

SHADOW - Hauptergebnis

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung

Annahmen für Schattenwurfberechnung

Beschattungsbereich der WEA

Schatten nur relevant, wo Rotorblatt mind. 20% der Sonne verdeckt

Siehe WEA-Tabelle

Minimale relevante Sonnenhöhe über Horizont	3 °
Tage zwischen Berechnungen	1 Tag(e)
Berechnungszeitsprung	1 Minuten

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsstunden ermittelt aus WEA in Berechnung und Windverteilung:

Terraindaten: Terrain; Wind Statistics (1)

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Monatliche Aggregation der met. wahrsch. Reduzierung

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Eine WEA wird nicht berücksichtigt, wenn sie von keinem Teil der Rezeptorfläche aus sichtbar ist. Die Sichtbarkeitsberechnung basiert auf den folgenden Annahmen:

DHM: Höhenlinien: CONTOURLINE_ONLINEDATA_0.wpo (1)

Rasterauflösung: 1,0 m

Topographischer Schatten berücksichtigt

Alle Koordinatenangaben in:

UTM (north)-ETRS89 Zone: 32

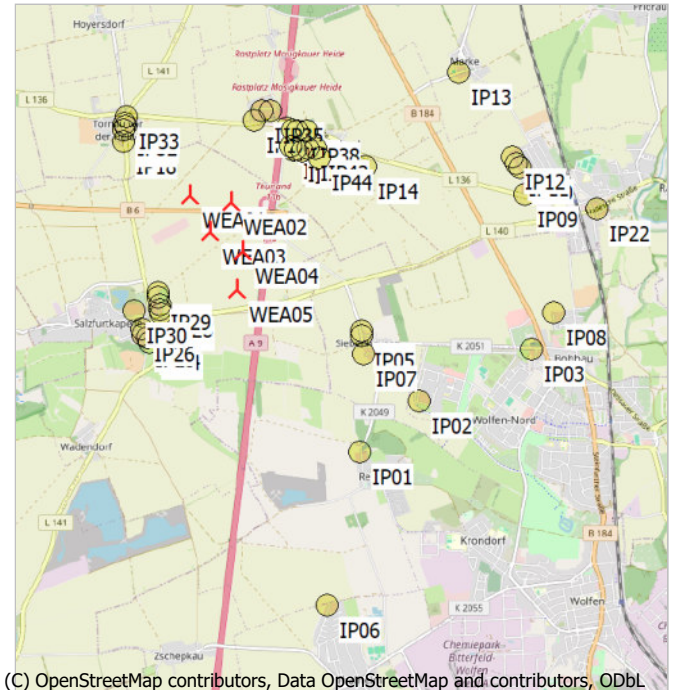
WEA

	Ost	Nord	Z	Beschreibung	WEA-Typ			Nennleistung	Rotor-durchmesser	NH	Schattendaten	
					Aktuell	Hersteller	Typ				Beschatt.-Bereich	U/min
			[m]					[kW]	[m]	[m]	[m]	[U/min]
WEA01	720.837	5.733.559	90,0	ENERCON E-175 EP5 E2 7...Ja	ENERCON	E-175 EP5 E2-7.000	7.000	175,0	174,5	1.736	-	
WEA02	721.400	5.733.506	90,0	ENERCON E-175 EP5 E2 7...Ja	ENERCON	E-175 EP5 E2-7.000	7.000	175,0	174,5	1.736	-	
WEA03	721.134	5.733.094	87,8	ENERCON E-175 EP5 E2 7...Ja	ENERCON	E-175 EP5 E2-7.000	7.000	175,0	174,5	1.736	-	
WEA04	721.562	5.732.855	87,1	ENERCON E-175 EP5 E2 7...Ja	ENERCON	E-175 EP5 E2-7.000	7.000	175,0	174,5	1.736	-	
WEA05	721.520	5.732.347	83,5	ENERCON E-175 EP5 E2 7...Ja	ENERCON	E-175 EP5 E2-7.000	7.000	175,0	174,5	1.736	-	

Schattenrezeptor-Eingabe

Nr.	Name	Ost	Nord	Z	Breite	Höhe	Höhe ü.Gr.	Neigung des Fensters	Ausrichtungsmodus	Augenhöhe (ZVI) ü.Gr.
				[m]	[m]	[m]	[m]	[°]		[m]
IP01	Dorfstraße 59, 06766 Bitterfeld-Wolfen	723.239	5.730.263	80,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP02	Auenstraße 24, 06766 Bitterfeld-Wolfen	724.004	5.730.992	80,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP03	Siebenhausener Str. 8, 06766 Bitterfeld-Wolfen	725.468	5.731.744	88,1	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP04	Siebenhausen 14, 06766 Bitterfeld-Wolfen	723.203	5.731.873	80,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP05	Siebenhausen 15, 06766 Bitterfeld-Wolfen	723.208	5.731.813	80,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP06	Reudener Weg 10, 06766 Bitterfeld-Wolfen	722.906	5.728.222	89,5	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP07	Siebenhausen 43, 06766 Bitterfeld-Wolfen	723.237	5.731.568	80,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP08	Feldrain 20, 06766 Bitterfeld-Wolfen (Gemengelage)	725.735	5.732.227	86,9	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP09	Thurländer Str. 1, 06779 Raguhn-Jeßnitz	725.279	5.733.775	88,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP10	Thurländer Str. 24, 06779 Raguhn-Jeßnitz	725.200	5.734.134	86,2	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP11	Thurländer Str. 28, 06779 Raguhn-Jeßnitz	725.159	5.734.185	86,1	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP12	Zerbster Str. 17, 06779 Raguhn-Jeßnitz	725.098	5.734.257	86,1	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP13	Dorfstraße 30, 06779 Raguhn-Jeßnitz	724.329	5.735.353	84,7	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP14	Holländer Mühle 1, 06779 Raguhn-Jeßnitz	723.149	5.734.061	85,4	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP15	Thurländer Dorfstraße 23, 06779 Raguhn-Jeßnitz	722.183	5.734.226	88,1	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP16	Thurländer Lindenstrasse 15, 06779 Raguhn-Jeßnitz	722.089	5.734.506	89,2	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP17	Kleinleipziger Str. 12A, 06779 Raguhn-Jeßnitz	721.647	5.734.592	90,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP18	Am Sportplatz 8, 06779 Raguhn-Jeßnitz	719.923	5.734.238	90,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP19	Vor d. Heide 10, 06779 Raguhn-Jeßnitz	719.920	5.734.387	90,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0

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(C) OpenStreetMap contributors, Data OpenStreetMap and contributors, ODbL

Neue WEA

Maßstab 1:100.000

Schattenrezeptor

SHADOW - Hauptergebnis

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung

...(Fortsetzung von vorheriger Seite)

Nr.	Name	Ost	Nord	Z	Breite	Höhe	Höhe ü.Gr.	Neigung des Fensters	Ausrichtungsmodus	Augenhöhe (ZVI) ü.Gr.
				[m]	[m]	[m]	[m]	[°]		[m]
IP20	Am Sandberg 11, 06780 Zörbig	720.521	5.731.990	80,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP21	Am Sandberg 24, 06780 Zörbig	720.479	5.732.269	80,7	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP22	Hallesche Str. 9, 06779 Raguhn-Jeßnitz	726.254	5.733.631	72,4	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP23	Hallesche Straße 10, 06780 Zörbig	720.380	5.731.604	80,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP24	Hallesche Straße 13, 06780 Zörbig	720.356	5.731.658	80,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP25	Hallesche Straße 15, 06780 Zörbig	720.293	5.731.698	80,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP26	Hallesche Straße 18, 06780 Zörbig	720.287	5.731.779	80,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP27	Am Sandberg 14, 06780 Zörbig	720.512	5.732.046	80,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP28	Am Sandberg 18, 06780 Zörbig	720.501	5.732.106	80,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP29	Am Sandberg 20, 06780 Zörbig	720.484	5.732.195	80,3	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP30	Am Sportpl. 15, 06780 Zörbig	720.165	5.732.005	80,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP31	Vor d. Heide 6, 06779 Raguhn-Jeßnitz	719.941	5.734.450	90,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP32	Vor d. Heide 4, 06779 Raguhn-Jeßnitz	719.929	5.734.487	90,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP33	Am Trappenberg 2, 06779 Raguhn-Jeßnitz	719.965	5.734.569	90,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP34	Kleinleipziger Str. 7, 06779 Raguhn-Jeßnitz	721.748	5.734.730	89,2	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP35	Kleinleipziger Str. 3, 06779 Raguhn-Jeßnitz	721.859	5.734.732	84,1	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP36	Thurländer Lindenstrasse 10, 06779 Raguhn-Jeßnitz	722.164	5.734.490	86,9	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP37	Thurländer Lindenstrasse 8a, 06779 Raguhn-Jeßnitz	722.237	5.734.475	84,8	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP38	Thurländer Lindenstrasse 3, 06779 Raguhn-Jeßnitz	722.347	5.734.479	82,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP39	Thurländer Dorfstraße 24A, 06779 Raguhn-Jeßnitz	722.145	5.734.268	87,4	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP40	Thurländer Dorfstraße 21, 06779 Raguhn-Jeßnitz	722.224	5.734.235	87,6	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP41	Thurländer Dorfstraße 19, 06779 Raguhn-Jeßnitz	722.306	5.734.220	87,4	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP42	Thurländer Dorfstraße 17, 06779 Raguhn-Jeßnitz	722.375	5.734.262	85,9	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP43	Thurländer Dorfstraße 12, 06779 Raguhn-Jeßnitz	722.483	5.734.269	85,0	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0
IP44	Am Dorfe 1, 06779 Raguhn-Jeßnitz	722.531	5.734.135	87,9	0,1	0,1	2,0	0,0	"Gewächshaus-Modus"	2,0

Berechnungsergebnisse

Schattenrezeptor

		astron. max. mögl. Beschattungsdauer			met. wahrsch. Beschattungsdauer
Nr.	Name	Stunden/Jahr	Schattentage/Jahr	Max.Schattendauer/Tag	Stunden/Jahr
		[h/a]	[d/a]	[h/d]	[h/a]
IP01	Dorfstraße 59, 06766 Bitterfeld-Wolfen	0:00	0	0:00	0:00
IP02	Auenstraße 24, 06766 Bitterfeld-Wolfen	0:00	0	0:00	0:00
IP03	Siebenhausener Str. 8, 06766 Bitterfeld-Wolfen	0:00	0	0:00	0:00
IP04	Siebenhausen 14, 06766 Bitterfeld-Wolfen	0:00	0	0:00	0:00
IP05	Siebenhausen 15, 06766 Bitterfeld-Wolfen	0:00	0	0:00	0:00
IP06	Reudener Weg 10, 06766 Bitterfeld-Wolfen	0:00	0	0:00	0:00
IP07	Siebenhausen 43, 06766 Bitterfeld-Wolfen	0:00	0	0:00	0:00
IP08	Feldrain 20, 06766 Bitterfeld-Wolfen (Gemengelage)	0:00	0	0:00	0:00
IP09	Thurländer Str. 1, 06779 Raguhn-Jeßnitz	0:00	0	0:00	0:00
IP10	Thurländer Str. 24, 06779 Raguhn-Jeßnitz	0:00	0	0:00	0:00
IP11	Thurländer Str. 28, 06779 Raguhn-Jeßnitz	0:00	0	0:00	0:00
IP12	Zerbster Str. 17, 06779 Raguhn-Jeßnitz	0:00	0	0:00	0:00
IP13	Dorfstraße 30, 06779 Raguhn-Jeßnitz	0:00	0	0:00	0:00
IP14	Holländer Mühle 1, 06779 Raguhn-Jeßnitz	0:00	0	0:00	0:00
IP15	Thurländer Dorfstraße 23, 06779 Raguhn-Jeßnitz	64:30	149	0:39	10:10
IP16	Thurländer Lindenstrasse 15, 06779 Raguhn-Jeßnitz	53:27	114	0:35	7:06
IP17	Kleinleipziger Str. 12A, 06779 Raguhn-Jeßnitz	37:38	80	0:33	4:33
IP18	Am Sportplatz 8, 06779 Raguhn-Jeßnitz	65:09	130	0:55	8:21
IP19	Vor d. Heide 10, 06779 Raguhn-Jeßnitz	42:43	88	0:49	5:09
IP20	Am Sandberg 11, 06780 Zörbig	40:34	82	0:39	11:58
IP21	Am Sandberg 24, 06780 Zörbig	66:38	131	0:38	19:19
IP22	Hallesche Str. 9, 06779 Raguhn-Jeßnitz	0:00	0	0:00	0:00
IP23	Hallesche Straße 10, 06780 Zörbig	24:10	56	0:31	7:20
IP24	Hallesche Straße 13, 06780 Zörbig	33:07	70	0:32	10:02
IP25	Hallesche Straße 15, 06780 Zörbig	36:56	84	0:31	11:09
IP26	Hallesche Straße 18, 06780 Zörbig	29:56	78	0:31	9:04
IP27	Am Sandberg 14, 06780 Zörbig	34:42	69	0:39	10:16
IP28	Am Sandberg 18, 06780 Zörbig	43:19	99	0:39	12:50
IP29	Am Sandberg 20, 06780 Zörbig	57:46	119	0:39	16:56
IP30	Am Sportpl. 15, 06780 Zörbig	43:56	113	0:29	13:06
IP31	Vor d. Heide 6, 06779 Raguhn-Jeßnitz	39:13	88	0:34	4:08

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SHADOW - Hauptergebnis

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung

...(Fortsetzung von vorheriger Seite)

Nr.	Name	astron. max. mögl. Beschattungsdauer			met. wahrsch. Beschattungsda
		Stunden/Jahr	Schattentage/Jahr	Max.Schattendauer/Tag	Stunden/Jahr
		[h/a]	[d/a]	[h/d]	[h/a]
IP32	Vor d. Heide 4, 06779 Raguhn-Jeßnitz	38:18	84	0:33	4:00
IP33	Am Trappenberg 2, 06779 Raguhn-Jeßnitz	33:47	70	0:33	3:30
IP34	Kleinleipziger Str. 7, 06779 Raguhn-Jeßnitz	30:11	70	0:29	3:36
IP35	Kleinleipziger Str. 3, 06779 Raguhn-Jeßnitz	28:46	78	0:28	3:29
IP36	Thurländer Lindenstrasse 10, 06779 Raguhn-Jeßnitz	53:29	120	0:34	7:14
IP37	Thurländer Lindenstrasse 8a, 06779 Raguhn-Jeßnitz	47:44	124	0:33	6:42
IP38	Thurländer Lindenstrasse 3, 06779 Raguhn-Jeßnitz	24:25	62	0:31	3:18
IP39	Thurländer Dorfstraße 24A, 06779 Raguhn-Jeßnitz	68:09	143	0:39	10:09
IP40	Thurländer Dorfstraße 21, 06779 Raguhn-Jeßnitz	58:32	130	0:37	9:25
IP41	Thurländer Dorfstraße 19, 06779 Raguhn-Jeßnitz	55:20	135	0:39	9:10
IP42	Thurländer Dorfstraße 17, 06779 Raguhn-Jeßnitz	51:22	134	0:36	8:23
IP43	Thurländer Dorfstraße 12, 06779 Raguhn-Jeßnitz	30:10	86	0:31	4:45
IP44	Am Dorfe 1, 06779 Raguhn-Jeßnitz	41:25	102	0:31	6:21

Gesamtdauer Beschattung an Rezeptoren pro WEA

Nr.	Name	Maximal	Erwartet
		[h/a]	[h/a]
WEA01	ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (1)	185:40	24:49
WEA02	ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (2)	163:40	24:40
WEA03	ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (3)	94:44	11:05
WEA04	ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (4)	93:59	21:35
WEA05	ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (5)	158:20	46:14

Summen in Rezeptortabelle und WEA-Tabelle können sich unterscheiden, da eine WEA gleichzeitig an zwei oder mehr Rezeptoren Beschattung verursachen kann und/oder ein Rezeptor gleichzeitig von zwei oder mehr WEA beschattet werden kann.

Die Berechnung der Gesamtsumme für einen Rezeptor arbeitet mit einer gemittelten Richtungskorrektur für alle WEA, die an einem gegebenen Tag zur Beschattung beitragen. Wenn der Schattenwurf durch mehrere WEA an einem Tag nicht gleichzeitig stattfindet, kann die so ermittelte Summe geringfügig von der Summe der Beschattungszeiten abweichen, die für die individuellen WEA berechnet werden.

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP01 - Dorfstraße 59, 06766 Bitterfeld-Wolfen

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:18 16:12	07:52 16:59	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:19	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51	07:04 16:46	07:54 16:06
2	08:18 16:13	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:20	04:58 21:33	05:35 21:00	06:24 19:58	07:12 18:49	07:06 16:44	07:56 16:05
3	08:18 16:14	07:49 17:03	06:55 17:54	06:44 19:47	05:41 20:37	04:58 21:21	04:58 21:33	05:36 20:58	06:26 19:56	07:14 18:47	07:08 16:42	07:57 16:05
4	08:18 16:15	07:47 17:05	06:53 17:55	06:42 19:49	05:39 20:39	04:58 21:22	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45	07:09 16:40	07:59 16:04
5	08:18 16:16	07:46 17:06	06:50 17:57	06:40 19:50	05:37 20:41	04:57 21:23	04:57 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	08:00 16:04
6	08:17 16:17	07:44 17:08	06:48 17:59	06:38 19:52	05:35 20:42	04:56 21:24	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40	07:13 16:37	08:01 16:03
7	08:17 16:19	07:42 17:10	06:46 18:01	06:35 19:54	05:34 20:44	04:56 21:25	05:02 21:31	05:42 20:52	06:32 19:47	07:21 18:38	07:15 16:35	08:02 16:03
8	08:17 16:20	07:41 17:12	06:44 18:03	06:33 19:55	05:32 20:45	04:55 21:26	05:03 21:30	05:44 20:50	06:34 19:44	07:22 18:35	07:16 16:34	08:04 16:02
9	08:16 16:21	07:39 17:14	06:41 18:04	06:31 19:57	05:30 20:47	04:55 21:27	05:04 21:29	05:45 20:48	06:35 19:42	07:24 18:33	07:18 16:32	08:05 16:02
10	08:16 16:23	07:37 17:16	06:39 18:06	06:29 19:59	05:29 20:49	04:54 21:28	05:05 21:29	05:47 20:46	06:37 19:40	07:26 18:31	07:20 16:30	08:06 16:02
11	08:15 16:24	07:35 17:17	06:37 18:08	06:26 20:00	05:27 20:50	04:54 21:29	05:06 21:28	05:49 20:44	06:38 19:38	07:27 18:29	07:22 16:29	08:07 16:02
12	08:14 16:25	07:33 17:19	06:35 18:10	06:24 20:02	05:25 20:52	04:54 21:29	05:07 21:27	05:50 20:42	06:40 19:35	07:29 18:27	07:23 16:27	08:08 16:02
13	08:14 16:27	07:31 17:21	06:32 18:11	06:22 20:04	05:24 20:53	04:53 21:30	05:08 21:26	05:52 20:40	06:42 19:33	07:31 18:24	07:25 16:26	08:09 16:02
14	08:13 16:28	07:30 17:23	06:30 18:13	06:20 20:06	05:22 20:55	04:53 21:31	05:09 21:25	05:53 20:38	06:43 19:31	07:33 18:22	07:27 16:24	08:10 16:02
15	08:12 16:30	07:28 17:25	06:28 18:15	06:18 20:07	05:20 20:56	04:53 21:31	05:10 21:24	05:55 20:36	06:45 19:28	07:34 18:20	07:29 16:23	08:11 16:02
16	08:11 16:32	07:26 17:27	06:26 18:16	06:16 20:09	05:19 20:58	04:53 21:32	05:11 21:23	05:57 20:34	06:46 19:26	07:36 18:18	07:30 16:21	08:12 16:02
17	08:10 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 20:59	04:53 21:32	05:12 21:22	05:58 20:32	06:48 19:24	07:38 18:16	07:32 16:20	08:13 16:02
18	08:10 16:35	07:22 17:30	06:21 18:20	06:11 20:12	05:16 21:01	04:53 21:32	05:14 21:21	06:00 20:30	06:50 19:21	07:39 18:14	07:34 16:19	08:13 16:02
19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	05:15 21:02	04:53 21:33	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:12	07:36 16:18	08:14 16:03
20	08:07 16:38	07:18 17:34	06:17 18:23	06:07 20:16	05:13 21:04	04:53 21:33	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	07:37 16:16	08:15 16:03
21	08:06 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:33	05:17 21:18	06:05 20:24	06:54 19:14	07:45 18:07	07:39 16:15	08:15 16:03
22	08:05 16:41	07:14 17:38	06:12 18:27	06:03 20:19	05:11 21:07	04:53 21:34	05:19 21:16	06:06 20:22	06:56 19:12	07:46 18:05	07:41 16:14	08:16 16:04
23	08:04 16:43	07:12 17:39	06:10 18:28	06:01 20:21	05:09 21:08	04:53 21:34	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	07:42 16:13	08:16 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:22	05:08 21:09	04:54 21:34	05:22 21:14	06:09 20:18	06:59 19:08	07:50 18:01	07:44 16:12	08:17 16:05
25	08:02 16:47	07:08 17:43	06:05 18:32	05:57 20:24	05:07 21:11	04:54 21:34	05:23 21:12	06:11 20:16	07:01 19:05	06:52 18:59	07:45 16:11	08:17 16:05
26	08:00 16:48	07:05 17:45	06:03 18:33	05:55 20:26	05:06 21:12	04:54 21:34	05:24 21:11	06:13 20:13	07:03 19:03	06:53 18:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:03 17:47	06:00 18:35	05:53 20:27	05:05 21:13	04:55 21:34	05:26 21:09	06:14 20:11	07:04 19:01	06:55 18:55	07:49 16:09	08:18 16:07
28	07:58 16:52	07:01 17:48	05:58 18:37	05:51 20:29	05:04 21:15	04:55 21:34	05:27 21:08	06:16 20:09	07:06 18:58	06:57 18:53	07:50 16:08	08:18 16:08
29	07:56 16:54		06:56 19:39	05:49 20:31	05:03 21:16	04:56 21:34	05:29 21:07	06:17 20:07	07:07 18:56	06:59 18:51	07:52 16:07	08:18 16:09
30	07:55 16:55		06:54 19:40	05:47 20:32	05:02 21:17	04:56 21:33	05:30 21:05	06:19 20:05	07:09 18:54	07:00 18:50	07:53 16:07	08:18 16:09
31	07:53 16:57		06:51 19:42		05:01 21:18		05:32 21:03	06:21 20:03		07:02 16:48		08:18 16:10
Sonnenscheinstunden	260	278	367	415	484	497	501	453	381	332	267	245
astr.max.mögl.Beschattung												
Red.Sonnenscheinwahrsch.												
Reduktion Betriebsdauer												
Reduktion Windrichtung												
Gesamte Reduktion												
Met.wahrsch.Beschattung												

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende	(WEA mit letztem Schatten)
	Minuten mit Schatten		

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP02 - Auenstraße 24, 06766 Bitterfeld-Wolfen

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:18	07:52	06:59	06:49	05:45	05:00	04:57	05:33	06:22	07:11	07:04	07:54
	16:12	16:59	17:50	19:44	20:34	21:19	21:33	21:02	20:00	18:51	16:46	16:06
2	08:18	07:50	06:57	06:47	05:43	04:59	04:58	05:35	06:24	07:12	07:06	07:56
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	16:25	17:19	18:09	20:02	20:52	21:29	21:27	20:42	19:35	18:27	16:27	16:02
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	16:27	17:21	18:11	20:04	20:53	21:30	21:26	20:40	19:33	18:24	16:26	16:02
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	16:35	17:30	18:20	20:12	21:01	21:32	21:21	20:30	19:21	18:14	16:19	16:02
19	08:09	07:20	06:19	06:09	05:15	04:53	05:15	06:01	06:51	07:41	07:36	08:14
	16:36	17:32	18:22	20:14	21:02	21:33	21:20	20:28	19:19	18:11	16:18	16:02
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21	08:06	07:16	06:14	06:05	05:12	04:53	05:17	06:05	06:54	07:45	07:39	08:15
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	16:43	17:39	18:28	20:21	21:08	21:34	21:15	20:20	19:10	18:03	16:13	16:04
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	16:45	17:41	18:30	20:22	21:09	21:34	21:14	20:18	19:07	18:01	16:12	16:05
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	16:46	17:43	18:32	20:24	21:11	21:34	21:12	20:16	19:05	16:59	16:11	16:05
26	08:00	07:05	06:03	05:54	05:06	04:54	05:24	06:13	07:03	06:53	07:47	08:17
	16:48	17:45	18:33	20:26	21:12	21:34	21:11	20:13	19:03	16:57	16:10	16:06
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	16:50	17:47	18:35	20:27	21:13	21:34	21:09	20:11	19:01	16:55	16:09	16:07
28	07:58	07:01	05:58	05:51	05:04	04:55	05:27	06:16	07:06	06:57	07:50	08:18
	16:52	17:48	18:37	20:29	21:15	21:34	21:08	20:09	18:58	16:53	16:08	16:08
29	07:56		06:56	05:49	05:03	04:56	05:29	06:17	07:07	06:59	07:52	08:18
	16:54		19:38	20:31	21:16	21:34	21:06	20:07	18:56	16:51	16:07	16:08
30	07:55		06:54	05:47	05:02	04:56	05:30	06:19	07:09	07:00	07:53	08:18
	16:55		19:40	20:32	21:17	21:33	21:05	20:05	18:54	16:49	16:07	16:09
31	07:53		06:51		05:01		05:32	06:21		07:02		08:18
	16:57		19:42		21:18		21:03	20:03		16:48		16:10
Sonnenscheinstunden	260	278	367	416	484	497	501	453	381	332	267	245
astr.max.mögl.Beschattung												
Red.Sonnenscheinwahrsch.												
Reduktion Betriebsdauer												
Reduktion Windrichtung												
Gesamte Reduktion												
Met.wahrsch.Beschattung												

