

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: AP2 - NORDEX N175/6.X 6800 175.0 I-I hub: 179,0 m (TOT: 266,5 m) (30)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

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

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	16:36-16:45/9	06:47	05:31	19:54-20:17/23	04:34				
	15:46	16:43	17:46	16:50-17:12/22	19:51	20:53		21:50				
2	08:48	08:11	07:06	16:49-17:12/23	06:44	05:28	19:53-20:18/25	04:33				
	15:48	16:46	17:48		19:53	20:55		21:52				
3	08:48	08:09	07:04	16:48-17:12/24	06:41	05:26	19:53-20:19/26	04:32				
	15:49	16:48	17:50		19:55	20:57		21:53				
4	08:47	08:07	07:01	16:49-17:12/23	06:39	05:24	19:53-20:19/26	04:31				
	15:50	16:50	17:52		19:57	20:59		21:54				
5	08:47	08:05	06:58	16:48-17:12/24	06:36	05:22	19:52-20:19/27	04:30				
	15:52	16:52	17:54		19:59	21:01		21:55				
6	08:46	08:02	06:56	16:49-17:12/23	06:34	05:19	19:52-20:19/27	04:29				
	15:53	16:55	17:56		20:01	21:03		21:57				
7	08:46	08:00	06:53	16:49-17:10/21	06:31	05:17	19:52-20:19/27	04:28				
	15:55	16:57	17:59		20:03	21:05		21:58				
8	08:45	07:58	06:51	16:50-17:09/19	06:28	05:15	19:52-20:19/27	04:28				
	15:56	16:59	18:01		20:05	21:07		21:59				
9	08:44	07:56	06:48	16:51-17:07/16	06:26	05:13	19:52-20:19/27	04:27				
	15:58	17:01	18:03		20:08	21:09		22:00				
10	08:44	07:54	06:45	16:53-17:05/12	06:23	05:11	19:52-20:19/27	04:26				
	15:59	17:04	18:05		20:10	21:11		22:01				
11	08:43	07:52	06:43	16:57-17:01/4	06:20	05:09	19:52-20:18/26	04:26				
	16:01	17:06	18:07		20:12	21:13		22:02				
12	08:42	07:50	06:40		06:18	05:07	19:53-20:17/24	04:25				
	16:03	17:08	18:09		20:14	21:15		22:03				
13	08:41	07:47	06:37		06:15	05:05	19:54-20:18/24	04:25				
	16:05	17:10	18:11		20:16	21:17		22:03				
14	08:40	07:45	06:35		06:13	05:03	19:54-20:17/23	04:24				
	16:06	17:12	18:13		20:18	21:19		22:04				
15	08:39	07:43	06:32	16:38-16:44/6	06:10	05:01	19:55-20:16/21	04:24				
	16:08	17:15	18:16		20:20	21:21		22:05				
16	08:38	07:40	06:30	16:35-16:46/11	06:07	04:59	19:55-20:14/19	04:24				
	16:10	17:17	18:18		20:22	21:23		22:05				
17	08:36	07:38	06:27	16:34-16:49/15	06:05	04:57	19:57-20:14/17	04:24				
	16:12	17:19	18:20		20:24	21:25		22:06				
18	08:35	07:36	06:24	16:32-16:50/18	06:02	04:55	19:58-20:12/14	04:24				
	16:14	17:21	18:22		20:26	21:27		22:06				
19	08:34	07:33	06:22	16:32-16:52/20	06:00	04:53	20:01-20:11/10	04:24				
	16:16	17:24	18:24		20:28	21:29		22:07				
20	08:32	07:31	06:19	16:31-16:52/21	05:57	04:52	20:05-20:06/1	04:24				
	16:18	17:26	18:26		20:30	21:31		22:07				
21	08:31	07:29	06:16	16:31-16:53/22	05:55	04:50		04:24				
	16:20	17:28	18:28		20:32	21:32		22:08				
22	08:30	07:26	06:14	16:30-16:53/23	05:52	04:48		04:24				
	16:22	17:30	18:30		20:35	21:34		22:08				
23	08:28	07:24	06:11	16:30-16:52/22	05:50	04:47		04:24				
	16:24	17:32	18:32		20:37	21:36		22:08				
24	08:26	07:21	06:08	16:31-16:52/21	05:47	04:45		04:24				
	16:26	17:35	18:34		20:39	21:38		22:08				
25	08:25	07:19	06:05	16:31-16:51/20	05:45	04:44		04:25				
	16:28	17:37	18:36	16:54-17:07/13	20:41	21:39		22:08				
26	08:23	07:16	06:03	16:32-16:51/19	05:43	04:42		04:25				
	16:30	17:39	18:38	16:53-17:10/17	20:43	21:41		22:08				
27	08:22	07:14	06:00	16:32-16:49/17	05:40	04:41		04:26				
	16:33	17:41	18:41	16:51-17:11/20	20:45	21:43		22:08				
28	08:20	07:11	05:57	16:33-16:47/14	05:38	04:39		04:26				
	16:35	17:43	18:43	16:50-17:11/21	20:47	21:44		22:08				
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				
Sum of minutes with flicker	0	327	220		390	441		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	Last time (hh:mm) with flicker	Minutes with flicker
	Sun set (hh:mm)	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	Minutes with flicker

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SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: AP2 - NORDEX N175/6.X 6800 175.0 I-I hub: 179,0 m (TOT: 266,5 m) (30)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 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 20:03-20:28/25 21:26	06:15 19:25-19:41/16 20:12	07:15 18:52	07:20 16:34	08:22 15:43
2	04:29 22:06	05:16 20:02-20:28/26 21:24	06:17 19:26-19:39/13 20:09	07:17 18:49	07:23 16:32	08:24 15:42
3	04:30 22:06	05:18 20:02-20:29/27 21:21	06:19 19:29-19:37/8 20:07	07:19 17:32-17:42/10 18:46	07:25 16:30	08:25 15:42
4	04:31 22:05	05:20 20:02-20:29/27 21:19	06:21 20:04	07:21 17:29-17:44/15 18:44	07:27 16:28	08:27 15:41
5	04:32 22:04	05:22 20:02-20:30/28 21:17	06:23 20:01	07:23 17:27-17:46/19 18:41	07:29 16:25	08:28 15:40
6	04:33 22:04	05:24 20:01-20:29/28 21:15	06:25 19:59	07:25 17:26-17:46/20 18:38	07:31 16:23	08:30 15:39
7	04:34 22:03	05:26 20:01-20:29/28 21:13	06:27 19:56	07:27 17:25-17:47/22 18:36	07:33 16:21	08:31 15:39
8	04:35 22:02	05:27 20:02-20:29/27 21:11	06:29 19:53	07:29 17:24-17:47/23 18:33	07:36 16:19	08:33 15:38
9	04:36 22:01	05:29 20:02-20:28/26 21:08	06:31 19:51	07:32 17:23-17:47/24 18:30	07:38 16:17	08:34 15:38
10	04:38 22:00	05:31 20:03-20:28/25 21:06	06:33 19:48	07:34 17:22-17:46/24 18:28	07:40 16:15	08:36 15:37
11	04:39 21:59	05:33 20:02-20:26/24 21:04	06:35 19:45	07:36 17:23-17:47/24 18:25	07:42 16:13	08:37 15:37
12	04:40 21:58	05:35 20:03-20:26/23 21:02	06:37 19:43	07:38 17:13-17:15/2 18:23	07:44 16:11	08:38 15:37
13	04:42 21:57	05:37 20:04-20:25/21 20:59	06:39 19:40	07:40 17:08-17:19/11 18:20	07:46 16:09	08:39 15:36
14	04:43 21:55	05:39 20:05-20:23/18 20:57	06:41 19:37	07:42 17:06-17:21/15 18:18	07:48 16:08	08:40 15:36
15	04:45 21:54	05:41 20:07-20:22/15 20:55	06:43 19:35	07:44 17:04-17:22/18 18:15	07:51 16:06	08:41 15:36
16	04:46 21:53	05:43 20:09-20:19/10 20:52	06:45 19:32	07:46 17:03-17:23/20 18:12	07:53 16:04	08:42 15:36
17	04:48 21:51	05:45 20:50	06:47 19:29	07:48 17:02-17:24/22 18:10	07:55 16:02	08:43 15:36
18	04:49 21:50	05:47 19:33-19:41/8 20:47	06:49 19:27	07:50 17:02-17:24/22 18:07	07:57 16:01	08:44 15:36
19	04:51 21:49	05:49 19:30-19:44/14 20:45	06:51 19:24	07:52 17:01-17:23/22 18:05	07:59 15:59	08:45 15:37
20	04:52 21:47	05:51 19:28-19:45/17 20:42	06:53 19:21	07:55 17:02-17:24/22 18:02	08:01 15:57	08:45 15:37
21	04:54 21:46	05:53 19:27-19:46/19 20:40	06:55 19:18	07:57 17:01-17:23/22 18:00	08:03 15:56	08:46 15:37
22	04:56 21:44	05:55 19:26-19:47/21 20:37	06:57 19:16	07:59 17:01-17:22/21 17:58	08:05 15:54	08:47 15:38
23	04:57 21:42	05:57 19:25-19:48/23 20:35	06:59 19:13	08:01 17:01-17:21/20 17:55	08:07 15:53	08:47 15:38
24	04:59 20:12-20:19/7 21:41	05:59 19:24-19:48/24 20:32	07:01 19:10	08:03 17:03-17:20/17 17:53	08:09 15:52	08:48 15:39
25	05:01 20:10-20:22/12 21:39	06:01 19:24-19:48/24 20:30	07:03 19:08	07:05 16:04-16:17/13 16:50	08:11 15:50	08:48 15:40
26	05:03 20:08-20:23/15 21:37	06:03 19:23-19:47/24 20:27	07:05 19:05	07:07 16:05-16:14/9 16:48	08:13 15:49	08:48 15:40
27	05:05 20:07-20:25/18 21:35	06:05 19:23-19:47/24 20:25	07:07 19:02	07:10 16:09-16:13/4 16:46	08:15 15:48	08:48 15:41
28	05:06 20:06-20:26/20 21:33	06:07 19:23-19:46/23 20:22	07:09 19:00	07:12 16:43	08:16 15:47	08:49 15:42
29	05:08 20:05-20:26/21 21:31	06:09 19:23-19:46/23 20:20	07:11 18:57	07:14 16:41	08:18 15:45	08:49 15:43
30	05:10 20:04-20:27/23 21:30	06:11 19:23-19:45/22 20:17	07:13 18:54	07:16 16:39	08:20 15:44	08:49 15:44
31	05:12 20:04-20:28/24 21:28	06:13 19:24-19:44/20 20:14		07:18 16:36		08:48 15:45
Potential sun hours		529	469	384	324	248
Sum of minutes with flicker		140	664	37	554	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	Last time (hh:mm) with flicker	Minutes with flicker
	Sun set (hh:mm)	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	Minutes with flicker

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SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: AP6.1 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (31)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

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

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

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 10:26-10:51/25 15:47	08:12 07:09 16:43 17:46	06:47 05:31 19:51 20:53	04:34 04:28 21:50 22:07	05:14 06:15 20:12 21:26	07:15 07:20 18:52 16:34	08:22 10:16-10:32/16 15:43					
2	08:48 10:26-10:51/25 15:48	08:11 07:06 16:46 17:48	06:44 05:28 19:53 20:55	04:33 04:29 21:52 22:06	05:16 06:17 20:12 21:24	07:17 07:23 18:49 16:32	08:24 10:15-10:34/19 15:42					
3	08:48 10:27-10:52/25 15:49	08:09 07:04 16:48 17:50	06:41 05:26 19:55 20:57	04:32 04:30 21:53 22:06	05:18 06:19 20:07 21:21	07:19 07:25 18:46 16:30	08:25 10:15-10:35/20 15:42					
4	08:47 10:27-10:52/25 15:50	08:07 07:01 16:50 17:52	06:39 05:24 19:57 20:59	04:31 04:31 21:54 22:05	05:20 06:21 20:04 21:19	07:21 07:27 18:44 16:28	08:27 10:15-10:36/21 15:41					
5	08:47 10:28-10:51/23 15:52	08:05 06:58 16:52 17:54	06:36 05:22 19:59 21:01	04:30 04:32 21:55 22:04	05:22 06:23 20:01 21:17	07:23 07:29 18:41 16:25	08:28 10:15-10:37/22 15:40					
6	08:46 10:29-10:52/23 15:53	08:03 06:56 16:55 17:56	06:34 05:19 20:01 21:03	04:29 04:33 21:57 22:04	05:24 06:25 20:01 21:15	07:25 07:31 18:38 16:23	08:30 10:14-10:37/23 15:39					
7	08:46 10:30-10:52/22 15:55	08:00 06:53 16:57 17:59	06:31 05:17 20:03 21:05	04:28 04:34 21:58 22:03	05:26 06:27 20:13 21:13	07:27 07:33 18:36 16:21	08:31 10:15-10:38/23 15:39					
8	08:45 10:31-10:52/21 15:56	07:58 06:51 16:59 18:01	06:28 05:15 20:05 21:07	04:28 04:35 21:59 22:02	05:27 06:29 20:11 21:11	07:30 07:36 18:33 16:19	08:33 10:15-10:40/25 15:38					
9	08:44 10:32-10:52/20 15:58	07:56 06:48 17:01 18:03	06:26 05:13 20:08 21:09	04:27 04:36 22:00 22:01	05:29 06:31 20:08 19:51	07:32 07:38 18:31 16:17	08:34 10:15-10:40/25 15:38					
10	08:44 10:33-10:52/19 15:59	07:54 06:45 17:04 18:05	06:23 05:11 20:10 21:11	04:26 04:38 22:01 22:00	05:31 06:33 20:06 19:48	07:34 07:40 18:28 16:15	08:36 10:16-10:41/25 15:37					
11	08:43 10:33-10:50/17 16:01	07:52 06:43 17:06 18:07	06:20 05:09 20:12 21:13	04:26 04:39 22:02 21:59	05:33 06:35 21:04 19:45	07:36 07:42 18:25 16:13	08:37 10:16-10:41/25 15:37					
12	08:42 10:35-10:50/15 16:03	07:50 06:40 17:08 18:09	06:18 05:07 20:14 21:15	04:25 04:40 22:03 21:58	05:35 06:37 21:02 19:43	07:38 07:44 18:23 16:11	08:38 10:16-10:42/26 15:37					
13	08:41 10:37-10:49/12 16:05	07:47 06:37 17:10 18:11	06:15 05:05 20:16 21:17	04:25 04:42 22:03 21:57	05:37 06:39 20:59 19:40	07:40 07:46 18:20 16:09	08:39 10:16-10:42/26 15:36					
14	08:40 10:40-10:48/8 16:06	07:45 06:35 17:13 18:13	06:13 05:03 20:18 21:19	04:24 04:43 22:04 21:55	05:39 06:41 20:57 19:37	07:42 07:48 18:18 16:08	08:40 10:17-10:43/26 15:36					
15	08:39 16:08	07:43 06:32 17:15 18:16	06:10 05:01 20:20 21:21	04:24 04:45 22:05 21:54	05:41 06:43 20:55 19:35	07:44 07:51 18:15 16:06	08:41 10:17-10:44/27 15:36					
16	08:38 16:10	07:40 06:30 17:17 18:18	06:07 04:59 20:22 21:23	04:24 04:46 22:05 21:53	05:43 06:45 20:52 19:32	07:46 07:53 18:13 16:04	08:42 10:18-10:44/26 15:36					
17	08:36 16:12	07:38 06:27 17:19 18:20	06:05 04:57 20:24 21:25	04:24 04:48 22:06 21:52	05:45 06:47 20:50 19:29	07:48 07:55 18:10 16:02	08:43 10:18-10:45/27 15:36					
18	08:35 16:14	07:36 06:24 17:21 18:22	06:02 04:55 20:26 21:27	04:24 04:49 22:07 21:50	05:47 06:49 20:47 19:27	07:50 07:57 18:07 16:01	08:44 10:18-10:45/27 15:36					
19	08:34 16:16	07:33 06:22 17:24 18:24	06:00 04:53 20:28 21:29	04:24 04:51 22:07 21:49	05:49 06:51 20:45 19:24	07:52 07:59 18:05 15:59	08:45 10:18-10:45/27 15:37					
20	08:32 16:18	07:31 06:19 17:26 18:26	05:57 04:52 20:30 21:31	04:24 04:52 22:07 21:47	05:51 06:53 20:42 19:21	07:55 08:01 18:02 15:57	08:45 10:19-10:46/27 15:37					
21	08:31 16:20	07:29 06:16 17:28 18:28	05:55 04:50 20:32 21:32	04:24 04:54 22:08 21:46	05:53 06:55 20:40 19:18	07:57 08:03 18:00 15:56	08:46 10:19-10:46/27 15:37					
22	08:30 16:22	07:26 06:14 17:30 18:30	05:52 04:48 20:35 21:34	04:24 04:56 22:08 21:44	05:55 06:57 20:37 19:16	07:59 08:05 17:58 15:54	08:47 10:20-10:47/27 15:38					
23	08:28 16:24	07:24 06:11 17:32 18:32	05:50 04:47 20:37 21:36	04:24 04:57 22:08 21:42	05:57 06:59 20:35 19:13	08:01 08:07 17:55 15:53	08:47 10:20-10:47/27 15:38					
24	08:27 16:26	07:21 06:08 17:35 18:34	05:47 04:45 20:39 21:38	04:24 04:59 22:08 21:41	05:59 07:01 20:32 19:10	08:03 08:09 17:53 15:52	08:48 10:21-10:48/27 15:39					
25	08:25 16:28	07:19 06:05 17:37 18:36	05:45 04:44 20:41 21:39	04:25 05:01 22:08 21:39	06:01 07:03 20:30 19:08	08:11 08:17 16:50 15:50	08:48 10:22-10:49/27 15:40					
26	08:23 16:30	07:16 06:03 17:39 18:38	05:43 04:42 20:43 21:41	04:25 05:03 22:08 21:37	06:03 07:05 20:27 19:05	08:13 08:19 16:48 15:49	08:48 10:22-10:49/27 15:40					
27	08:22 16:33	07:14 06:00 17:41 18:41	05:40 04:41 20:45 21:43	04:26 05:05 22:08 21:35	06:05 07:07 20:25 19:02	08:15 08:21 16:46 15:48	08:48 10:22-10:49/27 15:41					
28	08:20 16:35	07:11 05:57 17:43 18:43	05:38 04:39 20:47 21:44	04:26 05:06 22:08 21:33	06:07 07:09 20:22 19:00	08:17 08:23 16:43 15:47	08:49 10:23-10:50/27 15:42					
29	08:18 16:37	07:08 05:55 17:45 18:45	05:35 04:38 20:49 21:46	04:27 05:08 22:07 21:31	06:09 07:11 20:20 18:57	08:18 08:24 16:41 15:45	08:49 10:24-10:50/26 15:43					
30	08:16 16:39	07:06 05:53 17:47 18:47	05:33 04:37 20:51 21:47	04:28 05:10 22:07 21:30	06:11 07:13 20:17 18:54	08:20 08:26 16:39 15:44	08:49 10:24-10:51/27 15:44					
31	08:14 16:41	07:04 05:49 17:49 18:49	05:35 04:38 21:49 21:49	04:35 05:12 21:28 20:14	06:13 07:15 20:14 18:54	08:18 08:24 16:36 15:44	08:49 10:24-10:50/26 15:45					
Potential sun hours	236	266	366	426	507	528	529	469	384	324	248	778
Sum of minutes with flicker	280	0	0	0	0	0	0	0	0	0	35	217

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: DD1 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (23)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

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

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	13:33-14:13/40	08:13	13:49-14:19/30	07:09	16:08-16:48/40	06:47	05:31	04:35
	15:47		16:44		17:46		19:51	20:53	21:50
2	08:48	13:34-14:14/40	08:11	13:50-14:18/28	07:06	16:06-16:49/43	06:45	05:29	04:34
	15:48		16:46		17:48		19:53	20:55	21:52
3	08:48	13:34-14:14/40	08:09	13:53-14:16/23	07:04	16:06-16:50/44	06:42	05:27	04:33
	15:50		16:48		17:50		19:55	20:57	21:53
4	08:47	13:35-14:15/40	08:07	13:55-14:14/19	07:01	16:05-16:50/45	06:39	05:24	04:32
	15:51		16:51		17:53	17:16-17:24/8	19:57	20:59	21:54
5	08:47	13:35-14:16/41	08:05	13:58-14:10/12	06:59	16:03-16:50/47	06:37	05:22	04:31
	15:52		16:53		17:55	17:14-17:25/11	19:59	21:02	21:55
6	08:46	13:35-14:16/41	08:03		06:56	16:03-16:51/48	06:34	05:20	04:30
	15:54		16:55		17:57	17:13-17:28/15	20:02	21:04	21:57
7	08:46	13:35-14:16/41	08:01		06:54	16:03-16:51/48	06:31	05:18	04:29
	15:55		16:57		17:59	17:11-17:30/19	20:04	21:06	21:58
8	08:45	13:35-14:17/42	07:58		06:51	16:03-16:52/49	06:29	05:16	04:28
	15:57		17:00		18:01	17:10-17:32/22	20:06	21:08	21:59
9	08:44	13:35-14:18/43	07:56		06:48	16:02-16:52/50	06:26	05:14	04:28
	15:59		17:02		18:03	17:10-17:35/25	20:08	21:10	22:00
10	08:44	13:35-14:18/43	07:54		06:46	16:01-16:51/50	06:23	05:11	04:27
	16:00		17:04		18:05	17:09-17:37/28	20:10	21:12	22:01
11	08:43	13:36-14:19/43	07:52		06:43	16:01-16:50/49	06:21	05:09	04:27
	16:02		17:06		18:07	17:09-17:39/30	20:12	21:14	22:02
12	08:42	13:36-14:20/44	07:50		06:40	16:02-16:51/49	06:18	05:07	04:26
	16:04		17:09		18:10	17:10-17:42/32	20:14	21:16	22:03
13	08:41	13:37-14:20/43	07:48		06:38	16:01-16:50/49	06:16	05:05	04:26
	16:05		17:11		18:12	17:10-17:43/33	20:16	21:17	22:03
14	08:40	13:36-14:20/44	07:45		06:35	16:01-16:49/48	06:13	05:03	04:25
	16:07		17:13		18:14	17:10-17:43/33	20:18	21:19	22:04
15	08:39	13:37-14:21/44	07:43		06:33	16:02-16:49/47	06:11	05:01	04:25
	16:09		17:15		18:16	17:12-17:44/32	20:20	21:21	22:05
16	08:38	13:38-14:22/44	07:41		06:30	16:02-16:48/46	06:08	05:00	04:25
	16:11		17:17		18:18	17:13-17:44/31	20:22	21:23	22:05
17	08:36	13:38-14:22/44	07:38		06:27	16:02-16:47/45	06:05	04:58	04:25
	16:13		17:20		18:20	17:13-17:43/30	20:24	21:25	22:06
18	08:35	13:39-14:22/43	07:36		06:25	16:04-16:46/42	06:03	04:56	04:24
	16:15		17:22		18:22	17:13-17:43/30	20:26	21:27	22:06
19	08:34	13:39-14:22/43	07:34		06:22	16:04-16:45/41	06:00	04:54	04:24
	16:17		17:24		18:24	17:13-17:42/29	20:28	21:29	22:07
20	08:33	13:39-14:22/43	07:31		06:19	16:05-16:43/38	05:58	04:52	04:24
	16:19		17:26		18:26	17:13-17:41/28	20:31	21:31	22:07
21	08:31	13:40-14:23/43	07:29		06:17	16:07-16:42/35	05:55	04:51	04:25
	16:21		17:29		18:28	17:14-17:39/25	20:33	21:32	22:07
22	08:30	13:40-14:23/43	07:26		06:14	16:08-16:40/32	05:53	04:49	04:25
	16:23		17:31		18:31	17:15-17:38/23	20:35	21:34	22:08
23	08:28	13:40-14:23/43	07:24	16:21-16:37/16	06:11	16:10-16:37/27	05:50	04:47	04:25
	16:25		17:33		18:33	17:16-17:34/18	20:37	21:36	22:08
24	08:27	13:41-14:23/42	07:21	16:17-16:40/23	06:09	16:12-16:34/22	05:48	04:46	04:25
	16:27		17:35		18:35	17:18-17:30/12	20:39	21:38	22:08
25	08:25	13:41-14:22/41	07:19	16:15-16:43/28	06:06	16:17-16:30/13	05:46	04:44	04:26
	16:29		17:37		18:37		20:41	21:39	22:08
26	08:23	13:42-14:22/40	07:16	16:13-16:45/32	06:03		05:43	04:43	04:26
	16:31		17:40		18:39		20:43	21:41	22:08
27	08:22	13:43-14:22/39	07:14	16:11-16:46/35	06:01		05:41	04:41	04:27
	16:33		17:42		18:41		20:45	21:43	22:08
28	08:20	13:44-14:21/37	07:11	16:10-16:48/38	05:58		05:38	04:40	04:27
	16:35		17:44		18:43		20:47	21:44	22:07
29	08:18	13:45-14:21/36			06:55		05:36	04:39	04:28
	16:37				19:45		20:49	21:46	22:07
30	08:16	13:46-14:20/34			06:53		05:34	04:37	04:28
	16:40				19:47		20:51	21:47	22:07
31	08:14	13:47-14:20/33			06:50			04:36	
	16:42				19:49			21:49	
Potential sun hours	236		266		366		426	507	528
Sum of minutes with flicker	1277		284		1561		0	0	0

