
 Laura Kurzemniece / laura.kurzemniece@environment.lv
 Calculated:
 15.07.2025 09:53/4.1.254

SHADOW - Calendar

Calculation: Flickering_Nordex_N175_Prikuli_A Shadow receptor: Uzulini - Shadow Receptor: 1,0 × 1,0 Azimuth: 3,1° Slope: 90,0° (799)
 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)