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
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Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP03 - Siebenhausener Str. 8, 06766 Bitterfeld-Wolfen

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:18 16:11	07:52 17:50	06:59 17:50	06:49 19:43	05:45 20:34	05:00 21:19	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51	07:04 16:46	07:54 16:06
2	08:18 16:13	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:20	04:58 21:33	05:34 21:00	06:24 19:58	07:12 18:49	07:06 16:44	07:56 16:05
3	08:18 16:14	07:49 17:03	06:55 17:54	06:44 19:47	05:41 20:37	04:58 21:21	04:58 21:32	05:36 20:58	06:25 19:56	07:14 18:47	07:07 16:42	07:57 16:04
4	08:18 16:15	07:47 17:04	06:52 17:55	06:42 19:49	05:39 20:39	04:57 21:22	04:59 21:32	05:38 20:57	06:27 19:53	07:16 18:44	07:09 16:40	07:59 16:04
5	08:18 16:16	07:45 17:06	06:50 17:57	06:40 19:50	05:37 20:40	04:57 21:23	04:57 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:38	08:00 16:03
6	08:17 16:17	07:44 17:08	06:48 17:59	06:38 19:52	05:35 20:42	04:56 21:24	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40	07:13 16:37	08:01 16:03
7	08:17 16:18	07:42 17:10	06:46 18:01	06:35 19:54	05:34 20:44	04:56 21:25	05:01 21:30	05:42 20:51	06:32 19:47	07:21 18:38	07:15 16:35	08:02 16:03
8	08:16 16:20	07:40 17:12	06:44 18:02	06:33 19:55	05:32 20:45	04:55 21:26	05:02 21:30	05:44 20:50	06:33 19:44	07:22 18:35	07:16 16:33	08:04 16:02
9	08:16 16:21	07:39 17:14	06:41 18:04	06:31 19:57	05:30 20:47	04:55 21:27	05:03 21:29	05:45 20:48	06:35 19:42	07:24 18:33	07:18 16:32	08:05 16:02
10	08:15 16:22	07:37 17:15	06:39 18:06	06:29 19:59	05:28 20:49	04:54 21:28	05:04 21:28	05:47 20:46	06:37 19:40	07:26 18:31	07:20 16:30	08:06 16:02
11	08:15 16:24	07:35 17:17	06:37 18:08	06:26 20:00	05:27 20:50	04:54 21:29	05:05 21:28	05:48 20:44	06:38 19:37	07:27 18:29	07:22 16:29	08:07 16:02
12	08:14 16:25	07:33 17:19	06:35 18:09	06:24 20:02	05:25 20:52	04:53 21:29	05:06 21:27	05:50 20:42	06:40 19:35	07:29 18:26	07:23 16:27	08:08 16:01
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17	08:10 16:33	07:24 17:28	06:23 18:18	06:13 20:10	05:17 20:59	04:53 21:32	05:12 21:22	05:58 20:32	06:48 19:24	07:38 18:16	07:32 16:20	08:13 16:02
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20	08:07 16:38	07:18 17:34	06:16 18:23	06:07 20:16	05:13 21:04	04:53 21:33	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	07:37 16:16	08:15 16:03
21	08:06 16:39	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:33	05:17 21:18	06:04 20:24	06:54 19:14	07:44 18:07	07:39 16:15	08:15 16:03
22	08:05 16:41	07:14 17:37	06:12 18:27	06:03 20:19	05:10 21:07	04:53 21:34	05:19 21:16	06:06 20:22	06:56 19:12	07:46 18:05	07:40 16:14	08:16 16:04
23	08:04 16:43	07:12 17:39	06:09 18:28	06:01 20:21	05:09 21:08	04:53 21:34	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	07:42 16:13	08:16 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:58 20:22	05:08 21:09	04:53 21:34	05:21 21:14	06:09 20:18	06:59 19:07	07:50 18:01	07:44 16:12	08:17 16:05
25	08:02 16:46	07:07 17:43	06:05 18:32	05:56 20:24	05:07 21:11	04:54 21:34	05:23 21:12	06:11 20:16	07:01 19:05	06:51 16:59	07:45 16:11	08:17 16:05
26	08:00 16:48	07:05 17:45	06:03 18:33	05:54 20:26	05:06 21:12	04:54 21:34	05:24 21:11	06:12 20:13	07:02 19:03	06:53 16:57	07:47 16:10	08:17 16:06
27	07:59 16:50	07:03 17:46	06:00 18:35	05:52 20:27	05:05 21:13	04:55 21:34	05:26 21:09	06:14 20:11	07:04 19:00	06:55 16:55	07:48 16:09	08:18 16:07
28	07:58 16:52	07:01 17:48	05:58 18:37	05:50 20:29	05:04 21:14	04:55 21:34	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	07:50 16:08	08:18 16:07
29	07:56 16:53		06:56 19:38	05:48 20:31	05:03 21:16	04:56 21:34	05:28 21:06	06:17 20:07	07:07 18:56	06:59 16:51	07:51 16:07	08:18 16:08
30	07:55 16:55		06:53 19:40	05:46 20:32	05:02 21:17	04:56 21:33	05:30 21:05	06:19 20:05	07:09 18:54	07:00 16:49	07:53 16:06	08:18 16:09
31	07:53 16:57		06:51 19:42		05:01 21:18		05:31 21:03	06:21 20:02		07:02 16:47		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	497	501	453	381	332	267	245
astr.max.mögl.Beschattung												
Red.Sonnenscheinwahrsch.												
Reduktion Betriebsdauer												
Reduktion Windrichtung												
Gesamte Reduktion												
Met.wahrsch.Beschattung												

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende	(WEA mit letztem Schatten)
	Minuten mit Schatten		

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP04 - Siebenhausen 14, 06766 Bitterfeld-Wolfen

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:18 16:12	07:52 16:59	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:19	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51	07:04 16:46	07:55 16:06
2	08:18 16:13	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:20	04:58 21:33	05:35 21:00	06:24 19:58	07:12 18:49	07:06 16:44	07:56 16:05
3	08:18 16:14	07:49 17:03	06:55 17:54	06:44 19:47	05:41 20:37	04:58 21:22	04:58 21:33	05:36 20:59	06:25 19:56	07:14 18:47	07:08 16:42	07:57 16:05
4	08:18 16:15	07:47 17:04	06:53 17:55	06:42 19:49	05:39 20:39	04:58 21:23	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45	07:09 16:40	07:59 16:04
5	08:18 16:16	07:46 17:06	06:50 17:57	06:40 19:50	05:37 20:41	04:57 21:24	04:57 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	08:00 16:04
6	08:17 16:17	07:44 17:08	06:48 17:59	06:38 19:52	05:35 20:42	04:56 21:25	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40	07:13 16:37	08:01 16:03
7	08:17 16:19	07:42 17:10	06:46 18:01	06:35 19:54	05:34 20:44	04:56 21:25	05:02 21:31	05:42 20:52	06:32 19:47	07:21 18:38	07:15 16:35	08:03 16:03
8	08:17 16:20	07:41 17:12	06:44 18:03	06:33 19:55	05:32 20:45	04:55 21:26	05:03 21:30	05:44 20:50	06:34 19:45	07:22 18:35	07:16 16:34	08:04 16:02
9	08:16 16:21	07:39 17:14	06:41 18:04	06:31 19:57	05:30 20:47	04:55 21:27	05:03 21:29	05:45 20:48	06:35 19:42	07:24 18:33	07:18 16:32	08:05 16:02
10	08:16 16:23	07:37 17:16	06:39 18:06	06:29 19:59	05:28 20:49	04:54 21:28	05:04 21:29	05:47 20:46	06:37 19:40	07:26 18:31	07:20 16:30	08:06 16:02
11	08:15 16:24	07:35 17:17	06:37 18:08	06:26 20:00	05:27 20:50	04:54 21:29	05:05 21:28	05:49 20:44	06:38 19:38	07:27 18:29	07:22 16:29	08:07 16:02
12	08:14 16:25	07:33 17:19	06:35 18:10	06:24 20:02	05:25 20:52	04:54 21:29	05:07 21:27	05:50 20:42	06:40 19:35	07:29 18:27	07:24 16:27	08:08 16:02
13	08:14 16:27	07:32 17:21	06:32 18:11	06:22 20:04	05:24 20:53	04:53 21:30	05:08 21:26	05:52 20:40	06:42 19:33	07:31 18:24	07:25 16:26	08:09 16:02
14	08:13 16:28	07:30 17:23	06:30 18:13	06:20 20:06	05:22 20:55	04:53 21:31	05:09 21:25	05:53 20:38	06:43 19:31	07:33 18:22	07:27 16:24	08:10 16:02
15	08:12 16:30	07:28 17:25	06:28 18:15	06:18 20:07	05:20 20:56	04:53 21:31	05:10 21:24	05:55 20:36	06:45 19:28	07:34 18:20	07:29 16:23	08:11 16:02
16	08:11 16:31	07:26 17:27	06:26 18:16	06:15 20:09	05:19 20:58	04:53 21:32	05:11 21:23	05:57 20:34	06:46 19:26	07:36 18:18	07:30 16:21	08:12 16:02
17	08:10 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 20:59	04:53 21:32	05:12 21:22	05:58 20:32	06:48 19:24	07:38 18:16	07:32 16:20	08:13 16:02
18	08:10 16:35	07:22 17:30	06:21 18:20	06:11 20:12	05:16 21:01	04:53 21:33	05:14 21:21	06:00 20:30	06:50 19:21	07:39 18:14	07:34 16:19	08:13 16:02
19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	05:15 21:02	04:53 21:33	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:12	07:36 16:18	08:14 16:02
20	08:08 16:38	07:18 17:34	06:17 18:23	06:07 20:16	05:13 21:04	04:53 21:33	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	07:37 16:16	08:15 16:03
21	08:06 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:33	05:17 21:18	06:05 20:24	06:54 19:14	07:45 18:07	07:39 16:15	08:15 16:03
22	08:05 16:41	07:14 17:38	06:12 18:27	06:03 20:19	05:11 21:07	04:53 21:34	05:19 21:16	06:06 20:22	06:56 19:12	07:46 18:05	07:41 16:14	08:16 16:04
23	08:04 16:43	07:12 17:39	06:10 18:28	06:01 20:21	05:09 21:08	04:53 21:34	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	07:42 16:13	08:16 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:22	05:08 21:09	04:54 21:34	05:21 21:14	06:09 20:18	06:59 19:08	07:50 18:01	07:44 16:12	08:17 16:05
25	08:02 16:46	07:08 17:43	06:05 18:32	05:57 20:24	05:07 21:11	04:54 21:34	05:23 21:12	06:11 20:16	07:01 19:05	06:52 18:59	07:45 16:11	08:17 16:05
26	08:00 16:48	07:05 17:45	06:03 18:33	05:55 20:26	05:06 21:12	04:54 21:34	05:24 21:11	06:13 20:14	07:03 19:03	06:53 18:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:03 17:47	06:00 18:35	05:53 20:27	05:05 21:13	04:55 21:34	05:26 21:10	06:14 20:11	07:04 19:01	06:55 18:55	07:49 16:09	08:18 16:07
28	07:58 16:52	07:01 17:48	05:58 18:37	05:51 20:29	05:04 21:15	04:55 21:34	05:27 21:08	06:16 20:09	07:06 18:58	06:57 18:53	07:50 16:08	08:18 16:08
29	07:56 16:54		06:56 19:39	05:49 20:31	05:03 21:16	04:56 21:34	05:29 21:07	06:17 20:07	07:07 18:56	06:59 18:51	07:52 16:07	08:18 16:08
30	07:55 16:55		06:54 19:40	05:47 20:32	05:02 21:17	04:56 21:34	05:30 21:05	06:19 20:05	07:09 18:54	07:00 18:49	07:53 16:07	08:18 16:09
31	07:53 16:57		06:51 19:42		05:01 21:18		05:32 21:03	06:21 20:03		07:02 16:48		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	497	501	453	381	332	267	245
astr.max.mögl.Beschattung												
Red.Sonnenscheinwahrsch.												
Reduktion Betriebsdauer												
Reduktion Windrichtung												
Gesamte Reduktion												
Met.wahrsch.Beschattung												

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende	(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP05 - Siebenhausen 15, 06766 Bitterfeld-Wolfen

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:18 16:12	07:52 16:59	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:19	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51	07:04 16:46	07:55 16:06
2	08:18 16:13	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:20	04:58 21:33	05:35 21:00	06:24 19:58	07:12 18:49	07:06 16:44	07:56 16:05
3	08:18 16:14	07:49 17:03	06:55 17:54	06:44 19:47	05:41 20:37	04:58 21:22	04:58 21:33	05:36 20:59	06:25 19:56	07:14 18:47	07:08 16:42	07:57 16:05
4	08:18 16:15	07:47 17:04	06:53 17:55	06:42 19:49	05:39 20:39	04:58 21:23	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45	07:09 16:40	07:59 16:04
5	08:18 16:16	07:46 17:06	06:50 17:57	06:40 19:50	05:37 20:41	04:57 21:24	04:57 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	08:00 16:04
6	08:17 16:17	07:44 17:08	06:48 17:59	06:38 19:52	05:35 20:42	04:56 21:25	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40	07:13 16:37	08:01 16:03
7	08:17 16:19	07:42 17:10	06:46 18:01	06:35 19:54	05:34 20:44	04:56 21:25	05:02 21:31	05:42 20:52	06:32 19:47	07:21 18:38	07:15 16:35	08:03 16:03
8	08:17 16:20	07:41 17:12	06:44 18:03	06:33 19:55	05:32 20:45	04:55 21:26	05:03 21:30	05:44 20:50	06:34 19:45	07:22 18:35	07:16 16:34	08:04 16:02
9	08:16 16:21	07:39 17:14	06:41 18:04	06:31 19:57	05:30 20:47	04:55 21:27	05:03 21:29	05:45 20:48	06:35 19:42	07:24 18:33	07:18 16:32	08:05 16:02
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11	08:15 16:24	07:35 17:17	06:37 18:08	06:26 20:00	05:27 20:50	04:54 21:29	05:05 21:28	05:49 20:44	06:38 19:38	07:27 18:29	07:22 16:29	08:07 16:02
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14	08:13 16:28	07:30 17:23	06:30 18:13	06:20 20:06	05:22 20:55	04:53 21:31	05:09 21:25	05:53 20:38	06:43 19:31	07:33 18:22	07:27 16:24	08:10 16:02
15	08:12 16:30	07:28 17:25	06:28 18:15	06:18 20:07	05:20 20:56	04:53 21:31	05:10 21:24	05:55 20:36	06:45 19:28	07:34 18:20	07:29 16:23	08:11 16:02
16	08:11 16:31	07:26 17:27	06:26 18:16	06:15 20:09	05:19 20:58	04:53 21:32	05:11 21:23	05:57 20:34	06:46 19:26	07:36 18:18	07:30 16:21	08:12 16:02
17	08:10 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 20:59	04:53 21:32	05:12 21:22	05:58 20:32	06:48 19:24	07:38 18:16	07:32 16:20	08:13 16:02
18	08:10 16:35	07:22 17:30	06:21 18:20	06:11 20:12	05:16 21:01	04:53 21:33	05:14 21:21	06:00 20:30	06:50 19:21	07:39 18:14	07:34 16:19	08:13 16:02
19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	05:15 21:02	04:53 21:33	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:12	07:36 16:18	08:14 16:02
20	08:08 16:38	07:18 17:34	06:17 18:23	06:07 20:16	05:13 21:04	04:53 21:33	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	07:37 16:16	08:15 16:03
21	08:06 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:33	05:17 21:18	06:05 20:24	06:54 19:14	07:45 18:07	07:39 16:15	08:15 16:03
22	08:05 16:41	07:14 17:38	06:12 18:27	06:03 20:19	05:11 21:07	04:53 21:34	05:19 21:16	06:06 20:22	06:56 19:12	07:46 18:05	07:41 16:14	08:16 16:04
23	08:04 16:43	07:12 17:39	06:10 18:28	06:01 20:21	05:09 21:08	04:53 21:34	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	07:42 16:13	08:16 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:22	05:08 21:09	04:54 21:34	05:21 21:14	06:09 20:18	06:59 19:08	07:50 18:01	07:44 16:12	08:17 16:05
25	08:02 16:46	07:08 17:43	06:05 18:32	05:57 20:24	05:07 21:11	04:54 21:34	05:23 21:12	06:11 20:16	07:01 19:05	06:52 18:59	07:45 16:11	08:17 16:05
26	08:00 16:48	07:05 17:45	06:03 18:33	05:55 20:26	05:06 21:12	04:54 21:34	05:24 21:11	06:13 20:14	07:03 19:03	06:53 18:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:03 17:47	06:00 18:35	05:53 20:27	05:05 21:13	04:55 21:34	05:26 21:10	06:14 20:11	07:04 19:01	06:55 18:55	07:49 16:09	08:18 16:07
28	07:58 16:52	07:01 17:48	05:58 18:37	05:51 20:29	05:04 21:15	04:55 21:34	05:27 21:08	06:16 20:09	07:06 18:58	06:57 18:53	07:50 16:08	08:18 16:08
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31	07:53 16:57		06:51 19:42		05:01 21:18		05:32 21:03	06:21 20:03		07:02 16:48		08:18 16:10
Sonneneinstrahlung	260	278	367	416	484	497	501	453	381	332	267	245
astr.max.mögl.Beschattung												
Red.Sonneneinstrahlung												
Reduktion Betriebsdauer												
Reduktion Windrichtung												
Gesamte Reduktion												
Met.wahrsch.Beschattung												

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende	(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP06 - Reudener Weg 10, 06766 Bitterfeld-Wolfen

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:18	07:52	06:59	06:49	05:45	05:00	04:57	05:33	06:22	07:11	07:04	07:54
	16:12	16:59	17:50	19:44	20:34	21:19	21:33	21:02	20:00	18:51	16:46	16:06
2	08:18	07:50	06:57	06:47	05:43	04:59	04:58	05:35	06:24	07:12	07:06	07:56
	16:13	17:01	17:52	19:45	20:36	21:20	21:33	21:00	19:58	18:49	16:44	16:05
3	08:18	07:49	06:55	06:44	05:41	04:58	04:59	05:36	06:26	07:14	07:08	07:57
	16:14	17:03	17:54	19:47	20:37	21:21	21:32	20:58	19:56	18:47	16:42	16:05
4	08:18	07:47	06:53	06:42	05:39	04:58	04:59	05:38	06:27	07:16	07:09	07:59
	16:15	17:05	17:56	19:49	20:39	21:22	21:32	20:57	19:54	18:45	16:40	16:04
5	08:18	07:46	06:50	06:40	05:37	04:57	05:00	05:39	06:29	07:17	07:11	08:00
	16:16	17:06	17:57	19:50	20:41	21:23	21:32	20:55	19:51	18:42	16:39	16:04
6	08:17	07:44	06:48	06:38	05:36	04:56	05:01	05:41	06:30	07:19	07:13	08:01
	16:17	17:08	17:59	19:52	20:42	21:24	21:31	20:53	19:49	18:40	16:37	16:03
7	08:17	07:42	06:46	06:35	05:34	04:56	05:02	05:42	06:32	07:21	07:15	08:02
	16:19	17:10	18:01	19:54	20:44	21:25	21:30	20:51	19:47	18:38	16:35	16:03
8	08:17	07:40	06:44	06:33	05:32	04:55	05:03	05:44	06:34	07:22	07:16	08:04
	16:20	17:12	18:03	19:55	20:45	21:26	21:30	20:50	19:44	18:36	16:34	16:03
9	08:16	07:39	06:41	06:31	05:30	04:55	05:04	05:46	06:35	07:24	07:18	08:05
	16:21	17:14	18:04	19:57	20:47	21:27	21:29	20:48	19:42	18:33	16:32	16:02
10	08:16	07:37	06:39	06:29	05:29	04:54	05:05	05:47	06:37	07:26	07:20	08:06
	16:23	17:16	18:06	19:59	20:49	21:28	21:28	20:46	19:40	18:31	16:30	16:02
11	08:15	07:35	06:37	06:27	05:27	04:54	05:06	05:49	06:38	07:27	07:22	08:07
	16:24	17:17	18:08	20:00	20:50	21:29	21:28	20:44	19:38	18:29	16:29	16:02
12	08:14	07:33	06:35	06:24	05:25	04:54	05:07	05:50	06:40	07:29	07:23	08:08
	16:26	17:19	18:10	20:02	20:52	21:29	21:27	20:42	19:35	18:27	16:27	16:02
13	08:14	07:31	06:32	06:22	05:24	04:53	05:08	05:52	06:42	07:31	07:25	08:09
	16:27	17:21	18:11	20:04	20:53	21:30	21:26	20:40	19:33	18:24	16:26	16:02
14	08:13	07:30	06:30	06:20	05:22	04:53	05:09	05:53	06:43	07:33	07:27	08:10
	16:29	17:23	18:13	20:06	20:55	21:30	21:25	20:38	19:31	18:22	16:24	16:02
15	08:12	07:28	06:28	06:18	05:21	04:53	05:10	05:55	06:45	07:34	07:29	08:11
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	16:32	17:27	18:16	20:09	20:58	21:32	21:23	20:34	19:26	18:18	16:22	16:02
17	08:10	07:24	06:23	06:13	05:18	04:53	05:12	05:58	06:48	07:38	07:32	08:13
	16:33	17:29	18:18	20:11	20:59	21:32	21:22	20:32	19:24	18:16	16:20	16:02
18	08:09	07:22	06:21	06:11	05:16	04:53	05:14	06:00	06:50	07:39	07:34	08:13
	16:35	17:30	18:20	20:12	21:01	21:32	21:21	20:30	19:21	18:14	16:19	16:02
19	08:08	07:20	06:19	06:09	05:15	04:53	05:15	06:01	06:51	07:41	07:36	08:14
	16:36	17:32	18:22	20:14	21:02	21:33	21:20	20:28	19:19	18:12	16:18	16:03
20	08:07	07:18	06:17	06:07	05:13	04:53	05:16	06:03	06:53	07:43	07:37	08:15
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	16:40	17:36	18:25	20:17	21:05	21:33	21:18	20:24	19:14	18:07	16:15	16:03
22	08:05	07:14	06:12	06:03	05:11	04:53	05:19	06:06	06:56	07:46	07:41	08:16
	16:41	17:38	18:27	20:19	21:07	21:34	21:16	20:22	19:12	18:05	16:14	16:04
23	08:04	07:12	06:10	06:01	05:09	04:54	05:20	06:08	06:58	07:48	07:42	08:16
	16:43	17:39	18:28	20:21	21:08	21:34	21:15	20:20	19:10	18:03	16:13	16:04
24	08:03	07:10	06:07	05:59	05:08	04:54	05:22	06:09	06:59	07:50	07:44	08:17
	16:45	17:41	18:30	20:22	21:09	21:34	21:14	20:18	19:08	18:01	16:12	16:05
25	08:02	07:08	06:05	05:57	05:07	04:54	05:23	06:11	07:01	06:52	07:45	08:17
	16:47	17:43	18:32	20:24	21:11	21:34	21:12	20:16	19:05	16:59	16:11	16:06
26	08:00	07:05	06:03	05:55	05:06	04:55	05:24	06:13	07:03	06:53	07:47	08:17
	16:48	17:45	18:33	20:26	21:12	21:34	21:11	20:13	19:03	16:57	16:10	16:06
27	07:59	07:03	06:00	05:53	05:05	04:55	05:26	06:14	07:04	06:55	07:48	08:18
	16:50	17:47	18:35	20:27	21:13	21:34	21:09	20:11	19:01	16:55	16:09	16:07
28	07:58	07:01	05:58	05:51	05:04	04:55	05:27	06:16	07:06	06:57	07:50	08:18
	16:52	17:48	18:37	20:29	21:14	21:34	21:08	20:09	18:58	16:53	16:08	16:08
29	07:56		06:56	05:49	05:03	04:56	05:29	06:18	07:07	06:59	07:52	08:18
	16:54		19:39	20:31	21:16	21:34	21:06	20:07	18:56	16:51	16:07	16:09
30	07:55		06:54	05:47	05:02	04:57	05:30	06:19	07:09	07:00	07:53	08:18
	16:55		19:40	20:32	21:17	21:33	21:05	20:05	18:54	16:50	16:07	16:10
31	07:53		06:51		05:01		05:32	06:21		07:02		08:18
	16:57		19:42		21:18		21:03	20:03		16:48		16:10
Sonnenscheinstunden	260	278	367	415	484	497	501	453	381	332	267	245
astr.max.mögl.Beschattung												
Red.Sonnenscheinwahrsch.												
Reduktion Betriebsdauer												
Reduktion Windrichtung												
Gesamte Reduktion												
Met.wahrsch.Beschattung												

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
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Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP07 - Siebenhausen 43, 06766 Bitterfeld-Wolfen