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: DD1 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (23)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 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	05:15 21:26	06:16 20:12	07:16 16:41-17:30/49 18:52 17:49-18:22/33	07:21 16:35	08:22 13:18-14:01/43 15:44
2	04:30 22:06	05:16 21:24	06:18 20:09	07:18 16:40-17:29/49 18:49 17:48-18:19/31	07:23 16:33	08:24 13:19-14:01/42 15:43
3	04:31 22:05	05:18 21:22	06:20 20:07	07:20 16:39-17:29/50 18:47 17:47-18:16/29	07:25 16:30	08:25 13:19-14:02/43 15:42
4	04:32 22:05	05:20 21:19	06:22 20:04	07:22 16:39-17:29/50 18:44 17:47-18:13/26	07:27 16:28	08:27 13:20-14:02/42 15:41
5	04:33 22:04	05:22 21:17	06:24 20:02	07:24 16:39-17:28/49 18:41 17:47-18:10/23	07:29 16:26	08:28 13:20-14:02/42 15:41
6	04:34 22:03	05:24 21:15	06:26 19:59	07:26 16:39-17:28/49 18:39 17:47-18:08/21	07:31 13:28-13:42/14 16:24	08:30 13:21-14:02/41 15:40
7	04:35 22:03	05:26 21:13	06:28 19:56	07:28 16:38-17:27/49 18:36 17:47-18:05/18	07:34 13:25-13:44/19 16:22	08:31 13:22-14:03/41 15:39
8	04:36 22:02	05:28 21:11	06:30 19:54	07:30 16:39-17:27/48 18:34 17:48-18:02/14	07:36 13:22-13:46/24 16:20	08:33 13:22-14:02/40 15:39
9	04:37 22:01	05:30 21:09	06:32 19:51	07:32 16:40-17:26/46 18:31 17:50-18:00/10	07:38 13:21-13:49/28 16:18	08:34 13:23-14:03/40 15:38
10	04:39 22:00	05:32 21:06	06:34 19:48	07:34 16:40-17:25/45 18:28 17:53-17:57/4	07:40 13:19-13:50/31 16:16	08:36 13:23-14:03/40 15:38
11	04:40 21:59	05:34 21:04	06:36 19:46	07:36 16:40-17:24/44 18:26	07:42 13:19-13:52/33 16:14	08:37 13:24-14:04/40 15:38
12	04:41 21:58	05:36 21:02	06:38 19:43	07:38 16:41-17:22/41 18:23	07:44 13:18-13:52/34 16:12	08:38 13:25-14:04/39 15:37
13	04:43 21:57	05:38 20:59	06:40 19:40	07:40 16:41-17:21/40 18:21	07:46 13:16-13:53/37 16:10	08:39 13:25-14:04/39 15:37
14	04:44 21:55	05:40 20:57	06:42 19:38	07:42 16:42-17:19/37 18:18	07:49 13:17-13:54/37 16:08	08:40 13:25-14:04/39 15:37
15	04:45 21:54	05:42 20:55	06:44 19:35	07:44 16:44-17:18/34 18:16	07:51 13:16-13:55/39 16:06	08:41 13:26-14:04/38 15:37
16	04:47 21:53	05:44 20:52	06:46 19:32	07:46 16:46-17:16/30 18:13	07:53 13:15-13:55/40 16:05	08:42 13:26-14:05/39 15:37
17	04:48 21:51	05:46 20:50	06:48 19:30	07:48 16:47-17:14/27 18:10	07:55 13:15-13:56/41 16:03	08:43 13:27-14:05/38 15:37
18	04:50 21:50	05:48 20:48	06:50 17:05-17:17/12 19:27	07:51 16:50-17:10/20 18:08	07:57 13:15-13:57/42 16:01	08:44 13:28-14:06/38 15:37
19	04:52 21:49	05:50 20:45	06:52 17:00-17:21/21 19:24 18:06-18:17/11	07:53 16:54-17:07/13 18:05	07:59 13:14-13:57/43 16:00	08:45 13:29-14:06/37 15:37
20	04:53 21:47	05:52 20:43	06:54 16:57-17:23/26 19:21 18:03-18:20/17	07:55 18:03	08:01 13:15-13:58/43 15:58	08:45 13:28-14:06/38 15:38
21	04:55 21:46	05:54 20:40	06:56 16:54-17:25/31 19:19 18:01-18:23/22	07:57 18:01	08:03 13:15-13:58/43 15:57	08:46 13:29-14:07/38 15:38
22	04:57 21:44	05:56 20:38	06:58 16:52-17:26/34 19:16 17:59-18:24/25	07:59 17:58	08:05 13:15-13:58/43 15:55	08:47 13:30-14:08/38 15:39
23	04:58 21:42	05:58 20:35	07:00 16:50-17:27/37 19:13 17:58-18:25/27	08:01 17:56	08:07 13:16-13:59/43 15:54	08:47 13:30-14:08/38 15:39
24	05:00 21:41	06:00 20:33	07:02 16:48-17:28/40 19:11 17:57-18:26/29	08:03 17:53	08:09 13:16-14:00/44 15:52	08:48 13:31-14:08/37 15:40
25	05:02 21:39	06:02 20:30	07:04 16:47-17:29/42 19:08 17:56-18:26/30	07:05 16:51	08:11 13:16-14:00/44 15:51	08:48 13:31-14:08/37 15:40
26	05:03 21:37	06:04 20:28	07:06 16:45-17:29/44 19:05 17:56-18:26/30	07:08 16:48	08:13 13:16-14:00/44 15:50	08:48 13:32-14:10/38 15:41
27	05:05 21:35	06:06 20:25	07:08 16:44-17:30/46 19:03 17:55-18:26/31	07:10 16:46	08:15 13:16-14:00/44 15:48	08:48 13:32-14:10/38 15:42
28	05:07 21:33	06:08 20:22	07:10 16:43-17:30/47 19:00 17:53-18:25/32	07:12 16:44	08:17 13:17-14:00/43 15:47	08:49 13:33-14:11/38 15:43
29	05:09 21:32	06:10 20:20	07:12 16:42-17:30/48 18:57 17:51-18:24/33	07:14 16:41	08:18 13:17-14:00/43 15:46	08:49 13:32-14:11/39 15:44
30	05:11 21:30	06:12 20:17	07:14 16:41-17:30/49 18:55 17:50-18:23/33	07:16 16:39	08:20 13:17-14:01/44 15:45	08:49 13:33-14:11/38 15:45
31	05:13 21:28	06:14 20:15		07:18 16:37		08:48 13:33-14:12/39 15:46
Potential sun hours	528	469	384	324	248	217
Sum of minutes with flicker	0	0	797	979	940	1217

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: DD3 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (24)
Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

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

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 12:51-13:32/41 15:47 11:18-11:55/37	08:13 12:49-13:55/66 16:44 15:16-15:35/19	07:09 16:03-16:56/53 17:46	06:47 18:49-18:52/3 19:51	05:31 20:53	04:35 21:50
2	08:48 12:52-13:33/41 15:48 11:19-11:55/36	08:11 12:49-13:56/67 16:46 15:18-15:34/16	07:06 16:03-16:56/53 17:48	06:45 19:53	05:29 20:55	04:34 21:51
3	08:48 12:51-13:34/43 15:50 11:20-11:55/35	08:09 12:50-13:56/66 16:48 15:20-15:33/13	07:04 16:04-16:56/52 17:50	06:42 19:55	05:27 20:57	04:33 21:53
4	08:47 12:52-13:35/43 15:51 11:21-11:56/35	08:07 12:50-13:56/66 16:51 15:23-15:30/7	07:01 16:04-16:55/51 17:53	06:39 19:57	05:24 20:59	04:32 21:54
5	08:47 12:52-13:36/44 15:52 11:21-11:56/35	08:05 12:50-13:55/65 16:53	06:59 16:05-16:54/49 17:55	06:37 19:59	05:22 21:01	04:31 21:55
6	08:46 12:51-13:37/46 15:54 11:22-11:56/34	08:03 12:50-13:56/66 16:55	06:56 16:07-16:53/46 17:57	06:34 20:02	05:20 21:03	04:30 21:57
7	08:46 12:51-13:38/47 15:55 11:22-11:56/34	08:01 12:51-13:56/65 16:57	06:53 16:08-16:51/43 17:59	06:31 20:04	05:18 21:06	04:29 21:58
8	08:45 12:51-13:39/48 15:57 11:23-11:56/33	07:58 12:51-13:55/64 17:00	06:51 16:10-16:49/39 18:01	06:29 20:06	05:16 21:08	04:28 21:59
9	08:44 12:51-13:40/49 15:58 11:24-11:56/32	07:56 12:52-13:55/63 17:02 16:23-16:29/6	06:48 16:32-16:48/16 18:03 16:13-16:26/13	06:26 20:08	05:14 21:10	04:28 22:00
10	08:44 12:51-13:41/50 16:00 11:25-11:56/31	07:54 12:52-13:55/63 17:04 16:21-16:32/11	06:46 16:35-16:44/9 18:05	06:23 20:10	05:11 21:12	04:27 22:01
11	08:43 12:51-13:42/51 15:16-15:21/5 16:02 11:26-11:56/30	07:52 12:52-13:54/62 17:06 16:19-16:34/15	06:43 18:07	06:21 20:12	05:09 21:13	04:26 22:02
12	08:42 12:51-13:43/52 15:15-15:23/8 16:04 11:27-11:56/29	07:50 12:54-13:54/60 17:09 16:18-16:37/19	06:40 18:10	06:18 20:14	05:07 21:15	04:26 22:03
13	08:41 12:51-13:44/53 15:14-15:26/12 16:05 11:28-11:56/28	07:47 12:55-13:53/58 17:11 16:18-16:38/20	06:38 18:12	06:16 20:16	05:05 21:17	04:26 22:03
14	08:40 12:50-13:44/54 15:13-15:27/14 16:07 11:28-11:55/27	07:45 12:55-13:52/57 17:13 16:15-16:39/24	06:35 18:14	06:13 20:18	05:03 21:19	04:25 22:04
15	08:39 12:50-13:45/55 15:12-15:29/17 16:09 11:30-11:55/25	07:43 12:56-13:52/56 17:15 16:13-16:43/30	06:32 18:16	06:11 20:20	05:01 21:21	04:25 22:05
16	08:38 12:50-13:47/57 15:11-15:30/19 16:11 11:32-11:55/23	07:41 12:57-13:50/53 17:17 16:10-16:44/34	06:30 18:18	06:08 20:22	05:00 21:23	04:25 22:05
17	08:36 12:50-13:47/57 15:12-15:32/20 16:13 11:33-11:53/20	07:38 12:59-13:49/50 17:20 16:09-16:46/37	06:27 18:20	06:05 20:24	04:58 21:25	04:24 22:06
18	08:35 12:49-13:47/58 15:11-15:32/21 16:15 11:36-11:52/16	07:36 13:00-13:47/47 17:22 16:07-16:46/39	06:25 18:22	06:03 20:26	04:56 21:27	04:24 22:06
19	08:34 12:50-13:49/59 15:11-15:33/22 16:17 11:38-11:50/12	07:34 13:02-13:46/44 17:24 16:06-16:49/43	06:22 17:50-17:56/6 18:24	06:00 20:28	04:54 21:29	04:24 22:07
20	08:32 12:49-13:49/60 15:11-15:34/23 16:19 11:43-11:45/2	07:31 13:03-13:44/41 17:26 16:05-16:50/45	06:19 17:47-17:58/11 18:26	05:58 20:31	04:52 21:31	04:24 22:07
21	08:31 12:50-13:51/61 16:21 15:11-15:34/23	07:29 13:06-13:42/36 17:29 16:05-16:53/48	06:17 17:45-18:00/15 18:28	05:55 20:33	04:51 21:32	04:25 22:07
22	08:30 12:49-13:51/62 16:23 15:11-15:35/24	07:26 13:09-13:39/30 17:31 16:04-16:53/49	06:14 17:44-18:03/19 18:30	05:53 20:35	04:49 21:34	04:25 22:08
23	08:28 12:49-13:52/63 16:25 15:11-15:36/25	07:24 13:14-13:35/21 17:33 16:04-16:55/51	06:11 17:43-18:03/20 18:33	05:50 20:37	04:47 21:36	04:25 22:08
24	08:27 12:49-13:52/63 16:27 15:11-15:36/25	07:21 13:22-13:26/4 17:35 16:03-16:55/52	06:09 17:42-18:03/21 18:35	05:48 20:39	04:46 21:38	04:25 22:08
25	08:25 12:49-13:52/63 16:29 15:11-15:36/25	07:19 16:02-16:55/53 17:37	06:06 17:42-18:04/22 18:37	05:46 20:41	04:44 21:39	04:26 22:08
26	08:23 12:49-13:53/64 16:31 15:12-15:36/24	07:16 16:03-16:56/53 17:40	06:03 17:42-18:03/21 18:39	05:43 20:43	04:43 21:41	04:26 22:08
27	08:22 12:49-13:53/64 16:33 15:12-15:36/24	07:14 16:02-16:56/54 17:42	06:01 17:41-18:02/21 18:41	05:41 20:45	04:41 21:43	04:27 22:08
28	08:20 12:49-13:54/65 16:35 15:12-15:36/24	07:11 16:03-16:57/54 17:44	05:58 17:42-18:02/20 18:43	05:38 20:47	04:40 21:44	04:27 22:07
29	08:18 12:49-13:54/65 16:37 15:13-15:36/23		06:55 18:42-19:00/18 19:45	05:36 20:49	04:39 21:46	04:28 22:07
30	08:16 12:49-13:55/66 16:40 15:14-15:36/22		06:53 18:43-18:58/15 19:47	05:34 20:51	04:37 21:47	04:28 22:07
31	08:14 12:49-13:55/66 16:42 15:15-15:35/20		06:50 18:45-18:57/12 19:49		04:36 21:49	
Potential sun hours	236	266	366	426	507	528
Sum of minutes with flicker	2684	2062	645	3	0	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	Last time (hh:mm) with flicker	Minutes with flicker
	Sun set (hh:mm)	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	Minutes with flicker

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

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

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: DD3 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (24)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 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	05:15 21:26	06:16 20:12	07:16 18:52	07:20 12:22-13:24/62 16:35 15:51-16:01/10	08:22 12:33-13:24/51 14:58-15:03/5 15:44 11:08-11:38/30
2	04:30 22:06	05:16 21:24	06:18 20:09	07:18 18:49	07:23 12:21-13:25/64 16:32 15:53-15:58/5	08:24 12:34-13:24/50 15:43 11:08-11:39/31
3	04:31 22:05	05:18 21:21	06:20 20:07	07:20 18:47	07:25 12:20-13:24/64 16:30	08:25 12:35-13:24/49 15:42 11:08-11:40/32
4	04:32 22:05	05:20 21:19	06:22 20:04	07:22 17:10-17:23/13 18:44 16:53-17:00/7	07:27 12:21-13:25/64 16:28	08:27 12:36-13:24/48 15:41 11:08-11:41/33
5	04:33 22:04	05:22 21:17	06:24 20:02	07:24 16:48-17:04/16 18:41 17:07-17:26/19	07:29 12:20-13:25/65 16:26	08:28 12:36-13:23/47 15:41 11:07-11:41/34
6	04:34 22:03	05:24 21:15	06:26 19:59	07:26 16:45-17:27/42 18:39	07:31 12:20-13:26/66 16:24	08:30 12:37-13:23/46 15:40 11:08-11:42/34
7	04:35 22:03	05:26 21:13	06:28 19:56	07:28 16:43-17:28/45 18:36	07:33 12:20-13:26/66 16:22 14:52-15:01/9	08:31 12:39-13:23/44 15:39 11:08-11:43/35
8	04:36 22:02	05:28 21:11	06:30 19:54	07:30 16:41-17:28/47 18:34	07:36 12:20-13:26/66 16:20 14:49-15:03/14	08:33 12:39-13:23/44 15:39 11:08-11:43/35
9	04:37 22:01	05:30 21:09	06:32 19:51	07:32 16:40-17:30/50 18:31	07:38 12:20-13:26/66 16:18 14:48-15:05/17	08:34 12:40-13:23/43 15:38 11:09-11:44/35
10	04:38 22:00	05:32 21:06	06:34 19:48	07:34 16:39-17:30/51 18:28	07:40 12:20-13:26/66 16:16 14:47-15:06/19	08:35 12:41-13:22/41 15:38 11:08-11:44/36
11	04:40 21:59	05:34 21:04	06:36 19:46	07:36 16:37-17:30/53 18:26	07:42 12:21-13:27/66 16:14 14:47-15:07/20	08:37 12:42-13:23/41 15:38 11:09-11:46/37
12	04:41 21:58	05:36 21:02	06:38 18:37-18:48/11 19:43	07:38 16:36-17:30/54 18:23	07:44 12:21-13:26/65 16:12 14:46-15:08/22	08:38 12:43-13:23/40 15:37 11:09-11:46/37
13	04:42 21:57	05:38 20:59	06:40 18:35-18:50/15 19:40	07:40 16:36-17:29/53 18:21	07:46 12:20-13:26/66 16:10 14:45-15:08/23	08:39 12:44-13:23/39 15:37 11:10-11:46/36
14	04:44 21:55	05:40 20:57	06:42 18:33-18:51/18 19:38	07:42 16:35-17:29/54 18:18	07:48 12:21-13:27/66 16:08 14:45-15:09/24	08:40 12:44-13:22/38 15:37 11:10-11:47/37
15	04:45 21:54	05:42 20:55	06:44 18:32-18:51/19 19:35	07:44 16:35-17:29/54 18:15	07:51 12:21-13:26/65 16:06 14:45-15:09/24	08:41 12:45-13:22/37 15:37 11:10-11:47/37
16	04:47 21:53	05:44 20:52	06:46 18:31-18:51/20 19:32	07:46 16:35-17:28/53 18:13	07:53 12:22-13:26/64 16:05 14:45-15:09/24	08:42 12:46-13:23/37 15:37 11:10-11:48/38
17	04:48 21:51	05:46 20:50	06:48 18:30-18:51/21 19:30	07:48 16:34-17:27/53 18:10	07:55 12:23-13:26/63 16:03 14:45-15:10/25	08:43 12:47-13:23/36 15:37 11:11-11:48/37
18	04:50 21:50	05:48 20:47	06:50 18:30-18:51/21 19:27	07:51 13:48-14:02/14 18:08 16:34-17:26/52	07:57 12:23-13:26/63 16:01 14:45-15:10/25	08:44 12:48-13:23/35 15:37 11:12-11:49/37
19	04:52 21:49	05:50 20:45	06:52 18:29-18:51/22 19:24	07:53 13:43-14:08/25 18:05 16:35-17:25/50	07:59 12:23-13:26/63 16:00 14:45-15:10/25	08:45 12:48-13:24/36 15:37 11:12-11:50/38
20	04:53 21:47	05:52 20:43	06:54 18:29-18:50/21 19:21	07:55 13:39-14:11/32 18:03 16:35-17:24/49	08:01 12:24-13:26/62 15:58 14:46-15:10/24	08:45 12:48-13:24/36 15:38 11:12-11:49/37
21	04:55 21:45	05:54 20:40	06:56 18:30-18:49/19 19:19	07:57 13:36-14:13/37 18:00 16:35-17:22/47	08:03 12:25-13:26/61 15:57 14:47-15:10/23	08:46 12:49-13:24/35 15:38 11:13-11:50/37
22	04:56 21:44	05:56 20:38	06:57 18:30-18:46/16 19:16	07:59 13:33-14:15/42 17:58 16:35-17:20/45	08:05 12:25-13:25/60 14:47-15:10/23 15:55 11:19-11:20/1	08:47 12:49-13:24/35 15:39 11:14-11:51/37
23	04:58 21:42	05:58 20:35	06:59 18:31-18:43/12 19:13	08:01 13:32-14:17/45 17:56 16:37-17:19/42	08:07 12:26-13:25/59 14:47-15:09/22 15:54 11:15-11:27/12	08:47 12:50-13:25/35 15:39 11:14-11:51/37
24	05:00 21:41	06:00 20:33	07:01 18:33-18:41/8 19:11	08:03 13:30-14:18/48 17:53 16:38-17:16/38	08:09 12:27-13:26/59 14:49-15:10/21 15:52 11:13-11:29/16	08:47 12:50-13:26/36 15:40 11:14-11:52/38
25	05:02 21:39	06:02 20:30	07:03 19:08	07:05 12:28-13:19/51 16:51 15:39-16:15/36	08:11 12:28-13:25/57 14:50-15:10/20 15:51 11:11-11:31/20	08:48 12:50-13:26/36 15:40 11:14-11:52/38
26	05:03 21:37	06:04 20:28	07:05 19:05	07:08 12:27-13:21/54 16:48 15:41-16:14/33	08:13 12:28-13:25/57 14:51-15:09/18 15:50 11:10-11:33/23	08:48 12:52-13:28/36 15:41 11:16-11:53/37
27	05:05 21:35	06:06 20:25	07:07 19:03	07:10 12:26-13:21/55 16:46 15:43-16:11/28	08:15 12:29-13:25/56 14:52-15:09/17 15:48 11:09-11:34/25	08:48 12:52-13:28/36 15:42 11:16-11:53/37
28	05:07 21:33	06:08 20:22	07:09 19:00	07:12 12:24-13:22/58 16:44 15:45-16:08/23	08:16 12:30-13:24/54 14:53-15:07/14 15:47 11:09-11:35/26	08:48 12:52-13:29/37 15:43 11:17-11:54/37
29	05:09 21:31	06:10 20:20	07:11 18:57	07:14 12:24-13:23/59 16:41 15:48-16:08/20	08:18 12:31-13:24/53 14:54-15:06/12 15:46 11:08-11:36/28	08:49 12:51-13:29/38 15:44 11:16-11:53/37
30	05:11 21:30	06:12 20:17	07:14 18:55	07:16 12:23-13:23/60 16:39 15:48-16:06/18	08:20 12:32-13:24/52 14:56-15:04/8 15:45 11:08-11:37/29	08:49 12:52-13:30/38 15:45 11:17-11:54/37
31	05:13 21:28	06:14 20:15		07:18 12:22-13:23/61 16:37 15:49-16:03/14		08:48 12:52-13:31/39 15:46 11:18-11:55/37
Potential sun hours	528	469	384	324	248	217
Sum of minutes with flicker	0	0	223	1800	2528	2359

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: JV1 - NORDEX N175/6.X 6800 175.0 !-! hub: 179,0 m (TOT: 266,5 m) (26)

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

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

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	14:16-14:40/24	08:13	07:09	06:47	05:31 18:36-19:12/36	04:35
	15:47		16:44	17:46	19:51	20:53	21:50
2	08:48	14:17-14:41/24	08:11	07:06	06:45	05:29 18:37-19:11/34	04:34
	15:49		16:46	17:48	19:53	20:55	21:51
3	08:48	14:17-14:41/24	08:09	07:04	06:42	05:27 18:39-19:09/30	04:33
	15:50		16:49	17:50	19:55	20:57	21:53
4	08:47	14:18-14:42/24	08:07	07:01	06:39 18:51-19:07/16	05:25 18:40-19:08/28	04:32
	15:51		16:51	17:53	19:57	20:59	21:54
5	08:47	14:18-14:42/24	08:05	06:59	06:37 18:48-19:11/23	05:22 18:42-19:06/24	04:31
	15:53		16:53	17:55	19:59	21:01	21:55
6	08:46	14:18-14:42/24	08:03	06:56	06:34 18:45-19:13/28	05:20 18:44-19:04/20	04:30
	15:54		16:55	17:57	20:02	21:03	21:57
7	08:46	14:19-14:42/23	08:01	06:54	06:31 18:43-19:15/32	05:18 18:48-19:00/12	04:29
	15:55		16:57	17:59	20:04	21:06	21:58
8	08:45	14:19-14:43/24	07:58	06:51	06:29 18:41-19:16/35	05:16	04:28
	15:57		17:00	18:01	20:06	21:08	21:59
9	08:44	14:20-14:43/23	07:56	06:48	06:26 18:39-19:16/37	05:14	04:28
	15:59		17:02	18:03	20:08	21:10	22:00
10	08:44	14:21-14:43/22	07:54	06:46	06:24 18:38-19:18/40	05:12	04:27
	16:00		17:04	18:05	20:10	21:12	22:01
11	08:43	14:22-14:43/21	07:52	06:43	06:21 18:36-19:18/42	05:09	04:27
	16:02		17:06	18:07	20:12	21:13	22:02
12	08:42	14:23-14:43/20	07:50	06:40	06:18 18:36-19:19/43	05:07	04:26
	16:04		17:09	18:10	20:14	21:15	22:03
13	08:41	14:24-14:43/19	07:47	06:38	06:16 18:34-19:19/45	05:05	04:26
	16:05		17:11	18:12	20:16	21:17	22:03
14	08:40	14:24-14:43/19	07:45	06:35	06:13 18:34-19:20/46	05:03	04:25
	16:07		17:13	18:14	20:18	21:19	22:04
15	08:39	14:26-14:43/17	07:43	06:33	06:11 18:33-19:19/46	05:02	04:25
	16:09		17:15	18:16	20:20	21:21	22:05
16	08:38	14:28-14:42/14	07:41	06:30	06:08 18:33-19:20/47	05:00	04:25
	16:11		17:18	18:18	20:22	21:23	22:05
17	08:36	14:29-14:41/12	07:38	06:27	06:05 18:32-19:19/47	04:58	04:25
	16:13		17:20	18:20	20:24	21:25	22:06
18	08:35	14:31-14:39/8	07:36	06:25	06:03 18:32-19:20/48	04:56	04:25
	16:15		17:22	18:22	20:26	21:27	22:06
19	08:34		07:34	06:22	06:00 18:31-19:19/48	04:54	04:24
	16:17		17:24	18:24	20:28	21:29	22:07
20	08:32		07:31	06:19	05:58 18:31-19:19/48	04:52	04:25
	16:19		17:26	18:26	20:31	21:31	22:07
21	08:31		07:29	06:17	05:55 18:32-19:19/47	04:51	04:25
	16:21		17:29	18:28	20:33	21:32	22:07
22	08:30		07:26	06:14	05:53 18:31-19:18/47	04:49	04:25
	16:23		17:31	18:31	20:35	21:34	22:08
23	08:28		07:24	06:11	05:50 18:31-19:18/47	04:47	04:25
	16:25		17:33	18:33	20:37	21:36	22:08
24	08:27		07:21	06:09	05:48 18:32-19:18/46	04:46	04:25
	16:27		17:35	18:35	20:39	21:38	22:08
25	08:25		07:19	06:06	05:46 18:31-19:17/46	04:44	04:26
	16:29		17:37	18:37	20:41	21:39	22:08
26	08:23		07:16	06:03	05:43 18:32-19:16/44	04:43	04:26
	16:31		17:40	18:39	20:43	21:41	22:08
27	08:22		07:14	06:01	05:41 18:33-19:16/43	04:41	04:27
	16:33		17:42	18:41	20:45	21:43	22:08
28	08:20		07:11	05:58	05:38 18:34-19:15/41	04:40	04:27
	16:35		17:44	18:43	20:47	21:44	22:07
29	08:18			06:55	05:36 18:34-19:13/39	04:39	04:28
	16:38			19:45	20:49	21:46	22:07
30	08:16			06:53	05:34 18:35-19:13/38	04:37	04:29
	16:40			19:47	20:51	21:47	22:07
31	08:14			06:50		04:36	
	16:42			19:49		21:49	
Potential sun hours	236		266	366	426	507	528
Sum of minutes with flicker	366		0	0	1109	184	0