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:18 16:12	07:52 16:59	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:19	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51	07:04 16:46	07:55 16:06
2	08:18 16:13	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:20	04:58 21:33	05:35 21:00	06:24 19:58	07:12 18:49	07:06 16:44	07:56 16:05
3	08:18 16:14	07:49 17:03	06:55 17:54	06:44 19:47	05:41 20:37	04:58 21:22	04:58 21:33	05:36 20:59	06:25 19:56	07:14 18:47	07:08 16:42	07:57 16:05
4	08:18 16:15	07:47 17:04	06:53 17:55	06:42 19:49	05:39 20:39	04:58 21:23	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45	07:09 16:40	07:59 16:04
5	08:18 16:16	07:46 17:06	06:50 17:57	06:40 19:50	05:37 20:41	04:57 21:24	04:57 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	08:00 16:04
6	08:17 16:17	07:44 17:08	06:48 17:59	06:38 19:52	05:35 20:42	04:56 21:24	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40	07:13 16:37	08:01 16:03
7	08:17 16:19	07:42 17:10	06:46 18:01	06:35 19:54	05:34 20:44	04:56 21:25	05:02 21:31	05:42 20:52	06:32 19:47	07:21 18:38	07:15 16:35	08:03 16:03
8	08:17 16:20	07:41 17:12	06:44 18:03	06:33 19:55	05:32 20:45	04:55 21:26	05:03 21:30	05:44 20:50	06:34 19:45	07:22 18:35	07:16 16:34	08:04 16:02
9	08:16 16:21	07:39 17:14	06:41 18:04	06:31 19:57	05:30 20:47	04:55 21:27	05:03 21:29	05:45 20:48	06:35 19:42	07:24 18:33	07:18 16:32	08:05 16:02
10	08:16 16:23	07:37 17:16	06:39 18:06	06:29 19:59	05:28 20:49	04:54 21:28	05:04 21:29	05:47 20:46	06:37 19:40	07:26 18:31	07:20 16:30	08:06 16:02
11	08:15 16:24	07:35 17:17	06:37 18:08	06:26 20:00	05:27 20:50	04:54 21:29	05:05 21:28	05:49 20:44	06:38 19:38	07:27 18:29	07:22 16:29	08:07 16:02
12	08:14 16:25	07:33 17:19	06:35 18:10	06:24 20:02	05:25 20:52	04:54 21:29	05:07 21:27	05:50 20:42	06:40 19:35	07:29 18:27	07:24 16:27	08:08 16:02
13	08:14 16:27	07:32 17:21	06:32 18:11	06:22 20:04	05:24 20:53	04:53 21:30	05:08 21:26	05:52 20:40	06:42 19:33	07:31 18:24	07:25 16:26	08:09 16:02
14	08:13 16:28	07:30 17:23	06:30 18:13	06:20 20:06	05:22 20:55	04:53 21:31	05:09 21:25	05:53 20:38	06:43 19:31	07:33 18:22	07:27 16:24	08:10 16:02
15	08:12 16:30	07:28 17:25	06:28 18:15	06:18 20:07	05:20 20:56	04:53 21:31	05:10 21:24	05:55 20:36	06:45 19:28	07:34 18:20	07:29 16:23	08:11 16:02
16	08:11 16:31	07:26 17:27	06:26 18:16	06:15 20:09	05:19 20:58	04:53 21:32	05:11 21:23	05:57 20:34	06:46 19:26	07:36 18:18	07:30 16:21	08:12 16:02
17	08:10 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 20:59	04:53 21:32	05:12 21:22	05:58 20:32	06:48 19:24	07:38 18:16	07:32 16:20	08:13 16:02
18	08:10 16:35	07:22 17:30	06:21 18:20	06:11 20:12	05:16 21:01	04:53 21:33	05:14 21:21	06:00 20:30	06:50 19:21	07:39 18:14	07:34 16:19	08:13 16:02
19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	05:15 21:02	04:53 21:33	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:12	07:36 16:18	08:14 16:02
20	08:08 16:38	07:18 17:34	06:17 18:23	06:07 20:16	05:13 21:04	04:53 21:33	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	07:37 16:16	08:15 16:03
21	08:06 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:33	05:17 21:18	06:05 20:24	06:54 19:14	07:45 18:07	07:39 16:15	08:15 16:03
22	08:05 16:41	07:14 17:38	06:12 18:27	06:03 20:19	05:11 21:07	04:53 21:34	05:19 21:16	06:06 20:22	06:56 19:12	07:46 18:05	07:41 16:14	08:16 16:04
23	08:04 16:43	07:12 17:39	06:10 18:28	06:01 20:21	05:09 21:08	04:53 21:34	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	07:42 16:13	08:16 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:22	05:08 21:09	04:54 21:34	05:21 21:14	06:09 20:18	06:59 19:07	07:50 18:01	07:44 16:12	08:17 16:05
25	08:02 16:46	07:08 17:43	06:05 18:32	05:57 20:24	05:07 21:11	04:54 21:34	05:23 21:12	06:11 20:16	07:01 19:05	06:52 18:59	07:45 16:11	08:17 16:05
26	08:00 16:48	07:05 17:45	06:03 18:33	05:55 20:26	05:06 21:12	04:54 21:34	05:24 21:11	06:13 20:14	07:03 19:03	06:53 18:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:03 17:47	06:00 18:35	05:53 20:27	05:05 21:13	04:55 21:34	05:26 21:10	06:14 20:11	07:04 19:01	06:55 18:55	07:49 16:09	08:18 16:07
28	07:58 16:52	07:01 17:48	05:58 18:37	05:51 20:29	05:04 21:15	04:55 21:34	05:27 21:08	06:16 20:09	07:06 18:58	06:57 18:53	07:50 16:08	08:18 16:08
29	07:56 16:54		06:56 19:39	05:49 20:31	05:03 21:16	04:56 21:34	05:29 21:07	06:17 20:07	07:07 18:56	06:59 18:51	07:52 16:07	08:18 16:08
30	07:55 16:55		06:54 19:40	05:47 20:32	05:02 21:17	04:56 21:34	05:30 21:05	06:19 20:05	07:09 18:54	07:00 18:49	07:53 16:07	08:18 16:09
31	07:53 16:57		06:51 19:42		05:01 21:18		05:32 21:03	06:21 20:03		07:02 16:48		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	497	501	453	381	332	267	245
astr.max.mögl.Beschattung												
Red.Sonnenscheinwahrsch.												
Reduktion Betriebsdauer												
Reduktion Windrichtung												
Gesamte Reduktion												
Met.wahrsch.Beschattung												

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende	(WEA mit letztem Schatten)
	Minuten mit Schatten		

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP08 - Feldrain 20, 06766 Bitterfeld-Wolfen (Gemengelage)

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:18 16:11	07:52 16:59	06:59 17:50	06:49 19:43	05:45 20:34	05:00 21:19	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51	07:04 16:46	07:54 16:06
2	08:18 16:12	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:20	04:57 21:33	05:34 21:00	06:24 19:58	07:12 18:49	07:06 16:44	07:56 16:05
3	08:18 16:14	07:49 17:02	06:55 17:54	06:44 19:47	05:41 20:37	04:58 21:21	04:58 21:32	05:36 20:58	06:25 19:56	07:14 18:47	07:07 16:42	07:57 16:04
4	08:18 16:15	07:47 17:04	06:52 17:55	06:42 19:49	05:39 20:39	04:57 21:22	04:59 21:32	05:37 20:57	06:27 19:53	07:16 18:44	07:09 16:40	07:59 16:04
5	08:18 16:16	07:45 17:06	06:50 17:57	06:40 19:50	05:37 20:40	04:57 21:23	04:57 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:38	08:00 16:03
6	08:17 16:17	07:44 17:08	06:48 17:59	06:37 19:52	05:35 20:42	04:56 21:24	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40	07:13 16:37	08:01 16:03
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8	08:16 16:20	07:40 17:12	06:44 18:02	06:33 19:55	05:32 20:45	04:55 21:26	05:02 21:30	05:44 20:50	06:33 19:44	07:22 18:35	07:16 16:33	08:04 16:02
9	08:16 16:21	07:39 17:14	06:41 18:04	06:31 19:57	05:30 20:47	04:54 21:27	05:03 21:29	05:45 20:48	06:35 19:42	07:24 18:33	07:18 16:32	08:05 16:02
10	08:15 16:22	07:37 17:15	06:39 18:06	06:29 19:59	05:28 20:49	04:54 21:28	05:04 21:28	05:47 20:46	06:37 19:40	07:26 18:31	07:20 16:30	08:06 16:02
11	08:15 16:24	07:35 17:17	06:37 18:08	06:26 20:00	05:27 20:50	04:54 21:29	05:05 21:28	05:48 20:44	06:38 19:37	07:27 18:29	07:22 16:29	08:07 16:02
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Sonnenscheinstunden	260	278	367	416	484	497	501	453	381	332	267	245
astr.max.mögl.Beschattung												
Red.Sonnenscheinwahrsch.												
Reduktion Betriebsdauer												
Reduktion Windrichtung												
Gesamte Reduktion												
Met.wahrsch.Beschattung												

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende	(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP09 - Thurländer Str. 1, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:18 16:11	07:52 16:59	06:59 17:50	06:49 19:43	05:45 20:34	05:00 21:19	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51	07:04 16:46	07:55 16:06
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31	07:53 16:57		06:51 19:42		05:01 21:18		05:31 21:03	06:21 20:02		07:02 16:47		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
astr.max.mögl.Beschattung												
Red.Sonnenscheinwahrsch.												
Reduktion Betriebsdauer												
Reduktion Windrichtung												
Gesamte Reduktion												
Met.wahrsch.Beschattung												

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende	(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP10 - Thurländer Str. 24, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
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26	08:00 16:48	07:05 17:45	06:03 18:33	05:54 20:26	05:06 21:12	04:54 21:34	05:24 21:11	06:12 20:13	07:02 19:03	06:53 16:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:03 17:46	06:00 18:35	05:52 20:27	05:04 21:13	04:55 21:34	05:25 21:10	06:14 20:11	07:04 19:00	06:55 16:55	07:49 16:09	08:18 16:07
28	07:58 16:52	07:01 17:48	05:58 18:37	05:50 20:29	05:03 21:15	04:55 21:34	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	07:50 16:08	08:18 16:07
29	07:56 16:53		06:56 19:38	05:48 20:31	05:02 21:16	04:56 21:34	05:28 21:07	06:17 20:07	07:07 18:56	06:59 16:51	07:52 16:07	08:18 16:08
30	07:55 16:55		06:53 19:40	05:46 20:32	05:01 21:17	04:56 21:34	05:30 21:05	06:19 20:05	07:09 18:54	07:00 16:49	07:53 16:06	08:18 16:09
31	07:53 16:57		06:51 19:42		05:01 21:18		05:31 21:03	06:21 20:02		07:02 16:47		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
astr.max.mögl.Beschattung												
Red.Sonnenscheinwahrsch.												
Reduktion Betriebsdauer												
Reduktion Windrichtung												
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Met.wahrsch.Beschattung												

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende	(WEA mit letztem Schatten)
	Minuten mit Schatten		

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP11 - Thurländer Str. 28, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
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2	08:18 16:12	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:20	04:57 21:33	05:34 21:00	06:24 19:58	07:12 18:49	07:06 16:44	07:56 16:05
3	08:18 16:14	07:49 17:02	06:55 17:54	06:44 19:47	05:41 20:37	04:58 21:22	04:58 21:33	05:36 20:58	06:25 19:56	07:14 18:47	07:08 16:42	07:57 16:04
4	08:18 16:15	07:47 17:04	06:52 17:55	06:42 19:49	05:39 20:39	04:57 21:23	04:59 21:32	05:37 20:57	06:27 19:54	07:16 18:44	07:09 16:40	07:59 16:04
5	08:18 16:16	07:46 17:06	06:50 17:57	06:40 19:50	05:37 20:41	04:57 21:24	04:57 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:38	08:00 16:03
6	08:17 16:17	07:44 17:08	06:48 17:59	06:37 19:52	05:35 20:42	04:56 21:24	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40	07:13 16:37	08:01 16:03
7	08:17 16:18	07:42 17:10	06:46 18:01	06:35 19:54	05:33 20:44	04:55 21:25	05:01 21:31	05:42 20:52	06:32 19:47	07:21 18:38	07:15 16:35	08:03 16:02
8	08:17 16:20	07:40 17:12	06:44 18:02	06:33 19:55	05:32 20:45	04:55 21:26	05:02 21:30	05:44 20:50	06:33 19:44	07:22 18:35	07:16 16:33	08:04 16:02
9	08:16 16:21	07:39 17:14	06:41 18:04	06:31 19:57	05:30 20:47	04:54 21:27	05:03 21:29	05:45 20:48	06:35 19:42	07:24 18:33	07:18 16:32	08:05 16:02
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15	08:12 16:30	07:28 17:25	06:28 18:15	06:17 20:07	05:20 20:56	04:53 21:31	05:10 21:24	05:55 20:36	06:45 19:28	07:34 18:20	07:29 16:23	08:11 16:01
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18	08:10 16:34	07:22 17:30	06:21 18:20	06:11 20:12	05:16 21:01	04:52 21:33	05:13 21:21	06:00 20:30	06:49 19:21	07:39 18:13	07:34 16:19	08:13 16:02
19	08:09 16:36	07:20 17:32	06:19 18:21	06:09 20:14	05:14 21:02	04:52 21:33	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:11	07:36 16:17	08:14 16:02
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21	08:06 16:39	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:33	05:17 21:18	06:04 20:24	06:54 19:14	07:45 18:07	07:39 16:15	08:15 16:03
22	08:05 16:41	07:14 17:37	06:12 18:27	06:03 20:19	05:10 21:07	04:53 21:34	05:19 21:16	06:06 20:22	06:56 19:12	07:46 18:05	07:41 16:14	08:16 16:03
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	Minuten mit Schatten		

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP12 - Zerbster Str. 17, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
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2	08:18 16:12	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:20	04:57 21:33	05:34 21:00	06:24 19:58	07:12 18:49	07:06 16:44	07:56 16:05
3	08:18 16:14	07:49 17:02	06:55 17:54	06:44 19:47	05:41 20:37	04:58 21:22	04:58 21:33	05:36 20:58	06:25 19:56	07:14 18:47	07:08 16:42	07:57 16:04
4	08:18 16:15	07:47 17:04	06:52 17:55	06:42 19:49	05:39 20:39	04:57 21:23	04:59 21:32	05:37 20:57	06:27 19:54	07:16 18:44	07:09 16:40	07:59 16:04
5	08:18 16:16	07:46 17:06	06:50 17:57	06:40 19:50	05:37 20:41	04:57 21:24	04:57 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:38	08:00 16:03
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24	08:03 16:45	07:10 17:41	06:07 18:30	05:58 20:22	05:08 21:09	04:53 21:34	05:21 21:14	06:09 20:18	06:59 19:07	07:50 18:01	07:44 16:12	08:17 16:05
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Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
astr.max.mögl.Beschattung												
Red.Sonnenscheinwahrsch.												
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	Minuten mit Schatten		

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung

Schattenrezeptor: IP13 - Dorfstraße 30, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
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3	08:18 16:14	07:49 17:02	06:55 17:54	06:44 19:47	05:41 20:37	04:58 21:22	04:58 21:33	05:36 20:59	06:25 19:56	07:14 18:47	07:08 16:42	07:57 16:04
4	08:18 16:15	07:47 17:04	06:53 17:55	06:42 19:49	05:39 20:39	04:57 21:23	04:59 21:32	05:37 20:57	06:27 19:54	07:16 18:44	07:09 16:40	07:59 16:04
5	08:18 16:16	07:46 17:06	06:50 17:57	06:40 19:50	05:37 20:41	04:57 21:24	04:57 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:38	08:00 16:03
6	08:17 16:17	07:44 17:08	06:48 17:59	06:38 19:52	05:35 20:42	04:56 21:25	05:00 21:31	05:41 20:53	06:30 19:49	07:19 18:40	07:13 16:37	08:01 16:03
7	08:17 16:18	07:42 17:10	06:46 18:01	06:35 19:54	05:33 20:44	04:55 21:26	05:01 21:31	05:42 20:52	06:32 19:47	07:21 18:38	07:15 16:35	08:03 16:02
8	08:17 16:20	07:41 17:12	06:44 18:02	06:33 19:55	05:32 20:46	04:55 21:26	05:02 21:30	05:44 20:50	06:33 19:44	07:22 18:35	07:16 16:33	08:04 16:02
9	08:16 16:21	07:39 17:14	06:41 18:04	06:31 19:57	05:30 20:47	04:54 21:27	05:03 21:29	05:45 20:48	06:35 19:42	07:24 18:33	07:18 16:32	08:05 16:02
10	08:16 16:22	07:37 17:15	06:39 18:06	06:29 19:59	05:28 20:49	04:54 21:28	05:04 21:29	05:47 20:46	06:37 19:40	07:26 18:31	07:20 16:30	08:06 16:02
11	08:15 16:24	07:35 17:17	06:37 18:08	06:26 20:00	05:27 20:50	04:54 21:29	05:05 21:28	05:48 20:44	06:38 19:38	07:27 18:29	07:22 16:29	08:07 16:01
12	08:14 16:25	07:33 17:19	06:35 18:09	06:24 20:02	05:25 20:52	04:53 21:29	05:06 21:27	05:50 20:42	06:40 19:35	07:29 18:26	07:24 16:27	08:08 16:01
13	08:14 16:27	07:32 17:21	06:32 18:11	06:22 20:04	05:23 20:53	04:53 21:30	05:07 21:26	05:52 20:40	06:41 19:33	07:31 18:24	07:25 16:26	08:09 16:01
14	08:13 16:28	07:30 17:23	06:30 18:13	06:20 20:06	05:22 20:55	04:53 21:31	05:09 21:25	05:53 20:38	06:43 19:31	07:33 18:22	07:27 16:24	08:10 16:01
15	08:12 16:30	07:28 17:25	06:28 18:15	06:18 20:07	05:20 20:57	04:53 21:31	05:10 21:24	05:55 20:36	06:45 19:28	07:34 18:20	07:29 16:23	08:11 16:01
16	08:11 16:31	07:26 17:26	06:26 18:16	06:15 20:09	05:19 20:58	04:52 21:32	05:11 21:23	05:56 20:34	06:46 19:26	07:36 18:18	07:31 16:21	08:12 16:01
17	08:11 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 21:00	04:52 21:32	05:12 21:22	05:58 20:32	06:48 19:24	07:38 18:16	07:32 16:20	08:13 16:02
18	08:10 16:34	07:22 17:30	06:21 18:20	06:11 20:12	05:16 21:01	04:52 21:33	05:13 21:21	06:00 20:30	06:50 19:21	07:39 18:13	07:34 16:19	08:14 16:02
19	08:09 16:36	07:20 17:32	06:19 18:21	06:09 20:14	05:14 21:02	04:52 21:33	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:11	07:36 16:17	08:14 16:02
20	08:08 16:38	07:18 17:34	06:16 18:23	06:07 20:16	05:13 21:04	04:52 21:33	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	07:37 16:16	08:15 16:03
21	08:07 16:39	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34	05:17 21:18	06:04 20:24	06:54 19:14	07:45 18:07	07:39 16:15	08:15 16:03
22	08:05 16:41	07:14 17:37	06:12 18:27	06:03 20:19	05:10 21:07	04:53 21:34	05:19 21:16	06:06 20:22	06:56 19:12	07:46 18:05	07:41 16:14	08:16 16:03
23	08:04 16:43	07:12 17:39	06:10 18:28	06:00 20:21	05:09 21:08	04:53 21:34	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	07:42 16:13	08:17 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:58 20:22	05:08 21:10	04:53 21:34	05:21 21:14	06:09 20:18	06:59 19:07	07:50 18:01	07:44 16:12	08:17 16:05
25	08:02 16:46	07:08 17:43	06:05 18:32	05:56 20:24	05:07 21:11	04:54 21:34	05:23 21:12	06:11 20:16	07:01 19:05	06:52 16:59	07:46 16:11	08:17 16:05
26	08:01 16:48	07:05 17:45	06:03 18:33	05:54 20:26	05:06 21:12	04:54 21:34	05:24 21:11	06:12 20:14	07:02 19:03	06:53 16:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:03 17:46	06:00 18:35	05:52 20:27	05:04 21:13	04:54 21:34	05:25 21:10	06:14 20:11	07:04 19:00	06:55 16:55	07:49 16:09	08:18 16:07
28	07:58 16:52	07:01 17:48	05:58 18:37	05:50 20:29	05:03 21:15	04:55 21:34	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	07:50 16:08	08:18 16:07
29	07:56 16:53		06:56 19:38	05:48 20:31	05:02 21:16	04:56 21:34	05:28 21:07	06:17 20:07	07:07 18:56	06:59 16:51	07:52 16:07	08:18 16:08
30	07:55 16:55		06:53 19:40	05:46 20:32	05:01 21:17	04:56 21:34	05:30 21:05	06:19 20:05	07:09 18:54	07:00 16:49	07:53 16:06	08:18 16:09
31	07:54 16:57		06:51 19:42		05:01 21:18		05:31 21:03	06:21 20:03		07:02 16:47		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
astr.max.mögl.Beschattung												
Red.Sonnenscheinwahrsch.												
Reduktion Betriebsdauer												
Reduktion Windrichtung												
Gesamte Reduktion												
Met.wahrsch.Beschattung												

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende	(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP14 - Holländer Mühle 1, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:18	07:52	06:59	06:49	05:45	05:00	04:57	05:33	06:22	07:11	07:04	07:55
	16:11	16:59	17:50	19:44	20:34	21:19	21:33	21:02	20:00	18:51	16:46	16:06
2	08:18	07:51	06:57	06:47	05:43	04:59	04:58	05:35	06:24	07:12	07:06	07:56
	16:13	17:01	17:52	19:45	20:36	21:21	21:33	21:00	19:58	18:49	16:44	16:05
3	08:18	07:49	06:55	06:44	05:41	04:58	04:58	05:36	06:25	07:14	07:08	07:57
	16:14	17:03	17:54	19:47	20:37	21:22	21:33	20:59	19:56	18:47	16:42	16:04
4	08:18	07:47	06:53	06:42	05:39	04:57	04:59	05:38	06:27	07:16	07:09	07:59
	16:15	17:04	17:55	19:49	20:39	21:23	21:32	20:57	19:54	18:44	16:40	16:04
5	08:18	07:46	06:50	06:40	05:37	04:57	05:00	05:39	06:29	07:17	07:11	08:00
	16:16	17:06	17:57	19:50	20:41	21:24	21:32	20:55	19:51	18:42	16:39	16:03
6	08:18	07:44	06:48	06:38	05:35	04:56	05:01	05:41	06:30	07:19	07:13	08:01
	16:17	17:08	17:59	19:52	20:42	21:25	21:31	20:53	19:49	18:40	16:37	16:03
7	08:17	07:42	06:46	06:35	05:34	04:56	05:01	05:42	06:32	07:21	07:15	08:03
	16:18	17:10	18:01	19:54	20:44	21:26	21:31	20:52	19:47	18:38	16:35	16:03
8	08:17	07:41	06:44	06:33	05:32	04:55	05:02	05:44	06:34	07:22	07:17	08:04
	16:20	17:12	18:03	19:55	20:46	21:26	21:30	20:50	19:45	18:35	16:33	16:02
9	08:16	07:39	06:41	06:31	05:30	04:55	05:03	05:45	06:35	07:24	07:18	08:05
	16:21	17:14	18:04	19:57	20:47	21:27	21:29	20:48	19:42	18:33	16:32	16:02
10	08:16	07:37	06:39	06:29	05:28	04:54	05:04	05:47	06:37	07:26	07:20	08:06
	16:22	17:15	18:06	19:59	20:49	21:28	21:29	20:46	19:40	18:31	16:30	16:02
11	08:15	07:35	06:37	06:26	05:27	04:54	05:05	05:49	06:38	07:27	07:22	08:07
	16:24	17:17	18:08	20:01	20:50	21:29	21:28	20:44	19:38	18:29	16:29	16:02
12	08:15	07:33	06:35	06:24	05:25	04:53	05:06	05:50	06:40	07:29	07:24	08:08
	16:25	17:19	18:09	20:02	20:52	21:29	21:27	20:42	19:35	18:27	16:27	16:01
13	08:14	07:32	06:32	06:22	05:23	04:53	05:08	05:52	06:42	07:31	07:25	08:09
	16:27	17:21	18:11	20:04	20:53	21:30	21:26	20:40	19:33	18:24	16:26	16:01
14	08:13	07:30	06:30	06:20	05:22	04:53	05:09	05:53	06:43	07:33	07:27	08:10
	16:28	17:23	18:13	20:06	20:55	21:31	21:25	20:38	19:31	18:22	16:24	16:01
15	08:12	07:28	06:28	06:18	05:20	04:53	05:10	05:55	06:45	07:34	07:29	08:11
	16:30	17:25	18:15	20:07	20:57	21:31	21:24	20:36	19:28	18:20	16:23	16:01
16	08:11	07:26	06:26	06:15	05:19	04:53	05:11	05:56	06:46	07:36	07:31	08:12
	16:31	17:27	18:16	20:09	20:58	21:32	21:23	20:34	19:26	18:18	16:21	16:02
17	08:11	07:24	06:23	06:13	05:17	04:53	05:12	05:58	06:48	07:38	07:32	08:13
	16:33	17:28	18:18	20:11	21:00	21:32	21:22	20:32	19:24	18:16	16:20	16:02
18	08:10	07:22	06:21	06:11	05:16	04:53	05:13	06:00	06:50	07:39	07:34	08:14
	16:35	17:30	18:20	20:12	21:01	21:33	21:21	20:30	19:21	18:14	16:19	16:02
19	08:09	07:20	06:19	06:09	05:14	04:53	05:15	06:01	06:51	07:41	07:36	08:14
	16:36	17:32	18:22	20:14	21:03	21:33	21:20	20:28	19:19	18:11	16:17	16:02
20	08:08	07:18	06:17	06:07	05:13	04:53	05:16	06:03	06:53	07:43	07:37	08:15
	16:38	17:34	18:23	20:16	21:04	21:33	21:19	20:26	19:17	18:09	16:16	16:03
21	08:07	07:16	06:14	06:05	05:12	04:53	05:17	06:05	06:54	07:45	07:39	08:15
	16:40	17:36	18:25	20:17	21:05	21:34	21:18	20:24	19:14	18:07	16:15	16:03
22	08:05	07:14	06:12	06:03	05:10	04:53	05:19	06:06	06:56	07:46	07:41	08:16
	16:41	17:38	18:27	20:19	21:07	21:34	21:16	20:22	19:12	18:05	16:14	16:04
23	08:04	07:12	06:10	06:01	05:09	04:53	05:20	06:08	06:58	07:48	07:42	08:17
	16:43	17:39	18:28	20:21	21:08	21:34	21:15	20:20	19:10	18:03	16:13	16:04
24	08:03	07:10	06:07	05:59	05:08	04:53	05:21	06:09	06:59	07:50	07:44	08:17
	16:45	17:41	18:30	20:22	21:10	21:34	21:14	20:18	19:07	18:01	16:12	16:05
25	08:02	07:08	06:05	05:56	05:07	04:54	05:23	06:11	07:01	06:52	07:46	08:17
	16:46	17:43	18:32	20:24	21:11	21:34	21:12	20:16	19:05	16:59	16:11	16:05
26	08:01	07:06	06:03	05:54	05:06	04:54	05:24	06:13	07:03	06:53	07:47	08:18
	16:48	17:45	18:33	20:26	21:12	21:34	21:11	20:14	19:03	16:57	16:10	16:06
27	07:59	07:03	06:00	05:52	05:05	04:55	05:26	06:14	07:04	06:55	07:49	08:18
	16:50	17:47	18:35	20:27	21:13	21:34	21:10	20:11	19:01	16:55	16:09	16:07
28	07:58	07:01	05:58	05:50	05:04	04:55	05:27	06:16	07:06	06:57	07:50	08:18
	16:52	17:48	18:37	20:29	21:15	21:34	21:08	20:09	18:58	16:53	16:08	16:08
29	07:56		06:56	05:49	05:03	04:56	05:29	06:17	07:07	06:59	07:52	08:18
	16:53		19:39	20:31	21:16	21:34	21:07	20:07	18:56	16:51	16:07	16:08
30	07:55		06:54	05:47	05:02	04:56	05:30	06:19	07:09	07:01	07:53	08:18
	16:55		19:40	20:32	21:17	21:34	21:05	20:05	18:54	16:49	16:06	16:09
31	07:54		06:51		05:01		05:31	06:21		07:02		08:18
	16:57		19:42		21:18		21:04	20:03		16:48		16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
astr.max.mögl.Beschattung												
Red.Sonnenscheinwahrsch.												
Reduktion Betriebsdauer												
Reduktion Windrichtung												
Gesamte Reduktion												
Met.wahrsch.Beschattung												

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
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Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP15 - Thurländer Dorfstraße 23, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar		Februar		März		April		Mai		Juni	
1	08:19	15:22 (WEA03)	07:52	15:32 (WEA02)	06:59	16:39 (WEA01)	06:49	05:45	05:00		
	16:12	14	15:36 (WEA03)	16:59	36	16:08 (WEA02)	17:50	24	17:03 (WEA01)	19:44	20:34
2	08:18	15:22 (WEA03)	07:51	15:31 (WEA02)	06:57	16:40 (WEA01)	06:47	05:43	04:59		
	16:13	15	15:37 (WEA03)	17:01	37	16:08 (WEA02)	17:52	22	17:02 (WEA01)	19:45	20:36
3	08:18	15:22 (WEA03)	07:49	15:32 (WEA02)	06:55	16:41 (WEA01)	06:44	05:41	04:58		
	16:14	16	15:38 (WEA03)	17:03	38	16:10 (WEA02)	17:54	20	17:01 (WEA01)	19:47	20:37
4	08:18	15:22 (WEA03)	07:47	15:32 (WEA02)	06:53	16:43 (WEA01)	06:42	05:39	04:57		
	16:15	17	15:39 (WEA03)	17:04	38	16:10 (WEA02)	17:56	16	16:59 (WEA01)	19:49	20:39
5	08:18	15:21 (WEA03)	07:46	15:31 (WEA02)	06:50	16:46 (WEA01)	06:40	05:37	04:57		
	16:16	19	15:40 (WEA03)	17:06	39	16:10 (WEA02)	17:57	10	16:56 (WEA01)	19:50	20:41
6	08:18	15:22 (WEA03)	07:44	15:31 (WEA02)	06:48		06:38	05:35	04:56		
	16:17	19	15:41 (WEA03)	17:08	39	16:10 (WEA02)	17:59	19:52	20:42	21:25	
7	08:17	15:21 (WEA03)	07:42	15:32 (WEA02)	06:46		06:35	05:34	04:56		
	16:18	21	15:42 (WEA03)	17:10	39	16:11 (WEA02)	18:01	19:54	20:44	21:26	
8	08:17	15:22 (WEA03)	07:41	15:32 (WEA02)	06:44		06:33	05:32	04:55		
	16:20	21	15:43 (WEA03)	17:12	38	16:10 (WEA02)	18:03	19:56	20:46	21:26	
9	08:16	15:21 (WEA03)	07:39	15:32 (WEA02)	06:42		06:31	05:30	04:55		
	16:21	23	15:44 (WEA03)	17:14	38	16:10 (WEA02)	18:04	19:57	20:47	21:27	
10	08:16	15:21 (WEA03)	07:37	15:33 (WEA02)	06:39		06:29	05:28	04:54		
	16:23	23	15:44 (WEA03)	17:16	37	16:10 (WEA02)	18:06	19:59	20:49	21:28	
11	08:15	15:22 (WEA03)	07:35	15:33 (WEA02)	06:37		06:26	05:27	04:54		
	16:24	24	15:46 (WEA03)	17:17	36	16:09 (WEA02)	18:08	20:01	20:50	21:29	
12	08:15	15:21 (WEA03)	07:33	15:34 (WEA02)	06:35		06:24	05:25	04:53		
	16:25	25	15:46 (WEA03)	17:19	35	16:09 (WEA02)	18:10	20:02	20:52	21:30	
13	08:14	15:21 (WEA03)	07:32	15:34 (WEA02)	06:33		06:22	05:24	04:53		
	16:27	26	15:47 (WEA03)	17:21	34	16:08 (WEA02)	18:11	20:04	20:54	21:30	
14	08:13	15:21 (WEA03)	07:30	15:35 (WEA02)	06:30		06:20	05:22	04:53		
	16:28	26	15:47 (WEA03)	17:23	32	16:07 (WEA02)	18:13	20:06	20:55	21:31	
15	08:12	15:21 (WEA03)	07:28	15:36 (WEA02)	06:28		06:18	05:20	04:53		
	16:30	27	15:48 (WEA03)	17:25	30	16:06 (WEA02)	18:15	20:07	20:57	21:31	
16	08:12	15:22 (WEA03)	07:26	15:37 (WEA02)	06:26		06:15	05:19	04:53		
	16:31	27	15:49 (WEA03)	17:27	33	16:55 (WEA01)	18:16	20:09	20:58	21:32	
17	08:11	15:22 (WEA03)	07:24	15:39 (WEA02)	06:23		06:13	05:17	04:53		
	16:33	27	15:49 (WEA03)	17:28	38	16:59 (WEA01)	18:18	20:11	21:00	21:32	
18	08:10	15:22 (WEA03)	07:22	15:41 (WEA02)	06:21		06:11	05:16	04:53		
	16:35	28	15:50 (WEA03)	17:30	38	17:01 (WEA01)	18:20	20:12	21:01	21:33	
19	08:09	15:23 (WEA03)	07:20	15:44 (WEA02)	06:19		06:09	05:15	04:53		
	16:36	27	15:50 (WEA03)	17:32	36	17:03 (WEA01)	18:22	20:14	21:03	21:33	
20	08:08	15:23 (WEA03)	07:18	15:49 (WEA02)	06:17		06:07	05:13	04:53		
	16:38	28	15:51 (WEA03)	17:34	28	17:04 (WEA01)	18:23	20:16	21:04	21:33	
21	08:07	15:23 (WEA03)	07:16	16:41 (WEA01)	06:14		06:05	05:12	04:53		
	16:40	30	15:53 (WEA02)	17:36	24	17:05 (WEA01)	18:25	20:17	21:05	21:34	
22	08:06	15:24 (WEA03)	07:14	16:40 (WEA01)	06:12		06:03	05:11	04:53		
	16:41	32	15:56 (WEA02)	17:38	25	17:05 (WEA01)	18:27	20:19	21:07	21:34	
23	08:04	15:24 (WEA03)	07:12	16:40 (WEA01)	06:10		06:01	05:09	04:53		
	16:43	34	15:58 (WEA02)	17:39	26	17:06 (WEA01)	18:28	20:21	21:08	21:34	
24	08:03	15:24 (WEA03)	07:10	16:38 (WEA01)	06:07		05:59	05:08	04:54		
	16:45	36	16:00 (WEA02)	17:41	27	17:05 (WEA01)	18:30	20:22	21:10	21:34	
25	08:02	15:25 (WEA03)	07:08	16:38 (WEA01)	06:05		05:57	05:07	04:54		
	16:46	36	16:01 (WEA02)	17:43	27	17:05 (WEA01)	18:32	20:24	21:11	21:34	
26	08:01	15:27 (WEA03)	07:06	16:39 (WEA01)	06:03		05:55	05:06	04:54		
	16:48	36	16:03 (WEA02)	17:45	26	17:05 (WEA01)	18:34	20:26	21:12	21:34	
27	07:59	15:27 (WEA03)	07:03	16:39 (WEA01)	06:00		05:53	05:05	04:55		
	16:50	37	16:04 (WEA02)	17:47	26	17:05 (WEA01)	18:35	20:27	21:14	21:34	
28	07:58	15:29 (WEA03)	07:01	16:39 (WEA01)	05:58		05:51	05:04	04:55		
	16:52	37	16:06 (WEA02)	17:48	26	17:05 (WEA01)	18:37	20:29	21:15	21:34	
29	07:57	15:29 (WEA03)			06:56		05:49	05:03	04:56		
	16:54	37	16:06 (WEA02)		19:39		20:31	21:16	21:34		
30	07:55	15:31 (WEA03)			06:54		05:47	05:02	04:56		
	16:55	35	16:06 (WEA02)		19:40		20:32	21:17	21:34		
31	07:54	15:33 (WEA03)			06:51			05:01			
	16:57	35	16:08 (WEA02)		19:42			21:18			
Sonnenscheinstunden	260		278		367		416	484	498		
astr.max.mögl.Beschattung	838		926		92						
Red.Sonnenscheinwahrsch.	0,19		0,26		0,33						
Reduktion Betriebsdauer	0,98		0,98		0,98						
Reduktion Windrichtung	0,68		0,67		0,66						
Gesamte Reduktion	0,12		0,17		0,21						
Met.wahrsch.Beschattung	104		160		20						

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende
			(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP15 - Thurländer Dorfstraße 23, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober		November		Dezember
1	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51		07:04 16:46	15:02 (WEA02) 38 15:40 (WEA02)	07:55 16:06 24 15:28 (WEA03)
2	04:58 21:33	05:35 21:00	06:24 19:58	07:12 18:49		07:06 16:44	15:02 (WEA02) 38 15:40 (WEA02)	07:56 16:05 23 15:27 (WEA03)
3	04:58 21:33	05:36 20:59	06:26 19:56	07:14 18:47		07:08 16:42	15:02 (WEA02) 38 15:40 (WEA02)	07:58 16:05 23 15:28 (WEA03)
4	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45		07:09 16:40	15:02 (WEA02) 38 15:40 (WEA02)	07:59 16:04 21 15:27 (WEA03)
5	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42		07:11 16:39	15:02 (WEA02) 38 15:40 (WEA02)	08:00 16:03 21 15:27 (WEA03)
6	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40		07:13 16:37	15:01 (WEA02) 38 15:39 (WEA02)	08:01 16:03 19 15:27 (WEA03)
7	05:02 21:31	05:42 20:52	06:32 19:47	07:21 18:38		07:15 16:35	15:01 (WEA02) 38 15:39 (WEA02)	08:03 16:03 19 15:27 (WEA03)
8	05:02 21:30	05:44 20:50	06:34 19:45	07:22 18:36	17:24 (WEA01) 5 17:29 (WEA01)	07:17 16:34	15:02 (WEA02) 37 15:39 (WEA02)	08:04 16:02 18 15:27 (WEA03)
9	05:03 21:30	05:45 20:48	06:35 19:42	07:24 18:33	17:19 (WEA01) 13 17:32 (WEA01)	07:18 16:32	15:02 (WEA02) 37 15:39 (WEA02)	08:05 16:02 16 15:27 (WEA03)
10	05:04 21:29	05:47 20:46	06:37 19:40	07:26 18:31	17:16 (WEA01) 18 17:34 (WEA01)	07:20 16:30	15:03 (WEA02) 36 15:39 (WEA02)	08:06 16:02 15 15:27 (WEA03)
11	05:05 21:28	05:49 20:44	06:38 19:38	07:28 18:29	17:15 (WEA01) 21 17:36 (WEA01)	07:22 16:29	15:03 (WEA02) 36 15:39 (WEA02)	08:07 16:02 15 15:27 (WEA03)
12	05:06 21:27	05:50 20:42	06:40 19:35	07:29 18:27	17:14 (WEA01) 23 17:37 (WEA01)	07:24 16:27	15:02 (WEA03) 36 15:38 (WEA02)	08:08 16:02 13 15:26 (WEA03)
13	05:08 21:26	05:52 20:40	06:42 19:33	07:31 18:24	17:12 (WEA01) 24 17:36 (WEA01)	07:25 16:26	15:01 (WEA03) 37 15:38 (WEA02)	08:09 16:01 12 15:26 (WEA03)
14	05:09 21:25	05:53 20:38	06:43 19:31	07:33 18:22	17:11 (WEA01) 26 17:37 (WEA01)	07:27 16:24	15:00 (WEA03) 37 15:37 (WEA02)	08:10 16:01 10 15:26 (WEA03)
15	05:10 21:24	05:55 20:37	06:45 19:28	07:34 18:20	17:11 (WEA01) 26 17:37 (WEA01)	07:29 16:23	15:00 (WEA03) 37 15:37 (WEA02)	08:11 16:02 9 15:26 (WEA03)
16	05:11 21:23	05:57 20:35	06:46 19:26	07:36 18:18	17:11 (WEA01) 26 17:37 (WEA01)	07:31 16:21	15:00 (WEA03) 36 15:36 (WEA02)	08:12 16:02 8 15:26 (WEA03)
17	05:12 21:22	05:58 20:33	06:48 19:24	07:38 18:16	17:11 (WEA01) 26 17:37 (WEA01)	07:32 16:20	14:58 (WEA03) 36 15:34 (WEA02)	08:13 16:02 7 15:25 (WEA03)
18	05:13 21:21	06:00 20:30	06:50 19:21	07:39 18:14	17:10 (WEA01) 26 17:36 (WEA01)	07:34 16:19	14:58 (WEA03) 35 15:33 (WEA02)	08:14 16:02 5 15:25 (WEA03)
19	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:12	17:10 (WEA01) 26 17:36 (WEA01)	07:36 16:17	14:58 (WEA03) 34 15:32 (WEA02)	08:14 16:02 4 15:25 (WEA03)
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	17:10 (WEA01) 25 17:35 (WEA01)	07:37 16:16	14:59 (WEA03) 32 15:31 (WEA02)	08:15 16:03 3 15:25 (WEA03)
21	05:17 21:18	06:05 20:24	06:54 19:15	07:45 18:07	17:11 (WEA01) 24 17:35 (WEA01)	07:39 16:15	14:59 (WEA03) 30 15:29 (WEA02)	08:16 16:03 2 15:25 (WEA03)
22	05:19 21:17	06:06 20:22	06:56 19:12	07:46 18:05	16:17 (WEA02) 32 17:34 (WEA01)	07:41 16:14	14:59 (WEA03) 28 15:27 (WEA03)	08:16 16:04 2 15:25 (WEA03)
23	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	16:13 (WEA02) 38 17:33 (WEA01)	07:42 16:13	14:59 (WEA03) 27 15:26 (WEA03)	08:17 16:04 2 15:26 (WEA03)
24	05:21 21:14	06:09 20:18	06:59 19:08	07:50 18:01	16:11 (WEA02) 38 17:31 (WEA01)	07:44 16:12	14:59 (WEA03) 28 15:27 (WEA03)	08:17 16:05 4 15:27 (WEA03)
25	05:23 21:13	06:11 20:16	07:01 19:05	06:52 16:59	15:08 (WEA02) 38 16:28 (WEA01)	07:46 16:11	15:00 (WEA03) 27 15:27 (WEA03)	08:17 16:05 5 15:28 (WEA03)
26	05:24 21:11	06:13 20:14	07:03 19:03	06:53 16:57	15:07 (WEA02) 28 15:35 (WEA02)	07:47 16:10	15:01 (WEA03) 27 15:28 (WEA03)	08:18 16:06 7 15:30 (WEA03)
27	05:26 21:10	06:14 20:11	07:04 19:01	06:55 16:55	15:05 (WEA02) 31 15:36 (WEA02)	07:49 16:09	15:01 (WEA03) 26 15:27 (WEA03)	08:18 16:07 8 15:31 (WEA03)
28	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	15:04 (WEA02) 33 15:37 (WEA02)	07:50 16:08	15:01 (WEA03) 27 15:28 (WEA03)	08:18 16:08 9 15:32 (WEA03)
29	05:29 21:07	06:17 20:07	07:08 18:56	06:59 16:51	15:04 (WEA02) 34 15:38 (WEA02)	07:52 16:07	15:02 (WEA03) 26 15:28 (WEA03)	08:18 16:08 10 15:33 (WEA03)
30	05:30 21:05	06:19 20:05	07:09 18:54	07:01 16:49	15:03 (WEA02) 36 15:39 (WEA02)	07:53 16:06	15:03 (WEA03) 24 15:27 (WEA03)	08:18 16:09 12 15:34 (WEA03)
31	05:32 21:04	06:21 20:03		07:02 16:48	15:03 (WEA02) 36 15:39 (WEA02)			08:19 16:10 13 15:35 (WEA03)
Sonnenscheinstunden	501	453	381	332		267		245
astr.max.mögl.Beschattung				653		1002		359
Red.Sonnenscheinwahrsch.				0,35		0,21		0,16
Reduktion Betriebsdauer				0,98		0,98		0,98
Reduktion Windrichtung				0,67		0,68		0,68
Gesamte Reduktion				0,23		0,14		0,11
Met.wahrsch.Beschattung				150		138		39

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP16 - Thurländer Lindenstrasse 15, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar		Februar		März		April	Mai	Juni
1	08:19	14:37 (WEA02)	07:52	22	16:05 (WEA01)	06:59	06:49	05:45	05:00
	16:12	35	15:12 (WEA02)	16:59	16:27 (WEA01)	17:50	19:44	20:34	21:20
2	08:18	14:37 (WEA02)	07:51	23	16:04 (WEA01)	06:57	06:47	05:43	04:59
	16:13	35	15:12 (WEA02)	17:01	16:27 (WEA01)	17:52	19:45	20:36	21:21
3	08:18	14:37 (WEA02)	07:49	25	16:04 (WEA01)	06:55	06:44	05:41	04:58
	16:14	35	15:12 (WEA02)	17:03	16:29 (WEA01)	17:54	19:47	20:37	21:22
4	08:18	14:38 (WEA02)	07:47	25	16:04 (WEA01)	06:53	06:42	05:39	04:57
	16:15	35	15:13 (WEA02)	17:04	16:29 (WEA01)	17:56	19:49	20:39	21:23
5	08:18	14:38 (WEA02)	07:46	26	16:03 (WEA01)	06:50	06:40	05:37	04:57
	16:16	35	15:13 (WEA02)	17:06	16:29 (WEA01)	17:57	19:50	20:41	21:24
6	08:18	14:39 (WEA02)	07:44	26	16:03 (WEA01)	06:48	06:38	05:35	04:56
	16:17	35	15:14 (WEA02)	17:08	16:29 (WEA01)	17:59	19:52	20:42	21:25
7	08:17	14:39 (WEA02)	07:42	26	16:04 (WEA01)	06:46	06:35	05:34	04:56
	16:18	35	15:14 (WEA02)	17:10	16:30 (WEA01)	18:01	19:54	20:44	21:26
8	08:17	14:40 (WEA02)	07:41	26	16:04 (WEA01)	06:44	06:33	05:32	04:55
	16:20	35	15:15 (WEA02)	17:12	16:30 (WEA01)	18:03	19:56	20:46	21:26
9	08:16	14:40 (WEA02)	07:39	26	16:04 (WEA01)	06:42	06:31	05:30	04:55
	16:21	35	15:15 (WEA02)	17:14	16:30 (WEA01)	18:04	19:57	20:47	21:27
10	08:16	14:40 (WEA02)	07:37	26	16:04 (WEA01)	06:39	06:29	05:28	04:54
	16:22	35	15:15 (WEA02)	17:16	16:30 (WEA01)	18:06	19:59	20:49	21:28
11	08:15	14:41 (WEA02)	07:35	24	16:05 (WEA01)	06:37	06:26	05:27	04:54
	16:24	35	15:16 (WEA02)	17:17	16:29 (WEA01)	18:08	20:01	20:50	21:29
12	08:15	14:42 (WEA02)	07:33	22	16:06 (WEA01)	06:35	06:24	05:25	04:53
	16:25	34	15:16 (WEA02)	17:19	16:28 (WEA01)	18:10	20:02	20:52	21:30
13	08:14	14:42 (WEA02)	07:32	20	16:07 (WEA01)	06:33	06:22	05:24	04:53
	16:27	35	15:17 (WEA02)	17:21	16:27 (WEA01)	18:11	20:04	20:54	21:30
14	08:13	14:42 (WEA02)	07:30	18	16:08 (WEA01)	06:30	06:20	05:22	04:53
	16:28	35	15:17 (WEA02)	17:23	16:26 (WEA01)	18:13	20:06	20:55	21:31
15	08:12	14:43 (WEA02)	07:28	15	16:09 (WEA01)	06:28	06:18	05:20	04:53
	16:30	34	15:17 (WEA02)	17:25	16:24 (WEA01)	18:15	20:07	20:57	21:31
16	08:12	14:44 (WEA02)	07:26	10	16:12 (WEA01)	06:26	06:15	05:19	04:53
	16:31	33	15:17 (WEA02)	17:27	16:22 (WEA01)	18:16	20:09	20:58	21:32
17	08:11	14:44 (WEA02)	07:24			06:23	06:13	05:17	04:53
	16:33	33	15:17 (WEA02)	17:28		18:18	20:11	21:00	21:32
18	08:10	14:45 (WEA02)	07:22			06:21	06:11	05:16	04:53
	16:35	32	15:17 (WEA02)	17:30		18:20	20:12	21:01	21:33
19	08:09	14:46 (WEA02)	07:20			06:19	06:09	05:15	04:53
	16:36	31	15:17 (WEA02)	17:32		18:22	20:14	21:03	21:33
20	08:08	14:47 (WEA02)	07:18			06:17	06:07	05:13	04:53
	16:38	30	15:17 (WEA02)	17:34		18:23	20:16	21:04	21:33
21	08:07	14:47 (WEA02)	07:16			06:14	06:05	05:12	04:53
	16:40	29	15:16 (WEA02)	17:36		18:25	20:17	21:05	21:34
22	08:06	14:49 (WEA02)	07:14			06:12	06:03	05:11	04:53
	16:41	27	15:16 (WEA02)	17:38		18:27	20:19	21:07	21:34
23	08:04	14:50 (WEA02)	07:12			06:10	06:01	05:09	04:53
	16:43	26	15:16 (WEA02)	17:39		18:28	20:21	21:08	21:34
24	08:03	14:51 (WEA02)	07:10			06:07	05:59	05:08	04:54
	16:45	23	15:14 (WEA02)	17:41		18:30	20:22	21:10	21:34
25	08:02	14:53 (WEA02)	07:08			06:05	05:57	05:07	04:54
	16:46	21	15:14 (WEA02)	17:43		18:32	20:24	21:11	21:34
26	08:01	14:56 (WEA02)	07:06			06:03	05:55	05:06	04:54
	16:48	17	15:13 (WEA02)	17:45		18:34	20:26	21:12	21:34
27	07:59	14:58 (WEA02)	07:03			06:00	05:53	05:05	04:55
	16:50	12	15:10 (WEA02)	17:47		18:35	20:27	21:14	21:34
28	07:58	16:11 (WEA01)	07:01			05:58	05:51	05:04	04:55
	16:52	10	16:21 (WEA01)	17:48		18:37	20:29	21:15	21:34
29	07:57	16:08 (WEA01)				06:56	05:49	05:03	04:56
	16:54	15	16:23 (WEA01)			19:39	20:31	21:16	21:34
30	07:55	16:07 (WEA01)				06:54	05:47	05:02	04:56
	16:55	17	16:24 (WEA01)			19:40	20:32	21:17	21:34
31	07:54	16:06 (WEA01)				06:51		05:01	
	16:57	20	16:26 (WEA01)			19:42		21:18	
Sonnenscheinstunden	260		278			367	416	484	498
astr.max.mögl.Beschattung	899		360						
Red.Sonnenscheinwahrsch.	0,19		0,26						
Reduktion Betriebsdauer	0,98		0,98						
Reduktion Windrichtung	0,69		0,68						
Gesamte Reduktion	0,13		0,17						
Met.wahrsch.Beschattung	112		63						