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

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

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: JV1 - NORDEX N175/6.X 6800 175.0 !-! hub: 179,0 m (TOT: 266,5 m) (26)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 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	05:15 21:26	06:16 20:12	18:35-19:17/42 18:52	07:21 16:35	08:22 14:04-14:25/21 15:44
2	04:30 22:06	05:17 21:24	06:18 20:09	18:36-19:16/40 18:49	07:23 16:33	08:23 14:04-14:26/22 15:43
3	04:31 22:05	05:18 21:22	06:20 20:07	18:37-19:14/37 18:47	07:25 16:30	08:25 14:04-14:27/23 15:42
4	04:32 22:05	05:20 21:19	06:22 20:04	18:38-19:13/35 18:44	07:27 16:28	08:27 14:05-14:28/23 15:41
5	04:33 22:04	05:22 21:17	06:24 20:02	19:01-19:06/5 18:41	07:29 16:26	08:28 14:04-14:28/24 15:41
6	04:34 22:03	05:24 21:15	06:26 19:59	18:41-19:09/28 18:39	07:31 16:24	08:30 14:05-14:28/23 15:40
7	04:35 22:03	05:26 21:13	06:28 19:56	18:43-19:06/23 18:36	07:34 16:22	08:31 14:05-14:29/24 15:39
8	04:36 22:02	05:28 21:11	06:30 19:54	18:46-19:02/16 18:34	07:36 16:20	08:33 14:05-14:29/24 15:39
9	04:37 22:01	05:30 21:09	06:32 19:51	18:46-19:02/16 18:31	07:38 16:18	08:34 14:06-14:30/24 15:38
10	04:39 22:00	05:32 21:06	06:34 19:48		07:34 16:16	08:35 14:06-14:30/24 15:38
11	04:40 21:59	05:34 21:04	06:36 19:46		07:36 16:14	08:37 14:07-14:31/24 15:38
12	04:41 21:58	05:36 21:02	06:38 19:43		07:38 16:12	08:38 14:07-14:32/25 15:37
13	04:43 21:57	05:38 20:59	06:40 19:40		07:40 16:10	08:39 14:07-14:32/25 15:37
14	04:44 21:55	05:40 20:57	06:42 19:38		07:42 16:08	08:40 14:07-14:32/25 15:37
15	04:45 21:54	05:42 20:55	06:44 19:35		07:44 16:07	08:41 14:08-14:33/25 15:37
16	04:47 21:53	05:44 20:52	06:46 19:32		07:46 16:05	08:42 14:08-14:33/25 15:37
17	04:48 21:51	05:46 20:50	06:48 19:30		07:48 16:03	08:43 14:09-14:34/25 15:37
18	04:50 21:50	05:48 20:47	06:50 19:27		07:51 16:01	08:44 14:09-14:34/25 15:37
19	04:52 21:49	05:50 20:45	06:52 19:24		07:53 16:00	08:45 14:10-14:35/25 15:37
20	04:53 21:47	05:52 20:43	06:54 19:21		07:55 15:58	08:45 14:10-14:35/25 15:38
21	04:55 21:45	05:54 20:40	06:56 19:19		07:57 15:57	08:46 14:11-14:36/25 15:38
22	04:57 21:44	05:56 20:38	06:58 19:16		07:59 15:55	08:47 14:11-14:36/25 15:39
23	04:58 21:42	05:58 20:35	07:00 19:13		08:01 15:54	08:47 14:12-14:37/25 15:39
24	05:00 21:41	06:00 20:33	07:02 19:11		08:03 15:52	08:47 14:12-14:37/25 15:40
25	05:02 21:39	06:02 20:30	07:04 19:08		08:05 15:51	08:48 14:12-14:37/25 15:40
26	05:04 21:37	06:04 20:28	07:06 19:05		08:08 15:50	08:48 14:14-14:38/24 15:41
27	05:05 21:35	06:06 20:25	07:08 19:03		08:10 15:48	08:48 14:14-14:39/25 15:42
28	05:07 21:33	06:08 20:22	07:10 19:00		08:12 15:47	08:48 14:15-14:39/24 15:43
29	05:09 21:31	06:10 20:20	07:12 18:57		08:14 15:46	08:49 14:14-14:39/25 15:44
30	05:11 21:30	06:12 20:17	07:14 18:55		08:16 15:45	08:49 14:15-14:40/25 15:45
31	05:13 21:28	06:14 20:15			08:18 16:37	08:48 14:16-14:40/24 15:46
Potential sun hours	528	469	384	324	248	217
Sum of minutes with flicker	0	1054	253	0	110	753

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: JU1 - NORDEX N175/6.X 6800 175.0 l-l hub: 179,0 m (TOT: 266,5 m) (32)

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

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

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	13:06-13:34/28	11:15-11:27/12	08:13	07:09	06:47	05:31	04:34
	15:47	10:12-10:46/34	11:36-12:08/32	16:43	17:46	19:51	20:53	21:50
2	08:48	13:07-13:33/26	11:16-11:26/10	08:11	07:06	06:44	05:28	04:33
	15:48	10:12-10:46/34	11:36-12:07/31	16:46	17:48	19:53	20:55	21:52
3	08:48	13:08-13:34/26	11:18-11:25/7	08:09	07:04	06:42	05:26	04:32
	15:49	10:13-10:46/33	11:37-12:08/31	16:48	17:50	19:55	20:57	21:53
4	08:47	13:08-13:34/26	11:37-12:08/31	08:07	07:01	06:39	05:24	04:31
	15:50	10:13-10:46/33		16:50	17:52	19:57	20:59	21:54
5	08:47	13:09-13:33/24	11:38-12:08/30	08:05	06:58	06:36	05:22	04:30
	15:52	10:13-10:45/32		16:52	17:54	19:59	21:01	21:55
6	08:46	13:11-13:34/23	11:39-12:09/30	08:03	06:56	06:34	05:19	04:29
	15:53	10:15-10:45/30		16:55	17:56	20:01	21:03	21:57
7	08:46	13:11-13:34/23	11:40-12:09/29	08:00	06:53	06:31	05:17	04:28
	15:55	10:15-10:44/29		16:57	17:59	20:03	21:06	21:58
8	08:45	13:12-13:34/22	11:41-12:08/27	07:58	06:51	06:28	05:15	04:28
	15:56	10:16-10:39/23		16:59	18:01	20:05	21:08	21:59
9	08:45	13:14-13:33/19	11:42-12:08/26	07:56	06:48	06:26	05:13	04:27
	15:58	10:17-10:39/22		17:01	18:03	20:08	21:10	22:00
10	08:44	13:15-13:33/18	11:43-12:08/25	07:54	06:45	06:23	05:11	04:26
	15:59	10:18-10:39/21		17:04	18:05	20:10	21:12	22:01
11	08:43	13:16-13:31/15	11:44-12:07/23	07:52	06:43	06:20	05:09	04:26
	16:01	10:19-10:39/20		17:06	18:07	20:12	21:14	22:02
12	08:42	13:18-13:31/13	11:45-12:07/22	07:50	06:40	06:18	05:07	04:25
	16:03	10:19-10:38/19		17:08	18:09	20:14	21:15	22:03
13	08:41	13:21-13:29/8	11:47-12:06/19	07:47	06:38	06:15	05:05	04:25
	16:05	10:21-10:37/16		17:10	18:11	20:16	21:17	22:04
14	08:40	10:23-10:37/14		07:45	06:35	06:13	05:03	04:24
	16:06	11:49-12:05/16		17:13	18:13	20:18	21:19	22:04
15	08:39	10:24-10:35/11		07:43	06:32	06:10	05:01	04:24
	16:08	11:51-12:03/12		17:15	18:16	20:20	21:21	22:05
16	08:38	10:27-10:34/7		07:40	06:30	06:08	04:59	04:24
	16:10	11:54-12:01/7		17:17	18:18	20:22	21:23	22:06
17	08:36			07:38	06:27	06:05	04:57	04:24
	16:12			17:19	18:20	20:24	21:25	22:06
18	08:35			07:36	06:24	06:02	04:55	04:24
	16:14			17:21	18:22	20:26	21:27	22:07
19	08:34			07:33	06:22	06:00	04:53	04:24
	16:16			17:24	18:24	20:28	21:29	22:07
20	08:33			07:31	06:19	05:57	04:52	04:24
	16:18			17:26	18:26	20:30	21:31	22:07
21	08:31			07:29	06:16	05:55	04:50	04:24
	16:20			17:28	18:28	20:32	21:32	22:08
22	08:30			07:26	06:14	05:52	04:48	04:24
	16:22			17:30	18:30	20:35	21:34	22:08
23	08:28			07:24	06:11	05:50	04:47	04:24
	16:24			17:33	18:32	20:37	21:36	22:08
24	08:27			07:21	06:08	05:47	04:45	04:24
	16:26			17:35	18:34	20:39	21:38	22:08
25	08:25			07:19	06:06	05:45	04:44	04:25
	16:28			17:37	18:36	20:41	21:39	22:08
26	08:23			07:16	06:03	05:43	04:42	04:25
	16:30			17:39	18:39	20:43	21:41	22:08
27	08:22			07:14	06:00	05:40	04:41	04:26
	16:33			17:41	18:41	20:45	21:43	22:08
28	08:20			07:11	05:58	05:38	04:39	04:26
	16:35			17:43	18:43	20:47	21:44	22:08
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
Sum of minutes with flicker	1069			0	0	0	0	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	Last time (hh:mm) with flicker	Minutes with flicker
	Sun set (hh:mm)	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	Minutes with flicker

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: JU1 - NORDEX N175/6.X 6800 175.0 l-l hub: 179,0 m (TOT: 266,5 m) (32)

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	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
2	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	04:30 22:06	05:18 21:22	06:19 20:07	07:19 18:46	07:25 16:30	08:25 15:42
4	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	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	04:33 22:04	05:24 21:15	06:25 19:59	07:25 18:38	07:31 16:23	08:30 15:39
7	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	04:35 22:02	05:28 21:11	06:29 19:53	07:30 18:33	07:36 16:19	08:33 15:38
9	04:37 22:01	05:29 21:09	06:31 19:51	07:32 18:31	07:38 16:17	08:34 15:38
10	04:38 22:00	05:31 21:06	06:33 19:48	07:34 18:28	07:40 16:15	08:36 15:37
11	04:39 21:59	05:33 21:04	06:35 19:45	07:36 18:25	07:42 16:13	08:37 15:37
12	04:40 21:58	05:35 21:02	06:37 19:43	07:38 18:23	07:44 16:11	08:38 15:37
13	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	04:43 21:56	05:39 20:57	06:41 19:37	07:42 18:18	07:48 16:08	08:40 15:36
15	04:45 21:54	05:41 20:55	06:43 19:35	07:44 18:15	07:51 16:06	08:41 15:36
16	04:46 21:53	05:43 20:52	06:45 19:32	07:46 18:13	07:53 16:04	08:42 15:36
17	04:48 21:52	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 19:27	07:50 18:07	07:57 16:01	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 15:37
20	04:52 21:47	05:51 20:42	06:53 19:21	07:55 18:03	08:01 15:57	08:46 15:37
21	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	04:56 21:44	05:55 20:38	06:57 19:16	07:59 17:58	08:05 15:54	08:47 15:38
23	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	04:59 21:41	05:59 20:32	07:01 19:10	08:03 17:53	08:09 15:52	08:48 15:39
25	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	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	05:05 21:35	06:05 20:25	07:07 19:02	08:10 16:46	08:15 15:48	08:48 15:41
28	05:06 21:33	06:07 20:22	07:09 19:00	08:12 16:43	08:17 15:47	08:49 15:42
29	05:08 21:32	06:09 20:20	07:11 18:57	08:14 16:41	08:18 15:45	08:49 15:43
30	05:10 21:30	06:11 20:17	07:13 18:54	08:16 16:39	08:20 15:44	08:49 15:44
31	05:12 21:28	06:13 20:15		08:18 16:36		08:49 15:45
Potential sun hours	529	469	384	324	248	217
Sum of minutes with flicker	0	0	0	0	163	3202

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: O1.b - NORDEX N175/6.X 6800 175.0 !-! hub: 179,0 m (TOT: 266,5 m) (25)
Sunshine probability S (Average daily sunshine hours) []

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

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 14:36-14:58/22 15:47	08:13 16:44	07:09 17:46	06:47 19:51	05:31 20:53	04:35 20:17-20:45/28 21:50
2	08:48 14:37-14:59/22 15:49	08:11 16:46	07:06 17:48	06:45 19:53	05:29 20:55	04:34 20:17-20:45/28 21:52
3	08:48 14:37-15:00/23 15:50	08:09 16:49	07:04 17:50	06:42 19:55	05:27 20:57	04:33 20:17-20:45/28 21:53
4	08:47 14:38-15:01/23 15:51	08:07 16:51	07:01 17:53	06:39 19:57	05:25 20:59	04:32 20:18-20:44/26 21:54
5	08:47 14:38-15:01/23 15:53	08:05 16:53	06:59 17:55	06:37 20:00	05:22 21:02	04:31 20:19-20:45/26 21:55
6	08:46 14:38-15:02/24 15:54	08:03 16:15-16:20/5 16:55	06:56 17:57	06:34 20:02	05:20 21:04	04:30 20:19-20:45/26 21:57
7	08:46 14:38-15:02/24 15:55	08:01 16:12-16:24/12 16:57	06:54 17:59	06:31 20:04	05:18 21:06	04:29 20:19-20:44/25 21:58
8	08:45 14:38-15:02/24 15:57	07:58 16:09-16:25/16 17:00	06:51 18:01	06:29 20:06	05:16 21:08	04:28 20:20-20:45/25 21:59
9	08:44 14:39-15:03/24 15:59	07:56 16:08-16:27/19 17:02	06:48 18:03	06:26 20:08	05:14 21:10	04:28 20:20-20:44/24 22:00
10	08:44 14:39-15:04/25 16:00	07:54 16:07-16:29/22 17:04	06:46 18:05	06:24 20:10	05:12 20:25-20:35/10 21:12	04:27 20:21-20:45/24 22:01
11	08:43 14:39-15:04/25 16:02	07:52 16:06-16:29/23 17:06	06:43 18:08	06:21 20:12	05:09 20:22-20:37/15 21:14	04:27 20:21-20:44/23 22:02
12	08:42 14:40-15:05/25 16:04	07:50 16:06-16:30/24 17:09	06:40 18:10	06:18 20:14	05:07 20:21-20:39/18 21:16	04:26 20:22-20:44/22 22:03
13	08:41 14:41-15:05/24 16:05	07:48 16:06-16:31/25 17:11	06:38 18:12	06:16 20:16	05:05 20:19-20:40/21 21:17	04:26 20:22-20:45/23 22:03
14	08:40 14:40-15:05/25 16:07	07:45 16:05-16:31/26 17:13	06:35 18:14	06:13 20:18	05:03 20:18-20:40/22 21:19	04:25 20:23-20:45/22 22:04
15	08:39 14:41-15:06/25 16:09	07:43 16:05-16:31/26 17:15	06:33 18:16	06:11 20:20	05:02 20:18-20:42/24 21:21	04:25 20:23-20:44/21 22:05
16	08:38 14:42-15:06/24 16:11	07:41 16:05-16:31/26 17:18	06:30 18:18	06:08 20:22	05:00 20:17-20:42/25 21:23	04:25 20:23-20:44/21 22:05
17	08:36 14:42-15:06/24 16:13	07:38 16:05-16:31/26 17:20	06:27 18:20	06:05 20:24	04:58 20:16-20:42/26 21:25	04:25 20:23-20:44/21 22:06
18	08:35 14:43-15:07/24 16:15	07:36 16:05-16:30/25 17:22	06:25 18:22	06:03 20:26	04:56 20:16-20:44/28 21:27	04:24 20:24-20:44/20 22:06
19	08:34 14:44-15:06/22 16:17	07:34 16:06-16:30/24 17:24	06:22 18:24	06:00 20:29	04:54 20:15-20:44/29 21:29	04:24 20:24-20:44/20 22:07
20	08:33 14:44-15:06/22 16:19	07:31 16:07-16:28/21 17:26	06:19 18:26	05:58 20:31	04:52 20:16-20:44/28 21:31	04:24 20:24-20:45/21 22:07
21	08:31 14:46-15:06/20 16:21	07:29 16:08-16:28/20 17:29	06:17 18:28	05:55 20:33	04:51 20:15-20:44/29 21:32	04:25 20:25-20:46/21 22:07
22	08:30 14:47-15:05/18 16:23	07:26 16:09-16:26/17 17:31	06:14 18:31	05:53 20:35	04:49 20:15-20:45/30 21:34	04:25 20:25-20:46/21 22:08
23	08:28 14:48-15:04/16 16:25	07:24 16:12-16:24/12 17:33	06:11 18:33	05:50 20:37	04:47 20:15-20:44/29 21:36	04:25 20:25-20:46/21 22:08
24	08:27 14:49-15:03/14 16:27	07:21 16:16-16:19/3 17:35	06:09 18:35	05:48 20:39	04:46 20:15-20:45/30 21:38	04:25 20:26-20:46/20 22:08
25	08:25 14:51-15:02/11 16:29	07:19 17:37	06:06 18:37	05:46 20:41	04:44 20:15-20:45/30 21:39	04:26 20:26-20:46/20 22:08
26	08:23 14:55-14:58/3 16:31	07:17 17:40	06:03 18:39	05:43 20:43	04:43 20:16-20:46/30 21:41	04:26 20:25-20:46/21 22:08
27	08:22 16:33	07:14 17:42	06:01 18:41	05:41 20:45	04:41 20:15-20:45/30 21:43	04:27 20:26-20:47/21 22:08
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	04:40 20:16-20:45/29 21:44	04:27 20:25-20:47/22 22:07
29	08:18 16:38		06:55 19:45	05:36 20:49	04:39 20:16-20:45/29 21:46	04:28 20:26-20:48/22 22:07
30	08:16 16:40		06:53 19:47	05:34 20:51	04:37 20:16-20:45/29 21:47	04:29 20:26-20:48/22 22:07
31	08:15 16:42		06:50 19:49		04:36 20:17-20:45/28 21:49	
Potential sun hours	236	266	366	426	507	528
Sum of minutes with flicker	556	372	0	0	569	685

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

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker
	Sun set (hh:mm)	First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

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

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: O1.b - NORDEX N175/6.X 6800 175.0 !-! hub: 179,0 m (TOT: 266,5 m) (25)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 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 20:25-20:48/23 22:06	05:15 20:31-20:48/17 21:26	06:16 20:12 20:12	07:16 18:52 20:12	07:21 15:37-15:58/21 16:35	08:22 14:21-14:46/25 15:44
2	04:30 20:25-20:49/24 22:06	05:17 20:34-20:47/13 21:24	06:18 20:10 20:10	07:18 18:49 20:10	07:23 15:38-15:57/19 16:33	08:24 14:22-14:47/25 15:43
3	04:31 20:25-20:49/24 22:05	05:18 20:37-20:44/7 21:22	06:20 20:07 20:07	07:20 18:47 20:07	07:25 15:39-15:55/16 16:30	08:25 14:23-14:47/24 15:42
4	04:32 20:25-20:50/25 22:05	05:20 21:19 21:19	06:22 20:04 20:04	07:22 18:44 20:04	07:27 15:42-15:53/11 16:28	08:27 14:23-14:48/25 15:41
5	04:33 20:25-20:51/26 22:04	05:22 21:17 21:17	06:24 20:02 20:02	07:24 18:41 20:02	07:29 15:45-15:49/4 16:26	08:28 14:23-14:47/24 15:41
6	04:34 20:25-20:51/26 22:03	05:24 21:15 21:15	06:26 19:59 19:59	07:26 18:39 18:39	07:31 16:24 16:24	08:30 14:24-14:48/24 15:40
7	04:35 20:25-20:51/26 22:03	05:26 21:13 21:13	06:28 19:56 19:56	07:28 18:36 18:36	07:34 16:22 16:22	08:31 14:25-14:48/23 15:39
8	04:36 20:25-20:52/27 22:02	05:28 21:11 21:11	06:30 19:54 19:54	07:30 18:34 18:34	07:36 16:20 16:20	08:33 14:25-14:48/23 15:39
9	04:37 20:25-20:52/27 22:01	05:30 21:09 21:09	06:32 19:51 19:51	07:32 18:31 18:31	07:38 16:18 16:18	08:34 14:26-14:49/23 15:38
10	04:39 20:25-20:52/27 22:00	05:32 21:06 21:06	06:34 19:48 19:48	07:34 18:28 18:28	07:40 16:16 16:16	08:36 14:26-14:48/22 15:38
11	04:40 20:24-20:52/28 21:59	05:34 21:04 21:04	06:36 19:46 19:46	07:36 18:26 18:26	07:42 16:14 16:14	08:37 14:28-14:49/21 15:38
12	04:41 20:25-20:54/29 21:58	05:36 21:02 21:02	06:38 19:43 19:43	07:38 18:23 18:23	07:44 16:12 16:12	08:38 14:28-14:49/21 15:37
13	04:43 20:25-20:54/29 21:57	05:38 20:59 20:59	06:40 19:40 19:40	07:40 18:21 18:21	07:46 16:10 16:10	08:39 14:28-14:49/21 15:37
14	04:44 20:25-20:54/29 21:55	05:40 20:57 20:57	06:42 19:38 19:38	07:42 18:18 18:18	07:49 16:08 16:08	08:40 14:29-14:49/20 15:37
15	04:45 20:24-20:54/30 21:54	05:42 20:55 20:55	06:44 19:35 19:35	07:44 18:16 18:16	07:51 16:07 16:07	08:41 14:29-14:50/21 15:37
16	04:47 20:25-20:54/29 21:53	05:44 20:52 20:52	06:46 19:32 19:32	07:46 18:13 18:13	07:53 14:28-14:31/3 16:05	08:42 14:30-14:50/20 15:37
17	04:48 20:24-20:54/30 21:52	05:46 20:50 20:50	06:48 19:30 19:30	07:48 18:11 18:11	07:55 14:25-14:36/11 16:03	08:43 14:31-14:50/19 15:37
18	04:50 20:25-20:55/30 21:50	05:48 20:48 20:48	06:50 19:27 19:27	07:51 16:45-16:53/8 18:08	07:57 14:23-14:37/14 16:01	08:44 14:31-14:51/20 15:37
19	04:52 20:25-20:55/30 21:49	05:50 20:45 20:45	06:52 19:24 19:24	07:53 16:42-16:56/14 18:06	07:59 14:22-14:38/16 16:00	08:45 14:32-14:51/19 15:37
20	04:53 20:25-20:55/30 21:47	05:52 20:43 20:43	06:54 19:22 19:22	07:55 16:40-16:58/18 18:03	08:01 14:22-14:40/18 15:58	08:45 14:32-14:51/19 15:38
21	04:55 20:25-20:55/30 21:46	05:54 20:40 20:40	06:56 19:19 19:19	07:57 16:38-16:58/20 18:01	08:03 14:21-14:41/20 15:57	08:46 14:33-14:52/19 15:38
22	04:57 20:26-20:55/29 21:44	05:56 20:38 20:38	06:58 19:16 19:16	07:59 16:37-16:59/22 17:58	08:05 14:20-14:42/22 15:55	08:47 14:34-14:53/19 15:39
23	04:58 20:25-20:54/29 21:42	05:58 20:35 20:35	07:00 19:13 19:13	08:01 16:36-17:00/24 17:56	08:07 14:21-14:43/22 15:54	08:47 14:34-14:53/19 15:39
24	05:00 20:26-20:55/29 21:41	06:00 20:33 20:33	07:02 19:11 19:11	08:03 16:36-17:00/24 17:53	08:09 14:21-14:44/23 15:52	08:48 14:34-14:53/19 15:40
25	05:02 20:26-20:54/28 21:39	06:02 20:30 20:30	07:04 19:08 19:08	07:05 15:35-16:00/25 16:51	08:11 14:20-14:44/24 15:51	08:48 14:34-14:54/20 15:40
26	05:04 20:27-20:54/27 21:37	06:04 20:28 20:28	07:06 19:05 19:05	07:08 15:35-16:01/26 16:49	08:13 14:20-14:44/24 15:50	08:48 14:36-14:55/19 15:41
27	05:05 20:27-20:54/27 21:35	06:06 20:25 20:25	07:08 19:03 19:03	07:10 15:35-16:01/26 16:46	08:15 14:20-14:45/25 15:48	08:48 14:36-14:56/20 15:42
28	05:07 20:27-20:52/25 21:33	06:08 20:22 20:22	07:10 19:00 19:00	07:12 15:35-16:00/25 16:44	08:17 14:20-14:45/25 15:47	08:49 14:36-14:56/20 15:43
29	05:09 20:28-20:52/24 21:32	06:10 20:20 20:20	07:12 18:57 18:57	07:14 15:35-16:00/25 16:42	08:18 14:21-14:46/25 15:46	08:49 14:36-14:56/20 15:44
30	05:11 20:30-20:51/21 21:30	06:12 20:17 20:17	07:14 18:55 18:55	07:16 15:36-15:59/23 16:39	08:20 14:21-14:46/25 15:45	08:49 14:36-14:57/21 15:45
31	05:13 20:30-20:49/19 21:28	06:14 20:15 20:15	07:16 16:37 16:37	07:18 15:36-15:58/22 16:37	08:22 15:46 15:46	08:48 14:37-14:58/21 15:46
Potential sun hours	528	469	384	324	248	217
Sum of minutes with flicker	837	37	0	302	368	656

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

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

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: O2 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (19)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

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

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	17:25-18:16/51 20:53	05:31 21:50
2	08:48 15:48	08:11 16:46	07:06 17:48	06:45 19:53	17:26-18:16/50 20:55	05:29 21:52
3	08:48 15:50	08:09 16:48	07:04 17:50	06:42 19:55	17:26-18:15/49 20:57	05:27 21:53
4	08:47 15:51	08:07 16:51	07:01 17:53	06:39 19:57	17:26-18:13/47 21:00	05:24 21:54
5	08:47 15:52	08:05 16:53	06:59 17:55	06:37 20:00	17:28-18:13/45 21:02	05:22 21:55
6	08:46 15:54	08:03 16:55	06:56 17:57	06:34 20:02	17:28-18:11/43 21:04	05:20 21:57
7	08:46 15:55	08:01 16:57	06:54 17:59	06:31 20:04	17:30-18:10/40 21:06	05:18 21:58
8	08:45 15:57	07:59 17:00	06:51 18:01	06:29 20:06	17:31-18:08/37 21:08	05:16 21:59
9	08:45 15:58	07:56 17:02	06:48 18:03	06:26 20:08	19:35-19:38/3 17:32-18:06/34	05:14 21:10
10	08:44 16:00	07:54 17:04	06:46 18:05	06:23 20:10	19:32-19:41/9 17:34-18:04/30	05:11 21:12
11	08:43 16:02	07:52 17:06	06:43 18:07	06:21 20:12	19:29-19:42/13 17:36-18:01/25	05:09 21:14
12	08:42 16:04	07:50 17:09	06:40 18:10	06:18 20:14	19:28-19:45/17 17:40-17:58/18	05:07 21:16
13	08:41 16:05	07:48 17:11	06:38 18:12	06:16 20:16	19:27-19:46/19 19:26-19:49/23	05:05 21:18
14	08:40 16:07	07:45 17:13	06:35 18:14	06:13 20:18	19:25-19:49/24 19:25-19:48/23	05:03 21:19
15	08:39 16:09	07:43 17:15	06:33 18:16	06:11 20:20	19:25-19:49/24 19:25-19:48/23	05:01 21:21
16	08:38 16:11	07:41 17:17	06:30 18:18	06:08 20:22	19:25-19:49/24 19:25-19:48/23	05:00 21:23
17	08:37 16:13	07:38 17:20	06:27 18:20	06:05 20:24	19:25-19:49/24 19:25-19:48/23	04:58 21:25
18	08:35 16:15	07:36 17:22	06:25 18:22	06:03 20:26	19:25-19:49/24 19:25-19:48/23	04:56 21:27
19	08:34 16:17	07:34 17:24	06:22 18:24	06:00 20:29	19:25-19:48/23 19:25-19:48/23	04:54 21:29
20	08:33 16:19	07:31 17:26	06:19 18:26	05:58 20:31	19:25-19:48/23 19:27-19:48/21	04:52 21:31
21	08:31 16:21	07:29 17:29	06:17 18:28	05:55 20:33	19:27-19:48/21 19:27-19:46/19	04:51 21:32
22	08:30 16:23	07:26 17:31	06:14 18:31	05:53 20:35	19:27-19:46/19 19:28-19:45/17	04:49 21:34
23	08:28 16:25	07:24 17:33	06:11 18:33	05:50 20:37	19:28-19:45/17 19:47-19:52/5	04:47 21:36
24	08:27 16:27	07:21 17:35	06:09 18:35	05:48 20:39	19:47-19:52/5 19:30-19:44/14	04:46 21:38
25	08:25 16:29	07:19 17:37	06:06 18:37	05:46 20:41	19:31-19:56/25 19:31-19:56/25	04:44 21:39
26	08:23 16:31	07:17 17:40	06:03 18:39	05:43 20:43	19:39-19:59/20 19:39-19:59/20	04:43 21:41
27	08:22 16:33	07:14 17:42	06:01 18:41	05:41 20:45	19:37-20:01/24 19:34-20:02/28	04:41 21:43
28	08:20 16:35	07:11 17:44	05:58 18:43	05:38 20:47	19:34-20:02/28 19:33-20:03/30	04:40 21:44
29	08:18 16:37		06:55 19:45	05:36 20:49	19:33-20:03/30 19:32-20:04/32	04:39 21:46
30	08:16 16:40		06:53 19:47	05:34 20:51	19:32-20:04/32 19:43-19:56/13	04:37 21:47
31	08:15 16:42		06:50 19:49			04:36 21:49
Potential sun hours	236	266	366	426	507	528
Sum of minutes with flicker	0	0	1017	930	1012	9