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
	Minuten mit Schatten	

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP16 - Thurländer Lindenstrasse 15, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli	August	September	Oktober		November		Dezember			
1	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51		07:04 16:46	25	15:34 (WEA01) 15:59 (WEA01)	07:55 16:06	35	14:23 (WEA02) 14:58 (WEA02)
2	04:58 21:33	05:35 21:00	06:24 19:58	07:12 18:49		07:06 16:44	26	15:34 (WEA01) 16:00 (WEA01)	07:56 16:05	35	14:23 (WEA02) 14:58 (WEA02)
3	04:58 21:33	05:36 20:59	06:26 19:56	07:14 18:47		07:08 16:42	26	15:34 (WEA01) 16:00 (WEA01)	07:58 16:05	35	14:24 (WEA02) 14:59 (WEA02)
4	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45		07:09 16:40	26	15:34 (WEA01) 16:00 (WEA01)	07:59 16:04	35	14:24 (WEA02) 14:59 (WEA02)
5	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42		07:11 16:39	26	15:34 (WEA01) 16:00 (WEA01)	08:00 16:03	35	14:24 (WEA02) 14:59 (WEA02)
6	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40		07:13 16:37	26	15:33 (WEA01) 15:59 (WEA01)	08:01 16:03	35	14:25 (WEA02) 15:00 (WEA02)
7	05:02 21:31	05:42 20:52	06:32 19:47	07:21 18:38		07:15 16:35	25	15:34 (WEA01) 15:59 (WEA01)	08:03 16:03	35	14:25 (WEA02) 15:00 (WEA02)
8	05:02 21:30	05:44 20:50	06:34 19:45	07:22 18:36		07:17 16:34	24	15:34 (WEA01) 15:58 (WEA01)	08:04 16:02	35	14:25 (WEA02) 15:00 (WEA02)
9	05:03 21:30	05:45 20:48	06:35 19:42	07:24 18:33		07:18 16:32	23	15:35 (WEA01) 15:58 (WEA01)	08:05 16:02	35	14:27 (WEA02) 15:02 (WEA02)
10	05:04 21:29	05:47 20:46	06:37 19:40	07:26 18:31		07:20 16:30	21	15:36 (WEA01) 15:57 (WEA01)	08:06 16:02	35	14:27 (WEA02) 15:02 (WEA02)
11	05:05 21:28	05:49 20:44	06:38 19:38	07:28 18:29		07:22 16:29	20	15:37 (WEA01) 15:57 (WEA01)	08:07 16:02	35	14:27 (WEA02) 15:02 (WEA02)
12	05:06 21:27	05:50 20:42	06:40 19:35	07:29 18:27		07:24 16:27	18	15:38 (WEA01) 15:56 (WEA01)	08:08 16:02	34	14:28 (WEA02) 15:02 (WEA02)
13	05:08 21:26	05:52 20:40	06:42 19:33	07:31 18:24		07:25 16:26	14	15:40 (WEA01) 15:54 (WEA01)	08:09 16:01	35	14:28 (WEA02) 15:03 (WEA02)
14	05:09 21:25	05:53 20:39	06:43 19:31	07:33 18:22		07:27 16:24	12	14:35 (WEA02) 15:52 (WEA01)	08:10 16:01	34	14:29 (WEA02) 15:03 (WEA02)
15	05:10 21:24	05:55 20:37	06:45 19:28	07:34 18:20		07:29 16:23	13	14:30 (WEA02) 14:43 (WEA02)	08:11 16:02	35	14:29 (WEA02) 15:04 (WEA02)
16	05:11 21:23	05:57 20:35	06:46 19:26	07:36 18:18		07:31 16:21	18	14:28 (WEA02) 14:46 (WEA02)	08:12 16:02	34	14:30 (WEA02) 15:04 (WEA02)
17	05:12 21:22	05:58 20:33	06:48 19:24	07:38 18:16		07:32 16:20	21	14:26 (WEA02) 14:47 (WEA02)	08:13 16:02	34	14:30 (WEA02) 15:04 (WEA02)
18	05:13 21:21	06:00 20:30	06:50 19:21	07:39 18:14		07:34 16:19	23	14:25 (WEA02) 14:48 (WEA02)	08:14 16:02	34	14:30 (WEA02) 15:04 (WEA02)
19	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:12		07:36 16:17	26	14:24 (WEA02) 14:50 (WEA02)	08:14 16:02	34	14:31 (WEA02) 15:05 (WEA02)
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09		07:37 16:16	27	14:24 (WEA02) 14:51 (WEA02)	08:15 16:03	34	14:31 (WEA02) 15:05 (WEA02)
21	05:17 21:18	06:05 20:24	06:54 19:15	07:45 18:07		07:39 16:15	29	14:23 (WEA02) 14:52 (WEA02)	08:16 16:03	34	14:32 (WEA02) 15:06 (WEA02)
22	05:19 21:17	06:06 20:22	06:56 19:12	07:46 18:05		07:41 16:14	30	14:23 (WEA02) 14:53 (WEA02)	08:16 16:04	34	14:32 (WEA02) 15:06 (WEA02)
23	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03		07:42 16:13	31	14:22 (WEA02) 14:53 (WEA02)	08:17 16:04	34	14:33 (WEA02) 15:07 (WEA02)
24	05:21 21:14	06:09 20:18	06:59 19:08	07:50 18:01		07:44 16:12	32	14:22 (WEA02) 14:54 (WEA02)	08:17 16:05	34	14:33 (WEA02) 15:07 (WEA02)
25	05:23 21:13	06:11 20:16	07:01 19:05	06:52 16:59		07:46 16:11	33	14:22 (WEA02) 14:55 (WEA02)	08:17 16:05	34	14:33 (WEA02) 15:07 (WEA02)
26	05:24 21:11	06:13 20:14	07:03 19:03	06:53 16:57	15:41 (WEA01)	07:47 16:10	33	14:23 (WEA02) 14:56 (WEA02)	08:18 16:06	34	14:35 (WEA02) 15:09 (WEA02)
27	05:26 21:10	06:14 20:11	07:04 19:01	06:55 16:55	15:39 (WEA01)	07:49 16:09	34	14:22 (WEA02) 14:56 (WEA02)	08:18 16:07	34	14:35 (WEA02) 15:09 (WEA02)
28	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	15:37 (WEA01)	07:50 16:08	34	14:23 (WEA02) 14:57 (WEA02)	08:18 16:08	34	14:35 (WEA02) 15:09 (WEA02)
29	05:29 21:07	06:17 20:07	07:08 18:56	06:59 16:51	15:36 (WEA01)	07:52 16:07	35	14:23 (WEA02) 14:58 (WEA02)	08:18 16:08	34	14:36 (WEA02) 15:10 (WEA02)
30	05:30 21:05	06:19 20:05	07:09 18:54	07:01 16:49	15:35 (WEA01)	07:53 16:06	35	14:23 (WEA02) 14:58 (WEA02)	08:19 16:09	34	14:36 (WEA02) 15:10 (WEA02)
31	05:32 21:04	06:21 20:03		07:02 16:48	15:34 (WEA01) 15:59 (WEA01)				08:19 16:10	35	14:36 (WEA02) 15:11 (WEA02)
Sonnenscheinstunden	501	453	381	332		267			245		
astr.max.mögl.Beschattung				114		766				1068	
Red.Sonnenscheinwahrsch.				0,35		0,21				0,16	
Reduktion Betriebsdauer				0,98		0,98				0,98	
Reduktion Windrichtung				0,68		0,68				0,69	
Gesamte Reduktion				0,23		0,14				0,11	
Met.wahrsch.Beschattung				27		106				118	

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP18 - Am Sportplatz 8, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.054	1.054	834	690	673	8.592	

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar		Februar			März	April	Mai	Juni
1	08:19	08:51 (WEA03)	07:52		08:36 (WEA01)	06:59	06:49	05:45	05:00
	16:12	21 09:12 (WEA03)	16:59	34	09:10 (WEA01)	17:50	19:44	20:34	21:20
2	08:19	08:52 (WEA03)	07:51		08:36 (WEA01)	06:57	06:47	05:43	04:59
	16:13	21 09:13 (WEA03)	17:01	35	09:11 (WEA01)	17:52	19:46	20:36	21:21
3	08:18	08:51 (WEA03)	07:49		08:36 (WEA01)	06:55	06:45	05:41	04:58
	16:14	22 09:13 (WEA03)	17:03	35	09:11 (WEA01)	17:54	19:47	20:38	21:22
4	08:18	08:52 (WEA03)	07:48		08:35 (WEA01)	06:53	06:42	05:39	04:58
	16:15	22 09:14 (WEA03)	17:05	36	09:11 (WEA01)	17:56	19:49	20:39	21:23
5	08:18	08:51 (WEA03)	07:46		08:35 (WEA01)	06:51	06:40	05:37	04:57
	16:16	23 09:14 (WEA03)	17:06	36	09:11 (WEA01)	17:57	19:51	20:41	21:24
6	08:18	08:52 (WEA03)	07:44		08:36 (WEA01)	06:48	06:38	05:36	04:56
	16:17	24 09:16 (WEA03)	17:08	36	09:12 (WEA01)	17:59	19:52	20:42	21:25
7	08:17	08:52 (WEA03)	07:43		08:08 (WEA02)	06:46	06:36	05:34	04:56
	16:19	24 09:16 (WEA03)	17:10	45	09:12 (WEA01)	18:01	19:54	20:44	21:26
8	08:17	08:53 (WEA03)	07:41		08:06 (WEA02)	06:44	06:33	05:32	04:55
	16:20	24 09:17 (WEA03)	17:12	49	09:12 (WEA01)	18:03	19:56	20:46	21:27
9	08:16	08:52 (WEA03)	07:39		08:04 (WEA02)	06:42	06:31	05:30	04:55
	16:21	25 09:17 (WEA03)	17:14	52	09:11 (WEA01)	18:04	19:57	20:47	21:27
10	08:16	08:53 (WEA03)	07:37		08:03 (WEA02)	06:39	06:29	05:29	04:54
	16:23	25 09:18 (WEA03)	17:16	54	09:11 (WEA01)	18:06	19:59	20:49	21:28
11	08:15	08:53 (WEA03)	07:35		08:02 (WEA02)	06:37	06:27	05:27	04:54
	16:24	26 09:19 (WEA03)	17:18	54	09:10 (WEA01)	18:08	20:01	20:51	21:29
12	08:15	08:54 (WEA03)	07:34		08:01 (WEA02)	06:35	06:24	05:25	04:54
	16:25	25 09:19 (WEA03)	17:19	55	09:09 (WEA01)	18:10	20:02	20:52	21:30
13	08:14	08:54 (WEA03)	07:32		08:00 (WEA02)	06:33	06:22	05:24	04:53
	16:27	25 09:19 (WEA03)	17:21	55	09:09 (WEA01)	18:11	20:04	20:54	21:30
14	08:13	08:54 (WEA03)	07:30		08:00 (WEA02)	06:30	06:20	05:22	04:53
	16:28	26 09:20 (WEA03)	17:23	53	09:08 (WEA01)	18:13	20:06	20:55	21:31
15	08:12	08:54 (WEA03)	07:28		08:00 (WEA02)	06:28	06:18	05:21	04:53
	16:30	26 09:20 (WEA03)	17:25	51	09:06 (WEA01)	18:15	20:07	20:57	21:31
16	08:12	08:55 (WEA03)	07:26		08:00 (WEA02)	06:26	06:16	05:19	04:53
	16:32	25 09:20 (WEA03)	17:27	48	09:05 (WEA01)	18:17	20:09	20:58	21:32
17	08:11	08:55 (WEA03)	07:24		08:00 (WEA02)	06:24	06:13	05:18	04:53
	16:33	26 09:21 (WEA03)	17:29	43	09:03 (WEA01)	18:18	20:11	21:00	21:32
18	08:10	08:56 (WEA03)	07:22		08:00 (WEA02)	06:21	06:11	05:16	04:53
	16:35	25 09:21 (WEA03)	17:30	38	09:00 (WEA01)	18:20	20:13	21:01	21:33
19	08:09	08:57 (WEA03)	07:20		08:01 (WEA02)	06:19	06:09	05:15	04:53
	16:36	24 09:21 (WEA03)	17:32	23	08:24 (WEA02)	18:22	20:14	21:03	21:33
20	08:08	08:57 (WEA03)	07:18		08:02 (WEA02)	06:17	06:07	05:13	04:53
	16:38	24 09:21 (WEA03)	17:34	21	08:23 (WEA02)	18:23	20:16	21:04	21:34
21	08:07	08:47 (WEA01)	07:16		08:03 (WEA02)	06:14	06:05	05:12	04:53
	16:40	28 09:20 (WEA03)	17:36	19	08:22 (WEA02)	18:25	20:18	21:06	21:34
22	08:06	08:44 (WEA01)	07:14		08:04 (WEA02)	06:12	06:03	05:11	04:53
	16:41	34 09:20 (WEA03)	17:38	16	08:20 (WEA02)	18:27	20:19	21:07	21:34
23	08:04	08:42 (WEA01)	07:12		08:06 (WEA02)	06:10	06:01	05:09	04:53
	16:43	37 09:20 (WEA03)	17:39	12	08:18 (WEA02)	18:29	20:21	21:08	21:34
24	08:03	08:40 (WEA01)	07:10		08:11 (WEA02)	06:07	05:59	05:08	04:54
	16:45	39 09:19 (WEA03)	17:41	2	08:13 (WEA02)	18:30	20:23	21:10	21:34
25	08:02	08:40 (WEA01)	07:08			06:05	05:57	05:07	04:54
	16:47	38 09:18 (WEA03)	17:43			18:32	20:24	21:11	21:34
26	08:01	08:39 (WEA01)	07:06			06:03	05:55	05:06	04:54
	16:48	39 09:18 (WEA03)	17:45			18:34	20:26	21:12	21:34
27	07:59	08:38 (WEA01)	07:04			06:01	05:53	05:05	04:55
	16:50	36 09:15 (WEA03)	17:47			18:35	20:28	21:14	21:34
28	07:58	08:38 (WEA01)	07:01			05:58	05:51	05:04	04:55
	16:52	29 09:07 (WEA01)	17:49			18:37	20:29	21:15	21:34
29	07:57	08:37 (WEA01)				06:56	05:49	05:03	04:56
	16:54	30 09:07 (WEA01)				19:39	20:31	21:16	21:34
30	07:55	08:37 (WEA01)				06:54	05:47	05:02	04:56
	16:55	32 09:09 (WEA01)				19:40	20:33	21:17	21:34
31	07:54	08:36 (WEA01)				06:51		05:01	
	16:57	33 09:09 (WEA01)				19:42		21:19	
Sonnenscheinstunden	260		278			367	416	484	498
astr.max.mögl.Beschattung		858		902					
Red.Sonnenscheinwahrsch.		0,19		0,26					
Reduktion Betriebsdauer		0,98		0,98					
Reduktion Windrichtung		0,57		0,58					
Gesamte Reduktion		0,10		0,15					
Met.wahrsch.Beschattung		89		134					

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
	Minuten mit Schatten	

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP18 - Am Sportplatz 8, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober		November	Dezember
1	04:57 21:34	05:33 21:02	06:22 20:01	07:11 18:52		07:04 16:46	07:32 (WEA02) 16:06 (WEA01)
2	04:58 21:33	05:35 21:00	06:24 19:58	07:13 18:49		07:06 16:44	07:34 (WEA02) 16:05 (WEA01)
3	04:58 21:33	05:36 20:59	06:26 19:56	07:14 18:47		07:08 16:42	07:36 (WEA02) 16:05 (WEA01)
4	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45		07:10 16:40	07:39 (WEA02) 16:04 (WEA01)
5	05:00 21:32	05:39 20:55	06:29 19:52	07:18 18:42		07:11 16:39	08:06 (WEA01) 16:04 (WEA01)
6	05:01 21:31	05:41 20:54	06:30 19:49	07:19 18:40		07:13 16:37	08:06 (WEA01) 16:03 (WEA01)
7	05:02 21:31	05:42 20:52	06:32 19:47	07:21 18:38		07:15 16:35	08:06 (WEA01) 16:03 (WEA01)
8	05:03 21:30	05:44 20:50	06:34 19:45	07:23 18:36		07:17 16:34	08:05 (WEA01) 16:02 (WEA01)
9	05:04 21:30	05:46 20:48	06:35 19:42	07:24 18:33		07:19 16:32	08:06 (WEA01) 16:02 (WEA01)
10	05:05 21:29	05:47 20:46	06:37 19:40	07:26 18:31		07:20 16:30	08:06 (WEA01) 16:02 (WEA01)
11	05:06 21:28	05:49 20:44	06:39 19:38	07:28 18:29		07:22 16:29	08:07 (WEA01) 16:02 (WEA01)
12	05:07 21:27	05:50 20:43	06:40 19:36	07:29 18:27		07:24 16:27	08:08 (WEA01) 16:02 (WEA01)
13	05:08 21:26	05:52 20:41	06:42 19:33	07:31 18:25		07:26 16:26	08:09 (WEA01) 16:02 (WEA01)
14	05:09 21:26	05:53 20:39	06:43 19:31	07:33 18:22		07:27 16:24	08:10 (WEA01) 16:02 (WEA01)
15	05:10 21:25	05:55 20:37	06:45 19:29	07:34 18:20		07:29 16:23	08:11 (WEA01) 16:02 (WEA01)
16	05:11 21:24	05:57 20:35	06:47 19:26	07:36 18:18		07:31 16:22	08:12 (WEA01) 16:02 (WEA01)
17	05:12 21:23	05:58 20:33	06:48 19:24	07:38 18:16		07:32 16:20	08:14 (WEA01) 16:02 (WEA01)
18	05:14 21:21	06:00 20:31	06:50 19:22	07:40 18:14	08:40 (WEA02)	07:34 16:19	08:14 (WEA01) 16:02 (WEA01)
19	05:15 21:20	06:01 20:29	06:51 19:19	07:41 18:12	08:47 (WEA02)	07:36 16:18	08:16 (WEA01) 16:03 (WEA01)
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:10	08:49 (WEA02)	07:38 16:16	08:19 (WEA01) 16:03 (WEA01)
21	05:17 21:18	06:05 20:24	06:55 19:15	07:45 18:07	08:51 (WEA02)	07:39 16:15	08:23 (WEA01) 16:03 (WEA01)
22	05:19 21:17	06:06 20:22	06:56 19:12	07:47 18:05	08:52 (WEA02)	07:41 16:14	08:26 (WEA01) 16:04 (WEA01)
23	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	08:53 (WEA02)	07:43 16:13	08:34 (WEA01) 16:04 (WEA01)
24	05:22 21:14	06:10 20:18	06:59 19:08	07:50 18:01	08:55 (WEA02)	07:44 16:12	08:36 (WEA01) 16:05 (WEA01)
25	05:23 21:13	06:11 20:16	07:01 19:05	06:52 16:59	09:31 (WEA01)	07:46 16:11	08:38 (WEA01) 16:05 (WEA01)
26	05:24 21:11	06:13 20:14	07:03 19:03	06:54 16:57	08:34 (WEA02)	07:47 16:10	08:39 (WEA01) 16:06 (WEA01)
27	05:26 21:10	06:14 20:12	07:04 19:01	06:55 16:55	07:29 (WEA02)	07:49 16:09	08:33 (WEA01) 16:07 (WEA01)
28	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	07:30 (WEA02)	07:50 16:08	08:34 (WEA01) 16:08 (WEA01)
29	05:29 21:07	06:18 20:07	07:08 18:56	06:59 16:51	08:37 (WEA01)	07:52 16:07	08:35 (WEA01) 16:09 (WEA01)
30	05:30 21:05	06:19 20:05	07:09 18:54	07:01 16:50	07:30 (WEA02)	07:53 16:07	08:36 (WEA01) 16:09 (WEA01)
31	05:32 21:04	06:21 20:03	07:02 18:48	07:02 16:48	08:39 (WEA01)	07:54 16:07	08:37 (WEA01) 16:10 (WEA01)
Sonnenscheinstunden	501	453	381	332		267	245
astr.max.mögl.Beschattung				510		1009	630
Red.Sonnenscheinwahrsch.				0,35		0,21	0,16
Reduktion Betriebsdauer				0,98		0,98	0,98
Reduktion Windrichtung				0,58		0,57	0,57
Gesamte Reduktion				0,20		0,12	0,09
Met.wahrsch.Beschattung				103		117	58

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP19 - Vor d. Heide 10, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar		Februar		März	April	Mai	Juni
1	08:19	07:52		08:18 (WEA02)	06:59	06:49	05:00
	16:12	16:59	46	09:26 (WEA01)	17:50	19:44	21:20
2	08:19	07:51		08:17 (WEA02)	06:57	06:47	05:43
	16:13	17:01	48	09:26 (WEA01)	17:52	19:46	21:21
3	08:18	07:49		08:16 (WEA02)	06:55	06:45	05:41
	16:14	17:03	48	09:25 (WEA01)	17:54	19:47	21:22
4	08:18	08:59 (WEA01)	07:48	08:15 (WEA02)	06:53	06:42	05:39
	16:15	7 09:06 (WEA01)	17:05	09:24 (WEA01)	17:56	19:49	21:23
5	08:18	08:57 (WEA01)	07:46	08:15 (WEA02)	06:51	06:40	05:37
	16:16	11 09:08 (WEA01)	17:06	09:23 (WEA01)	17:57	19:51	21:24
6	08:18	08:57 (WEA01)	07:44	08:15 (WEA02)	06:48	06:38	05:36
	16:17	13 09:10 (WEA01)	17:08	09:22 (WEA01)	17:59	19:52	21:25
7	08:17	08:55 (WEA01)	07:43	08:15 (WEA02)	06:46	06:36	05:34
	16:19	16 09:11 (WEA01)	17:10	09:20 (WEA01)	18:01	19:54	21:26
8	08:17	08:55 (WEA01)	07:41	08:15 (WEA02)	06:44	06:33	05:32
	16:20	18 09:13 (WEA01)	17:12	09:17 (WEA01)	18:03	19:56	21:27
9	08:16	08:55 (WEA01)	07:39	08:15 (WEA02)	06:42	06:31	05:30
	16:21	19 09:14 (WEA01)	17:14	08:39 (WEA02)	18:04	19:57	21:27
10	08:16	08:55 (WEA01)	07:37	08:15 (WEA02)	06:39	06:29	05:29
	16:23	21 09:16 (WEA01)	17:16	08:38 (WEA02)	18:06	19:59	21:28
11	08:15	08:54 (WEA01)	07:35	08:16 (WEA02)	06:37	06:27	05:27
	16:24	23 09:17 (WEA01)	17:18	08:38 (WEA02)	18:08	20:01	21:29
12	08:15	08:54 (WEA01)	07:34	08:16 (WEA02)	06:35	06:24	05:25
	16:25	24 09:18 (WEA01)	17:19	08:37 (WEA02)	18:10	20:02	21:30
13	08:14	08:53 (WEA01)	07:32	08:17 (WEA02)	06:33	06:22	05:24
	16:27	26 09:19 (WEA01)	17:21	08:36 (WEA02)	18:11	20:04	21:30
14	08:13	08:53 (WEA01)	07:30	08:18 (WEA02)	06:30	06:20	05:22
	16:28	27 09:20 (WEA01)	17:23	08:35 (WEA02)	18:13	20:06	21:31
15	08:13	08:53 (WEA01)	07:28	08:20 (WEA02)	06:28	06:18	05:21
	16:30	27 09:20 (WEA01)	17:25	08:33 (WEA02)	18:15	20:07	21:31
16	08:12	08:52 (WEA01)	07:26	08:23 (WEA02)	06:26	06:16	05:19
	16:32	29 09:21 (WEA01)	17:27	08:30 (WEA02)	18:17	20:09	21:32
17	08:11	08:52 (WEA01)	07:24		06:24	06:13	05:18
	16:33	30 09:22 (WEA01)	17:29		18:18	20:11	21:32
18	08:10	08:52 (WEA01)	07:22		06:21	06:11	05:16
	16:35	31 09:23 (WEA01)	17:30		18:20	20:13	21:33
19	08:09	08:52 (WEA01)	07:20		06:19	06:09	05:15
	16:36	32 09:24 (WEA01)	17:32		18:22	20:14	21:33
20	08:08	08:53 (WEA01)	07:18		06:17	06:07	05:13
	16:38	32 09:25 (WEA01)	17:34		18:23	20:16	21:34
21	08:07	08:52 (WEA01)	07:16		06:14	06:05	05:12
	16:40	33 09:25 (WEA01)	17:36		18:25	20:18	21:34
22	08:06	08:52 (WEA01)	07:14		06:12	06:03	05:11
	16:41	33 09:25 (WEA01)	17:38		18:27	20:19	21:34
23	08:04	08:53 (WEA01)	07:12		06:10	06:01	05:09
	16:43	33 09:26 (WEA01)	17:39		18:29	20:21	21:34
24	08:03	08:52 (WEA01)	07:10		06:07	05:59	05:08
	16:45	34 09:26 (WEA01)	17:41		18:30	20:23	21:34
25	08:02	08:53 (WEA01)	07:08		06:05	05:57	05:07
	16:47	34 09:27 (WEA01)	17:43		18:32	20:24	21:34
26	08:01	08:53 (WEA01)	07:06		06:03	05:55	05:06
	16:48	34 09:27 (WEA01)	17:45		18:34	20:26	21:34
27	07:59	08:53 (WEA01)	07:04		06:01	05:53	05:05
	16:50	34 09:27 (WEA01)	17:47		18:35	20:28	21:34
28	07:58	08:54 (WEA01)	07:01		05:58	05:51	05:04
	16:52	34 09:28 (WEA01)	17:49		18:37	20:29	21:34
29	07:57	08:24 (WEA02)			06:56	05:49	05:03
	16:54	36 09:27 (WEA01)			19:39	20:31	21:34
30	07:55	08:22 (WEA02)			06:54	05:47	05:02
	16:55	42 09:28 (WEA01)			19:40	20:33	21:34
31	07:54	08:20 (WEA02)			06:51		05:01
	16:57	45 09:27 (WEA01)			19:42		21:19
Sonnenscheinstunden		260	278	367	416	484	498
astr.max.mögl.Beschattung		778	499				
Red.Sonnenscheinwahrsch.		0,19	0,26				
Reduktion Betriebsdauer		0,98	0,98				
Reduktion Windrichtung		0,57	0,58				
Gesamte Reduktion		0,10	0,15				
Met.wahrsch.Beschattung		80	74				

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende
			(WEA mit letztem Schatten)



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP19 - Vor d. Heide 10, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober		November	Dezember
1	04:57	05:33	06:22	07:11		07:04	07:45 (WEA02) 07:55
	21:34	21:02	20:01	18:52		16:46	23 08:08 (WEA02) 16:06 23 08:59 (WEA01)
2	04:58	05:35	06:24	07:13		07:06	07:45 (WEA02) 07:56 08:37 (WEA01)
	21:33	21:00	19:58	18:49		16:44	23 08:08 (WEA02) 16:05 21 08:58 (WEA01)
3	04:58	05:36	06:26	07:14		07:08	07:45 (WEA02) 07:58 08:39 (WEA01)
	21:33	20:59	19:56	18:47		16:42	35 08:47 (WEA01) 16:05 19 08:58 (WEA01)
4	04:59	05:38	06:27	07:16		07:10	07:45 (WEA02) 07:59 08:39 (WEA01)
	21:32	20:57	19:54	18:45		16:40	41 08:50 (WEA01) 16:04 18 08:57 (WEA01)
5	05:00	05:39	06:29	07:18		07:11	07:45 (WEA02) 08:00 08:41 (WEA01)
	21:32	20:55	19:52	18:42		16:39	44 08:52 (WEA01) 16:04 16 08:57 (WEA01)
6	05:01	05:41	06:30	07:19		07:13	07:46 (WEA02) 08:02 08:43 (WEA01)
	21:32	20:54	19:49	18:40		16:37	46 08:54 (WEA01) 16:03 13 08:56 (WEA01)
7	05:02	05:42	06:32	07:21		07:15	07:46 (WEA02) 08:03 08:44 (WEA01)
	21:31	20:52	19:47	18:38		16:35	48 08:55 (WEA01) 16:03 11 08:55 (WEA01)
8	05:03	05:44	06:34	07:23		07:17	07:46 (WEA02) 08:04 08:47 (WEA01)
	21:30	20:50	19:45	18:36		16:34	49 08:55 (WEA01) 16:02 7 08:54 (WEA01)
9	05:04	05:46	06:35	07:24		07:19	07:47 (WEA02) 08:05
	21:30	20:48	19:42	18:33		16:32	48 08:56 (WEA01) 16:02
10	05:05	05:47	06:37	07:26		07:20	07:49 (WEA02) 08:06
	21:29	20:46	19:40	18:31		16:30	47 08:57 (WEA01) 16:02
11	05:06	05:49	06:39	07:28		07:22	07:51 (WEA02) 08:07
	21:28	20:44	19:38	18:29		16:29	45 08:58 (WEA01) 16:02
12	05:07	05:50	06:40	07:29		07:24	07:53 (WEA02) 08:08
	21:27	20:43	19:36	18:27		16:27	41 08:58 (WEA01) 16:02
13	05:08	05:52	06:42	07:31		07:26	07:56 (WEA02) 08:09
	21:26	20:41	19:33	18:25		16:26	35 08:59 (WEA01) 16:02
14	05:09	05:53	06:43	07:33		07:27	08:26 (WEA01) 08:10
	21:26	20:39	19:31	18:22		16:24	33 08:59 (WEA01) 16:02
15	05:10	05:55	06:45	07:34		07:29	08:26 (WEA01) 08:11
	21:25	20:37	19:29	18:20		16:23	34 09:00 (WEA01) 16:02
16	05:11	05:57	06:47	07:36		07:31	08:26 (WEA01) 08:12
	21:24	20:35	19:26	18:18		16:22	34 09:00 (WEA01) 16:02
17	05:12	05:58	06:48	07:38		07:32	08:27 (WEA01) 08:13
	21:23	20:33	19:24	18:16		16:20	34 09:01 (WEA01) 16:02
18	05:14	06:00	06:50	07:40		07:34	08:26 (WEA01) 08:14
	21:21	20:31	19:22	18:14		16:19	34 09:00 (WEA01) 16:02
19	05:15	06:01	06:51	07:41		07:36	08:27 (WEA01) 08:14
	21:20	20:29	19:19	18:12		16:18	33 09:00 (WEA01) 16:02
20	05:16	06:03	06:53	07:43		07:38	08:27 (WEA01) 08:15
	21:19	20:26	19:17	18:10		16:16	33 09:00 (WEA01) 16:03
21	05:17	06:05	06:55	07:45		07:39	08:28 (WEA01) 08:16
	21:18	20:24	19:15	18:07		16:15	33 09:01 (WEA01) 16:03
22	05:19	06:06	06:56	07:47		07:41	08:29 (WEA01) 08:16
	21:17	20:22	19:12	18:05		16:14	32 09:01 (WEA01) 16:04
23	05:20	06:08	06:58	07:48		07:43	08:29 (WEA01) 08:17
	21:15	20:20	19:10	18:03		16:13	32 09:01 (WEA01) 16:04
24	05:22	06:10	06:59	07:50		07:44	08:29 (WEA01) 08:17
	21:14	20:18	19:08	18:01		16:12	31 09:00 (WEA01) 16:05
25	05:23	06:11	07:01	06:52		07:46	08:30 (WEA01) 08:18
	21:13	20:16	19:05	16:59		16:11	30 09:00 (WEA01) 16:05
26	05:24	06:13	07:03	06:54	07:51 (WEA02)	07:47	08:31 (WEA01) 08:18
	21:11	20:14	19:03	16:57	10 08:01 (WEA02)	16:10	29 09:00 (WEA01) 16:06
27	05:26	06:14	07:04	06:55	07:49 (WEA02)	07:49	08:32 (WEA01) 08:18
	21:10	20:12	19:01	16:55	14 08:03 (WEA02)	16:09	28 09:00 (WEA01) 16:07
28	05:27	06:16	07:06	06:57	07:47 (WEA02)	07:50	08:33 (WEA01) 08:18
	21:08	20:09	18:58	16:53	18 08:05 (WEA02)	16:08	27 09:00 (WEA01) 16:08
29	05:29	06:18	07:08	06:59	07:46 (WEA02)	07:52	08:34 (WEA01) 08:19
	21:07	20:07	18:56	16:51	20 08:06 (WEA02)	16:07	26 09:00 (WEA01) 16:09
30	05:30	06:19	07:09	07:01	07:46 (WEA02)	07:53	08:35 (WEA01) 08:19
	21:05	20:05	18:54	16:50	21 08:07 (WEA02)	16:07	24 08:59 (WEA01) 16:09
31	05:32	06:21		07:02	07:45 (WEA02)		08:19
	21:04	20:03		16:48	23 08:08 (WEA02)		16:10
Sonnenscheinstunden	501	453	381	332		267	245
astr.max.mögl.Beschattung				106		1052	128
Red.Sonnenscheinwahrsch.				0,35		0,21	0,16
Reduktion Betriebsdauer				0,98		0,98	0,98
Reduktion Windrichtung				0,59		0,57	0,57
Gesamte Reduktion				0,20		0,12	0,09
Met.wahrsch.Beschattung				21		122	12

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
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Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP20 - Am Sandberg 11, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April		Mai	Juni
1	08:19	07:52	06:59	06:49		05:45	06:22 (WEA05)
	16:12	16:59	17:50	19:44		20:34	06:52 (WEA05)
2	08:18	07:51	06:57	06:47		05:43	06:21 (WEA05)
	16:13	17:01	17:52	19:45		20:36	06:53 (WEA05)
3	08:18	07:49	06:55	06:45		05:41	06:20 (WEA05)
	16:14	17:03	17:54	19:47		20:37	06:53 (WEA05)
4	08:18	07:47	06:53	06:42		05:39	06:19 (WEA05)
	16:15	17:05	17:56	19:49		20:39	06:55 (WEA05)
5	08:18	07:46	06:51	06:40		05:37	06:19 (WEA05)
	16:16	17:06	17:57	19:51		20:41	06:55 (WEA05)
6	08:18	07:44	06:48	06:38		05:36	06:18 (WEA05)
	16:17	17:08	17:59	19:52		20:42	06:55 (WEA05)
7	08:17	07:42	06:46	06:36		05:34	06:18 (WEA05)
	16:19	17:10	18:01	19:54		20:44	06:56 (WEA05)
8	08:17	07:41	06:44	06:33		05:32	06:17 (WEA05)
	16:20	17:12	18:03	19:56		20:46	06:55 (WEA05)
9	08:16	07:39	06:42	06:31		05:30	06:17 (WEA05)
	16:21	17:14	18:04	19:57		20:47	06:55 (WEA05)
10	08:16	07:37	06:39	06:29		05:29	06:17 (WEA05)
	16:23	17:16	18:06	19:59		20:49	06:56 (WEA05)
11	08:15	07:35	06:37	06:27		05:27	06:16 (WEA05)
	16:24	17:18	18:08	20:01		20:50	06:55 (WEA05)
12	08:15	07:34	06:35	06:24		05:25	06:17 (WEA05)
	16:26	17:19	18:10	20:02		20:52	06:56 (WEA05)
13	08:14	07:32	06:33	06:22		05:24	06:16 (WEA05)
	16:27	17:21	18:11	20:04		20:54	06:55 (WEA05)
14	08:13	07:30	06:30	06:20		05:22	06:17 (WEA05)
	16:29	17:23	18:13	20:06		20:55	06:55 (WEA05)
15	08:12	07:28	06:28	06:18		05:21	06:17 (WEA05)
	16:30	17:25	18:15	20:07		20:57	06:56 (WEA05)
16	08:12	07:26	06:26	06:16		05:19	06:17 (WEA05)
	16:32	17:27	18:17	20:09		20:58	06:55 (WEA05)
17	08:11	07:24	06:24	06:13		05:18	06:18 (WEA05)
	16:33	17:29	18:18	20:11		21:00	06:55 (WEA05)
18	08:10	07:22	06:21	06:11		05:16	06:17 (WEA05)
	16:35	17:30	18:20	20:12		21:01	06:54 (WEA05)
19	08:09	07:20	06:19	06:09		05:15	06:18 (WEA05)
	16:36	17:32	18:22	20:14		21:03	06:54 (WEA05)
20	08:08	07:18	06:17	06:07		05:13	06:18 (WEA05)
	16:38	17:34	18:23	20:16		21:04	06:54 (WEA05)
21	08:07	07:16	06:14	06:05		05:12	06:19 (WEA05)
	16:40	17:36	18:25	20:17		21:05	06:53 (WEA05)
22	08:06	07:14	06:12	06:03		05:11	06:20 (WEA05)
	16:41	17:38	18:27	20:19		21:07	06:53 (WEA05)
23	08:04	07:12	06:10	06:01		05:09	06:20 (WEA05)
	16:43	17:40	18:29	20:21		21:08	06:53 (WEA05)
24	08:03	07:10	06:07	05:59		05:08	06:20 (WEA05)
	16:45	17:41	18:30	20:23		21:10	06:51 (WEA05)
25	08:02	07:08	06:05	05:57		05:07	06:21 (WEA05)
	16:47	17:43	18:32	20:24		21:11	06:51 (WEA05)
26	08:01	07:06	06:03	05:55	06:32 (WEA05)	05:06	06:22 (WEA05)
	16:48	17:45	18:34	20:26	11 06:43 (WEA05)	21:12	06:50 (WEA05)
27	07:59	07:04	06:01	05:53	06:29 (WEA05)	05:05	06:22 (WEA05)
	16:50	17:47	18:35	20:28	17 06:46 (WEA05)	21:14	06:50 (WEA05)
28	07:58	07:01	05:58	05:51	06:27 (WEA05)	05:04	06:24 (WEA05)
	16:52	17:49	18:37	20:29	22 06:49 (WEA05)	21:15	06:50 (WEA05)
29	07:57		06:56	05:49	06:25 (WEA05)	05:03	06:25 (WEA05)
	16:54		19:39	20:31	25 06:50 (WEA05)	21:16	06:49 (WEA05)
30	07:55		06:54	05:47	06:23 (WEA05)	05:02	06:26 (WEA05)
	16:56		19:40	20:33	28 06:51 (WEA05)	21:17	06:48 (WEA05)
31	07:54		06:51			05:01	06:27 (WEA05)
	16:57		19:42			21:18	06:47 (WEA05)
Sonnenscheinstunden	260	278	367	416		484	497
astr.max.mögl.Beschattung				103		1044	64
Red.Sonnenscheinwahrsch.				0,42		0,48	0,45
Reduktion Betriebsdauer				0,98		0,98	0,98
Reduktion Windrichtung				0,63		0,63	0,63
Gesamte Reduktion				0,26		0,30	0,28
Met.wahrsch.Beschattung				27		308	18

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP20 - Am Sandberg 11, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Juli		August		September		Oktober		November		Dezember	
1	04:57 21:33	05:33 21:02	39	06:27 (WEA05) 07:06 (WEA05)	06:22 20:00	07:11 18:52	07:04 16:46	07:55 16:06			
2	04:58 21:33	05:35 21:00	39	06:27 (WEA05) 07:06 (WEA05)	06:24 19:58	07:13 18:49	07:06 16:44	07:56 16:05			
3	04:58 21:33	05:36 20:59	39	06:27 (WEA05) 07:06 (WEA05)	06:26 19:56	07:14 18:47	07:08 16:42	07:58 16:05			
4	04:59 21:32	05:38 20:57	39	06:27 (WEA05) 07:06 (WEA05)	06:27 19:54	07:16 18:45	07:10 16:40	07:59 16:04			
5	05:00 21:32	05:39 20:55	38	06:28 (WEA05) 07:06 (WEA05)	06:29 19:51	07:18 18:42	07:11 16:39	08:00 16:04			
6	05:01 21:31	05:41 20:54	38	06:27 (WEA05) 07:05 (WEA05)	06:30 19:49	07:19 18:40	07:13 16:37	08:01 16:03			
7	05:02 21:31	05:42 20:52	37	06:27 (WEA05) 07:04 (WEA05)	06:32 19:47	07:21 18:38	07:15 16:35	08:03 16:03			
8	05:03 21:30	05:44 20:50	36	06:28 (WEA05) 07:04 (WEA05)	06:34 19:45	07:23 18:36	07:17 16:34	08:04 16:02			
9	05:04 21:30	05:46 20:48	35	06:28 (WEA05) 07:03 (WEA05)	06:35 19:42	07:24 18:33	07:18 16:32	08:05 16:02			
10	05:05 21:29	05:47 20:46	34	06:29 (WEA05) 07:03 (WEA05)	06:37 19:40	07:26 18:31	07:20 16:30	08:06 16:02			
11	05:06 21:28	05:49 20:44	32	06:29 (WEA05) 07:01 (WEA05)	06:39 19:38	07:28 18:29	07:22 16:29	08:07 16:02			
12	05:07 21:27	05:50 20:42	30	06:31 (WEA05) 07:01 (WEA05)	06:40 19:35	07:29 18:27	07:24 16:27	08:08 16:02			
13	05:08 21:26	05:52 20:40	28	06:31 (WEA05) 06:59 (WEA05)	06:42 19:33	07:31 18:25	07:25 16:26	08:09 16:02			
14	05:09 21:25	05:53 20:39	25	06:33 (WEA05) 06:58 (WEA05)	06:43 19:31	07:33 18:22	07:27 16:24	08:10 16:02			
15	05:10 21:24	05:55 20:37	21	06:34 (WEA05) 06:55 (WEA05)	06:45 19:29	07:34 18:20	07:29 16:23	08:11 16:02			
16	05:11 21:23	05:57 20:35	16	06:37 (WEA05) 06:59 (WEA05)	06:47 19:26	07:36 18:18	07:31 16:22	08:12 16:02			
17	05:12 21:22	05:58 20:33	8	06:40 (WEA05) 06:48 (WEA05)	06:48 19:24	07:38 18:16	07:32 16:20	08:13 16:02			
18	05:14 21:21	06:00 20:31			06:50 19:22	07:40 18:14	07:34 16:19	08:14 16:02			
19	05:15 21:20	06:01 20:28			06:51 19:19	07:41 18:12	07:36 16:18	08:14 16:03			
20	05:16 21:19	06:03 20:26			06:53 19:17	07:43 18:10	07:37 16:16	08:15 16:03			
21	05:18 21:18	06:05 20:24			06:55 19:15	07:45 18:07	07:39 16:15	08:16 16:03			
22	05:19 21:17	06:06 20:22			06:56 19:12	07:47 18:05	07:41 16:14	08:16 16:04			
23	05:20 21:15	06:08 20:20			06:58 19:10	07:48 18:03	07:42 16:13	08:17 16:04			
24	05:22 21:14	06:10 20:18			06:59 19:08	07:50 18:01	07:44 16:12	08:17 16:05			
25	05:23 21:13	06:11 20:16			07:01 19:05	06:52 16:59	07:46 16:11	08:17 16:06			
26	05:24 21:11	06:13 20:14			07:03 19:03	06:54 16:57	07:47 16:10	08:18 16:06			
27	05:26 21:10	06:14 20:12			07:04 19:01	06:55 16:55	07:49 16:09	08:18 16:07			
28	05:27 21:08	06:16 20:09			07:06 18:58	06:57 16:53	07:50 16:08	08:18 16:08			
29	05:29 21:07	06:18 20:07			07:08 18:56	06:59 16:52	07:52 16:07	08:18 16:09			
30	05:30 21:05	06:19 20:05			07:09 18:54	07:01 16:50	07:53 16:07	08:18 16:09			
31	05:32 21:04	06:21 20:03				07:02 16:48		08:19 16:10			
Sonnenscheinstunden		501	453		381	332	267	245			
astr.max.mögl.Beschattung		689	534								
Red.Sonnenscheinwahrsch.		0,47	0,50								
Reduktion Betriebsdauer		0,98	0,98								
Reduktion Windrichtung		0,63	0,63								
Gesamte Reduktion		0,29	0,31								
Met.wahrsch.Beschattung		201	165								

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende
			(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP21 - Am Sandberg 24, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	
1	08:19	07:52	06:59	06:49	07:24 (WEA05)	05:45	05:00
	16:12	16:59	17:50	19:44	20	07:44 (WEA05)	20:34
2	08:18	07:51	06:57	06:47	07:21 (WEA05)	05:43	04:59
	16:13	17:01	17:52	19:45	24	07:45 (WEA05)	20:36
3	08:18	07:49	06:55	06:45	07:19 (WEA05)	05:41	04:58
	16:14	17:03	17:54	19:47	28	07:47 (WEA05)	20:37
4	08:18	07:47	06:53	06:42	07:18 (WEA05)	05:39	04:58
	16:15	17:05	17:56	19:49	30	07:48 (WEA05)	20:39
5	08:18	07:46	06:51	06:40	07:16 (WEA05)	05:37	04:57
	16:16	17:06	17:57	19:51	33	07:49 (WEA05)	20:41
6	08:18	07:44	06:48	06:38	07:14 (WEA05)	05:36	04:56
	16:17	17:08	17:59	19:52	35	07:49 (WEA05)	20:42
7	08:17	07:42	06:46	06:36	07:14 (WEA05)	05:34	04:56
	16:19	17:10	18:01	19:54	35	07:49 (WEA05)	20:44
8	08:17	07:41	06:44	06:33	07:13 (WEA05)	05:32	04:55
	16:20	17:12	18:03	19:56	37	07:50 (WEA05)	20:46
9	08:16	07:39	06:42	06:31	07:13 (WEA05)	05:30	04:55
	16:21	17:14	18:04	19:57	37	07:50 (WEA05)	20:47
10	08:16	07:37	06:39	06:29	07:11 (WEA05)	05:29	04:54
	16:23	17:16	18:06	19:59	38	07:49 (WEA05)	20:49
11	08:15	07:35	06:37	06:27	07:11 (WEA05)	05:27	04:54
	16:24	17:18	18:08	20:01	38	07:49 (WEA05)	20:50
12	08:15	07:34	06:35	06:24	07:11 (WEA05)	05:25	04:54
	16:26	17:19	18:10	20:02	38	07:49 (WEA05)	20:52
13	08:14	07:32	06:33	06:22	07:11 (WEA05)	05:24	04:53
	16:27	17:21	18:11	20:04	38	07:49 (WEA05)	20:54
14	08:13	07:30	06:30	06:20	07:11 (WEA05)	05:22	04:53
	16:29	17:23	18:13	20:06	37	07:48 (WEA05)	20:55
15	08:12	07:28	06:28	06:18	07:11 (WEA05)	05:21	04:53
	16:30	17:25	18:15	20:07	37	07:48 (WEA05)	20:57
16	08:12	07:26	06:26	06:16	07:11 (WEA05)	05:19	04:53
	16:32	17:27	18:17	20:09	36	07:47 (WEA05)	20:58
17	08:11	07:24	06:24	06:13	07:11 (WEA05)	05:18	04:53
	16:33	17:29	18:18	20:11	34	07:45 (WEA05)	21:00
18	08:10	07:22	06:21	06:11	07:11 (WEA05)	05:16	04:53
	16:35	17:30	18:20	20:12	34	07:45 (WEA05)	21:01
19	08:09	07:20	06:19	06:09	07:12 (WEA05)	05:15	04:53
	16:36	17:32	18:22	20:14	31	07:43 (WEA05)	21:03
20	08:08	07:18	06:17	06:07	07:13 (WEA05)	05:13	04:53
	16:38	17:34	18:23	20:16	29	07:42 (WEA05)	21:04
21	08:07	07:16	06:14	06:05	07:14 (WEA05)	05:12	04:53
	16:40	17:36	18:25	20:17	27	07:41 (WEA05)	21:05
22	08:06	07:14	06:12	06:03	07:15 (WEA05)	05:11	04:53
	16:41	17:38	18:27	20:19	24	07:39 (WEA05)	21:07
23	08:04	07:12	06:10	06:01	07:17 (WEA05)	05:09	04:53
	16:43	17:40	18:29	20:21	20	07:37 (WEA05)	21:08
24	08:03	07:10	06:07	05:59	07:19 (WEA05)	05:08	04:54
	16:45	17:41	18:30	20:23	15	07:34 (WEA05)	21:10
25	08:02	07:08	06:05	05:57	07:23 (WEA05)	05:07	04:54
	16:47	17:43	18:32	20:24	6	07:29 (WEA05)	21:11
26	08:01	07:06	06:03	05:55		05:06	04:54
	16:48	17:45	18:34	20:26		21:12	33
27	07:59	07:04	06:01	05:53		05:05	04:55
	16:50	17:47	18:35	20:28		21:14	33
28	07:58	07:01	05:58	05:51		05:04	04:55
	16:52	17:49	18:37	20:29		21:15	34
29	07:57		06:56	05:49		05:03	04:56
	16:54		19:39	20:31		21:16	34
30	07:55		06:54	05:47		05:02	04:56
	16:55		19:40	20:33		21:17	34
31	07:54		06:51	07:27 (WEA05)		05:01	04:54
	16:57		19:42	07:41 (WEA05)		21:18	34
Sonnenscheinstunden	260	278	367	416		484	498
astr.max.mögl.Beschattung			14	761		509	1023
Red.Sonnenscheinwahrsch.			0,33	0,42		0,48	0,45
Reduktion Betriebsdauer			0,98	0,98		0,98	0,98
Reduktion Windrichtung			0,63	0,63		0,66	0,66
Gesamte Reduktion			0,21	0,26		0,31	0,29
Met.wahrsch.Beschattung			3	196		157	302

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende	(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP21 - Am Sandberg 24, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan Feb Mär Apr Mai Jun Jul Aug Sep Okt Nov Dez
1,56 2,60 3,92 5,75 7,42 7,51 7,59 7,27 5,27 3,77 1,84 1,30