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

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

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: O2 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (19)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 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 19:38-20:17/39 21:26	06:16 19:28-19:41/13 20:12 17:35-18:00/25	07:16 17:19-17:51/32 18:52	07:21 16:35	08:22 15:44
2	04:30 22:06	05:16 19:38-20:18/40 21:24	06:18 19:30-19:39/9 20:10 17:32-18:02/30	07:18 17:21-17:49/28 18:49	07:23 16:33	08:24 15:43
3	04:31 22:06	05:18 19:38-20:18/40 21:22	06:20 19:33-19:36/3 20:07 17:30-18:04/34	07:20 17:24-17:45/21 18:47	07:25 16:30	08:25 15:42
4	04:32 22:05	05:20 19:37-20:17/40 21:20	06:22 17:28-18:05/37 20:04	07:22 17:29-17:40/11 18:44	07:27 16:28	08:27 15:41
5	04:33 22:04	05:22 19:38-20:17/39 21:17	06:24 17:26-18:06/40 20:02	07:24 18:41	07:29 16:26	08:28 15:41
6	04:34 22:04	05:24 19:38-20:17/39 21:15	06:26 17:24-18:07/43 19:59	07:26 18:39	07:31 16:24	08:30 15:40
7	04:35 22:03	05:26 19:38-20:17/39 21:13	06:28 17:23-18:08/45 19:56	07:28 18:36	07:34 16:22	08:31 15:39
8	04:36 22:02	05:28 19:39-20:16/37 21:11	06:30 17:21-18:08/47 19:54	07:30 18:34	07:36 16:20	08:33 15:39
9	04:37 22:01	05:30 19:38-20:15/37 21:09	06:32 17:20-18:09/49 19:51	07:32 18:31	07:38 16:18	08:34 15:38
10	04:38 22:00	05:32 19:39-20:15/36 21:06	06:34 17:19-18:09/50 19:48	07:34 18:28	07:40 16:16	08:36 15:38
11	04:40 21:59	05:34 19:39-20:14/35 21:04	06:36 17:17-18:09/52 19:46	07:36 18:26	07:42 16:14	08:37 15:38
12	04:41 21:58	05:36 19:40-20:13/33 21:02	06:38 17:16-18:09/53 19:43	07:38 18:23	07:44 16:12	08:38 15:37
13	04:42 21:57	05:38 19:41-20:12/31 20:59	06:40 17:15-18:09/54 19:40	07:40 18:21	07:46 16:10	08:39 15:37
14	04:44 21:56	05:40 19:42-20:11/29 20:57	06:42 17:15-18:09/54 19:38	07:42 18:18	07:49 16:08	08:40 15:37
15	04:45 21:54	05:42 19:42-20:09/27 20:55	06:44 17:14-18:09/55 19:35	07:44 18:16	07:51 16:06	08:41 15:37
16	04:47 21:53	05:44 19:44-20:07/23 20:52	06:46 17:14-18:08/54 19:32	07:46 18:13	07:53 16:05	08:42 15:37
17	04:48 21:52	05:46 19:46-20:05/19 20:50	06:48 17:13-18:08/55 19:30	07:48 18:10	07:55 16:03	08:43 15:37
18	04:50 21:50	05:48 19:49-20:02/13 20:48	06:50 17:13-18:08/55 19:27	07:51 18:08	07:57 16:01	08:44 15:37
19	04:52 21:49	05:50 19:35-19:50/15 20:45	06:52 17:13-18:07/54 19:24	07:53 18:05	07:59 16:00	08:45 15:37
20	04:53 21:47	05:52 19:34-19:51/17 20:43	06:54 17:13-18:07/54 19:22	07:55 18:03	08:01 15:58	08:45 15:38
21	04:55 21:46	05:54 19:33-19:52/19 20:40	06:56 17:12-18:06/54 19:19	07:57 18:01	08:03 15:57	08:46 15:38
22	04:56 21:44	05:56 19:30-19:51/21 20:38	06:58 17:13-18:05/52 19:16	07:59 17:58	08:05 15:55	08:47 15:39
23	04:58 21:42	05:58 19:29-19:52/23 20:35	07:00 17:13-18:04/51 19:13	08:01 17:56	08:07 15:54	08:47 15:39
24	05:00 21:41	06:00 19:28-19:52/24 20:33	07:02 17:13-18:03/50 19:11	08:03 17:53	08:09 15:52	08:48 15:40
25	05:02 21:39	06:02 19:28-19:52/24 20:30	07:04 17:13-18:02/49 19:08	08:05 16:51	08:11 15:51	08:48 15:40
26	05:03 21:37	06:04 19:27-19:52/25 20:28	07:06 17:14-18:01/47 19:05	08:08 16:48	08:13 15:50	08:48 15:41
27	05:05 21:35	06:06 19:27-19:51/24 20:25	07:08 17:15-17:59/44 19:03	08:10 16:46	08:15 15:48	08:48 15:42
28	05:07 21:33	06:08 19:27-19:51/24 20:22	07:10 17:15-17:58/43 19:00	08:12 16:44	08:17 15:47	08:49 15:43
29	05:09 21:32	06:10 19:27-19:50/23 20:20	07:12 17:16-17:56/40 18:57	08:14 16:42	08:18 15:46	08:49 15:44
30	05:11 21:30	06:12 19:28-19:47/19 20:17	07:14 17:18-17:54/36 18:55	08:16 16:39	08:20 15:45	08:49 15:45
31	05:13 21:28	06:14 19:27-19:44/17 20:15	07:18 16:37	08:18 16:37	08:24 15:45	08:49 15:46
Potential sun hours		528	469	384	324	248
Sum of minutes with flicker		587	904	1431	92	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	Last time (hh:mm) with flicker	Minutes with flicker
	Sun set (hh:mm)	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	Minutes with flicker

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

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Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: O3 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (20)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

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

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 15:11-15:35/24 16:44	07:09 15:03-15:44/41 17:46	06:47 18:33-19:17/44 19:51	05:31 20:53	04:35 21:50
2	08:48 15:48	08:11 15:09-15:37/28 16:46	07:06 15:04-15:42/38 17:48	06:45 18:31-19:17/46 19:53	05:29 20:55	04:34 21:52
3	08:48 15:50	08:09 15:07-15:39/32 16:48	07:04 15:06-15:41/35 17:50	06:42 18:29-19:18/49 19:55	05:27 20:57	04:33 21:53
4	08:47 15:51	08:07 15:06-15:41/35 16:51	07:01 15:08-15:38/30 17:53	06:39 18:28-19:17/49 19:57	05:24 20:59	04:32 21:54
5	08:47 15:52	08:05 15:04-15:42/38 16:53	06:59 15:11-15:36/25 17:55	06:37 18:27-19:17/50 20:00	05:22 21:02	04:31 21:55
6	08:46 15:54	08:03 15:04-15:43/39 16:55	06:56 15:14-15:32/18 17:57	06:34 18:25-19:16/51 20:02	05:20 21:04	04:30 21:57
7	08:46 15:55	08:01 15:03-15:45/42 16:57	06:54 15:20-15:25/5 17:59	06:31 18:24-19:14/50 20:04	05:18 21:06	04:29 21:58
8	08:45 15:57	07:58 15:02-15:46/44 17:00	06:51 18:01	06:29 18:24-19:13/49 20:06	05:16 21:08	04:28 21:59
9	08:44 15:58	07:56 15:01-15:46/45 17:02	06:48 18:03	06:26 18:23-19:11/48 20:08	05:14 21:10	04:28 22:00
10	08:44 16:00	07:54 15:01-15:47/46 17:04	06:46 18:05	06:23 18:23-19:10/47 20:10	05:11 21:12	04:27 22:01
11	08:43 16:02	07:52 14:59-15:47/48 17:06	06:43 18:07	06:21 18:22-19:08/46 20:12	05:09 21:14	04:26 22:02
12	08:42 16:04	07:50 14:59-15:48/49 17:09	06:40 18:10	06:18 18:22-19:08/46 20:14	05:07 21:16	04:26 22:03
13	08:41 16:05	07:48 14:59-15:49/50 17:11	06:38 18:12	06:16 18:21-19:07/46 20:16	05:05 21:17	04:26 22:03
14	08:40 16:07	07:45 14:58-15:49/51 17:13	06:35 18:14	06:13 18:22-19:07/45 20:18	05:03 21:19	04:25 22:04
15	08:39 16:09	07:43 14:58-15:50/52 17:15	06:33 18:16	06:11 18:21-19:07/46 20:20	05:01 21:21	04:25 22:05
16	08:38 16:11	07:41 14:58-15:50/52 17:17	06:30 18:18	06:08 18:22-19:07/45 20:22	05:00 21:23	04:25 22:05
17	08:37 16:13	07:38 14:58-15:50/52 17:20	06:27 18:20	06:05 18:21-19:05/44 20:24	04:58 21:25	04:24 22:06
18	08:35 16:15	07:36 14:57-15:50/53 17:22	06:25 18:22	06:03 18:22-19:05/43 20:26	04:56 21:27	04:24 22:06
19	08:34 16:17	07:34 14:58-15:50/52 17:24	06:22 18:24	06:00 18:22-19:04/42 20:29	04:54 21:29	04:24 22:07
20	08:33 16:19	07:31 14:57-15:50/53 17:26	06:19 18:26	05:58 18:23-19:03/40 20:31	04:52 21:31	04:24 22:07
21	08:31 16:21	07:29 14:58-15:50/52 17:29	06:17 18:28	05:55 18:24-19:03/39 20:33	04:51 21:32	04:25 22:07
22	08:30 16:23	07:26 14:58-15:49/51 17:31	06:14 18:31	05:53 18:24-19:01/37 20:35	04:49 21:34	04:25 22:08
23	08:28 16:25	07:24 14:59-15:49/50 17:33	06:11 18:33	05:50 18:25-19:00/35 20:37	04:47 21:36	04:25 22:08
24	08:27 16:27	07:21 14:59-15:48/49 17:35	06:09 18:35	05:48 18:27-18:59/32 20:39	04:46 21:38	04:25 22:08
25	08:25 16:29	07:19 15:00-15:48/48 17:37	06:06 18:05-18:09/4 18:37	05:46 18:27-18:57/30 20:41	04:44 21:39	04:26 22:08
26	08:23 16:31	07:16 15:00-15:47/47 17:40	06:03 18:01-18:11/10 18:39	05:43 18:29-18:55/26 20:43	04:43 21:41	04:26 22:08
27	08:22 16:33	07:14 15:01-15:46/45 17:42	06:01 17:58-18:12/14 18:41	05:41 18:32-18:53/21 20:45	04:41 21:43	04:27 22:08
28	08:20 16:35	07:11 15:02-15:45/43 17:44	05:58 17:57-18:15/18 18:43	05:38 18:34-18:49/15 20:47	04:40 21:44	04:27 22:08
29	08:18 16:37		06:55 18:43-18:54/11 19:45	05:36 18:39-18:44/5 20:49	04:39 21:46	04:28 22:07
30	08:16 16:40	15:17-15:28/11	06:53 18:38-19:16/38 19:47	05:34 20:51	04:37 21:47	04:28 22:07
31	08:15 16:42	15:13-15:32/19	06:50 18:36-19:18/42 19:49		04:36 21:49	
Potential sun hours		236	366	426	507	528
Sum of minutes with flicker		30	1270	350	1166	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	Last time (hh:mm) with flicker	Minutes with flicker
	Sun set (hh:mm)	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	Minutes with flicker

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: O3 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (20

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	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	18:21-19:07/46 18:52	07:21 16:35	14:30-15:17/47 15:44
2	04:30 22:06	05:16 21:24	06:18 20:10	18:21-19:08/47 18:49	07:23 16:33	14:31-15:16/45 15:43
3	04:31 22:06	05:18 21:22	06:20 20:07	18:21-19:09/48 18:47	07:25 16:30	14:32-15:16/44 15:42
4	04:32 22:05	05:20 21:19	06:22 20:04	18:21-19:10/49 18:44	07:27 16:28	14:33-15:14/41 15:41
5	04:33 22:04	05:22 21:17	06:24 20:02	18:21-19:11/50 18:41	07:29 16:26	14:33-15:13/40 15:41
6	04:34 22:04	05:24 21:15	06:26 19:59	18:21-19:12/51 18:39	07:31 16:24	14:35-15:12/37 15:40
7	04:35 22:03	05:26 21:13	06:28 19:56	18:22-19:12/50 18:36	07:34 16:22	14:36-15:11/35 15:39
8	04:36 22:02	05:28 21:11	06:30 19:54	18:23-19:12/49 18:34	07:36 16:20	14:37-15:09/32 15:39
9	04:37 22:01	05:30 21:09	06:32 19:51	18:23-19:12/49 18:31	07:38 16:18	14:40-15:08/28 15:38
10	04:39 22:00	05:32 21:06	06:34 19:48	18:25-19:10/45 18:28	07:40 16:16	14:42-15:05/23 15:38
11	04:40 21:59	05:34 21:04	06:36 19:46	18:25-19:10/45 18:26	07:42 16:14	14:45-15:03/18 15:38
12	04:41 21:58	05:36 21:02	06:38 19:43	18:27-19:09/42 18:23	07:44 16:12	14:49-14:59/10 15:37
13	04:42 21:57	05:38 20:59	06:40 19:40	18:29-19:08/39 18:21	07:46 16:10	15:37 15:37
14	04:44 21:55	05:40 20:57	06:42 19:38	18:32-19:07/35 18:18	07:49 16:08	15:37 15:37
15	04:45 21:54	05:42 20:55	06:44 19:35	18:46-19:05/19 18:16	07:51 16:06	15:37 15:37
16	04:47 21:53	05:44 20:52	06:46 19:32	18:47-19:02/15 18:13	07:53 16:05	15:37 15:37
17	04:48 21:52	05:46 20:50	06:48 19:30	18:49-19:00/11 18:10	07:55 16:03	15:37 15:37
18	04:50 21:50	05:48 20:48	06:50 19:27	18:51-18:57/6 18:08	07:57 16:01	15:37 15:37
19	04:52 21:49	05:50 20:45	06:52 19:24	15:30-16:20/50 18:05	07:59 16:00	15:37 15:37
20	04:53 21:47	05:52 20:43	06:54 19:21	15:29-16:20/51 18:03	08:01 15:58	15:37 15:37
21	04:55 21:46	05:54 20:40	06:56 19:19	15:28-16:20/52 18:01	08:03 15:57	15:37 15:37
22	04:56 21:44	05:56 20:38	06:58 19:16	15:28-16:20/52 17:58	08:05 15:55	15:37 15:39
23	04:58 21:42	05:58 20:35	07:00 19:13	15:28-16:21/53 17:56	08:07 15:54	15:37 15:39
24	05:00 21:41	06:00 20:33	07:02 19:11	15:28-16:20/52 17:53	08:09 15:52	15:37 15:40
25	05:02 21:39	06:02 20:30	07:04 19:08	14:27-15:20/53 16:51	08:11 15:51	15:40 15:40
26	05:03 21:37	06:04 20:28	07:06 19:05	14:28-15:20/52 16:48	08:13 15:50	15:41 15:41
27	05:05 21:35	06:06 20:25	07:08 19:03	14:28-15:19/51 16:46	08:15 15:48	15:41 15:42
28	05:07 21:33	06:08 20:22	07:10 19:00	14:28-15:19/51 16:44	08:17 15:47	15:42 15:43
29	05:09 21:32	06:10 20:20	07:12 18:57	14:29-15:19/50 16:42	08:18 15:46	15:43 15:44
30	05:11 21:30	06:12 20:17	07:14 18:55	14:29-15:18/49 16:39	08:20 15:45	15:44 15:45
31	05:13 21:28	06:14 20:15	18:21-19:07/46	14:29-15:17/48 16:37	08:21 15:45	15:45 15:46
Potential sun hours	528	469	384	324	248	217
Sum of minutes with flicker	0	651	696	1113	400	0

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: 04 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (22)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

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

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 15:13-15:44/31 16:44	07:09 16:55-17:12/17 17:46	06:47 19:51	05:31 20:53	04:35 21:50
2	08:48 15:49	08:11 15:13-15:44/31 16:46	07:06 16:52-17:13/21 17:48	06:45 19:53	05:29 20:55	04:34 21:52
3	08:48 15:50	08:09 15:14-15:44/30 16:49	07:04 16:51-17:15/24 17:50	06:42 19:55	05:27 20:57	04:33 21:53
4	08:47 15:51	08:07 15:14-15:45/31 16:51	07:01 16:50-17:16/26 17:53	06:39 19:57	05:25 20:59	04:32 21:54
5	08:47 15:52	08:05 15:14-15:44/30 16:53	06:59 16:49-17:16/27 17:55	06:37 20:00	05:22 21:02	04:31 21:55
6	08:46 15:54	08:03 15:15-15:44/29 16:55	06:56 16:48-17:17/29 17:57	06:34 20:02	05:20 21:04	04:30 21:57
7	08:46 15:55	08:01 15:16-15:43/27 16:57	06:54 16:47-17:17/30 17:59	06:31 20:04	05:18 21:06	04:29 21:58
8	08:45 15:57	07:59 15:17-15:43/26 17:00	06:51 16:48-17:18/30 18:01	06:29 20:06	05:16 21:08	04:28 21:59
9	08:44 15:59	07:56 15:18-15:41/23 17:02	06:48 16:47-17:17/30 18:03	06:26 20:08	05:14 21:10	04:28 22:00
10	08:44 16:00	07:54 15:19-15:41/22 17:04	06:46 16:47-17:16/29 18:05	06:24 20:10	05:12 21:12	04:27 22:01
11	08:43 16:02	07:52 15:20-15:38/18 17:06	06:43 16:46-17:16/30 18:08	06:21 20:12	05:09 21:14	04:27 22:02
12	08:42 16:04	07:50 15:23-15:37/14 17:09	06:40 16:47-17:15/28 18:10	06:18 20:14	05:07 21:16	04:26 22:03
13	08:41 16:05	07:48 15:28-15:32/4 17:11	06:38 16:47-17:14/27 18:12	06:16 20:16	05:05 21:17	04:26 22:03
14	08:40 16:07	07:45 17:13	06:35 16:48-17:13/25 18:14	06:13 20:18	05:03 21:19	04:25 22:04
15	08:39 16:09	07:43 17:15	06:33 16:49-17:12/23 18:16	06:11 20:20	05:02 21:21	04:25 22:05
16	08:38 16:11	07:41 17:18	06:30 16:51-17:10/19 18:18	06:08 20:22	05:00 21:23	04:25 22:05
17	08:37 16:13	07:38 17:20	06:27 16:52-17:07/15 18:20	06:05 20:24	04:58 21:25	04:25 22:06
18	08:35 15:22-15:29/7 16:15	07:36 17:22	06:25 16:57-17:03/6 18:22	06:03 20:26	04:56 21:27	04:24 22:06
19	08:34 15:19-15:32/13 16:17	07:34 17:24	06:22 18:24	06:00 20:29	04:54 21:29	04:24 22:07
20	08:33 15:17-15:34/17 16:19	07:31 17:26	06:19 18:26	05:58 20:31	04:52 21:31	04:24 22:07
21	08:31 15:17-15:36/19 16:21	07:29 17:29	06:17 18:28	05:55 20:33	04:51 21:32	04:25 22:07
22	08:30 15:16-15:37/21 16:23	07:26 17:31	06:14 18:31	05:53 20:35	04:49 21:34	04:25 22:08
23	08:28 15:15-15:38/23 16:25	07:24 17:33	06:11 18:33	05:50 20:37	04:47 21:36	04:25 22:08
24	08:27 15:14-15:39/25 16:27	07:21 17:35	06:09 18:35	05:48 20:39	04:46 21:38	04:25 22:08
25	08:25 15:14-15:40/26 16:29	07:19 17:37	06:06 18:37	05:46 20:41	04:44 21:39	04:26 22:08
26	08:23 15:13-15:41/28 16:31	07:17 17:40	06:03 18:39	05:43 20:43	04:43 21:41	04:26 22:08
27	08:22 15:13-15:41/28 16:33	07:14 17:42	06:01 18:41	05:41 20:45	04:41 21:43	04:27 22:08
28	08:20 15:13-15:42/29 16:35	07:11 16:58-17:10/12 17:44	05:58 18:43	05:38 20:47	04:40 21:44	04:27 22:08
29	08:18 15:13-15:43/30 16:38		06:55 19:45	05:36 20:49	04:39 21:46	04:28 22:07
30	08:16 15:13-15:43/30 16:40		06:53 19:47	05:34 20:51	04:37 21:47	04:28 22:07
31	08:15 15:13-15:44/31 16:42		06:50 19:49		04:36 21:49	
Potential sun hours	236	266	366	426	507	528
Sum of minutes with flicker	327	328	436	0	0	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	Last time (hh:mm) with flicker	Minutes with flicker
	Sun set (hh:mm)	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	Minutes with flicker

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: 04 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (22)

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	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	07:16 17:27-17:54/27 18:52	07:21 14:49-15:10/21 16:35	08:22 15:44
2	04:30 22:06	05:17 21:24	06:18 20:10	07:18 17:26-17:54/28 18:49	07:23 14:47-15:11/24 16:33	08:24 15:43
3	04:31 22:06	05:18 21:22	06:20 20:07	07:20 17:25-17:54/29 18:47	07:25 14:47-15:13/26 16:30	08:25 15:42
4	04:32 22:05	05:20 21:19	06:22 20:04	07:22 17:24-17:54/30 18:44	07:27 14:46-15:13/27 16:28	08:27 15:41
5	04:33 22:04	05:22 21:17	06:24 20:02	07:24 17:24-17:54/30 18:41	07:29 14:45-15:13/28 16:26	08:28 15:41
6	04:34 22:04	05:24 21:15	06:26 19:59	07:26 17:24-17:53/29 18:39	07:31 14:45-15:14/29 16:24	08:30 15:40
7	04:35 22:03	05:26 21:13	06:28 19:56	07:28 17:23-17:52/29 18:36	07:34 14:44-15:14/30 16:22	08:31 15:39
8	04:36 22:02	05:28 21:11	06:30 19:54	07:30 17:24-17:53/29 18:34	07:36 14:44-15:14/30 16:20	08:33 15:39
9	04:37 22:01	05:30 21:09	06:32 19:51	07:32 17:25-17:51/26 18:31	07:38 14:44-15:15/31 16:18	08:34 15:38
10	04:39 22:00	05:32 21:06	06:34 19:48	07:34 17:25-17:50/25 18:28	07:40 14:44-15:15/31 16:16	08:36 15:38
11	04:40 21:59	05:34 21:04	06:36 19:46	07:36 17:26-17:49/23 18:26	07:42 14:45-15:15/30 16:14	08:37 15:38
12	04:41 21:58	05:36 21:02	06:38 19:43	07:38 17:27-17:47/20 18:23	07:44 14:45-15:15/30 16:12	08:38 15:37
13	04:43 21:57	05:38 20:59	06:40 19:40	07:40 17:29-17:44/15 18:21	07:46 14:45-15:15/30 16:10	08:39 15:37
14	04:44 21:55	05:40 20:57	06:42 19:38	07:42 17:32-17:40/8 18:18	07:49 14:46-15:15/29 16:08	08:40 15:37
15	04:45 21:54	05:42 20:55	06:44 19:35	07:44 18:16	07:51 14:46-15:14/28 16:06	08:41 15:37
16	04:47 21:53	05:44 20:52	06:46 19:32	07:46 18:13	07:53 14:46-15:14/28 16:05	08:42 15:37
17	04:48 21:52	05:46 20:50	06:48 19:30	07:48 18:10	07:55 14:48-15:14/26 16:03	08:43 15:37
18	04:50 21:50	05:48 20:48	06:50 19:27	07:51 18:08	07:57 14:48-15:13/25 16:01	08:44 15:37
19	04:52 21:49	05:50 20:45	06:52 19:24	07:53 18:05	07:59 14:49-15:12/23 16:00	08:45 15:37
20	04:53 21:47	05:52 20:43	06:54 19:22	07:55 18:03	08:01 14:51-15:12/21 15:58	08:45 15:38
21	04:55 21:46	05:54 20:40	06:56 19:19	07:57 18:01	08:03 14:52-15:11/19 15:57	08:46 15:38
22	04:57 21:44	05:56 20:38	06:58 19:16	07:59 17:58	08:05 14:53-15:10/17 15:55	08:47 15:39
23	04:58 21:42	05:58 20:35	07:00 19:13	08:01 17:56	08:07 14:56-15:09/13 15:54	08:47 15:39
24	05:00 21:41	06:00 20:33	07:02 19:11	08:03 17:53	08:09 14:59-15:07/8 15:52	08:48 15:40
25	05:02 21:39	06:02 20:30	07:04 19:08	07:05 16:51	08:11 15:51	08:48 15:40
26	05:04 21:37	06:04 20:28	07:06 17:36-17:49/13 19:05	07:08 16:49	08:13 15:50	08:48 15:41
27	05:05 21:35	06:06 20:25	07:08 17:33-17:51/18 19:03	07:10 16:46	08:15 15:48	08:48 15:42
28	05:07 21:33	06:08 20:22	07:10 17:31-17:52/21 19:00	07:12 16:44	08:17 15:47	08:49 15:43
29	05:09 21:32	06:10 20:20	07:12 17:29-17:53/24 18:57	07:14 14:56-15:04/8 16:42	08:18 15:46	08:49 15:44
30	05:11 21:30	06:12 20:17	07:14 17:28-17:54/26 18:55	07:16 14:52-15:07/15 16:39	08:20 15:45	08:49 15:45
31	05:13 21:28	06:14 20:15		07:18 14:50-15:08/18 16:37		08:49 15:46
Potential sun hours	528	469	384	324	248	217
Sum of minutes with flicker	0	0	102	389	604	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	Last time (hh:mm) with flicker	Minutes with flicker
	Sun set (hh:mm)	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	Minutes with flicker