Betriebsdauer je Sektor

N NNO ONO O OSO SSO S SSW WSW W WNW NNW Summe
390 372 588 603 418 487 1.048 1.054 1.436 834 690 673 8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli		August		September		Oktober		November		Dezember
1	04:57	05:55 (WEA04)	05:33		06:22	07:10 (WEA05)	07:11	07:04	07:55		
	21:33	34 06:29 (WEA04)	21:02		20:00	38 07:48 (WEA05)	18:52	16:46	16:06		
2	04:58	05:54 (WEA04)	05:35		06:24	07:10 (WEA05)	07:13	07:06	07:56		
	21:33	34 06:28 (WEA04)	21:00		19:58	38 07:48 (WEA05)	18:49	16:44	16:05		
3	04:58	05:55 (WEA04)	05:36		06:26	07:10 (WEA05)	07:14	07:08	07:58		
	21:33	34 06:29 (WEA04)	20:59		19:56	37 07:47 (WEA05)	18:47	16:42	16:05		
4	04:59	05:55 (WEA04)	05:38		06:27	07:10 (WEA05)	07:16	07:10	07:59		
	21:32	34 06:29 (WEA04)	20:57		19:54	37 07:47 (WEA05)	18:45	16:40	16:04		
5	05:00	05:54 (WEA04)	05:39		06:29	07:11 (WEA05)	07:18	07:11	08:00		
	21:32	35 06:29 (WEA04)	20:55		19:51	35 07:46 (WEA05)	18:42	16:39	16:04		
6	05:01	05:55 (WEA04)	05:41		06:30	07:11 (WEA05)	07:19	07:13	08:01		
	21:31	34 06:29 (WEA04)	20:54		19:49	34 07:45 (WEA05)	18:40	16:37	16:03		
7	05:02	05:55 (WEA04)	05:42		06:32	07:11 (WEA05)	07:21	07:15	08:03		
	21:31	35 06:30 (WEA04)	20:52		19:47	33 07:44 (WEA05)	18:38	16:35	16:03		
8	05:03	05:55 (WEA04)	05:44		06:34	07:12 (WEA05)	07:23	07:17	08:04		
	21:30	35 06:30 (WEA04)	20:50		19:45	30 07:42 (WEA05)	18:36	16:34	16:02		
9	05:04	05:56 (WEA04)	05:46		06:35	07:13 (WEA05)	07:24	07:18	08:05		
	21:30	34 06:30 (WEA04)	20:48		19:42	28 07:41 (WEA05)	18:33	16:32	16:02		
10	05:05	05:56 (WEA04)	05:47		06:37	07:14 (WEA05)	07:26	07:20	08:06		
	21:29	35 06:31 (WEA04)	20:46		19:40	24 07:38 (WEA05)	18:31	16:30	16:02		
11	05:06	05:56 (WEA04)	05:49		06:39	07:16 (WEA05)	07:28	07:22	08:07		
	21:28	35 06:31 (WEA04)	20:44		19:38	20 07:36 (WEA05)	18:29	16:29	16:02		
12	05:07	05:56 (WEA04)	05:50		06:40	07:18 (WEA05)	07:29	07:24	08:08		
	21:27	35 06:31 (WEA04)	20:42		19:35	14 07:32 (WEA05)	18:27	16:27	16:02		
13	05:08	05:56 (WEA04)	05:52		06:42		07:31	07:25	08:09		
	21:26	35 06:31 (WEA04)	20:40		19:33		18:25	16:26	16:02		
14	05:09	05:57 (WEA04)	05:53		06:43		07:33	07:27	08:10		
	21:25	34 06:31 (WEA04)	20:39		19:31		18:22	16:24	16:02		
15	05:10	05:57 (WEA04)	05:55		06:45		07:34	07:29	08:11		
	21:24	34 06:31 (WEA04)	20:37		19:29		18:20	16:23	16:02		
16	05:11	05:57 (WEA04)	05:57		06:47		07:36	07:31	08:12		
	21:23	34 06:31 (WEA04)	20:35		19:26		18:18	16:22	16:02		
17	05:12	05:57 (WEA04)	05:58		06:48		07:38	07:32	08:13		
	21:22	33 06:30 (WEA04)	20:33		19:24		18:16	16:20	16:02		
18	05:14	05:57 (WEA04)	06:00	07:28 (WEA05)	06:50		07:40	07:34	08:14		
	21:21	33 06:30 (WEA04)	20:31	9 07:37 (WEA05)	19:22		18:14	16:19	16:02		
19	05:15	05:59 (WEA04)	06:01	07:24 (WEA05)	06:51		07:41	07:36	08:14		
	21:20	32 06:31 (WEA04)	20:28	16 07:40 (WEA05)	19:19		18:12	16:18	16:03		
20	05:16	05:59 (WEA04)	06:03	07:22 (WEA05)	06:53		07:43	07:37	08:15		
	21:19	31 06:30 (WEA04)	20:26	21 07:43 (WEA05)	19:17		18:10	16:16	16:03		
21	05:18	05:59 (WEA04)	06:05	07:20 (WEA05)	06:55		07:45	07:39	08:16		
	21:18	31 06:30 (WEA04)	20:24	25 07:45 (WEA05)	19:15		18:07	16:15	16:03		
22	05:19	05:59 (WEA04)	06:06	07:18 (WEA05)	06:56		07:47	07:41	08:16		
	21:17	30 06:29 (WEA04)	20:22	28 07:46 (WEA05)	19:12		18:05	16:14	16:04		
23	05:20	06:01 (WEA04)	06:08	07:17 (WEA05)	06:58		07:48	07:42	08:17		
	21:15	28 06:29 (WEA04)	20:20	30 07:47 (WEA05)	19:10		18:03	16:13	16:04		
24	05:22	06:01 (WEA04)	06:10	07:16 (WEA05)	06:59		07:50	07:44	08:17		
	21:14	27 06:28 (WEA04)	20:18	31 07:47 (WEA05)	19:08		18:01	16:12	16:05		
25	05:23	06:02 (WEA04)	06:11	07:15 (WEA05)	07:01		06:52	07:46	08:17		
	21:13	25 06:27 (WEA04)	20:16	33 07:48 (WEA05)	19:05		16:59	16:11	16:06		
26	05:24	06:03 (WEA04)	06:13	07:13 (WEA05)	07:03		06:54	07:47	08:18		
	21:11	24 06:27 (WEA04)	20:14	35 07:48 (WEA05)	19:03		16:57	16:10	16:06		
27	05:26	06:04 (WEA04)	06:14	07:13 (WEA05)	07:04		06:55	07:49	08:18		
	21:10	21 06:25 (WEA04)	20:12	36 07:49 (WEA05)	19:01		16:55	16:09	16:07		
28	05:27	06:05 (WEA04)	06:16	07:12 (WEA05)	07:06		06:57	07:50	08:18		
	21:08	19 06:24 (WEA04)	20:09	37 07:49 (WEA05)	18:58		16:53	16:08	16:08		
29	05:29	06:07 (WEA04)	06:18	07:12 (WEA05)	07:08		06:59	07:52	08:18		
	21:07	15 06:22 (WEA04)	20:07	37 07:49 (WEA05)	18:56		16:52	16:07	16:09		
30	05:30	06:10 (WEA04)	06:19	07:11 (WEA05)	07:09		07:01	07:53	08:19		
	21:05	9 06:19 (WEA04)	20:05	38 07:49 (WEA05)	18:54		16:50	16:07	16:09		
31	05:32		06:21	07:11 (WEA05)			07:02		08:19		
	21:04		20:03	38 07:49 (WEA05)			16:48		16:10		
Sonnenscheinstunden	501		453		381		332	267	245		
astr.max.mögl.Beschattung		909		414		368					
Red.Sonnenscheinwahrsch.		0,47		0,50		0,42					
Reduktion Betriebsdauer		0,98		0,98							
Reduktion Windrichtung		0,66		0,63							
Gesamte Reduktion		0,31		0,31		0,26					
Met.wahrsch.Beschattung		278		128		95					

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Minuten mit Schatten
		Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP22 - Hallesche Str. 9, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:18 16:11	07:52 16:59	06:59 17:50	06:49 19:43	05:44 20:34	05:00 21:19	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51	07:04 16:46	07:54 16:06
2	08:18 16:12	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:20	04:57 21:33	05:34 21:00	06:24 19:58	07:12 18:49	07:06 16:44	07:56 16:05
3	08:18 16:13	07:49 17:02	06:55 17:54	06:44 19:47	05:41 20:37	04:58 21:21	04:58 21:32	05:36 20:58	06:25 19:56	07:14 18:47	07:07 16:42	07:57 16:04
4	08:18 16:15	07:47 17:04	06:52 17:55	06:42 19:49	05:39 20:39	04:57 21:22	04:59 21:32	05:37 20:57	06:27 19:53	07:16 18:44	07:09 16:40	07:59 16:04
5	08:18 16:16	07:45 17:06	06:50 17:57	06:40 19:50	05:37 20:40	04:57 21:23	04:57 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:38	08:00 16:03
6	08:17 16:17	07:44 17:08	06:48 17:59	06:37 19:52	05:35 20:42	04:56 21:24	05:00 21:31	05:40 20:53	06:30 19:49	07:19 18:40	07:13 16:37	08:01 16:03
7	08:17 16:18	07:42 17:10	06:46 18:01	06:35 19:54	05:33 20:44	04:55 21:25	05:01 21:31	05:42 20:51	06:32 19:47	07:21 18:38	07:15 16:35	08:02 16:02
8	08:17 16:20	07:40 17:12	06:44 18:02	06:33 19:55	05:32 20:45	04:55 21:26	05:02 21:30	05:44 20:50	06:33 19:44	07:22 18:35	07:16 16:33	08:04 16:02
9	08:16 16:21	07:39 17:13	06:41 18:04	06:31 19:57	05:30 20:47	04:54 21:27	05:03 21:29	05:45 20:48	06:35 19:42	07:24 18:33	07:18 16:32	08:05 16:02
10	08:16 16:22	07:37 17:15	06:39 18:06	06:28 19:59	05:28 20:49	04:54 21:28	05:04 21:29	05:47 20:46	06:37 19:40	07:26 18:31	07:20 16:30	08:06 16:02
11	08:15 16:24	07:35 17:17	06:37 18:08	06:26 20:00	05:27 20:50	04:54 21:29	05:05 21:28	05:48 20:44	06:38 19:37	07:27 18:29	07:22 16:28	08:07 16:01
12	08:14 16:25	07:33 17:19	06:35 18:09	06:24 20:02	05:25 20:52	04:53 21:29	05:06 21:27	05:50 20:42	06:40 19:35	07:29 18:26	07:23 16:27	08:08 16:01
13	08:14 16:27	07:31 17:21	06:32 18:11	06:22 20:04	05:23 20:53	04:53 21:30	05:07 21:26	05:52 20:40	06:41 19:33	07:31 18:24	07:25 16:25	08:09 16:01
14	08:13 16:28	07:29 17:23	06:30 18:13	06:20 20:05	05:22 20:55	04:53 21:31	05:08 21:25	05:53 20:38	06:43 19:31	07:32 18:22	07:27 16:24	08:10 16:01
15	08:12 16:30	07:28 17:25	06:28 18:15	06:17 20:07	05:20 20:56	04:53 21:31	05:10 21:24	05:55 20:36	06:45 19:28	07:34 18:20	07:29 16:23	08:11 16:01
16	08:11 16:31	07:26 17:26	06:25 18:16	06:15 20:09	05:19 20:58	04:52 21:32	05:11 21:23	05:56 20:34	06:46 19:26	07:36 18:18	07:30 16:21	08:12 16:01
17	08:10 16:33	07:24 17:28	06:23 18:18	06:13 20:10	05:17 20:59	04:52 21:32	05:12 21:22	05:58 20:32	06:48 19:24	07:38 18:16	07:32 16:20	08:13 16:02
18	08:09 16:34	07:22 17:30	06:21 18:20	06:11 20:12	05:16 21:01	04:52 21:32	05:13 21:21	06:00 20:30	06:49 19:21	07:39 18:13	07:34 16:19	08:13 16:02
19	08:08 16:36	07:20 17:32	06:19 18:21	06:09 20:14	05:14 21:02	04:52 21:33	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:11	07:35 16:17	08:14 16:02
20	08:07 16:38	07:18 17:34	06:16 18:23	06:07 20:15	05:13 21:04	04:52 21:33	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	07:37 16:16	08:15 16:03
21	08:06 16:39	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:33	05:17 21:18	06:04 20:24	06:54 19:14	07:44 18:07	07:39 16:15	08:15 16:03
22	08:05 16:41	07:14 17:37	06:12 18:26	06:02 20:19	05:10 21:07	04:53 21:34	05:18 21:16	06:06 20:22	06:56 19:12	07:46 18:05	07:40 16:14	08:16 16:03
23	08:04 16:43	07:12 17:39	06:09 18:28	06:00 20:21	05:09 21:08	04:53 21:34	05:20 21:15	06:08 20:20	06:57 19:10	07:48 18:03	07:42 16:13	08:16 16:04
24	08:03 16:44	07:10 17:41	06:07 18:30	05:58 20:22	05:08 21:09	04:53 21:34	05:21 21:14	06:09 20:18	06:59 19:07	07:50 18:01	07:44 16:12	08:17 16:05
25	08:02 16:46	07:07 17:43	06:05 18:32	05:56 20:24	05:07 21:11	04:54 21:34	05:23 21:12	06:11 20:16	07:01 19:05	06:51 16:59	07:45 16:11	08:17 16:05
26	08:00 16:48	07:05 17:45	06:03 18:33	05:54 20:26	05:06 21:12	04:54 21:34	05:24 21:11	06:12 20:13	07:02 19:03	06:53 16:57	07:47 16:10	08:17 16:06
27	07:59 16:50	07:03 17:46	06:00 18:35	05:52 20:27	05:04 21:13	04:54 21:34	05:25 21:09	06:14 20:11	07:04 19:00	06:55 16:55	07:48 16:09	08:18 16:07
28	07:58 16:52	07:01 17:48	05:58 18:37	05:50 20:29	05:03 21:15	04:55 21:34	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	07:50 16:08	08:18 16:07
29	07:56 16:53		06:56 19:38	05:48 20:31	05:02 21:16	04:55 21:34	05:28 21:06	06:17 20:07	07:07 18:56	06:59 16:51	07:52 16:07	08:18 16:08
30	07:55 16:55		06:53 19:40	05:46 20:32	05:01 21:17	04:56 21:33	05:30 21:05	06:19 20:05	07:09 18:53	07:00 16:49	07:53 16:06	08:18 16:09
31	07:53 16:57		06:51 19:42		05:00 21:18		05:31 21:03	06:20 20:02		07:02 16:47		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
astr.max.mögl.Beschattung												
Red.Sonnenscheinwahrsch.												
Reduktion Betriebsdauer												
Reduktion Windrichtung												
Gesamte Reduktion												
Met.wahrsch.Beschattung												

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende	(WEA mit letztem Schatten)
	Minuten mit Schatten		

SW25034 Salzfurtkapelle

windtest grevenbroich gmbh

Berechnet:



Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP25 - Hallesche Straße 15, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	
1	08:19	07:52	06:59	06:49	05:45	05:00	05:49 (WEA05)
	16:12	16:59	17:50	19:44	20:34	21:20	06:19 (WEA05)
2	08:18	07:51	06:57	06:47	05:43	04:59	05:50 (WEA05)
	16:13	17:01	17:52	19:45	20:36	21:21	06:20 (WEA05)
3	08:18	07:49	06:55	06:45	05:41	04:58	05:50 (WEA05)
	16:14	17:03	17:54	19:47	20:37	21:22	06:19 (WEA05)
4	08:18	07:47	06:53	06:42	05:39	04:58	05:50 (WEA05)
	16:15	17:05	17:56	19:49	20:39	21:23	06:19 (WEA05)
5	08:18	07:46	06:51	06:40	05:37	04:57	05:51 (WEA05)
	16:16	17:06	17:57	19:51	20:41	21:24	06:19 (WEA05)
6	08:18	07:44	06:48	06:38	05:36	04:56	05:51 (WEA05)
	16:17	17:08	17:59	19:52	20:42	21:25	06:19 (WEA05)
7	08:17	07:42	06:46	06:36	05:34	04:56	05:52 (WEA05)
	16:19	17:10	18:01	19:54	20:44	21:26	06:19 (WEA05)
8	08:17	07:41	06:44	06:33	05:32	04:55	05:52 (WEA05)
	16:20	17:12	18:03	19:56	20:46	21:26	06:20 (WEA05)
9	08:16	07:39	06:42	06:31	05:30	04:55	05:52 (WEA05)
	16:21	17:14	18:04	19:57	20:47	21:27	06:19 (WEA05)
10	08:16	07:37	06:39	06:29	05:29	04:54	05:53 (WEA05)
	16:23	17:16	18:06	19:59	20:49	21:28	06:19 (WEA05)
11	08:15	07:35	06:37	06:27	05:27	05:58 (WEA05)	04:54
	16:24	17:18	18:08	20:01	20:50	06:08 (WEA05)	21:29
12	08:15	07:34	06:35	06:24	05:25	05:56 (WEA05)	04:54
	16:26	17:19	18:10	20:02	20:52	06:11 (WEA05)	21:30
13	08:14	07:32	06:33	06:22	05:24	05:54 (WEA05)	04:53
	16:27	17:21	18:11	20:04	20:54	06:12 (WEA05)	21:30
14	08:13	07:30	06:30	06:20	05:22	05:53 (WEA05)	04:53
	16:29	17:23	18:13	20:06	20:55	06:14 (WEA05)	21:31
15	08:12	07:28	06:28	06:18	05:21	05:52 (WEA05)	04:53
	16:30	17:25	18:15	20:07	20:57	06:15 (WEA05)	21:31
16	08:12	07:26	06:26	06:16	05:19	05:51 (WEA05)	04:53
	16:32	17:27	18:17	20:09	20:58	06:15 (WEA05)	21:32
17	08:11	07:24	06:24	06:13	05:18	05:50 (WEA05)	04:53
	16:33	17:29	18:18	20:11	21:00	06:16 (WEA05)	21:32
18	08:10	07:22	06:21	06:11	05:16	05:50 (WEA05)	04:53
	16:35	17:30	18:20	20:12	21:01	06:17 (WEA05)	21:33
19	08:09	07:20	06:19	06:09	05:15	05:49 (WEA05)	04:53
	16:36	17:32	18:22	20:14	21:03	06:17 (WEA05)	21:33
20	08:08	07:18	06:17	06:07	05:13	05:49 (WEA05)	04:53
	16:38	17:34	18:23	20:16	21:04	06:18 (WEA05)	21:33
21	08:07	07:16	06:14	06:05	05:12	05:49 (WEA05)	04:53
	16:40	17:36	18:25	20:17	21:05	06:18 (WEA05)	21:34
22	08:06	07:14	06:12	06:03	05:11	05:49 (WEA05)	04:53
	16:41	17:38	18:27	20:19	21:07	06:19 (WEA05)	21:34
23	08:04	07:12	06:10	06:01	05:09	05:49 (WEA05)	04:53
	16:43	17:40	18:29	20:21	21:08	06:19 (WEA05)	21:34
24	08:03	07:10	06:07	05:59	05:08	05:48 (WEA05)	04:54
	16:45	17:41	18:30	20:23	21:10	06:18 (WEA05)	21:34
25	08:02	07:08	06:05	05:57	05:07	05:48 (WEA05)	04:54
	16:47	17:43	18:32	20:24	21:11	06:18 (WEA05)	21:34
26	08:01	07:06	06:03	05:55	05:06	05:48 (WEA05)	04:54
	16:48	17:45	18:34	20:26	21:12	06:19 (WEA05)	21:34
27	07:59	07:04	06:01	05:53	05:05	05:49 (WEA05)	04:55
	16:50	17:47	18:35	20:28	21:14	06:20 (WEA05)	21:34
28	07:58	07:01	05:58	05:51	05:04	05:49 (WEA05)	04:55
	16:52	17:49	18:37	20:29	21:15	06:20 (WEA05)	21:34
29	07:57		06:56	05:49	05:03	05:49 (WEA05)	04:56
	16:54		19:39	20:31	21:16	06:20 (WEA05)	21:34
30	07:55		06:54	05:47	05:02	05:49 (WEA05)	04:57
	16:56		19:40	20:33	21:17	06:19 (WEA05)	21:34
31	07:54		06:51		05:01	05:49 (WEA05)	
	16:57		19:42		21:18	06:19 (WEA05)	
Sonnenscheinstunden	260	278	367	416	484	497	
astr.max.mögl.Beschattung					554		779
Red.Sonnenscheinwahrsch.					0,48		0,45
Reduktion Betriebsdauer					0,98		0,98
Reduktion Windrichtung					0,66		0,66
Gesamte Reduktion					0,31		0,29
Met.wahrsch.Beschattung					171		229

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
--------------	-----------------------	-------------------------	----------------------	----------------------------------	--------------------------------	---------------------------	----------------------------

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP25 - Hallesche Straße 15, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli		August		September		Oktober	November	Dezember
1	04:57	05:58 (WEA05)	05:33		06:07 (WEA05)	06:22	07:11	07:04	07:55
	21:33	06:24 (WEA05)	21:02	14	06:21 (WEA05)	20:01	18:52	16:46	16:06
2	04:58	05:57 (WEA05)	05:35		06:09 (WEA05)	06:24	07:13	07:06	07:56
	21:33	06:24 (WEA05)	21:00	8	06:17 (WEA05)	19:58	18:49	16:44	16:05
3	04:59	05:57 (WEA05)	05:36			06:26	07:14	07:08	07:58
	21:33	06:24 (WEA05)	20:59			19:56	18:47	16:42	16:05
4	04:59	05:58 (WEA05)	05:38			06:27	07:16	07:10	07:59
	21:32	06:25 (WEA05)	20:57			19:54	18:45	16:41	16:04
5	05:00	05:57 (WEA05)	05:39			06:29	07:18	07:11	08:00
	21:32	06:25 (WEA05)	20:55			19:52	18:42	16:39	16:04
6	05:01	05:57 (WEA05)	05:41			06:30	07:19	07:13	08:01
	21:31	06:25 (WEA05)	20:54			19:49	18:40	16:37	16:03
7	05:02	05:57 (WEA05)	05:42			06:32	07:21	07:15	08:03
	21:31	06:26 (WEA05)	20:52			19:47	18:38	16:35	16:03
8	05:03	05:57 (WEA05)	05:44			06:34	07:23	07:17	08:04
	21:30	06:26 (WEA05)	20:50			19:45	18:36	16:34	16:03
9	05:04	05:57 (WEA05)	05:46			06:35	07:24	07:18	08:05
	21:30	06:27 (WEA05)	20:48			19:42	18:33	16:32	16:02
10	05:05	05:58 (WEA05)	05:47			06:37	07:26	07:20	08:06
	21:29	06:27 (WEA05)	20:46			19:40	18:31	16:30	16:02
11	05:06	05:58 (WEA05)	05:49			06:39	07:28	07:22	08:07
	21:28	06:27 (WEA05)	20:44			19:38	18:29	16:29	16:02
12	05:07	05:58 (WEA05)	05:50			06:40	07:29	07:24	08:08
	21:27	06:28 (WEA05)	20:42			19:35	18:27	16:27	16:02
13	05:08	05:58 (WEA05)	05:52			06:42	07:31	07:25	08:09
	21:26	06:28 (WEA05)	20:40			19:33	18:25	16:26	16:02
14	05:09	05:58 (WEA05)	05:54			06:43	07:33	07:27	08:10
	21:25	06:28 (WEA05)	20:39			19:31	18:22	16:24	16:02
15	05:10	05:58 (WEA05)	05:55			06:45	07:34	07:29	08:11
	21:24	06:28 (WEA05)	20:37			19:29	18:20	16:23	16:02
16	05:11	05:57 (WEA05)	05:57			06:47	07:36	07:31	08:12
	21:23	06:28 (WEA05)	20:35			19:26	18:18	16:22	16:02
17	05:12	05:57 (WEA05)	05:58			06:48	07:38	07:32	08:13
	21:22	06:28 (WEA05)	20:33			19:24	18:16	16:20	16:02
18	05:14	05:57 (WEA05)	06:00			06:50	07:40	07:34	08:14
	21:21	06:28 (WEA05)	20:31			19:22	18:14	16:19	16:02
19	05:15	05:58 (WEA05)	06:02			06:51	07:41	07:36	08:14
	21:20	06:29 (WEA05)	20:28			19:19	18:12	16:18	16:03
20	05:16	05:58 (WEA05)	06:03			06:53	07:43	07:37	08:15
	21:19	06:29 (WEA05)	20:26			19:17	18:10	16:16	16:03
21	05:18	05:58 (WEA05)	06:05			06:55	07:45	07:39	08:16
	21:18	06:28 (WEA05)	20:24			19:15	18:08	16:15	16:03
22	05:19	05:58 (WEA05)	06:06			06:56	07:47	07:41	08:16
	21:17	06:28 (WEA05)	20:22			19:12	18:05	16:14	16:04
23	05:20	05:59 (WEA05)	06:08			06:58	07:48	07:42	08:17
	21:15	06:28 (WEA05)	20:20			19:10	18:03	16:13	16:04
24	05:22	06:00 (WEA05)	06:10			06:59	07:50	07:44	08:17
	21:14	06:28 (WEA05)	20:18			19:08	18:01	16:12	16:05
25	05:23	06:00 (WEA05)	06:11			07:01	06:52	07:46	08:17
	21:13	06:27 (WEA05)	20:16			19:05	16:59	16:11	16:06
26	05:24	06:01 (WEA05)	06:13			07:03	06:54	07:47	08:18
	21:11	06:27 (WEA05)	20:14			19:03	16:57	16:10	16:06
27	05:26	06:01 (WEA05)	06:14			07:04	06:55	07:49	08:18
	21:10	06:26 (WEA05)	20:12			19:01	16:55	16:09	16:07
28	05:27	06:02 (WEA05)	06:16			07:06	06:57	07:50	08:18
	21:08	06:25 (WEA05)	20:09			18:58	16:53	16:08	16:08
29	05:29	06:03 (WEA05)	06:18			07:08	06:59	07:52	08:18
	21:07	06:25 (WEA05)	20:07			18:56	16:52	16:07	16:09
30	05:30	06:04 (WEA05)	06:19			07:09	07:01	07:53	08:18
	21:05	06:24 (WEA05)	20:05			18:54	16:50	16:07	16:10
31	05:32	06:05 (WEA05)	06:21				07:02		08:19
	21:04	06:22 (WEA05)	20:03				16:48		16:10
Sonnenscheinstunden	501		453			381	332	267	245
astr.max.mögl.Beschattung	861		22						
Red.Sonnenscheinwahrsch.	0,47		0,50						
Reduktion Betriebsdauer	0,98		0,98						
Reduktion Windrichtung	0,66		0,66						
Gesamte Reduktion	0,31		0,32						
Met.wahrsch.Beschattung	263		7						