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

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

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: 05 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (21
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

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

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

	January	February	March	April	May	June	July	August	September	October	November	December
1	08:48 13:06-13:21/15 15:47	08:13 14:40-15:15/35 16:44	07:09 17:46 19:51	06:47 20:53 21:50	05:31 22:06 21:26	04:35 20:12 18:52	04:29 20:17 18:52	05:15 20:09 18:49	06:16 20:20 18:47	07:16 20:22 18:44	07:21 14:20-14:37/17 16:35 15:55-16:01/6	08:22 14:22-14:45/23 15:44
2	08:48 13:08-13:21/13 15:48	08:11 14:40-15:15/35 16:46	07:06 17:48 19:53	06:45 20:55 21:51	05:29 22:06 21:24	04:34 20:17 18:52	04:30 20:09 18:49	05:17 20:20 18:47	06:18 20:22 18:47	07:18 20:22 18:44	07:23 14:18-14:39/21 16:33	08:24 14:23-14:45/22 15:43
3	08:48 13:09-13:21/12 15:50	08:09 14:41-15:15/34 16:48	07:04 17:50 19:55	06:42 20:57 21:53	05:27 22:05 21:22	04:33 20:12 18:52	04:31 20:07 18:47	05:18 20:20 18:47	06:20 20:22 18:44	07:20 20:22 18:44	07:25 14:15-14:40/25 16:30	08:25 14:25-14:44/19 15:42
4	08:47 14:47-14:50/3 15:51 13:11-13:20/9	08:07 14:42-15:15/33 16:51	07:01 17:53 19:57	06:39 20:59 21:54	05:24 22:05 21:19	04:32 20:12 18:52	04:33 20:04 18:44	05:20 20:24 18:44	06:22 20:24 18:44	07:22 20:24 18:44	07:27 14:15-14:42/27 16:28	08:27 14:26-14:44/18 15:41
5	08:47 14:45-14:53/8 15:52 13:13-13:19/6	08:05 14:42-15:14/32 16:53	06:59 17:55 19:59	06:37 20:52 21:01	05:22 21:55 22:04	04:31 20:12 18:52	04:33 20:04 18:44	05:22 20:24 18:44	06:24 20:24 18:44	07:24 20:24 18:44	07:29 14:13-14:43/30 16:26	08:28 14:27-14:42/15 15:41
6	08:46 14:43-14:55/12 15:54	08:03 14:44-15:13/29 16:55	06:56 17:57 19:59	06:34 20:50 21:04	05:20 21:57 22:03	04:30 20:15 18:52	04:34 20:07 18:47	05:24 20:26 18:47	06:26 20:26 18:47	07:26 20:26 18:47	07:31 14:13-14:44/31 16:24	08:30 14:29-14:42/13 15:40
7	08:46 14:42-14:57/15 15:55	08:01 14:45-15:12/27 16:57	06:54 17:59 19:59	06:31 20:58 21:04	05:18 21:06 21:13	04:29 20:13 18:52	04:35 20:07 18:47	05:26 20:28 18:47	06:28 20:28 18:47	07:28 20:28 18:47	07:34 14:12-14:45/33 16:22	08:31 14:31-14:41/10 15:39 13:00-13:06/6
8	08:45 14:41-14:59/18 15:57	07:58 14:46-15:10/24 17:00	06:51 18:01 19:59	06:29 21:08 21:14	05:16 21:59 22:02	04:28 20:11 18:52	04:36 20:04 18:44	05:28 20:26 18:44	06:30 20:26 18:44	07:30 20:26 18:44	07:36 14:11-14:45/34 16:20	08:33 14:34-14:38/4 15:39 12:58-13:07/9
9	08:44 14:41-15:00/19 15:59	07:56 14:48-15:09/21 17:02	06:48 18:03 19:59	06:26 21:08 21:14	05:14 22:00 22:01	04:28 20:11 18:52	04:37 20:04 18:44	05:30 20:26 18:44	06:32 20:26 18:44	07:32 20:26 18:44	07:38 14:11-14:46/35 16:18	08:34 12:58-13:10/12 15:38
10	08:44 14:40-15:02/22 16:00	07:54 14:51-15:07/16 17:04 16:24-16:32/8	06:46 18:05 19:59	06:23 21:12 22:01	05:12 22:01 22:00	04:27 20:06 18:52	04:39 20:04 18:44	05:32 20:26 18:44	06:34 20:26 18:44	07:34 20:26 18:44	07:40 14:10-14:46/36 16:16	08:35 12:57-13:10/13 15:38
11	08:43 14:40-15:03/23 16:02	07:52 14:55-15:02/7 17:06 16:21-16:34/13	06:43 18:07 19:59	06:21 21:14 22:02	05:09 21:59 22:01	04:27 20:04 18:52	04:40 20:04 18:44	05:34 20:26 18:44	06:36 20:26 18:44	07:36 20:26 18:44	07:42 14:11-14:47/36 16:14	08:37 12:57-13:12/15 15:38
12	08:42 14:39-15:04/25 16:04	07:50 16:20-16:37/17 17:09	06:40 18:10 19:59	06:18 20:14 21:15	05:07 22:03 21:58	04:26 20:04 18:52	04:41 20:04 18:44	05:36 20:26 18:44	06:38 20:26 18:44	07:38 20:26 18:44	07:44 14:10-14:47/37 16:12	08:38 12:57-13:13/16 15:37
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22	08:30 14:38-15:13/35 16:23	07:26 16:17-16:40/23 17:31	06:14 18:31 19:59	05:53 20:35 21:34	04:49 22:08 21:44	04:25 20:04 18:52	04:57 20:04 18:44	05:56 20:26 18:44	06:58 20:26 18:44	07:58 20:26 18:44	16:46-17:11/25 08:05 14:13-14:48/35	08:47 13:00-13:20/20 15:39
23	08:28 14:37-15:14/37 16:25	07:24 16:18-16:39/21 17:33	06:11 18:33 19:59	05:50 20:37 21:36	04:47 22:08 21:42	04:25 20:04 18:52	04:58 20:04 18:44	05:58 20:26 18:44	07:00 20:26 18:44	08:01 20:26 18:44	16:47-17:12/25 08:07 14:14-14:47/33	08:47 13:00-13:20/20 15:39
24	08:27 14:37-15:14/37 16:27	07:21 16:19-16:38/19 17:35	06:09 18:35 19:59	05:48 20:39 21:38	04:46 22:08 21:41	04:25 20:04 18:52	05:00 20:04 18:44	06:00 20:26 18:44	07:02 20:26 18:44	08:03 20:26 18:44	16:46-17:12/26 08:09 14:15-14:48/33	08:48 13:00-13:20/20 15:40
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27	08:22 14:37-15:15/38 16:33	07:14 17:42 18:41	06:01 18:41 19:59	05:41 20:45 21:43	04:41 22:08 21:35	04:27 20:04 18:52	05:05 20:04 18:44	06:06 20:26 18:44	07:08 20:26 18:44	08:09 20:26 18:44	15:47-16:10/23 08:15 14:18-14:47/29	08:48 13:02-13:22/20 15:42
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29	08:18 14:38-15:15/37 16:38	07:09 17:44 18:43	06:55 18:45 19:59	05:36 20:49 21:46	04:39 22:07 21:31	04:28 20:04 18:52	05:09 20:04 18:44	06:10 20:26 18:44	07:12 20:26 18:44	08:13 20:26 18:44	15:49-16:08/19 08:18 14:19-14:46/27	08:49 13:03-13:21/18 15:45
30	08:16 14:38-15:15/37 16:40	07:07 17:44 18:43	06:53 18:45 19:59	05:34 20:51 21:47	04:37 22:07 21:30	04:28 20:04 18:52	05:11 20:04 18:44	06:12 20:26 18:44	07:14 20:26 18:44	08:15 20:26 18:44	15:50-16:06/16 08:20 14:21-14:46/25	08:49 13:04-13:22/18 15:45
31	08:14 14:39-15:15/36 16:42	07:04 17:44 18:43	06:50 18:45 19:59	05:30 21:49 21:49	04:36 22:07 21:28	04:26 20:04 18:52	05:13 20:04 18:44	06:14 20:26 18:44	07:16 20:26 18:44	08:17 20:26 18:44	15:51-16:03/12 08:18 14:23-14:33/10	08:48 13:05-13:22/17 15:46
Potential sun hours	236	266	366	426	507	528	528	469	384	324	248	217
Sum of minutes with flicker	851	632	0	0	0	0	0	0	0	342	971	560

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: O6 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (28)

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

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

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 14:48-15:04/16 15:47 14:15-14:43/28	08:13 15:05-15:40/35 16:44	07:09 16:12-16:48/36 17:46 15:19-16:04/45	06:47 19:51	05:31 20:53	04:34 21:50
2	08:48 14:48-15:04/16 15:48 14:15-14:43/28	08:11 15:05-15:41/36 16:46	07:06 16:12-16:47/35 17:48 15:19-16:02/43	06:44 19:53	05:28 20:55	04:33 21:52
3	08:48 14:49-15:06/17 15:49 14:16-14:44/28	08:09 15:04-15:42/38 16:48	07:04 16:12-16:48/36 17:50 15:20-16:02/42	06:42 19:55	05:26 20:57	04:32 21:53
4	08:48 14:48-15:06/18 15:50 14:16-14:45/29	08:07 15:04-15:43/39 16:50	07:01 16:12-16:47/35 17:52 15:21-16:00/39	06:39 19:57	05:24 21:00	04:31 21:54
5	08:47 14:48-15:07/19 15:52 14:15-14:45/30	08:05 15:03-15:48/45 16:52	06:59 16:12-16:46/34 17:54 15:22-15:58/36	06:36 19:59	05:22 21:02	04:30 21:56
6	08:47 14:49-15:08/19 15:53 14:16-14:46/30	08:03 15:03-15:52/49 16:55	06:56 16:13-16:46/33 17:57 15:24-15:57/33	06:34 20:01	05:19 21:04	04:29 21:57
7	08:46 14:49-15:09/20 15:55 14:17-14:47/30	08:01 15:03-15:55/52 16:57	06:53 16:14-16:44/30 17:59 15:26-15:55/29	06:31 20:04	05:17 21:06	04:28 21:58
8	08:45 14:49-15:10/21 15:56 14:17-14:48/31	07:58 15:03-15:57/54 16:59	06:51 17:28-17:30/2 15:28-15:52/24 18:01 16:14-16:43/29	06:28 20:06	05:15 21:08	04:28 21:59
9	08:45 14:49-15:11/22 15:58 14:17-14:48/31	07:56 15:02-15:58/56 17:01	06:48 17:24-17:35/11 15:32-15:49/17 18:03 16:16-16:42/26	06:26 20:08	05:13 21:10	04:27 22:00
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11	08:43 14:18-15:12/54 16:01	07:52 15:03-16:02/59 17:06	06:43 17:19-17:38/19 18:07 16:19-16:36/17	06:20 20:12	05:09 21:14	04:26 22:02
12	08:42 14:17-15:12/55 16:03	07:50 15:02-16:02/60 17:08	06:40 17:19-17:40/21 18:09 16:24-16:33/9	06:18 20:14	05:07 21:16	04:25 22:03
13	08:41 14:18-15:13/55 16:05	07:47 15:03-16:03/60 17:10	06:38 17:16-17:40/24 18:11	06:15 20:16	05:05 21:18	04:25 22:04
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16	08:38 14:19-15:15/56 16:10	07:41 15:03-16:05/62 17:17	06:30 17:11-17:40/29 18:18	06:08 20:22	04:59 21:23	04:24 22:06
17	08:37 14:19-15:15/56 16:12	07:38 15:04-16:06/62 17:19 16:29-16:34/5	06:27 17:09-17:39/30 18:20	06:05 20:24	04:57 21:25	04:24 22:06
18	08:35 14:20-15:15/55 16:14	07:36 15:04-16:06/62 17:22 16:23-16:38/15	06:24 17:08-17:39/31 18:22	06:02 20:26	04:55 21:27	04:24 22:07
19	08:34 14:20-15:15/55 16:16	07:34 15:06-16:07/61 17:24 16:21-16:41/20	06:22 17:08-17:40/32 18:24	06:00 20:28	04:53 21:29	04:24 22:07
20	08:33 14:21-15:15/54 16:18	07:31 15:06-16:06/60 17:26 16:19-16:43/24	06:19 17:07-17:40/33 18:26	05:57 20:31	04:52 21:31	04:24 22:07
21	08:31 14:21-15:16/55 16:20	07:29 15:08-16:07/59 17:28 16:18-16:45/27	06:16 17:06-17:39/33 18:28	05:55 20:33	04:50 21:33	04:24 22:08
22	08:30 14:21-15:16/55 16:22	07:26 15:09-16:06/57 17:30 16:16-16:45/29	06:14 17:07-17:40/33 18:30	05:52 20:35	04:48 21:34	04:24 22:08
23	08:28 14:53-15:15/22 16:24 14:22-14:52/30	07:24 15:11-16:07/56 17:33 16:16-16:47/31	06:11 17:06-17:39/33 18:32	05:50 20:37	04:47 21:36	04:24 22:08
24	08:27 14:53-15:15/22 16:26 14:23-14:52/29	07:21 15:13-16:06/53 17:35 16:14-16:47/33	06:08 17:06-17:38/32 18:34	05:48 20:39	04:45 21:38	04:24 22:08
25	08:25 14:54-15:14/20 15:15-15:26/11 16:28 14:24-14:52/28	07:19 15:15-16:05/50 17:37 16:13-16:47/34	06:06 17:07-17:38/31 18:37	05:45 20:41	04:44 21:40	04:25 22:08
26	08:23 14:56-15:31/35 16:30 14:25-14:52/27	07:16 15:17-16:06/49 17:39 16:13-16:48/35	06:03 17:07-17:36/29 18:39	05:43 20:43	04:42 21:41	04:25 22:08
27	08:22 14:58-15:33/35 16:33 14:26-14:51/25	07:14 16:12-16:48/36 17:41 15:17-16:05/48	06:00 17:08-17:35/27 18:41	05:40 20:45	04:41 21:43	04:26 22:08
28	08:20 15:00-15:35/35 16:35 14:28-14:50/22	07:11 16:13-16:48/35 17:44 15:18-16:05/47	05:58 17:09-17:34/25 18:43	05:38 20:47	04:39 21:44	04:26 22:08
29	08:18 15:02-15:37/35 16:37 14:29-14:49/20		06:55 18:10-18:32/22 19:45	05:35 20:49	04:38 21:46	04:27 22:08
30	08:16 14:31-14:48/17 16:39 15:07-15:37/30		06:52 18:12-18:29/17 19:47	05:33 20:51	04:37 21:47	04:28 22:07
31	08:15 14:33-14:45/12 16:41 15:06-15:39/33		06:50 18:15-18:26/11 19:49		04:35 21:49	
Potential sun hours	236	266	366	426	507	528
Sum of minutes with flicker	1637	1815	1245	0	0	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	Last time (hh:mm) with flicker	Minutes with flicker
	Sun set (hh:mm)	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	Minutes with flicker

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: O6 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (28)

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	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 17:57-18:19/22 18:52	07:21 14:32-15:29/57 16:34	08:22 13:59-14:53/54 15:43
2	04:29 22:06	05:16 21:24	06:17 20:09	07:17 17:58-18:18/20 18:49 17:00-17:14/14	07:23 14:32-15:27/55 16:32	08:24 13:59-14:53/54 15:42
3	04:30 22:06	05:18 21:22	06:19 20:07	07:19 17:59-18:16/17 18:46 16:57-17:16/19	07:25 14:33-15:26/53 16:30	08:25 14:32-14:54/22 15:42 14:00-14:31/31
4	04:31 22:05	05:20 21:20	06:21 20:04	07:21 18:00-18:13/13 16:12-16:24/12 18:44 16:54-17:18/24	07:27 14:32-15:24/52 16:28	08:27 14:33-14:54/21 15:41 14:01-14:32/31
5	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:02-18:10/8 16:07-16:28/21 18:41 16:52-17:19/27	07:29 14:33-15:21/48 16:26	08:29 14:34-14:54/20 15:40 14:02-14:32/30
6	04:33 22:04	05:24 21:15	06:25 19:59	07:26 16:50-17:20/30 18:38 16:03-16:30/27	07:31 14:34-15:18/44 16:23	08:30 14:35-14:54/19 15:39 14:03-14:33/30
7	04:34 22:03	05:26 21:13	06:27 19:56	07:28 16:49-17:20/31 18:36 16:00-16:32/32	07:34 14:34-15:13/39 16:21	08:32 14:35-14:54/19 15:39 14:03-14:32/29
8	04:35 22:02	05:28 21:11	06:29 19:54	07:30 16:48-17:21/33 18:33 15:58-16:33/35	07:36 14:35-15:13/38 16:19	08:33 14:36-14:54/18 15:38 14:04-14:33/29
9	04:37 22:01	05:30 21:09	06:31 19:51	07:32 16:48-17:22/34 18:31 15:57-16:35/38	07:38 14:36-15:12/36 16:17	08:34 14:37-14:54/17 15:38 14:04-14:32/28
10	04:38 22:00	05:32 21:06	06:33 19:48	07:34 16:47-17:22/35 18:28 15:55-16:36/41	07:40 14:36-15:11/35 16:15	08:36 14:38-14:54/16 15:37 14:05-14:33/28
11	04:39 21:59	05:33 21:04	06:35 19:45	07:36 16:46-17:22/36 18:25 15:54-16:36/42	07:42 14:05-14:17/12 16:13 14:38-15:10/32	08:37 14:39-14:54/15 15:37 14:05-14:33/28
12	04:40 21:58	05:35 21:02	06:37 18:07-18:17/10 19:43	07:38 16:45-17:21/36 18:23 15:52-16:37/45	07:44 14:02-14:19/17 16:11 14:39-15:09/30	08:38 14:39-14:53/14 15:37 14:06-14:33/27
13	04:42 21:57	05:37 20:59	06:39 18:03-18:20/17 19:40	07:40 16:45-17:21/36 18:20 15:51-16:37/46	07:46 14:34-15:09/35 16:10 14:01-14:21/20	08:39 14:41-14:54/13 15:36 14:07-14:34/27
14	04:43 21:56	05:39 20:57	06:41 18:01-18:22/21 19:37	07:42 16:45-17:20/35 18:18 15:50-16:37/47	07:49 14:31-15:07/36 16:08 13:59-14:22/23	08:40 14:42-14:53/11 15:36 14:08-14:34/26
15	04:45 21:54	05:41 20:55	06:43 17:59-18:23/24 19:35	07:44 16:45-17:21/36 18:15 15:50-16:38/48	07:51 14:30-15:05/35 16:06 13:58-14:23/25	08:41 14:42-14:53/11 15:36 14:08-14:34/26
16	04:46 21:53	05:43 20:52	06:45 17:57-18:24/27 19:32	07:46 15:49-16:38/49 18:13 16:45-17:20/35	07:53 14:29-15:04/35 16:04 13:58-14:25/27	08:42 14:43-14:53/10 15:36 14:09-14:34/25
17	04:48 21:52	05:45 20:50	06:47 17:56-18:25/29 19:29	07:48 15:46-16:38/52 18:10 16:45-17:19/34	07:55 14:28-14:48/20 14:49-15:00/11 16:02 13:57-14:25/28	08:43 14:44-14:53/9 15:36 14:09-14:35/26
18	04:49 21:50	05:47 20:48	06:49 17:55-18:25/30 19:27	07:50 15:43-16:37/54 18:08 16:46-17:18/32	07:57 14:27-14:49/22 16:01 13:56-14:26/30	08:44 14:44-14:52/8 15:36 14:09-14:34/25
19	04:51 21:49	05:49 20:45	06:51 17:54-18:25/31 19:24	07:53 15:41-16:38/57 18:05 16:47-17:18/31	07:59 14:28-14:50/22 15:59 13:57-14:27/30	08:45 14:45-14:53/8 15:37 14:10-14:35/25
20	04:52 21:47	05:51 20:43	06:53 17:53-18:25/32 19:21	07:55 15:39-16:38/59 18:03 16:48-17:16/28	08:01 13:56-14:51/55 15:58	08:46 14:46-14:53/7 15:37 14:11-14:36/25
21	04:54 21:46	05:53 20:40	06:55 17:53-18:25/32 19:19	07:57 15:38-16:37/59 18:00 16:48-17:15/27	08:03 13:56-14:51/55 15:56	08:46 14:46-14:53/7 15:37 14:11-14:36/25
22	04:56 21:44	05:55 20:38	06:57 17:52-18:25/33 19:16	07:59 15:36-16:36/60 17:58 16:50-17:12/22	08:05 13:57-14:52/55 15:54	08:47 14:47-14:54/7 15:38 14:12-14:37/25
23	04:58 21:42	05:57 20:35	06:59 17:52-18:24/32 19:13	08:01 15:36-16:37/61 17:55 16:52-17:11/19	08:07 13:57-14:52/55 15:53	08:47 14:47-14:54/7 15:38 14:12-14:37/25
24	04:59 21:41	05:59 20:33	07:01 17:52-18:24/32 19:10	08:03 15:34-16:36/62 17:53 16:55-17:08/13	08:09 13:57-14:52/55 15:52	08:48 14:48-14:56/8 15:39 14:13-14:38/25
25	05:01 21:39	06:01 20:30	07:03 17:52-18:23/31 19:08	07:05 14:33-15:35/62 16:50	08:11 13:57-14:53/56 15:50	08:48 14:48-14:56/8 15:40 14:13-14:38/25
26	05:03 21:37	06:03 20:28	07:05 17:52-18:22/30 19:05	07:08 14:33-15:35/62 16:48	08:13 13:57-14:53/56 15:49	08:48 14:48-14:57/9 15:40 14:13-14:39/26
27	05:05 21:35	06:05 20:25	07:07 17:52-18:21/29 19:02	07:10 14:32-15:34/62 16:46	08:15 13:57-14:53/56 15:48	08:49 14:48-14:58/10 15:41 14:14-14:39/25
28	05:06 21:34	06:07 20:22	07:09 17:53-18:21/28 19:00	07:12 14:32-15:33/61 16:43	08:17 13:58-14:53/55 15:47	08:49 14:48-14:59/11 15:42 14:14-14:40/26
29	05:08 21:32	06:09 20:20	07:11 17:54-18:21/27 18:57	07:14 14:32-15:33/61 16:41	08:18 13:59-14:54/55 15:45	08:49 14:48-15:00/12 15:43 14:14-14:41/27
30	05:10 21:30	06:11 20:17	07:13 17:55-18:20/25 18:54	07:16 14:32-15:31/59 16:39	08:20 13:59-14:54/55 15:44	08:49 14:49-15:01/12 15:44 14:15-14:41/26
31	05:12 21:28	06:13 20:15		07:18 14:31-15:30/59 16:36		08:49 14:48-15:02/14 15:45 14:14-14:41/27
Potential sun hours	529	469	384	324	248	217
Sum of minutes with flicker	0	0	520	2120	1555	1249

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: P19.2b - NORDEX N175/6.X 6800 175.0 !-! hub: 179,0 m (TOT: 266,5 m) (35)

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

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

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	13:03-13:12/9	08:13	07:09	06:47	05:31	04:35	05:36-05:57/21
	15:47	14:48-15:04/16	16:44	17:46	19:51	20:53	21:50	
2	08:48	13:05-13:12/7	08:11	07:06	06:45	05:29	04:34	05:37-05:57/20
	15:49	14:48-15:06/18	16:46	17:48	19:53	20:55	21:51	
3	08:48	14:48-15:07/19	08:09	07:04	06:42	05:27	04:33	05:37-05:56/19
	15:50		16:48	17:50	19:55	20:57	21:53	
4	08:47	14:49-15:09/20	08:07	07:01	06:39	05:24	04:32	05:39-05:57/18
	15:51		16:51	17:53	19:57	20:59	21:54	
5	08:47	14:49-15:11/22	08:05	06:59	06:37	05:22	04:31	05:39-05:56/17
	15:52		16:53	17:55	19:59	21:01	21:55	
6	08:46	14:48-15:12/24	08:03	06:56	06:34	05:20	04:30	05:40-05:56/16
	15:54		16:55	17:57	20:02	21:03	21:56	
7	08:46	14:48-15:12/24	08:01	06:53	06:31	05:18	04:29	05:41-05:56/15
	15:55		16:57	17:59	20:04	21:05	21:58	
8	08:45	14:48-15:13/25	07:58	06:51	06:29	05:16	04:28	05:41-05:55/14
	15:57		17:00	18:01	20:06	21:07	21:59	
9	08:44	14:49-15:14/25	07:56	06:48	06:26	05:14	04:28	05:42-05:54/12
	15:59		17:02	18:03	20:08	21:09	22:00	
10	08:44	14:49-15:14/25	07:54	06:46	06:23	05:12	04:27	05:43-05:54/11
	16:00		17:04	18:05	20:10	21:11	22:01	
11	08:43	14:49-15:15/26	07:52	06:43	06:21	05:09	04:27	05:44-05:54/10
	16:02		17:06	18:07	20:12	21:13	22:02	
12	08:42	14:50-15:16/26	07:50	06:40	06:18	05:07	04:26	05:44-05:53/9
	16:04		17:09	18:10	20:14	21:15	22:02	
13	08:41	14:50-15:17/27	07:47	06:38	06:16	05:05	04:26	05:46-05:53/7
	16:05		17:11	18:12	20:16	21:17	22:03	
14	08:40	14:50-15:17/27	07:45	06:35	06:13	05:03	04:25	05:47-05:52/5
	16:07		17:13	18:14	20:18	21:19	22:04	
15	08:39	14:50-15:18/28	07:43	06:33	06:11	05:02	04:25	05:49-05:51/2
	16:09		17:15	18:16	20:20	21:21	22:05	
16	08:38	14:50-15:18/28	07:41	06:30	06:08	05:00	04:25	
	16:11		17:17	18:18	20:22	21:23	22:05	
17	08:36	14:51-15:18/27	07:38	06:27	06:05	04:58	04:25	
	16:13		17:20	18:20	20:24	21:25	22:06	
18	08:35	14:51-15:18/27	07:36	06:25	06:03	04:56	04:24	
	16:15		17:22	18:22	20:26	21:27	22:06	
19	08:34	14:52-15:19/27	07:34	06:22	06:00	04:54	04:24	
	16:17		17:24	18:24	20:28	21:29	22:07	
20	08:32	14:52-15:19/27	07:31	06:19	05:58	04:52	04:24	
	16:19		17:26	18:26	20:31	21:31	22:07	
21	08:31	14:53-15:19/26	07:29	06:17	05:55	04:51	04:25	
	16:21		17:29	18:28	20:33	21:32	22:07	
22	08:30	14:54-15:19/25	07:26	06:14	05:53	04:49	04:25	
	16:23		17:31	18:30	20:35	21:34	22:08	
23	08:28	14:55-15:19/24	07:24	06:11	05:50	04:47	04:25	
	16:25		17:33	18:33	20:37	21:36	22:08	
24	08:27	14:56-15:18/22	07:21	06:09	05:48	04:46	04:25	
	16:27		17:35	18:35	20:39	21:38	22:08	
25	08:25	14:57-15:18/21	07:19	06:06	05:46	04:44	04:26	
	16:29		17:37	18:37	20:41	21:39	22:08	
26	08:23	14:59-15:17/18	07:16	06:03	05:43	04:43	04:26	
	16:31		17:40	18:39	20:43	21:41	22:08	
27	08:22	15:01-15:15/14	07:14	06:01	05:41	04:41	04:27	
	16:33		17:42	18:41	20:45	21:42	22:08	
28	08:20	15:06-15:13/7	07:11	05:58	05:38	04:40	04:27	05:51-05:55/4
	16:35		17:44	18:43	20:47	21:44	22:07	
29	08:18			06:55	05:36	04:39	04:28	05:49-05:55/6
	16:38			19:45	20:49	21:46	22:07	
30	08:16			06:53	05:34	04:37	04:29	05:49-05:57/8
	16:40			19:47	20:51	21:47	22:07	
31	08:14			06:50		04:36		
	16:42			19:49		21:49		
Potential sun hours	236		266	366	426	507	528	
Sum of minutes with flicker	661	0	0	0	486		214	

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: P19.2b - NORDEX N175/6.X 6800 175.0 !-! hub: 179,0 m (TOT: 266,5 m) (35)

Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	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	05:49-05:58/9	05:15	05:48-06:03/15	06:16	07:16	07:20	08:22	14:31-14:57/26
	22:06		21:26		20:12	18:52	16:35	15:44	
2	04:30	05:47-05:58/11	05:17	05:50-06:02/12	06:18	07:18	07:23	08:23	14:32-14:58/26
	22:06		21:24		20:09	18:49	16:33	15:43	
3	04:31	05:47-05:59/12	05:18	05:53-05:59/6	06:20	07:20	07:25	08:25	14:33-14:58/25
	22:05		21:21		20:07	18:47	16:30	15:42	
4	04:32	05:47-06:00/13	05:20		06:22	07:22	07:27	08:27	14:34-14:58/24
	22:05		21:19		20:04	18:44	16:28	15:41	
5	04:33	05:46-06:01/15	05:22		06:24	07:24	07:29	08:28	14:34-14:57/23
	22:04		21:17		20:02	18:41	16:26	15:41	
6	04:34	05:46-06:02/16	05:24		06:26	07:26	07:31	08:30	14:35-14:58/23
	22:03		21:15		19:59	18:39	16:24	15:40	
7	04:35	05:46-06:02/16	05:26		06:28	07:28	07:33	08:31	14:36-14:58/22
	22:03		21:13		19:56	18:36	16:22	15:39	
8	04:36	05:45-06:03/18	05:28		06:30	07:30	07:36	08:33	14:36-14:56/20
	22:02		21:11		19:54	18:34	16:20	15:39	
9	04:37	05:45-06:04/19	05:30		06:32	07:32	07:38	08:34	14:37-14:56/19
	22:01		21:09		19:51	18:31	16:18	15:38	
10	04:39	05:45-06:04/19	05:32		06:34	07:34	07:40	08:35	12:55-13:00/5
	22:00		21:06		19:48	18:28	16:16	15:38	14:37-14:55/18
11	04:40	05:45-06:06/21	05:34		06:36	07:36	07:42	08:37	12:54-13:03/9
	21:59		21:04		19:46	18:26	16:14	15:38	14:39-14:55/16
12	04:41	05:45-06:06/21	05:36		06:38	07:38	07:44	08:38	12:53-13:04/11
	21:58		21:02		19:43	18:23	16:12	15:37	14:39-14:55/16
13	04:43	05:44-06:06/22	05:38		06:40	07:40	07:46	08:39	12:53-13:05/12
	21:57		20:59		19:40	18:21	16:10	15:37	14:40-14:54/14
14	04:44	05:44-06:06/22	05:40		06:42	07:42	07:48	08:40	12:52-13:06/14
	21:55		20:57		19:38	18:18	16:08	15:37	14:41-14:54/13
15	04:45	05:44-06:07/23	05:42		06:44	07:44	07:51	08:41	12:52-13:07/15
	21:54		20:55		19:35	18:15	16:06	15:37	14:41-14:54/13
16	04:47	05:44-06:07/23	05:44		06:46	07:46	07:53	08:42	12:52-13:08/16
	21:53		20:52		19:32	18:13	16:05	15:37	14:42-14:53/11
17	04:48	05:43-06:07/24	05:46		06:48	07:48	07:55	08:43	12:53-13:09/16
	21:51		20:50		19:30	18:10	16:03	15:37	14:43-14:54/11
18	04:50	05:44-06:08/24	05:48		06:50	07:51	07:57	08:44	12:53-13:10/17
	21:50		20:47		19:27	18:08	16:01	15:37	14:44-14:54/10
19	04:52	05:43-06:08/25	05:50		06:52	07:53	07:59	08:45	12:54-13:10/16
	21:49		20:45		19:24	18:05	16:00	15:37	14:45-14:54/9
20	04:53	05:44-06:09/25	05:52		06:54	07:55	08:01	08:45	12:53-13:10/17
	21:47		20:43		19:21	18:03	15:58	15:38	14:45-14:54/9
21	04:55	05:43-06:08/25	05:54		06:56	07:57	08:03	08:46	12:54-13:11/17
	21:45		20:40		19:19	18:01	15:57	15:38	14:46-14:55/9
22	04:57	05:44-06:09/25	05:56		06:58	07:59	08:05	08:47	12:54-13:11/17
	21:44		20:38		19:16	17:58	15:55	15:39	14:46-14:55/9
23	04:58	05:43-06:08/25	05:58		07:00	08:01	08:07	08:47	12:55-13:12/17
	21:42		20:35		19:13	17:56	15:54	15:39	14:47-14:56/9
24	05:00	05:44-06:09/25	06:00		07:01	08:03	08:09	08:47	12:56-13:12/16
	21:40		20:33		19:11	17:53	15:52	15:40	14:47-14:56/9
25	05:02	05:44-06:09/25	06:02		07:03	07:05	08:11	08:48	12:56-13:12/16
	21:39		20:30		19:08	16:51	15:51	15:40	14:47-14:57/10
26	05:04	05:44-06:08/24	06:04		07:05	07:08	08:13	08:48	12:57-13:14/17
	21:37		20:28		19:05	16:48	15:50	15:41	14:47-14:57/10
27	05:05	05:45-06:08/23	06:06		07:07	07:10	08:15	08:48	12:58-13:14/16
	21:35		20:25		19:03	16:46	15:48	15:42	14:48-14:59/11
28	05:07	05:45-06:07/22	06:08		07:09	07:12	08:16	08:48	12:59-13:14/15
	21:33		20:22		19:00	16:44	15:47	15:43	14:47-14:59/12
29	05:09	05:46-06:07/21	06:10		07:12	07:14	08:18	08:48	12:59-13:13/14
	21:31		20:20		18:57	16:42	15:46	15:44	14:47-15:00/13
30	05:11	05:47-06:06/19	06:12		07:14	07:16	08:20	08:48	13:00-13:13/13
	21:30		20:17		18:55	16:39	15:45	15:45	14:48-15:02/14
31	05:13	05:48-06:05/17	06:14			07:18		08:48	13:02-13:13/11
	21:28		20:15			16:37		15:46	14:48-15:03/15
Potential sun hours	528		469		384	324	248	217	
Sum of minutes with flicker	629		33		0	0	403	786	

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: Pr11 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (29)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

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

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 12:05-12:58/53 15:47 13:47-14:22/35	08:13 13:56-14:33/37 16:43 12:28-12:52/24	07:09 16:09-16:28/19 17:46 15:19-15:51/32	06:47 19:51 20:53	05:31 21:50	04:34 21:50
2	08:48 12:05-12:58/53 15:48 13:47-14:22/35	08:11 13:58-14:32/34 16:46 12:31-12:50/19	07:06 16:11-16:25/14 17:48 15:21-15:49/28	06:44 19:53 20:55	05:28 21:52	04:33 21:52
3	08:48 12:06-12:59/53 15:49 13:47-14:23/36	08:09 13:59-14:31/32 16:48 12:35-12:46/11	07:04 16:18-16:19/1 17:50 15:24-15:47/23	06:42 19:55 20:57	05:26 21:53	04:32 21:53
4	08:48 12:06-12:59/53 15:50 13:47-14:24/37	08:07 14:01-14:31/30 16:50 15:22-15:50/28	07:01 15:26-15:44/18 17:52 15:33-15:37/4	06:39 19:57 20:59	05:24 21:54	04:31 21:54
5	08:47 12:06-12:59/53 15:52 13:47-14:24/37	08:05 14:02-14:29/27 16:52 15:19-15:51/32	06:59 17:54 19:59	06:36 20:52 21:02	05:22 21:56	04:30 21:56
6	08:47 12:08-13:00/52 15:53 13:48-14:26/38	08:03 14:04-14:27/23 16:55 15:19-15:52/33	06:56 17:56 20:01	06:34 20:01 21:04	05:19 21:57	04:29 21:57
7	08:46 12:08-13:00/52 15:55 13:48-14:26/38	08:01 14:07-14:25/18 16:57 15:18-15:54/36	06:53 17:59 20:03	06:31 20:03 21:06	05:17 21:58	04:28 21:58
8	08:45 12:08-13:00/52 15:56 13:48-14:27/39	07:58 14:12-14:21/9 16:59 15:17-15:55/38	06:51 18:01 20:06	06:28 20:06 21:08	05:15 21:59	04:28 21:59
9	08:45 12:09-13:00/51 15:58 13:48-14:28/40	07:56 15:16-15:55/39 17:01 18:03	06:48 18:03 20:08	06:26 20:08 21:10	05:13 22:00	04:27 22:00
10	08:44 12:09-13:01/52 15:59 13:48-14:29/41	07:54 16:15-16:24/9 17:04 15:15-15:57/42	06:45 18:05 20:10	06:23 20:10 21:12	05:11 22:01	04:26 22:01
11	08:43 12:10-13:01/51 16:01 13:48-14:28/40	07:52 16:11-16:26/15 17:06 15:14-15:57/43	06:43 18:07 20:12	06:20 20:12 21:14	05:09 22:02	04:26 22:02
12	08:42 12:09-13:00/51 16:03 13:48-14:29/41	07:50 16:09-16:29/20 17:08 15:14-15:58/44	06:40 18:09 20:14	06:18 20:14 21:16	05:07 22:03	04:25 22:03
13	08:41 12:10-13:01/51 16:05 13:48-14:30/42	07:47 16:08-16:31/23 17:10 15:14-15:59/45	06:38 18:11 20:16	06:15 20:16 21:18	05:05 22:04	04:25 22:04
14	08:40 12:11-13:01/50 16:06 13:49-14:31/42	07:45 16:07-16:32/25 17:13 15:13-15:59/46	06:35 18:13 20:18	06:13 20:18 21:19	05:03 22:04	04:24 22:04
15	08:39 12:11-13:00/49 16:08 13:49-14:31/42	07:43 16:06-16:33/27 17:15 15:13-15:59/46	06:32 18:16 20:20	06:10 20:20 21:21	05:01 22:05	04:24 22:05
16	08:38 12:12-13:01/49 16:10 13:49-14:32/43	07:41 16:05-16:33/28 17:17 15:12-15:59/47	06:30 18:18 20:22	06:08 20:22 21:23	04:59 22:06	04:24 22:06
17	08:37 12:12-13:00/48 16:12 13:49-14:32/43	07:38 16:05-16:34/29 17:19 15:13-16:00/47	06:27 18:20 20:24	06:05 20:24 21:25	04:57 22:06	04:24 22:06
18	08:35 12:13-13:01/48 16:14 13:50-14:33/43	07:36 16:04-16:34/30 17:21 15:12-15:59/47	06:24 18:22 20:26	06:02 20:26 21:27	04:55 22:07	04:24 22:07
19	08:34 12:13-13:00/47 16:16 13:49-14:33/44	07:33 16:04-16:35/31 17:24 15:13-15:59/46	06:22 18:24 20:28	06:00 20:28 21:29	04:53 22:07	04:24 22:07
20	08:33 12:13-13:00/47 16:18 13:49-14:33/44	07:31 16:03-16:35/32 17:26 15:12-15:59/47	06:19 18:26 20:30	05:57 20:30 21:31	04:52 22:07	04:24 22:07
21	08:31 12:15-13:01/46 16:20 13:50-14:34/44	07:29 16:04-16:35/31 17:28 15:13-15:59/46	06:16 18:28 20:33	05:55 20:33 21:33	04:50 22:08	04:24 22:08
22	08:30 12:15-13:00/45 16:22 13:50-14:34/44	07:26 16:03-16:34/31 17:30 15:13-15:58/45	06:14 18:30 20:35	05:52 20:35 21:34	04:48 22:08	04:24 22:08
23	08:28 12:16-13:00/44 16:24 13:51-14:34/43	07:24 16:04-16:35/31 17:33 15:14-15:58/44	06:11 18:32 20:37	05:50 20:37 21:36	04:47 22:08	04:24 22:08
24	08:27 12:16-12:59/43 16:26 13:51-14:34/43	07:21 16:04-16:34/30 17:35 15:14-15:57/43	06:08 18:34 20:39	05:47 20:39 21:38	04:45 22:08	04:24 22:08
25	08:25 12:17-12:59/42 16:28 13:51-14:34/43	07:19 16:04-16:33/29 17:37 15:14-15:56/42	06:06 18:36 20:41	05:45 20:41 21:39	04:44 22:08	04:25 22:08
26	08:23 13:53-14:35/42 16:30 12:19-12:59/40	07:16 16:05-16:32/27 17:39 15:16-15:56/40	06:03 18:39 20:43	05:43 20:43 21:41	04:42 22:08	04:25 22:08
27	08:22 13:53-14:35/42 16:33 12:20-12:59/39	07:14 16:06-16:31/25 17:41 15:16-15:54/38	06:00 18:41 20:45	05:40 20:45 21:43	04:41 22:08	04:26 22:08
28	08:20 13:54-14:35/41 16:35 12:21-12:58/37	07:11 16:08-16:30/22 17:43 15:18-15:53/35	05:58 18:43 20:47	05:38 20:47 21:44	04:39 22:08	04:26 22:08
29	08:18 13:54-14:35/41 16:37 12:23-12:57/34		06:55 19:45 20:49	05:35 20:49 21:46	04:38 22:07	04:27 22:07
30	08:16 13:54-14:33/39 16:39 12:23-12:55/32		06:52 19:47 20:51	05:33 20:51 21:47	04:37 22:07	04:28 22:07
31	08:14 13:55-14:33/38 16:41 12:25-12:54/29		06:50 19:49 20:51		04:35 21:49	
Potential sun hours	236	266	366	426	507	528
Sum of minutes with flicker	2706	1855	139	0	0	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	Last time (hh:mm) with flicker	Minutes with flicker
	Sun set (hh:mm)	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	Minutes with flicker

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: Pr11 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (29)
Assumptions for shadow calculations

Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 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 15:45-15:52/7 16:34 14:45-15:26/41	08:22 11:51-12:42/51 15:43 13:30-14:11/41
2	04:29 22:06	05:16 21:24	06:17 20:09	07:17 18:49	07:23 14:45-15:25/40 16:32	08:24 11:51-12:43/52 15:42 13:31-14:11/40
3	04:30 22:06	05:18 21:22	06:19 20:07	07:19 18:46	07:25 13:40-13:52/12 16:30 14:47-15:25/38	08:25 11:52-12:44/52 15:42 13:31-14:11/40
4	04:31 22:05	05:20 21:19	06:21 20:04	07:21 18:44	07:27 13:36-13:55/19 16:28 14:48-15:23/35	08:27 11:52-12:44/52 15:41 13:32-14:11/39
5	04:32 22:04	05:22 21:17	06:23 20:01	07:23 18:41	07:29 13:33-13:57/24 16:25 14:48-15:22/34	08:29 11:53-12:45/52 15:40 13:33-14:12/39
6	04:33 22:04	05:24 21:15	06:25 19:59	07:25 18:38	07:31 13:32-13:59/27 16:23 14:50-15:21/31	08:30 11:53-12:45/52 15:39 13:33-14:11/38
7	04:34 22:03	05:26 21:13	06:27 19:56	07:28 18:36	07:34 13:30-14:01/31 16:21 14:52-15:19/27	08:32 11:53-12:46/53 15:39 13:34-14:11/37
8	04:35 22:02	05:28 21:11	06:29 19:53	07:30 18:33	07:36 13:30-14:02/32 14:54-15:18/24 16:19 12:05-12:17/12	08:33 11:54-12:47/53 15:38 13:35-14:12/37
9	04:37 22:01	05:30 21:09	06:31 19:51	07:32 16:04-16:17/13 18:31	07:38 13:28-14:03/35 14:56-15:15/19 16:17 12:01-12:21/20	08:34 11:54-12:47/53 15:38 13:36-14:12/36
10	04:38 22:00	05:31 21:06	06:33 19:48	07:34 16:00-16:20/20 18:28	07:40 13:27-14:04/37 14:59-15:12/13 16:15 11:58-12:23/25	08:36 11:55-12:48/53 15:37 13:37-14:12/35
11	04:39 21:59	05:33 21:04	06:35 19:45	07:36 16:48-16:57/9 18:25 15:56-16:22/26	07:42 13:27-14:05/38 16:13 11:57-12:26/29	08:37 11:55-12:48/53 15:37 13:37-14:12/35
12	04:40 21:58	05:35 21:02	06:37 19:43	07:38 16:44-17:00/16 18:23 15:54-16:24/30	07:44 13:26-14:05/39 16:11 11:55-12:27/32	08:38 11:56-12:48/52 15:37 13:38-14:12/34
13	04:42 21:57	05:37 20:59	06:39 19:40	07:40 16:41-17:01/20 18:20 15:51-16:25/34	07:46 13:26-14:07/41 16:10 11:54-12:29/35	08:39 11:57-12:49/52 15:36 13:38-14:12/34
14	04:43 21:56	05:39 20:57	06:41 19:37	07:42 16:39-17:02/23 18:18 15:50-16:26/36	07:49 13:26-14:07/41 16:08 11:53-12:30/37	08:40 11:57-12:50/53 15:36 13:40-14:13/33
15	04:45 21:54	05:41 20:55	06:43 19:35	07:44 16:38-17:04/26 18:15 15:49-16:27/38	07:51 13:25-14:07/42 16:06 11:52-12:31/39	08:41 11:58-12:50/52 15:36 13:40-14:13/33
16	04:46 21:53	05:43 20:52	06:45 19:32	07:46 16:37-17:05/28 18:13 15:47-16:28/41	07:53 13:26-14:08/42 16:04 11:52-12:32/40	08:42 11:58-12:51/53 15:36 13:41-14:13/32
17	04:48 21:52	05:45 20:50	06:47 19:29	07:48 16:36-17:05/29 18:10 15:46-16:28/42	07:55 11:51-12:33/42 16:02 13:25-14:08/43	08:43 11:59-12:51/52 15:36 13:41-14:13/32
18	04:49 21:50	05:47 20:47	06:49 19:27	07:50 16:35-17:05/30 18:08 15:45-16:28/43	07:57 11:50-12:33/43 16:01 13:25-14:08/43	08:44 11:59-12:51/52 15:36 13:41-14:13/32
19	04:51 21:49	05:49 20:45	06:51 19:24	07:53 16:34-17:05/31 18:05 15:44-16:29/45	07:59 11:51-12:35/44 15:59 13:26-14:09/43	08:45 11:59-12:52/53 15:37 13:42-14:14/32
20	04:52 21:47	05:51 20:43	06:53 19:21	07:55 16:34-17:06/32 18:03 15:44-16:29/45	08:01 11:50-12:35/45 15:57 13:25-14:09/44	08:46 12:00-12:52/52 15:37 13:43-14:15/32
21	04:54 21:46	05:53 20:40	06:55 19:19	07:57 16:34-17:05/31 18:00 15:43-16:29/46	08:03 11:50-12:36/46 15:56 13:25-14:09/44	08:46 12:00-12:52/52 15:37 13:43-14:15/32
22	04:56 21:44	05:55 20:38	06:57 19:16	07:59 16:33-17:05/32 17:58 15:43-16:29/46	08:05 11:50-12:37/47 15:54 13:25-14:09/44	08:47 12:01-12:53/52 15:38 13:44-14:16/32
23	04:58 21:42	05:57 20:35	06:59 19:13	08:01 16:34-17:05/31 17:55 15:43-16:30/47	08:07 11:50-12:37/47 15:53 13:27-14:10/43	08:47 12:01-12:53/52 15:38 13:44-14:16/32
24	04:59 21:41	05:59 20:33	07:01 19:10	08:03 16:34-17:04/30 17:53 15:43-16:29/46	08:09 11:50-12:38/48 15:52 13:27-14:10/43	08:48 12:02-12:54/52 15:39 13:45-14:17/32
25	05:01 21:39	06:01 20:30	07:03 19:08	07:05 15:34-16:03/29 16:50 14:42-15:29/47	08:11 11:50-12:38/48 15:50 13:27-14:10/43	08:48 12:02-12:55/53 15:40 13:45-14:17/32
26	05:03 21:37	06:03 20:27	07:05 19:05	07:07 15:35-16:03/28 16:48 14:43-15:29/46	08:13 11:50-12:39/49 15:49 13:27-14:10/43	08:48 12:03-12:55/52 15:40 13:45-14:18/33
27	05:05 21:35	06:05 20:25	07:07 19:02	07:10 15:36-16:02/26 16:46 14:43-15:29/46	08:15 11:50-12:39/49 15:48 13:28-14:10/42	08:49 12:03-12:55/52 15:41 13:46-14:18/32
28	05:06 21:33	06:07 20:22	07:09 19:00	07:12 15:36-16:01/25 16:43 14:43-15:28/45	08:17 11:50-12:40/50 15:47 13:28-14:10/42	08:49 12:04-12:56/52 15:42 13:46-14:19/33
29	05:08 21:32	06:09 20:20	07:11 18:57	07:14 15:38-16:00/22 16:41 14:43-15:28/45	08:18 11:51-12:42/51 15:45 13:29-14:10/41	08:49 12:04-12:56/52 15:43 13:46-14:20/34
30	05:10 21:30	06:11 20:17	07:13 18:54	07:16 15:39-15:58/19 16:39 14:44-15:27/43	08:20 11:51-12:42/51 15:44 13:29-14:10/41	08:49 12:05-12:57/52 15:44 13:47-14:21/34
31	05:12 21:28	06:13 20:15		07:18 15:41-15:55/14 16:36 14:44-15:26/42		08:49 12:04-12:57/53 15:45 13:46-14:21/35
Potential sun hours	529	469	384	324	248	217
Sum of minutes with flicker	0	0	0	1443	2297	2694

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

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

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B
Assumptions for shadow calculations

WTG: Pr12 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (27
Sunshine probability S (Average daily sunshine hours) []

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

No operational time reduction. It is assumed 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 13:38-14:13/35 15:47 14:44-15:58/14	08:13 14:54-15:08/14 16:44 15:44-16:02/18	07:09 06:47 05:31 04:34 04:28 05:14 06:16 07:15	06:47 05:31 04:34 04:28 05:14 06:16 07:15	05:31 04:34 04:28 05:14 06:16 07:15	04:34 04:28 05:14 06:16 07:15	04:28 05:14 06:16 07:15	05:14 06:16 07:15	06:16 07:15	07:15	07:20 15:41-16:00/19 16:34 15:09-15:38/29	08:22 13:26-13:58/32 15:43 14:24-14:49/25
2	08:48 13:38-14:13/35 15:48 14:43-14:59/16	08:11 14:58-15:05/7 16:46 15:43-16:04/21	07:06 06:44 05:29 04:33 04:29 05:16 06:18 07:17	06:44 05:29 04:33 04:29 05:16 06:18 07:17	05:29 04:33 04:29 05:16 06:18 07:17	04:33 04:29 05:16 06:18 07:17	04:29 05:16 06:18 07:17	05:16 06:18 07:17	06:18 07:17	07:17	07:23 15:41-15:58/17 16:32 15:09-15:38/29	08:24 13:26-13:58/32 15:42 14:25-14:49/24
3	08:48 13:39-14:14/35 15:49 14:44-15:00/16	08:09 15:42-16:05/23 16:48	07:04 06:42 05:26 04:32 04:30 05:18 06:19 07:19	06:42 05:26 04:32 04:30 05:18 06:19 07:19	05:26 04:32 04:30 05:18 06:19 07:19	04:32 04:30 05:18 06:19 07:19	04:30 05:18 06:19 07:19	05:18 06:19 07:19	06:19 07:19	07:19	07:25 15:42-15:55/13 16:30 15:10-15:38/28	08:25 13:26-13:59/33 15:42 14:26-14:49/23
4	08:48 13:39-14:14/35 15:50 14:43-15:01/18	08:07 15:41-16:06/25 16:50	07:01 06:39 05:24 04:31 04:31 05:20 06:21 07:21	06:39 05:24 04:31 04:31 05:20 06:21 07:21	05:24 04:31 04:31 05:20 06:21 07:21	04:31 04:31 05:20 06:21 07:21	04:31 05:20 06:21 07:21	05:20 06:21 07:21	06:21 07:21	07:21	07:27 15:44-15:53/9 16:28 15:10-15:38/28	08:27 13:27-14:00/33 15:41 14:27-14:49/22
5	08:47 13:40-14:14/34 15:52 14:43-15:02/19	08:05 15:40-16:06/26 16:52	06:59 06:36 05:22 04:30 04:32 05:22 06:23 07:23	06:36 05:22 04:30 04:32 05:22 06:23 07:23	05:22 04:30 04:32 05:22 06:23 07:23	04:30 04:32 05:22 06:23 07:23	04:32 05:22 06:23 07:23	05:22 06:23 07:23	06:23 07:23	07:23	07:29 15:47-15:50/3 16:26 15:10-15:37/27	08:29 13:27-14:01/34 15:40 14:28-14:49/21
6	08:47 13:41-14:15/34 15:53 14:44-15:03/19	08:03 16:17-16:21/4 16:55 15:40-16:07/27	06:56 06:34 05:20 04:29 04:33 05:24 06:25 07:26	06:34 05:20 04:29 04:33 05:24 06:25 07:26	05:20 04:29 04:33 05:24 06:25 07:26	04:29 04:33 05:24 06:25 07:26	04:33 05:24 06:25 07:26	05:24 06:25 07:26	06:25 07:26	07:26	07:31 15:11-15:37/26 16:23	08:30 13:26-14:00/34 15:39 14:29-14:49/20
7	08:46 13:42-14:15/33 15:55 14:43-15:04/21	08:01 16:14-16:24/10 16:57 15:40-16:08/28	06:53 06:31 05:17 04:28 04:34 05:26 06:27 07:28	06:31 05:17 04:28 04:34 05:26 06:27 07:28	05:17 04:28 04:34 05:26 06:27 07:28	04:28 04:34 05:26 06:27 07:28	04:34 05:26 06:27 07:28	05:26 06:27 07:28	06:27 07:28	07:28	07:34 15:11-15:36/25 16:21	08:32 13:27-14:01/34 15:39 14:30-14:49/19
8	08:45 13:42-14:16/34 15:56 14:43-15:05/22	07:58 16:13-16:27/14 16:59 15:40-16:09/29	06:51 06:28 05:15 04:28 04:35 05:28 06:29 07:30	06:28 05:15 04:28 04:35 05:28 06:29 07:30	05:15 04:28 04:35 05:28 06:29 07:30	04:28 04:35 05:28 06:29 07:30	04:35 05:28 06:29 07:30	05:28 06:29 07:30	06:29 07:30	07:30	07:36 15:13-15:36/23 16:19	08:33 13:27-14:02/35 15:38 14:31-14:49/18
9	08:45 13:43-14:16/33 15:58 14:43-15:06/23	07:56 16:11-16:28/17 17:01 15:39-16:08/29	06:48 06:26 05:13 04:27 04:37 05:30 06:31 07:32	06:26 05:13 04:27 04:37 05:30 06:31 07:32	05:13 04:27 04:37 05:30 06:31 07:32	04:27 04:37 05:30 06:31 07:32	04:37 05:30 06:31 07:32	05:30 06:31 07:32	06:31 07:32	07:32	07:38 14:28-14:36/8 16:17 15:13-15:34/21	08:34 13:27-14:02/35 15:38 14:32-14:48/16
10	08:44 13:44-14:16/32 15:59 14:43-15:07/24	07:54 16:11-16:30/19 17:04 15:40-16:09/29	06:46 06:23 05:11 04:26 04:38 05:32 06:33 07:34	06:23 05:11 04:26 04:38 05:32 06:33 07:34	05:11 04:26 04:38 05:32 06:33 07:34	04:26 04:38 05:32 06:33 07:34	04:38 05:32 06:33 07:34	05:32 06:33 07:34	06:33 07:34	07:34	07:40 14:25-14:39/14 16:15 15:14-15:33/19	08:36 13:28-14:03/35 15:37 14:33-14:49/16
11	08:43 13:45-14:17/32 16:01 14:42-15:07/25	07:52 16:10-16:30/20 17:06 15:39-16:08/29	06:43 06:21 05:09 04:26 04:39 05:34 06:35 07:36	06:21 05:09 04:26 04:39 05:34 06:35 07:36	05:09 04:26 04:39 05:34 06:35 07:36	04:26 04:39 05:34 06:35 07:36	04:39 05:34 06:35 07:36	05:34 06:35 07:36	06:35 07:36	07:36	07:42 14:24-14:41/17 16:13 15:17-15:32/15	08:37 13:28-14:03/35 15:37 14:34-14:48/14
12	08:42 13:44-14:16/32 16:03 14:42-15:08/26	07:50 16:10-16:31/21 17:08 15:40-16:08/28	06:40 06:18 05:07 04:25 04:40 05:35 06:37 07:38	06:18 05:07 04:25 04:40 05:35 06:37 07:38	05:07 04:25 04:40 05:35 06:37 07:38	04:25 04:40 05:35 06:37 07:38	04:40 05:35 06:37 07:38	05:35 06:37 07:38	06:37 07:38	07:38	07:44 14:22-14:42/20 16:11 15:19-15:29/10	08:38 13:28-14:03/35 15:37 14:35-14:48/13
13	08:41 13:45-14:17/32 16:05 14:43-15:09/26	07:47 16:10-16:32/22 17:10 15:41-16:08/27	06:38 06:15 05:05 04:25 04:42 05:37 06:39 07:40	06:15 05:05 04:25 04:42 05:37 06:39 07:40	05:05 04:25 04:42 05:37 06:39 07:40	04:25 04:42 05:37 06:39 07:40	04:42 05:37 06:39 07:40	05:37 06:39 07:40	06:39 07:40	07:40	07:46 14:22-14:44/22 16:10	08:39 13:29-14:04/35 15:36 14:36-14:47/11
14	08:40 13:46-14:17/31 16:06 14:43-15:10/27	07:45 16:09-16:31/22 17:13 15:41-16:07/26	06:35 06:13 05:03 04:24 04:43 05:39 06:41 07:42	06:13 05:03 04:24 04:43 05:39 06:41 07:42	05:03 04:24 04:43 05:39 06:41 07:42	04:24 04:43 05:39 06:41 07:42	04:43 05:39 06:41 07:42	05:39 06:41 07:42	06:41 07:42	07:42	07:49 14:21-14:45/24 16:08	08:40 13:29-14:05/36 15:36 14:38-14:48/10
15	08:39 13:47-14:16/29 16:08 14:43-15:10/27	07:43 16:10-16:32/22 17:15 15:42-16:07/25	06:32 06:10 05:01 04:24 04:45 05:41 06:43 07:44	06:10 05:01 04:24 04:45 05:41 06:43 07:44	05:01 04:24 04:45 05:41 06:43 07:44	04:24 04:45 05:41 06:43 07:44	04:45 05:41 06:43 07:44	05:41 06:43 07:44	06:43 07:44	07:44	07:51 14:20-14:45/25 16:06	08:41 13:30-14:05/35 15:36 14:39-14:47/8
16	08:38 13:48-14:17/29 16:10 14:43-15:11/28	07:41 16:10-16:31/21 17:17 15:42-16:06/24	06:30 06:08 04:59 04:24 04:46 05:43 06:45 07:46	06:08 04:59 04:24 04:46 05:43 06:45 07:46	04:59 04:24 04:46 05:43 06:45 07:46	04:24 04:46 05:43 06:45 07:46	04:46 05:43 06:45 07:46	05:43 06:45 07:46	06:45 07:46	07:46	07:53 14:20-14:46/26 16:04	08:42 13:30-14:06/36 15:36 14:40-14:47/7
17	08:37 13:48-14:16/28 16:12 14:43-15:11/28	07:38 16:11-16:31/20 17:19 15:44-16:05/21	06:27 06:05 04:57 04:24 04:48 05:45 06:47 07:48	06:05 04:57 04:24 04:48 05:45 06:47 07:48	04:57 04:24 04:48 05:45 06:47 07:48	04:24 04:48 05:45 06:47 07:48	04:48 05:45 06:47 07:48	05:45 06:47 07:48	06:47 07:48	07:48	07:55 14:20-14:47/27 16:02	08:43 13:31-14:06/35 15:36 14:41-14:47/6
18	08:35 13:50-14:16/26 16:14 14:44-15:12/28	07:36 16:11-16:30/19 17:22 15:45-16:03/18	06:24 06:02 04:55 04:24 04:49 05:47 06:49 07:50	06:02 04:55 04:24 04:49 05:47 06:49 07:50	04:55 04:24 04:49 05:47 06:49 07:50	04:24 04:49 05:47 06:49 07:50	04:49 05:47 06:49 07:50	05:47 06:49 07:50	06:49 07:50	07:50	07:57 14:19-14:47/28 16:01 13:34-13:42/8	08:44 13:30-14:06/36 15:36 14:42-14:46/4
19	08:34 14:43-15:12/29 16:16 13:51-14:15/24	07:33 16:12-16:29/17 17:24 15:48-16:01/13	06:22 06:00 04:53 04:24 04:51 05:49 06:51 07:53	06:00 04:53 04:24 04:51 05:49 06:51 07:53	04:53 04:24 04:51 05:49 06:51 07:53	04:24 04:51 05:49 06:51 07:53	04:51 05:49 06:51 07:53	05:49 06:51 07:53	06:51 07:53	07:53	07:59 14:20-14:48/28 15:59 13:32-13:46/14	08:45 13:31-14:06/35 15:37 14:44-14:45/1
20	08:33 14:43-15:12/29 16:18 13:52-14:14/22	07:31 16:13-16:27/14 17:26 15:53-15:55/2	06:19 05:57 04:52 04:24 04:53 05:51 06:53 07:55	05:57 04:52 04:24 04:53 05:51 06:53 07:55	04:52 04:24 04:53 05:51 06:53 07:55	04:24 04:53 05:51 06:53 07:55	04:53 05:51 06:53 07:55	05:51 06:53 07:55	06:53 07:55	07:55	08:01 14:20-14:48/28 15:58 13:30-13:48/18	08:46 13:32-14:07/35 15:37
21	08:31 14:44-15:13/29 16:20 13:54-14:14/20	07:29 16:16-16:25/9 17:28	06:16 05:55 04:50 04:24 04:54 05:53 06:55 07:57 16:46-16:56/10	05:55 04:50 04:24 04:54 05:53 06:55 07:57 16:46-16:56/10	04:50 04:24 04:54 05:53 06:55 07:57 16:46-16:56/10	04:24 04:54 05:53 06:55 07:57 16:46-16:56/10	04:54 05:53 06:55 07:57 16:46-16:56/10	05:53 06:55 07:57 16:46-16:56/10	06:55 07:57 16:46-16:56/10	07:57 16:46-16:56/10	08:03 14:19-14:48/29 15:56 13:29-13:49/20	08:46 13:32-14:07/35 15:37
22	08:30 14:45-15:13/28 16:22 13:55-14:13/18	07:26 17:30 18:30	06:14 05:52 04:48 04:24 04:56 05:55 06:57 07:59 16:43-16:58/15	05:52 04:48 04:24 04:56 05:55 06:57 07:59 16:43-16:58/15	04:48 04:24 04:56 05:55 06:57 07:59 16:43-16:58/15	04:24 04:56 05:55 06:57 07:59 16:43-16:58/15	04:56 05:55 06:57 07:59 16:43-16:58/15	05:55 06:57 07:59 16:43-16:58/15	06:57 07:59 16:43-16:58/15	07:59 16:43-16:58/15	08:05 14:19-14:48/29 15:54 13:29-13:51/22	08:47 13:33-14:08/35 15:38
23	08:28 14:45-15:13/28 16:24 13:57-14:11/14	07:24 17:33 18:32	06:11 05:50 04:47 04:24 04:58 05:57 06:59 08:01 16:42-17:00/18	05:50 04:47 04:24 04:58 05:57 06:59 08:01 16:42-17:00/18	04:47 04:24 04:58 05:57 06:59 08:01 16:42-17:00/18	04:24 04:58 05:57 06:59 08:01 16:42-17:00/18	04:58 05:57 06:59 08:01 16:42-17:00/18	05:57 06:59 08:01 16:42-17:00/18	06:59 08:01 16:42-17:00/18	07:59 16:42-17:00/18	08:07 14:21-14:49/28 15:53 13:28-13:52/24	08:47 13:33-14:08/35 15:38
24	08:27 14:45-15:13/28 16:26 14:00-14:08/8	07:21 17:35 18:34	06:08 05:48 04:45 04:24 04:59 05:59 07:01 08:03 16:41-17:00/19	05:48 04:45 04:24 04:59 05:59 07:01 08:03 16:41-17:00/19	04:45 04:24 04:59 05:59 07:01 08:03 16:41-17:00/19	04:24 04:59 05:59 07:01 08:03 16:41-17:00/19	04:59 05:59 07:01 08:03 16:41-17:00/19	05:59 07:01 08:03 16:41-17:00/19	06:59 07:01 08:03 16:41-17:00/19	07:01 08:03 16:41-17:00/19	08:09 13:27-13:53/26 15:52 14:21-14:49/28	08:48 13:34-14:09/35 15:39
25	08:25 14:46-15:13/27 16:28	07:19 17:37 18:37	06:06 05:45 04:44 04:25 05:01 06:01 07:03 07:05 15:40-16:00/20	05:45 04:44 04:25 05:01 06:01 07:03 07:05 15:40-16:00/20	04:44 04:25 05:01 06:01 07:03 07:05 15:40-16:00/20	04:25 05:01 06:01 07:03 07:05 15:40-16:00/20	05:01 06:01 07:03 07:05 15:40-16:00/20	06:01 07:03 07:05 15:40-16:00/20	07:03 07:05 15:40-16:00/20	07:03 07:05 15:0		

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

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

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: Pr25 - NORDEX N175/6.X 6800 175.0 !-! hub: 179,0 m (TOT: 266,5 m) (33)
 Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

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

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 17:46	06:47 19:51	05:31 20:53	04:34 21:50
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
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
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
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
6	08:46 15:53	08:03 16:55	06:56 17:56	06:33 20:01	05:19 21:03	04:29 21:57
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
8	08:45 15:56	07:58 16:59	06:51 18:01	06:28 20:05	05:15 21:07	04:27 21:59
9	08:44 15:58	07:56 17:01	06:48 18:03	06:26 20:08	05:13 21:10	04:27 22:00
10	08:44 15:59	07:54 17:03	06:45 18:05	06:23 20:10	05:11 21:11	04:26 22:01
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
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
13	08:41 16:04	07:47 17:10	06:37 18:11	06:15 20:16	05:05 21:17	04:25 22:04
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
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
16	08:38 16:10	07:40 17:17	06:30 18:18	06:07 20:22	04:59 21:23	04:24 22:06
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
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
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
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
21	08:31 16:20	07:29 17:28	06:16 18:28	05:55 20:32	04:50 21:32	04:24 22:08
22	08:30 16:22	07:26 17:30	06:13 18:30	05:52 20:35	04:48 21:34	04:24 22:08
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
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
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	08:22 16:32	07:14 17:41	06:00 18:41	05:40 20:45	04:41 21:43	04:26 22:08
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
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	04:37 21:47	04:28 22:07
31	08:14 16:41		06:49 19:49		04:35 21:49	20:13:20:34/21
Potential sun hours	236	266	366	426	507	528
Sum of minutes with flicker	0	1349	1777	679	1015	138

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment
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Calculated:
15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: Pr25 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (33)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	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 19:53-20:08/15 21:26 20:20-20:45/25	06:15 19:13-19:35/22 20:12	07:15 17:52-18:14/22 08:15-08:48/33 18:52 17:35-17:45/10	07:20 08:21-08:50/29 16:34	08:22 15:43
2	04:29 20:29-20:31/2 22:06	05:16 19:52-20:10/18 21:24 20:21-20:44/23	06:17 19:13-19:35/22 20:09	07:17 17:51-18:14/23 08:15-08:48/33 18:49 17:32-17:47/15	07:23 08:22-08:48/26 16:32	08:24 15:42
3	04:30 20:27-20:33/6 22:06	05:18 19:51-20:17/26 21:21 20:22-20:44/22	06:19 19:13-19:34/21 20:07	07:19 17:51-18:13/22 08:14-08:47/33 18:46 17:30-17:48/18	07:25 08:24-08:45/21 16:30	08:25 15:41
4	04:31 20:26-20:35/9 22:05	05:20 19:50-20:19/29 21:19 20:23-20:43/20	06:21 19:13-19:34/21 20:04 18:48-18:52/4	07:21 17:51-18:12/21 08:14-08:47/33 18:44 17:28-17:49/21	07:27 08:28-08:43/15 16:28	08:27 15:41
5	04:32 20:25-20:36/11 22:04	05:22 19:49-20:20/31 21:17 20:24-20:41/17	06:23 19:12-19:31/19 20:01 18:42-18:55/13	07:23 17:52-18:10/18 09:31-09:46/15 18:41 17:27-17:50/23 08:14-08:46/32	07:29 08:33-08:36/3 16:25	08:28 15:40
6	04:33 20:24-20:37/13 22:04	05:23 19:48-20:21/33 21:15 20:25-20:39/14	06:25 19:13-19:28/15 19:59 18:40-18:57/17	07:25 17:53-18:07/14 09:28-09:49/21 18:38 17:26-17:50/24 08:13-08:46/33	07:31 16:23	08:30 15:39
7	04:34 20:24-20:38/14 22:03	05:25 19:47-20:22/35 21:13 20:28-20:36/8	06:27 19:14-19:25/11 19:56 18:38-18:58/20	07:27 17:54-18:05/11 09:25-09:52/27 18:36 17:25-17:50/25 08:13-08:45/32	07:33 16:21	08:31 15:39
8	04:35 20:23-20:39/16 22:02	05:27 19:47-20:23/36 21:11	06:29 19:16-19:23/7 19:53 18:37-18:59/22	07:29 17:57-18:02/5 09:22-09:53/31 18:33 17:25-17:49/24 08:14-08:44/30	07:36 16:19	08:33 15:38
9	04:36 20:22-20:40/18 22:01	05:29 19:47-20:23/36 21:08	06:31 18:36-18:59/23 19:51	07:32 17:24-17:49/25 08:45-08:56/11 18:30 09:21-09:55/34 08:15-08:44/29	07:38 16:17	08:34 15:37
10	04:38 20:22-20:40/18 22:00	05:31 19:46-20:24/38 21:06	06:33 18:35-19:00/25 19:48	07:34 17:24-17:48/24 08:16-08:58/42 18:28 09:20-09:57/37	07:40 16:15	08:36 15:37
11	04:39 20:22-20:42/20 21:59	05:33 19:45-20:23/38 21:04	06:35 18:34-19:00/26 19:45	07:36 17:25-17:49/24 08:17-08:59/42 18:25 09:18-09:57/39	07:42 16:13	08:37 15:37
12	04:40 20:21-20:43/22 21:58	05:35 19:45-20:23/38 21:02	06:37 18:34-19:00/26 19:43	07:38 17:25-17:48/23 08:16-09:00/44 18:23 09:17-09:58/41	07:44 16:11	08:38 15:36
13	04:42 20:21-20:43/22 21:57	05:37 19:45-20:23/38 20:59	06:39 18:33-18:59/26 19:40	07:40 17:26-17:46/20 08:16-09:01/45 18:20 09:16-09:58/42	07:46 16:09	08:39 15:36
14	04:43 20:20-20:43/23 21:56	05:39 19:46-20:23/37 20:57	06:41 18:33-18:59/26 19:37	07:42 17:26-17:45/19 08:16-09:01/45 18:18 09:15-09:58/43	07:48 16:08	08:40 11:32-11:36/4 15:36 10:59-11:04/5
15	04:45 20:20-20:44/24 21:54	05:41 19:46-20:22/36 20:55	06:43 18:33-18:58/25 19:35	07:44 17:28-17:42/14 08:17-09:02/45 18:15 09:15-10:00/45	07:51 16:06	08:41 11:31-11:38/7 15:36 10:58-11:05/7
16	04:46 20:20-20:45/25 21:53	05:43 19:46-20:20/34 20:52	06:45 18:28-18:57/29 19:32	07:46 17:31-17:40/9 08:17-09:02/45 18:12 09:14-10:00/46	07:53 16:04	08:42 11:31-11:39/8 15:36 10:58-11:07/9
17	04:48 20:19-20:45/26 21:52	05:45 19:47-20:18/31 20:50	06:47 18:25-18:56/31 19:29	07:48 09:14-10:00/46 18:10 08:18-09:02/44	07:55 16:02	08:43 11:31-11:40/9 15:36 10:58-11:08/10
18	04:49 20:19-20:46/27 21:50	05:47 19:47-20:15/28 20:47	06:49 18:23-18:55/32 19:27	07:50 09:13-09:59/46 18:07 08:20-09:01/41	07:57 16:01	08:44 11:30-11:40/10 15:36 10:57-11:08/11
19	04:51 20:19-20:46/27 21:49	05:49 19:48-20:13/25 20:45	06:51 18:22-18:52/30 19:24	07:52 09:13-09:59/46 08:23-08:30/7 18:05 08:31-09:01/30	07:59 15:59	08:45 11:30-11:41/11 15:37 10:58-11:09/11
20	04:52 20:19-20:46/27 21:47	05:51 19:49-20:11/22 20:42	06:53 18:21-18:49/28 19:21	07:55 09:13-10:00/47 18:02 08:31-09:00/29	08:01 15:57	08:46 11:31-11:42/11 15:37 10:58-11:10/12
21	04:54 20:18-20:46/28 21:46	05:53 19:51-20:06/15 20:40	06:55 18:20-18:41/21 19:18 18:42-18:44/2	07:57 09:13-09:59/46 18:00 08:31-08:59/28	08:03 15:56	08:46 11:31-11:42/11 15:37 10:58-11:10/12
22	04:56 20:19-20:47/28 21:44	05:55 19:53-20:02/9 20:37	06:57 18:20-18:41/21 19:16	07:59 09:13-09:58/45 17:58 08:31-08:58/27	08:05 15:54	08:47 11:32-11:43/11 15:38 10:59-11:11/12
23	04:57 20:18-20:47/29 21:42	05:57 20:35	06:59 18:19-18:40/21 19:13	08:01 09:14-09:59/45 17:55 08:33-08:58/25	08:07 15:53	08:47 11:32-11:43/11 15:38 10:59-11:11/12
24	04:59 20:18-20:47/29 21:41	05:59 20:32	07:01 18:03-18:07/4 08:27-08:41/14 19:10 18:19-18:40/21	08:03 09:13-09:58/45 17:53 08:34-08:56/22	08:09 15:51	08:48 11:33-11:44/11 15:39 11:01-11:12/11
25	05:01 20:19-20:47/28 21:39	06:01 19:23-19:29/6 20:30	07:03 17:58-18:10/12 08:24-08:43/19 19:08 18:20-18:37/17	07:05 08:14-08:57/43 16:50 07:36-07:53/17	08:11 15:50	08:48 11:34-11:44/10 15:39 11:01-11:12/11
26	05:03 20:18-20:47/29 21:37	06:03 19:19-19:31/12 20:27	07:05 17:56-18:12/16 08:22-08:45/23 19:05 18:20-18:34/14	07:07 08:15-08:57/42 16:48 07:39-07:50/11	08:13 15:49	08:48 11:34-11:44/10 15:40 11:02-11:12/10
27	05:05 20:19-20:47/28 21:35	06:05 19:17-19:33/16 20:25	07:07 17:54-18:13/19 08:20-08:46/26 19:02 18:21-18:31/10	07:10 08:15-08:56/41 16:46	08:15 15:48	08:48 11:35-11:44/9 15:41 11:03-11:12/9
28	05:06 20:19-20:47/28 21:33	06:07 19:16-19:34/18 20:22	07:09 17:53-18:13/20 08:19-08:47/28 19:00 18:23-18:29/6	07:12 08:15-08:55/40 16:43	08:17 15:46	08:49 11:37-11:44/7 15:42 11:04-11:11/7
29	05:08 20:19-20:46/27 21:31	06:09 19:15-19:34/19 20:20	07:11 17:52-18:14/22 18:57 08:17-08:47/30	07:14 08:17-08:54/37 16:41	08:18 15:45	08:49 11:38-11:44/6 15:43 11:05-11:11/6
30	05:10 20:00-20:03/3 21:30	06:11 19:14-19:35/21 20:17	07:13 17:51-18:13/22 18:54 08:16-08:47/31	07:16 08:18-08:53/35 16:39	08:20 15:44	08:49 11:07-11:10/3 15:44
31	05:12 19:56-20:07/11 21:28	06:13 19:13-19:35/22 20:14		07:18 08:19-08:51/32 16:36		08:49 15:45
Potential sun hours	529	469	384	324	248	217
Sum of minutes with flicker	671	891	960	2399	94	304

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

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker	First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker
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Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

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

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: Pr3b - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (36)
 Sunshine probability S (Average daily sunshine hours) []

Assumptions for shadow calculations

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

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

	January	February	March	April	May	June
1	08:48	08:12 15:23-15:51/28	07:09 16:21-16:54/33	06:47 18:19-18:59/40	05:31 18:55-19:38/43	04:34 20:56-21:12/16
	15:46	16:43 08:59-09:26/27	17:46	19:51	20:53	21:50
2	08:48	08:11 15:24-15:51/27	07:06 16:21-16:53/32	06:44 18:18-18:59/41	05:28 18:55-19:38/43	04:33 20:55-21:12/17
	15:48	16:46 08:59-09:26/27	17:48	19:53	20:55	21:52
3	08:48	08:09 15:24-15:51/27	07:04 17:17-17:20/3	06:41 18:17-18:58/41	05:26 18:56-19:38/42	04:32 20:54-21:13/19
	15:49	16:48 08:59-09:27/28	17:50 16:21-16:52/31	19:55	20:57	21:53
4	08:47	08:07 16:06-16:15/9 08:59-09:27/28	07:01 17:14-17:23/9	06:39 18:18-18:59/41	05:24 18:56-19:37/41	04:31 20:55-21:15/20
	15:50	16:50 15:24-15:51/27	17:52 16:22-16:52/30	19:57 19:13-19:24/11	20:59	21:54
5	08:47	08:05 16:04-16:18/14 08:59-09:26/27	06:58 17:11-17:25/14	06:36 18:17-18:58/41	05:22 18:57-19:37/40	04:30 20:54-21:15/21
	15:52	16:52 15:24-15:51/27	17:54 16:22-16:51/29	19:59 19:09-19:26/17	21:01	21:55
6	08:46	08:02 16:02-16:20/18 08:59-09:26/27	06:56 17:10-17:27/17	06:33 18:17-18:59/42	05:19 18:57-19:36/39	04:29 20:54-21:15/21
	15:53	16:54 15:25-15:51/26	17:56 16:23-16:51/28	20:01 19:08-19:28/20	21:03	21:57
7	08:46	08:00 16:02-16:22/20 09:00-09:26/26	06:53 17:09-17:30/21	06:31 18:17-18:58/41	05:17 18:58-19:36/38	04:28 20:54-21:16/22
	15:55	16:57 15:26-15:51/25	17:58 16:23-16:50/27	20:03 19:06-19:29/23	21:05	21:58
8	08:45	07:58 16:00-16:22/22 09:01-09:26/25	06:51 17:08-17:31/23	06:28 18:16-18:57/41	05:15 18:58-19:35/37	04:28 20:54-21:16/22
	15:56	16:59 15:26-15:49/23	18:01 16:24-16:48/24	20:05 19:04-19:29/25	21:07	21:59
9	08:44	07:56 16:00-16:23/23 09:01-09:25/24	06:48 17:06-17:32/26	06:26 18:17-18:57/40	05:13 18:59-19:34/35	04:27 20:53-21:16/23
	15:58	17:01 15:28-15:49/21	18:03 16:25-16:45/20	20:07 19:03-19:30/27	21:09	22:00
10	08:44	07:54 16:00-16:24/24 09:02-09:25/23	06:45 17:06-17:34/28	06:23 18:17-18:56/39	05:11 19:00-19:33/33	04:26 20:54-21:17/23
	15:59	17:03 15:30-15:48/18	18:05 16:28-16:44/16	20:10 19:02-19:30/28	21:11	22:01
11	08:43	07:52 15:59-16:24/25 09:03-09:23/20	06:43 17:05-17:36/31	06:20 18:18-18:55/37	05:09 19:01-19:32/31	04:26 20:54-21:18/24
	16:01	17:06 15:31-15:45/14 08:20-08:29/9	18:07 16:32-16:39/7	20:12 19:02-19:31/29	21:13	22:02
12	08:42	07:50 15:59-16:24/25 09:05-09:22/17	06:40 17:05-17:38/33	06:18 18:18-18:54/36	05:07 19:02-19:30/28	04:25 20:53-21:18/25
	16:03	17:08 15:34-15:43/9 08:18-08:32/14	18:09	20:14 19:01-19:31/30	21:15	22:03
13	08:41	07:47 15:58-16:24/26 08:17-08:34/17	06:37 17:05-17:43/38	06:15 18:19-18:53/34	05:05 19:04-19:30/26	04:25 20:54-21:18/24
	16:04	17:10 09:07-09:20/13	18:11	20:16 19:01-19:31/30	21:17	22:03
14	08:40	07:45 15:59-16:24/25 08:15-08:34/19	06:35 17:05-17:45/40	06:13 18:19-18:51/32	05:03 19:05-19:28/23	04:24 20:54-21:19/25
	16:06	17:12 09:11-09:15/4	18:13	20:18 19:00-19:30/30	21:19	22:04
15	08:39	07:43 15:59-16:24/25	06:32 17:05-17:47/42	06:10 18:21-18:50/29	05:01 19:07-19:26/19	04:24 20:54-21:19/25
	16:08	17:15 08:15-08:35/20	18:15	20:20 19:01-19:33/32	21:21	22:05
16	08:38	07:40 15:59-16:24/25	06:29 17:06-17:49/43	06:07 18:22-18:48/26	04:59 19:09-19:24/15	04:24 20:54-21:19/25
	16:10	17:17 08:14-08:35/21	18:18	20:22 19:01-19:34/33	21:23	22:05
17	08:36	07:38 16:00-16:23/23 08:14-08:36/22	06:27 17:07-17:49/42	06:05 18:24-18:46/22	04:57 19:13-19:21/8	04:24 20:54-21:19/25
	16:12	17:19 16:39-16:48/9	18:20	20:24 19:01-19:36/35	21:25	22:06
18	08:35	07:36 16:01-16:22/21 08:13-08:36/23	06:24 17:08-17:53/45	06:02 18:26-18:43/17	04:55	04:23 20:54-21:19/25
	16:14	17:21 16:36-16:50/14	18:22	20:26 19:01-19:36/35	21:27	22:06
19	08:34	07:33 16:02-16:21/19 08:14-08:36/22	06:21 17:10-17:56/46	06:00 18:31-18:38/7	04:53	04:23 20:54-21:19/25
	16:16	17:24 16:33-16:53/20	18:24	20:28 19:01-19:37/36	21:29	22:07
20	08:32	07:31 16:03-16:19/16 08:13-08:36/23	06:19 17:11-17:57/46	05:57 18:59-19:38/39	04:52	04:23 20:55-21:21/26
	16:18	17:26 16:29-16:54/25	18:26	20:30	21:31	22:07
21	08:31	07:28 16:06-16:18/12 08:14-08:36/22	06:16 17:12-17:58/46	05:55 18:59-19:38/39	04:50	04:24 20:55-21:21/26
	16:20	17:28 16:28-16:55/27	18:28	20:32	21:32	22:08
22	08:30	07:26 16:26-16:55/29	06:13 17:13-17:58/45	05:52 18:58-19:39/41	04:48	04:24 20:55-21:21/26
	16:22	17:30 08:14-08:34/20	18:30	20:34	21:34	22:08
23	08:28	07:24 16:24-16:55/31	06:11 17:14-17:59/45	05:50 18:57-19:39/42	04:47	04:24 20:55-21:21/26
	16:24	09:06-09:14/8	18:32	20:37	21:36	22:08
24	08:26	07:21 16:24-16:56/32	06:08 17:15-17:59/44	05:47 18:57-19:39/42	04:45	04:24 20:56-21:21/25
	16:26	09:04-09:17/13	18:34	20:39	21:38	22:08
25	08:25	07:19 16:23-16:55/32	06:05 17:15-17:58/43	05:45 18:56-19:40/44	04:43	04:25 20:56-21:21/25
	16:28	09:02-09:19/17	18:36	20:41	21:39	22:08
26	08:23	07:16 16:23-16:56/33	06:03 17:17-17:58/41	05:42 18:55-19:39/44	04:42	04:25 20:57-21:22/25
	16:30	09:01-09:20/19	18:38	20:43	21:41	22:08
27	08:22	07:14 16:22-16:55/33	06:00 17:19-17:57/38	05:40 18:55-19:39/44	04:41	04:26 20:56-21:21/25
	16:32	09:01-09:22/21	18:40	20:45	21:43	22:08
28	08:20	07:11 16:21-16:54/33	05:57 17:23-17:56/33	05:38 18:55-19:39/44	04:39 21:01-21:04/3	04:26 20:57-21:22/25
	16:35	09:01-09:23/22	18:43	20:47	21:44	22:08
29	08:18	15:23-15:49/26	06:55 18:23-18:58/35	05:35 18:55-19:40/45	04:38 20:59-21:08/9	04:27 20:57-21:21/24
	16:37	08:59-09:23/24	19:45	20:49	21:46	22:07
30	08:16	15:23-15:50/27	06:52 18:21-18:58/37	05:33 18:55-19:38/43	04:37 20:57-21:09/12	04:28 20:58-21:22/24
	16:39	08:59-09:24/25	19:47	20:51	21:47	22:07
31	08:14	15:23-15:50/27	06:49 18:20-18:58/38		04:35 20:56-21:10/14	
	16:41	08:59-09:25/26	19:49		21:49	
Potential sun hours	236	266	366	426	507	528
Sum of minutes with flicker	403	1554	1269	1555	579	704

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

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

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: Pr3b - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (36)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,02 2,14 4,62 6,27 9,21 10,00 8,04 7,90 5,53 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 20:58-21:22/24 22:07	05:14 19:12-19:41/29 21:26	06:15 18:17-18:54/37 20:12 19:01-19:30/29	07:15 17:45-18:21/36 18:52	07:20 15:29-15:53/24 08:32-08:54/22 16:34 14:59-15:18/19	08:22 15:43
2	04:29 20:58-21:21/23 22:06	05:16 19:11-19:42/31 21:24	06:17 18:16-18:55/39 20:09 19:01-19:29/28	07:17 17:44-18:16/32 18:49	07:23 15:29-15:52/23 08:31-08:55/24 16:32 14:57-15:18/21	08:24 15:42
3	04:30 20:58-21:22/24 22:06	05:18 19:10-19:44/34 21:21	06:19 18:15-18:55/40 20:07 19:01-19:28/27	07:19 17:44-18:12/28 18:46 17:08-17:20/12	07:25 15:30-15:51/21 08:30-08:55/25 16:30 14:56-15:19/23	08:25 15:41
4	04:31 20:59-21:22/23 22:05	05:20 19:09-19:45/36 21:19	06:21 18:14-18:55/41 20:04 19:02-19:27/25	07:21 17:44-18:11/27 18:44 17:04-17:23/19	07:27 15:31-15:51/20 08:30-08:56/26 16:28 14:56-15:20/24	08:27 15:41
5	04:32 20:59-21:22/23 22:04	05:22 19:08-19:45/37 21:17	06:23 18:13-18:54/41 20:01 19:02-19:25/23	07:23 17:44-18:09/25 18:41 17:02-17:24/22	07:29 15:32-15:49/17 08:29-08:56/27 16:25 14:55-15:20/25	08:28 15:40
6	04:33 21:00-21:22/22 22:04	05:23 19:07-19:45/38 21:15	06:25 18:12-18:54/42 19:59 19:03-19:23/20	07:25 17:45-18:07/22 18:38 17:00-17:25/25	07:31 15:35-15:48/13 08:30-08:57/27 16:23 14:55-15:22/27	08:30 15:39
7	04:34 21:00-21:21/21 22:03	05:25 19:06-19:46/40 21:13	06:27 18:12-18:53/41 19:56 19:04-19:21/17	07:27 17:45-18:05/20 18:36 16:59-17:26/27	07:33 15:37-15:46/9 08:29-08:57/28 16:21 14:54-15:21/27	08:31 15:39
8	04:35 21:01-21:21/20 22:02	05:27 19:06-19:46/40 21:11	06:29 18:12-18:53/41 19:53 19:07-19:18/11	07:29 17:46-18:02/16 18:33 16:57-17:26/29	07:36 14:54-15:21/27 16:19 08:29-08:56/27	08:33 15:38
9	04:36 21:01-21:21/20 22:01	05:29 19:05-19:47/42 21:08	06:31 18:12-18:53/41 19:51	07:32 17:47-17:59/12 18:30 16:56-17:26/30	07:38 14:55-15:22/27 16:17 08:30-08:57/27	08:34 15:37
10	04:38 21:02-21:20/18 22:00	05:31 19:05-19:47/42 21:06	06:33 18:12-18:52/40 19:48	07:34 17:49-17:56/7 18:28 16:55-17:26/31	07:40 14:54-15:22/28 16:15 08:30-08:56/26	08:36 15:37
11	04:39 21:04-21:20/16 21:59	05:33 19:04-19:47/43 21:04	06:35 18:12-18:51/39 19:45	07:36 16:55-17:27/32 18:25	07:42 14:55-15:22/27 16:13 08:31-08:57/26	08:37 15:37
12	04:40 21:04-21:19/15 21:58	05:35 19:03-19:47/44 21:02	06:37 18:12-18:50/38 19:43	07:38 16:55-17:27/32 18:23	07:44 14:55-15:22/27 16:11 08:31-08:56/25	08:38 15:36
13	04:42 21:05-21:18/13 21:57	05:37 19:03-19:47/44 20:59	06:39 18:12-18:49/37 19:40	07:40 16:54-17:27/33 18:20	07:46 14:55-15:21/26 16:09 08:31-08:55/24	08:39 15:36
14	04:43 21:06-21:17/11 21:55	05:39 19:03-19:47/44 20:57	06:41 18:13-18:48/35 19:37	07:42 16:54-17:27/33 18:18	07:48 14:57-15:21/24 16:08 08:33-08:55/22	08:40 15:36
15	04:45 21:09-21:16/7 21:54	05:41 19:03-19:47/44 20:55	06:43 18:14-18:47/33 19:35	07:44 16:54-17:27/33 18:15	07:51 14:57-15:21/24 16:06 08:33-08:54/21	08:41 15:36
16	04:46 21:53 21:53	05:43 19:03-19:47/44 20:52	06:45 18:09-18:47/38 19:32	07:46 16:55-17:28/33 18:12 08:53-09:00/7	07:53 14:57-15:20/23 16:04 08:35-08:54/19	08:42 15:36
17	04:48 21:51 21:51	05:45 19:03-19:47/44 20:50	06:47 18:06-18:47/41 19:29	07:48 16:55-17:27/32 18:10 08:49-09:02/13	07:55 14:59-15:20/21 16:02 08:36-08:53/17	08:43 15:36
18	04:49 21:50 21:50	05:47 19:02-19:45/43 20:47	06:49 18:03-18:46/43 19:26	07:50 16:55-17:27/32 18:07 08:47-09:04/17	07:57 15:00-15:19/19 16:01 08:38-08:51/13	08:44 15:36
19	04:51 21:49 21:49	05:49 19:02-19:45/43 20:45	06:51 18:01-18:45/44 19:24	07:52 16:56-17:26/30 18:05 08:46-09:04/18	07:59 15:01-15:17/16 15:59 08:41-08:49/8	08:45 15:37
20	04:52 21:47 21:47	05:51 19:02-19:44/42 20:42	06:53 18:00-18:45/45 19:21	07:54 16:40-16:45/5 08:45-09:06/21 18:02 16:58-17:26/28	08:01 15:04-15:17/13 15:57	08:45 15:37
21	04:54 21:46 21:46	05:53 19:03-19:44/41 20:40	06:55 17:59-18:44/45 19:18	07:57 16:36-16:49/13 08:44-09:06/22 18:00 16:59-17:25/26	08:03 15:06-15:14/8 15:56	08:46 15:37
22	04:56 21:44 21:44	05:55 19:03-19:43/40 20:37	06:57 17:58-18:43/45 19:16	07:59 16:33-16:50/17 08:44-09:06/22 17:58 17:00-17:24/24	08:05 15:54	08:47 15:38
23	04:57 21:42 21:42	05:57 19:04-19:42/38 20:35	06:59 17:55-18:42/47 19:13	08:01 16:31-16:51/20 08:44-09:07/23 17:55 17:03-17:22/19	08:07 15:53	08:47 15:38
24	04:59 21:41 21:41	05:59 18:34-18:43/9 20:32 19:05-19:41/36	07:01 17:53-18:40/47 19:10	08:03 16:31-16:53/22 08:44-09:06/22 17:53 17:07-17:20/13	08:09 15:51	08:48 15:39
25	05:01 21:39 21:39	06:01 18:30-18:47/17 20:30 19:05-19:40/35	07:03 17:51-18:37/46 19:08	07:05 15:30-15:53/23 07:43-08:06/23 16:50 16:09-16:17/8	08:11 15:50	08:48 15:39
26	05:03 21:37 21:37	06:03 18:26-18:48/22 20:27 19:03-19:37/34	07:05 17:49-18:34/45 19:05	07:07 15:29-15:53/24 16:48 07:44-08:06/22	08:13 15:49	08:48 15:40
27	05:05 19:22-19:33/11 21:35	06:05 18:24-18:50/26 20:25 19:02-19:36/34	07:07 17:47-18:30/43 19:02	07:09 15:29-15:54/25 16:46 07:45-08:05/20	08:15 15:48	08:48 15:41
28	05:06 19:19-19:36/17 21:33	06:07 18:22-18:51/29 20:22 19:02-19:34/32	07:09 17:46-18:29/43 19:00	07:12 15:28-15:54/26 07:45-08:03/18 16:43 08:39-08:46/7	08:16 15:46	08:49 15:42
29	05:08 19:16-19:37/21 21:31	06:09 18:20-18:52/32 20:20 19:01-19:31/30	07:11 17:45-18:26/41 18:57	07:14 15:28-15:53/25 07:47-08:03/16 16:41 08:36-08:50/14	08:18 15:45	08:49 15:43
30	05:10 19:15-19:39/24 21:30	06:11 18:19-18:53/34 20:17 19:01-19:31/30	07:13 17:44-18:23/39 18:54	07:16 15:28-15:54/26 08:34-08:52/18 16:39 15:03-15:13/10 07:48-08:01/13	08:20 15:44	08:49 15:44
31	05:12 19:14-19:41/27 21:28	06:13 18:18-18:54/36 20:14 19:01-19:30/29		07:18 15:28-15:53/25 08:32-08:53/21 16:36 15:00-15:15/15 07:50-07:58/8		08:48 15:45
Potential sun hours	529	469	384	324	248	217
Sum of minutes with flicker	380	1388	1417	1449	1037	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	Last time (hh:mm) with flicker	Minutes with flicker
	Sun set (hh:mm)	First time (hh:mm) with flicker	Last time (hh:mm) with flicker	Minutes with flicker

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

SIA Estonian, Latvian & Lithuanian environment

Vilandes 3-6

LV-1010 Riga

0037167242411

Laura Kurzemniece / laura.kurzemniece@environment.lv

Calculated:

15.07.2025 16:18/4.1.254

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: PrRR3 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (34)
Assumptions for shadow calculations Sunshine probability S (Average daily sunshine hours) []

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

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 10:02-10:39/37 15:46	08:12 16:43	07:09 17:06-17:17/11 15:52-16:17/25 17:46 16:29-17:01/32 07:53-08:21/28	06:47 18:03-19:18/75 19:51	05:31 20:53	04:34 19:43-20:36/53 21:50
2	08:48 10:02-10:39/37 15:48	08:11 16:46	07:06 17:04-17:18/14 15:53-16:15/22 17:48 16:28-17:01/33 07:53-08:21/28	06:44 18:03-19:19/76 19:53	05:28 20:55	04:33 19:43-20:36/53 21:52
3	08:48 10:03-10:40/37 15:49	08:09 16:48	07:04 17:02-17:20/18 15:56-16:13/17 17:50 16:27-17:00/33 07:53-08:21/28	06:41 18:03-19:19/76 19:55	05:26 20:57	04:32 19:43-20:36/53 21:53
4	08:47 10:03-10:39/36 15:50	08:07 16:50	07:01 17:02-17:23/21 16:00-16:08/8 07:27-07:36/9 17:52 16:28-17:01/33 07:53-08:20/27	06:39 18:03-19:27/84 19:57	05:24 20:59	04:31 19:44-20:36/52 21:54
5	08:47 10:03-10:39/36 15:52	08:05 16:52	06:58 16:27-17:23/56 07:24-07:38/14 17:54 07:53-08:19/26	06:36 18:03-19:29/86 19:59	05:22 21:01	04:30 19:44-20:36/52 21:55
6	08:46 10:05-10:39/34 15:53	08:02 16:54	06:56 16:28-17:23/55 07:22-07:40/18 17:56 07:55-08:18/23	06:33 18:45-19:31/46 20:01	05:19 21:03	04:29 19:44-20:36/52 21:57
7	08:46 10:05-10:39/34 15:55	08:00 16:03-16:07/4 16:57	06:53 17:00-17:24/24 07:55-08:16/21 17:58 16:28-16:59/31 07:21-07:40/19	06:31 18:44-19:32/48 21:05	05:17 20:15-20:25/10 21:05	04:28 19:44-20:36/52 21:58
8	08:45 10:06-10:38/32 15:56	07:58 15:57-16:12/15 16:59	06:51 16:59-17:25/26 07:56-08:14/18 18:01 16:28-16:58/30 07:20-07:40/20	06:28 18:44-19:32/48 21:07	05:15 20:12-20:28/16 21:07	04:27 19:44-20:36/52 21:59
9	08:44 10:07-10:27/20 15:58	07:56 15:55-16:15/20 17:01	06:48 16:59-17:29/30 07:59-08:12/13 18:03 16:28-16:57/29 07:20-07:41/21	06:26 18:45-19:33/48 21:09	05:13 20:10-20:29/19 21:09	04:27 19:44-20:35/51 22:00
10	08:44 10:08-10:28/20 15:59	07:54 15:54-16:17/23 17:03	06:45 17:00-17:37/37 08:03-08:06/3 18:05 16:29-16:57/28 07:19-07:41/22	06:23 18:45-19:33/48 21:11	05:11 20:09-20:31/22 21:11	04:26 19:44-20:36/52 22:01
11	08:43 10:08-10:27/19 16:01	07:52 15:52-16:18/26 17:06	06:43 17:00-17:39/39 07:18-07:40/22 18:07 16:30-16:55/25	06:20 18:46-19:40/54 21:13	05:09 20:02-20:32/30 21:13	04:26 19:45-20:36/51 22:02
12	08:42 10:09-10:26/17 16:03	07:50 16:28-16:36/8 17:08	06:40 17:01-17:40/39 07:19-07:40/21 18:09 16:31-16:53/22	06:18 18:46-19:42/56 21:15	05:07 19:58-20:32/34 21:15	04:25 19:45-20:36/51 22:03
13	08:41 10:10-10:26/16 16:04	07:47 16:25-16:38/13 17:10	06:37 17:03-17:43/40 07:19-07:39/20 18:11 16:34-16:51/17	06:15 18:48-19:44/56 21:17	05:05 19:56-20:33/37 21:17	04:24 19:45-20:37/52 22:03
14	08:40 10:12-10:26/14 16:06	07:45 16:24-16:41/17 17:12	06:35 17:06-17:44/38 07:19-07:38/19 18:13 16:37-16:47/10	06:13 18:50-19:44/54 21:19	05:03 19:54-20:34/40 21:19	04:24 19:45-20:37/52 22:04
15	08:39 10:13-10:24/11 16:08	07:43 15:49-16:43/54 17:15	06:32 17:05-17:44/39 18:15 07:20-07:37/17	06:10 18:52-19:46/54 20:20	05:01 19:52-20:35/43 21:21	04:24 19:46-20:37/51 22:05
16	08:38 10:16-10:23/7 16:10	07:40 15:48-16:43/55 17:17	06:29 17:05-17:45/40 18:18 07:22-07:35/13	06:07 18:52-19:46/54 20:22	04:59 19:51-20:35/44 21:23	04:24 19:45-20:37/52 22:05
17	08:36 16:12	07:38 15:48-16:44/56 17:19	06:27 17:04-17:44/40 18:20 07:24-07:31/7	06:05 18:54-19:46/52 20:24	04:57 19:50-20:36/46 21:25	04:24 19:45-20:37/52 22:06
18	08:35 16:14	07:36 15:47-16:44/57 17:21	06:24 17:04-17:44/40 18:22	06:02 18:56-19:46/50 20:26	04:55 19:49-20:36/47 21:27	04:23 19:46-20:37/51 22:07
19	08:34 16:16	07:33 15:47-16:45/58 17:24	06:21 17:04-17:43/39 18:24	06:00 19:00-19:46/46 20:28	04:53 19:47-20:35/48 21:29	04:23 19:46-20:37/51 22:07
20	08:32 16:18	07:31 15:46-16:44/58 17:26	06:19 17:04-17:43/39 18:26	05:57 19:00-19:46/46 20:30	04:52 19:47-20:36/49 21:31	04:23 19:47-20:39/52 22:07
21	08:31 16:20	07:28 15:47-16:45/58 17:28	06:16 17:04-17:42/38 18:28	05:55 19:00-19:46/46 20:32	04:50 19:46-20:36/50 21:32	04:24 19:47-20:39/52 22:08
22	08:30 16:22	07:26 15:47-16:52/65 17:30	06:13 17:04-17:43/39 18:30	05:52 19:01-19:46/45 20:34	04:48 19:46-20:36/50 21:34	04:24 19:47-20:39/52 22:08
23	08:28 16:24	07:24 15:46-16:54/68 17:32	06:11 17:53-18:04/11 18:32	05:50 19:01-19:44/43 20:37	04:47 19:46-20:37/51 21:36	04:24 19:47-20:38/51 22:08
24	08:26 16:26	07:21 15:47-16:57/70 17:35	06:08 17:49-18:06/17 18:34	05:47 19:02-19:44/42 20:39	04:45 19:45-20:36/51 21:38	04:24 19:48-20:39/51 22:08
25	08:25 16:28	07:19 16:23-16:57/34 07:55-08:20/25 17:37	06:05 17:47-18:07/20 18:36	05:45 19:03-19:44/41 20:41	04:43 19:45-20:37/52 21:39	04:25 19:47-20:39/52 22:08
26	08:23 16:30	07:16 16:25-16:59/34 07:54-08:21/27 17:39	06:03 17:07-18:08/61 18:38	05:42 19:03-19:42/39 20:43	04:42 19:45-20:37/52 21:41	04:25 19:47-20:39/52 22:08
27	08:22 16:32	07:14 16:28-16:59/31 07:53-08:21/28 17:41	06:00 17:06-18:09/63 18:40	05:40 19:05-19:41/36 20:45	04:40 19:45-20:36/51 21:43	04:26 19:48-20:40/52 22:08
28	08:20 16:35	07:11 17:09-17:14/5 15:50-16:18/28 17:43	05:57 17:05-18:10/65 18:43	05:38 19:07-19:40/33 20:47	04:39 19:44-20:36/52 21:44	04:26 19:49-20:40/51 22:08
29	08:18 16:37	16:29-17:00/31 07:54-08:22/28 17:45	06:55 18:05-19:13/68 19:45	05:35 19:23-19:38/15 20:49	04:38 19:44-20:36/52 21:46	04:27 19:48-20:40/52 22:07
30	08:16 16:39	16:37 17:47	06:52 18:04-19:13/69 19:47	05:33 19:24-19:35/11 20:51	04:36 19:44-20:36/52 21:47	04:27 19:49-20:40/51 22:07
31	08:14 16:41	16:41 17:49	06:49 18:03-19:16/73 19:49	16:41 17:49	04:35 19:44-20:36/52 21:49	16:41 17:49
Potential sun hours	236	266	366	426	507	528
Sum of minutes with flicker	418	1272	2179	1779	1050	1553

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

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

Project:

Flickering_Nordex_N175_Prikuli_B

Licensed user:

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

SHADOW - Calendar per WTG

Calculation: Flickering_Nordex_N175_Prikuli_B WTG: PrRR3 - NORDEX N175/6.X 6800 175.0 !-I hub: 179,0 m (TOT: 266,5 m) (34)
Sunshine probability S (Average daily sunshine hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1,02	2,14	4,62	6,27	9,21	10,00	8,04	7,90	5,53	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 19:49-20:41/52	05:14 20:09-20:42/33	06:15 18:45-19:39/54	07:15 17:42-18:20/38 07:58-08:19/21	07:20 15:24-15:46/22	08:22 09:50-10:09/19
2	22:07	21:26	20:12 18:07-18:35/28	18:52 17:12-17:32/20	16:34	15:43
2	04:29 19:49-20:40/51	05:16 20:15-20:42/27	06:17 18:44-19:32/48	07:17 17:40-18:19/39 07:57-08:19/22	07:23 15:25-15:44/19	08:24 09:50-10:10/20
2	22:06	21:24	20:09 18:06-18:37/31	18:49 17:10-17:33/23	16:32	15:42 10:14-10:17/3
3	04:30 19:49-20:40/51	05:18 20:19-20:41/22	06:19 18:43-19:31/48	07:19 17:38-18:16/38 07:57-08:19/22	07:25 15:28-15:41/13	08:25 09:50-10:11/21
2	22:06	21:21	20:07 18:04-18:38/34	18:46 17:08-17:34/26	16:30	15:41 10:12-10:20/8
4	04:31 19:49-20:41/52	05:20 20:21-20:39/18	06:21 18:42-19:30/48	07:21 17:37-18:08/31 08:37-08:48/11	07:27	08:27 09:50-10:22/32
2	22:05	21:19	20:04 18:03-18:38/35	18:44 17:07-17:35/28 07:57-08:18/21	16:27	15:41
5	04:32 19:50-20:41/51	05:21 20:22-20:36/14	06:23 18:41-19:28/47	07:23 17:37-18:04/27 08:34-08:50/16	07:29	08:28 09:50-10:24/34
2	22:04	21:17	20:01 18:00-18:38/38	18:41 17:05-17:35/30 07:56-08:18/22	16:25	15:40
6	04:33 19:50-20:42/52	05:23 20:26-20:33/7	06:25 18:40-19:26/46	07:25 17:36-18:00/24 08:32-08:52/20	07:31	08:30 09:50-10:24/34
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31	05:12 20:07-20:44/37	06:13 18:46-19:42/56		07:18 15:22-15:47/25		08:49 10:00-10:39/39
2	21:28	20:14 18:10-18:34/24		16:36		15:45
Potential sun hours	529	469	384	324	248	217
Sum of minutes with flicker	1543	1024	1943	2391	119	1134

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

Day in month	Sun rise (hh:mm)	First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker
	Sun set (hh:mm)	First time (hh:mm) with flicker-Last time (hh:mm) with flicker/Minutes with flicker