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende
			(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP26 - Hallesche Straße 18, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	
1	08:19	07:52	06:59	06:49	05:45	05:00	06:04 (WEA05)
	16:12	16:59	17:50	19:44	20:34	21:20	06:26 (WEA05)
2	08:18	07:51	06:57	06:47	05:43	04:59	06:05 (WEA05)
	16:13	17:01	17:52	19:45	20:36	21:21	06:26 (WEA05)
3	08:18	07:49	06:55	06:45	05:41	04:58	06:06 (WEA05)
	16:14	17:03	17:54	19:47	20:37	21:22	06:25 (WEA05)
4	08:18	07:47	06:53	06:42	05:39	06:11 (WEA05)	04:58
	16:15	17:05	17:56	19:49	20:39	06:19 (WEA05)	21:23
5	08:18	07:46	06:51	06:40	05:37	06:07 (WEA05)	04:57
	16:16	17:06	17:57	19:51	20:41	06:22 (WEA05)	21:24
6	08:18	07:44	06:48	06:38	05:36	06:05 (WEA05)	04:56
	16:17	17:08	17:59	19:52	20:42	06:23 (WEA05)	21:25
7	08:17	07:42	06:46	06:36	05:34	06:04 (WEA05)	04:56
	16:19	17:10	18:01	19:54	20:44	06:25 (WEA05)	21:26
8	08:17	07:41	06:44	06:33	05:32	06:03 (WEA05)	04:55
	16:20	17:12	18:03	19:56	20:46	06:26 (WEA05)	21:26
9	08:16	07:39	06:42	06:31	05:30	06:01 (WEA05)	04:55
	16:21	17:14	18:04	19:57	20:47	06:26 (WEA05)	21:27
10	08:16	07:37	06:39	06:29	05:29	06:01 (WEA05)	04:54
	16:23	17:16	18:06	19:59	20:49	06:28 (WEA05)	21:28
11	08:15	07:35	06:37	06:27	05:27	06:00 (WEA05)	04:54
	16:24	17:18	18:08	20:01	20:50	06:28 (WEA05)	21:29
12	08:15	07:34	06:35	06:24	05:25	06:00 (WEA05)	04:54
	16:26	17:19	18:10	20:02	20:52	06:29 (WEA05)	21:30
13	08:14	07:32	06:33	06:22	05:24	05:59 (WEA05)	04:53
	16:27	17:21	18:11	20:04	20:54	06:29 (WEA05)	21:30
14	08:13	07:30	06:30	06:20	05:22	05:59 (WEA05)	04:53
	16:29	17:23	18:13	20:06	20:55	06:29 (WEA05)	21:31
15	08:12	07:28	06:28	06:18	05:21	05:59 (WEA05)	04:53
	16:30	17:25	18:15	20:07	20:57	06:30 (WEA05)	21:31
16	08:12	07:26	06:26	06:16	05:19	05:59 (WEA05)	04:53
	16:32	17:27	18:17	20:09	20:58	06:29 (WEA05)	21:32
17	08:11	07:24	06:24	06:13	05:18	05:59 (WEA05)	04:53
	16:33	17:29	18:18	20:11	21:00	06:30 (WEA05)	21:32
18	08:10	07:22	06:21	06:11	05:16	05:59 (WEA05)	04:53
	16:35	17:30	18:20	20:12	21:01	06:30 (WEA05)	21:33
19	08:09	07:20	06:19	06:09	05:15	05:59 (WEA05)	04:53
	16:36	17:32	18:22	20:14	21:03	06:29 (WEA05)	21:33
20	08:08	07:18	06:17	06:07	05:13	05:59 (WEA05)	04:53
	16:38	17:34	18:23	20:16	21:04	06:30 (WEA05)	21:33
21	08:07	07:16	06:14	06:05	05:12	05:59 (WEA05)	04:53
	16:40	17:36	18:25	20:17	21:05	06:30 (WEA05)	21:34
22	08:06	07:14	06:12	06:03	05:11	06:00 (WEA05)	04:53
	16:41	17:38	18:27	20:19	21:07	06:30 (WEA05)	21:34
23	08:04	07:12	06:10	06:01	05:09	06:00 (WEA05)	04:53
	16:43	17:40	18:29	20:21	21:08	06:30 (WEA05)	21:34
24	08:03	07:10	06:07	05:59	05:08	05:59 (WEA05)	04:54
	16:45	17:41	18:30	20:23	21:10	06:29 (WEA05)	21:34
25	08:02	07:08	06:05	05:57	05:07	06:00 (WEA05)	04:54
	16:47	17:43	18:32	20:24	21:11	06:28 (WEA05)	21:34
26	08:01	07:06	06:03	05:55	05:06	06:00 (WEA05)	04:54
	16:48	17:45	18:34	20:26	21:12	06:28 (WEA05)	21:34
27	07:59	07:04	06:01	05:53	05:05	06:02 (WEA05)	04:55
	16:50	17:47	18:35	20:28	21:14	06:29 (WEA05)	21:34
28	07:58	07:01	05:58	05:51	05:04	06:02 (WEA05)	04:55
	16:52	17:49	18:37	20:29	21:15	06:28 (WEA05)	21:34
29	07:57		06:56	05:49	05:03	06:03 (WEA05)	04:56
	16:54		19:39	20:31	21:16	06:28 (WEA05)	21:34
30	07:55		06:54	05:47	05:02	06:03 (WEA05)	04:57
	16:56		19:40	20:33	21:17	06:27 (WEA05)	21:34
31	07:54		06:51		05:01	06:04 (WEA05)	
	16:57		19:42		21:18	06:27 (WEA05)	
Sonnenscheinstunden	260	278	367	416	484	497	
astr.max.mögl.Beschattung					740		156
Red.Sonnenscheinwahrsch.					0,48		0,45
Reduktion Betriebsdauer					0,98		0,98
Reduktion Windrichtung					0,65		0,65
Gesamte Reduktion					0,30		0,29
Met.wahrsch.Beschattung					225		45

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende
			(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP26 - Hallesche Straße 18, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Juli		August		September		Oktober		November		Dezember	
1	04:57		05:33		06:11 (WEA05)	06:22	07:11	07:04	07:55		
	21:33		21:02	28	06:39 (WEA05)	20:01	18:52	16:46	16:06		
2	04:58		05:35		06:11 (WEA05)	06:24	07:13	07:06	07:56		
	21:33	6	06:24 (WEA05)	21:00	27	06:38 (WEA05)	19:58	18:49	16:44	16:05	
3	04:59		05:36		06:12 (WEA05)	06:26	07:14	07:08	07:58		
	21:33	9	06:26 (WEA05)	20:59	26	06:38 (WEA05)	19:56	18:47	16:42	16:05	
4	04:59		05:38		06:12 (WEA05)	06:27	07:16	07:10	07:59		
	21:32	11	06:28 (WEA05)	20:57	25	06:37 (WEA05)	19:54	18:45	16:41	16:04	
5	05:00		05:39		06:14 (WEA05)	06:29	07:18	07:11	08:00		
	21:32	13	06:28 (WEA05)	20:55	22	06:36 (WEA05)	19:52	18:42	16:39	16:04	
6	05:01		05:41		06:14 (WEA05)	06:30	07:19	07:13	08:01		
	21:31	14	06:29 (WEA05)	20:54	20	06:34 (WEA05)	19:49	18:40	16:37	16:03	
7	05:02		05:42		06:16 (WEA05)	06:32	07:21	07:15	08:03		
	21:31	16	06:30 (WEA05)	20:52	17	06:33 (WEA05)	19:47	18:38	16:35	16:03	
8	05:03		05:44		06:18 (WEA05)	06:34	07:23	07:17	08:04		
	21:30	17	06:31 (WEA05)	20:50	13	06:31 (WEA05)	19:45	18:36	16:34	16:03	
9	05:04		05:46		06:21 (WEA05)	06:35	07:24	07:18	08:05		
	21:30	19	06:32 (WEA05)	20:48	5	06:26 (WEA05)	19:42	18:33	16:32	16:02	
10	05:05		05:47			06:37	07:26	07:20	08:06		
	21:29	20	06:33 (WEA05)	20:46		19:40	18:31	16:30	16:02		
11	05:06		05:49			06:39	07:28	07:22	08:07		
	21:28	21	06:34 (WEA05)	20:44		19:38	18:29	16:29	16:02		
12	05:07		05:50			06:40	07:29	07:24	08:08		
	21:27	23	06:35 (WEA05)	20:42		19:35	18:27	16:27	16:02		
13	05:08		05:52			06:42	07:31	07:25	08:09		
	21:26	23	06:35 (WEA05)	20:40		19:33	18:25	16:26	16:02		
14	05:09		05:54			06:43	07:33	07:27	08:10		
	21:25	25	06:36 (WEA05)	20:39		19:31	18:22	16:24	16:02		
15	05:10		05:55			06:45	07:34	07:29	08:11		
	21:24	26	06:37 (WEA05)	20:37		19:29	18:20	16:23	16:02		
16	05:11		05:57			06:47	07:36	07:31	08:12		
	21:23	27	06:37 (WEA05)	20:35		19:26	18:18	16:22	16:02		
17	05:12		05:58			06:48	07:38	07:32	08:13		
	21:22	27	06:37 (WEA05)	20:33		19:24	18:16	16:20	16:02		
18	05:14		06:00			06:50	07:40	07:34	08:14		
	21:21	28	06:38 (WEA05)	20:31		19:22	18:14	16:19	16:02		
19	05:15		06:02			06:51	07:41	07:36	08:14		
	21:20	29	06:39 (WEA05)	20:28		19:19	18:12	16:18	16:03		
20	05:16		06:03			06:53	07:43	07:37	08:15		
	21:19	29	06:39 (WEA05)	20:26		19:17	18:10	16:16	16:03		
21	05:18		06:05			06:55	07:45	07:39	08:16		
	21:18	30	06:39 (WEA05)	20:24		19:15	18:08	16:15	16:03		
22	05:19		06:06			06:56	07:47	07:41	08:16		
	21:17	30	06:39 (WEA05)	20:22		19:12	18:05	16:14	16:04		
23	05:20		06:08			06:58	07:48	07:42	08:17		
	21:15	30	06:40 (WEA05)	20:20		19:10	18:03	16:13	16:04		
24	05:22		06:10			06:59	07:50	07:44	08:17		
	21:14	31	06:40 (WEA05)	20:18		19:08	18:01	16:12	16:05		
25	05:23		06:11			07:01	06:52	07:46	08:17		
	21:13	31	06:40 (WEA05)	20:16		19:05	16:59	16:11	16:06		
26	05:24		06:13			07:03	06:54	07:47	08:18		
	21:11	31	06:41 (WEA05)	20:14		19:03	16:57	16:10	16:06		
27	05:26		06:14			07:04	06:55	07:49	08:18		
	21:10	31	06:40 (WEA05)	20:12		19:01	16:55	16:09	16:07		
28	05:27		06:16			07:06	06:57	07:50	08:18		
	21:08	31	06:40 (WEA05)	20:09		18:58	16:53	16:08	16:08		
29	05:29		06:18			07:08	06:59	07:52	08:18		
	21:07	30	06:40 (WEA05)	20:07		18:56	16:52	16:07	16:09		
30	05:30		06:19			07:09	07:01	07:53	08:19		
	21:05	30	06:40 (WEA05)	20:05		18:54	16:50	16:07	16:10		
31	05:32		06:21				07:02		08:19		
	21:04	29	06:39 (WEA05)	20:03			16:48		16:10		
Sonnenscheinstunden	501		453			381	332	267	245		
astr.max.mögl.Beschattung	717		183								
Red.Sonnenscheinwahrsch.	0,47		0,50								
Reduktion Betriebsdauer	0,98		0,98								
Reduktion Windrichtung	0,65		0,65								
Gesamte Reduktion	0,30		0,32								
Met.wahrsch.Beschattung	216		58								

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
--------------	-----------------------	-------------------------	----------------------	----------------------------------	--------------------------------	---------------------------	----------------------------

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP27 - Am Sandberg 14, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April		Mai	Juni
1	08:19	07:52	06:59	06:49		05:45	06:28 (WEA05) 05:00
	16:12	16:59	17:50	19:44		20:34	38 07:06 (WEA05) 21:20
2	08:18	07:51	06:57	06:47		05:43	06:27 (WEA05) 04:59
	16:13	17:01	17:52	19:45		20:36	39 07:06 (WEA05) 21:21
3	08:18	07:49	06:55	06:45		05:41	06:27 (WEA05) 04:58
	16:14	17:03	17:54	19:47		20:37	39 07:06 (WEA05) 21:22
4	08:18	07:47	06:53	06:42		05:39	06:27 (WEA05) 04:58
	16:15	17:05	17:56	19:49		20:39	39 07:06 (WEA05) 21:23
5	08:18	07:46	06:51	06:40		05:37	06:27 (WEA05) 04:57
	16:16	17:06	17:57	19:51		20:41	39 07:06 (WEA05) 21:24
6	08:18	07:44	06:48	06:38		05:36	06:27 (WEA05) 04:56
	16:17	17:08	17:59	19:52		20:42	39 07:06 (WEA05) 21:25
7	08:17	07:42	06:46	06:36		05:34	06:27 (WEA05) 04:56
	16:19	17:10	18:01	19:54		20:44	39 07:06 (WEA05) 21:26
8	08:17	07:41	06:44	06:33		05:32	06:27 (WEA05) 04:55
	16:20	17:12	18:03	19:56		20:46	38 07:05 (WEA05) 21:26
9	08:16	07:39	06:42	06:31		05:30	06:27 (WEA05) 04:55
	16:21	17:14	18:04	19:57		20:47	38 07:05 (WEA05) 21:27
10	08:16	07:37	06:39	06:29		05:29	06:28 (WEA05) 04:54
	16:23	17:16	18:06	19:59		20:49	37 07:05 (WEA05) 21:28
11	08:15	07:35	06:37	06:27		05:27	06:28 (WEA05) 04:54
	16:24	17:18	18:08	20:01		20:50	36 07:04 (WEA05) 21:29
12	08:15	07:34	06:35	06:24		05:25	06:28 (WEA05) 04:54
	16:26	17:19	18:10	20:02		20:52	36 07:04 (WEA05) 21:30
13	08:14	07:32	06:33	06:22		05:24	06:28 (WEA05) 04:53
	16:27	17:21	18:11	20:04		20:54	35 07:03 (WEA05) 21:30
14	08:13	07:30	06:30	06:20		05:22	06:29 (WEA05) 04:53
	16:29	17:23	18:13	20:06		20:55	33 07:02 (WEA05) 21:31
15	08:12	07:28	06:28	06:18		05:21	06:30 (WEA05) 04:53
	16:30	17:25	18:15	20:07		20:57	32 07:02 (WEA05) 21:31
16	08:12	07:26	06:26	06:16		05:19	06:30 (WEA05) 04:53
	16:32	17:27	18:17	20:09		20:58	31 07:01 (WEA05) 21:32
17	08:11	07:24	06:24	06:13		05:18	06:32 (WEA05) 04:53
	16:33	17:29	18:18	20:11		21:00	28 07:00 (WEA05) 21:32
18	08:10	07:22	06:21	06:11		05:16	06:32 (WEA05) 04:53
	16:35	17:30	18:20	20:12		21:01	27 06:59 (WEA05) 21:33
19	08:09	07:20	06:19	06:09		05:15	06:33 (WEA05) 04:53
	16:36	17:32	18:22	20:14		21:03	25 06:58 (WEA05) 21:33
20	08:08	07:18	06:17	06:07	06:47 (WEA05)	05:13	06:35 (WEA05) 04:53
	16:38	17:34	18:23	20:16	4 06:51 (WEA05)	21:04	22 06:57 (WEA05) 21:33
21	08:07	07:16	06:14	06:05	06:41 (WEA05)	05:12	06:36 (WEA05) 04:53
	16:40	17:36	18:25	20:17	15 06:56 (WEA05)	21:05	20 06:56 (WEA05) 21:34
22	08:06	07:14	06:12	06:03	06:38 (WEA05)	05:11	06:38 (WEA05) 04:53
	16:41	17:38	18:27	20:19	21 06:59 (WEA05)	21:07	16 06:54 (WEA05) 21:34
23	08:04	07:12	06:10	06:01	06:36 (WEA05)	05:09	06:40 (WEA05) 04:53
	16:43	17:40	18:29	20:21	24 07:00 (WEA05)	21:08	13 06:53 (WEA05) 21:34
24	08:03	07:10	06:07	05:59	06:34 (WEA05)	05:08	06:43 (WEA05) 04:54
	16:45	17:41	18:30	20:23	28 07:02 (WEA05)	21:10	5 06:48 (WEA05) 21:34
25	08:02	07:08	06:05	05:57	06:33 (WEA05)	05:07	04:54
	16:47	17:43	18:32	20:24	30 07:03 (WEA05)	21:11	21:34
26	08:01	07:06	06:03	05:55	06:32 (WEA05)	05:06	04:54
	16:48	17:45	18:34	20:26	32 07:04 (WEA05)	21:12	21:34
27	07:59	07:04	06:01	05:53	06:30 (WEA05)	05:05	04:55
	16:50	17:47	18:35	20:28	34 07:04 (WEA05)	21:14	21:34
28	07:58	07:01	05:58	05:51	06:30 (WEA05)	05:04	04:55
	16:52	17:49	18:37	20:29	36 07:06 (WEA05)	21:15	21:34
29	07:57		06:56	05:49	06:30 (WEA05)	05:03	04:56
	16:54		19:39	20:31	36 07:06 (WEA05)	21:16	21:34
30	07:55		06:54	05:47	06:29 (WEA05)	05:02	04:56
	16:56		19:40	20:33	37 07:06 (WEA05)	21:17	21:34
31	07:54		06:51			05:01	
	16:57		19:42			21:18	
Sonnenscheinstunden	260	278	367	416		484	497
astr.max.mögl.Beschattung				297		744	
Red.Sonnenscheinwahrsch.				0,42		0,48	
Reduktion Betriebsdauer				0,98		0,98	
Reduktion Windrichtung				0,64		0,64	
Gesamte Reduktion				0,26		0,30	
Met.wahrsch.Beschattung				77		221	

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)	Zeitpunkt (SS:MM) Schattenende	(WEA mit letztem Schatten)
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Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP27 - Am Sandberg 14, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Juli		August		September		Oktober		November		Dezember	
1	04:57 21:33	05:33 21:02	35	06:39 (WEA05) 07:14 (WEA05)	06:22 20:00	07:11 18:52	07:04 16:46	07:55 16:06			
2	04:58 21:33	05:35 21:00	36	06:38 (WEA05) 07:14 (WEA05)	06:24 19:58	07:13 18:49	07:06 16:44	07:56 16:05			
3	04:58 21:33	05:36 20:59	37	06:38 (WEA05) 07:15 (WEA05)	06:26 19:56	07:14 18:47	07:08 16:42	07:58 16:05			
4	04:59 21:32	05:38 20:57	38	06:37 (WEA05) 07:15 (WEA05)	06:27 19:54	07:16 18:45	07:10 16:40	07:59 16:04			
5	05:00 21:32	05:39 20:55	39	06:37 (WEA05) 07:16 (WEA05)	06:29 19:51	07:18 18:42	07:11 16:39	08:00 16:04			
6	05:01 21:31	05:41 20:54	38	06:37 (WEA05) 07:15 (WEA05)	06:30 19:49	07:19 18:40	07:13 16:37	08:01 16:03			
7	05:02 21:31	05:42 20:52	39	06:36 (WEA05) 07:15 (WEA05)	06:32 19:47	07:21 18:38	07:15 16:35	08:03 16:03			
8	05:03 21:30	05:44 20:50	39	06:37 (WEA05) 07:16 (WEA05)	06:34 19:45	07:23 18:36	07:17 16:34	08:04 16:02			
9	05:04 21:30	05:46 20:48	39	06:36 (WEA05) 07:15 (WEA05)	06:35 19:42	07:24 18:33	07:18 16:32	08:05 16:02			
10	05:05 21:29	05:47 20:46	38	06:37 (WEA05) 07:15 (WEA05)	06:37 19:40	07:26 18:31	07:20 16:30	08:06 16:02			
11	05:06 21:28	05:49 20:44	38	06:36 (WEA05) 07:14 (WEA05)	06:39 19:38	07:28 18:29	07:22 16:29	08:07 16:02			
12	05:07 21:27	05:50 20:42	37	06:37 (WEA05) 07:14 (WEA05)	06:40 19:35	07:29 18:27	07:24 16:27	08:08 16:02			
13	05:08 21:26	05:52 20:40	37	06:36 (WEA05) 07:13 (WEA05)	06:42 19:33	07:31 18:25	07:25 16:26	08:09 16:02			
14	05:09 21:25	05:53 20:39	36	06:37 (WEA05) 07:13 (WEA05)	06:43 19:31	07:33 18:22	07:27 16:24	08:10 16:02			
15	05:10 21:24	05:55 20:37	35	06:37 (WEA05) 07:12 (WEA05)	06:45 19:29	07:34 18:20	07:29 16:23	08:11 16:02			
16	05:11 21:23	05:57 20:35	34	06:38 (WEA05) 07:12 (WEA05)	06:47 19:26	07:36 18:18	07:31 16:22	08:12 16:02			
17	05:12 21:22	05:58 20:33	32	06:38 (WEA05) 07:10 (WEA05)	06:48 19:24	07:38 18:16	07:32 16:20	08:13 16:02			
18	05:14 21:21	06:00 20:31	29	06:40 (WEA05) 07:09 (WEA05)	06:50 19:22	07:40 18:14	07:34 16:19	08:14 16:02			
19	05:15 21:20	06:01 20:28	27	06:40 (WEA05) 07:07 (WEA05)	06:51 19:19	07:41 18:12	07:36 16:18	08:14 16:03			
20	05:16 21:19	06:03 20:26	24	06:42 (WEA05) 07:06 (WEA05)	06:53 19:17	07:43 18:10	07:37 16:16	08:15 16:03			
21	05:18 21:18	06:49 (WEA05) 07:03 (WEA05)	20	06:44 (WEA05) 07:04 (WEA05)	06:55 19:15	07:45 18:07	07:39 16:15	08:16 16:03			
22	05:19 21:17	06:47 (WEA05) 07:05 (WEA05)	14	06:46 (WEA05) 07:00 (WEA05)	06:56 19:12	07:47 18:05	07:41 16:14	08:16 16:04			
23	05:20 21:15	06:46 (WEA05) 07:07 (WEA05)	21	06:08 20:20	06:58 19:10	07:48 18:03	07:42 16:13	08:17 16:04			
24	05:22 21:14	06:44 (WEA05) 07:08 (WEA05)	24	06:10 20:18	06:59 19:08	07:50 18:01	07:44 16:12	08:17 16:05			
25	05:23 21:13	06:43 (WEA05) 07:09 (WEA05)	26	06:11 20:16	07:01 19:05	06:52 16:59	07:46 16:11	08:17 16:06			
26	05:24 21:11	06:43 (WEA05) 07:11 (WEA05)	28	06:13 20:14	07:03 19:03	06:54 16:57	07:47 16:10	08:18 16:06			
27	05:26 21:10	06:42 (WEA05) 07:11 (WEA05)	29	06:14 20:12	07:04 19:01	06:55 16:55	07:49 16:09	08:18 16:07			
28	05:27 21:08	06:41 (WEA05) 07:12 (WEA05)	31	06:16 20:09	07:06 18:58	06:57 16:53	07:50 16:08	08:18 16:08			
29	05:29 21:07	06:41 (WEA05) 07:13 (WEA05)	32	06:18 20:07	07:08 18:56	06:59 16:52	07:52 16:07	08:18 16:09			
30	05:30 21:05	06:40 (WEA05) 07:13 (WEA05)	33	06:19 20:05	07:09 18:54	07:01 16:50	07:53 16:07	08:19 16:09			
31	05:32 21:04	06:39 (WEA05) 07:13 (WEA05)	34	06:21 20:03		07:02 16:48		08:19 16:10			
Sonnenscheinstunden		501		453		381	332	267	245		
astr.max.mögl.Beschattung		300		741							
Red.Sonnenscheinwahrsch.		0,47		0,50							
Reduktion Betriebsdauer		0,98		0,98							
Reduktion Windrichtung		0,64		0,64							
Gesamte Reduktion		0,29		0,31							
Met.wahrsch.Beschattung		88		230							

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende
			(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP28 - Am Sandberg 18, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April		Mai		Juni
1	08:19	07:52	06:59	06:49		05:45	06:39 (WEA05)	05:00
	16:12	16:59	17:50	19:44		20:34	38 07:17 (WEA05)	21:20
2	08:18	07:51	06:57	06:47		05:43	06:39 (WEA05)	04:59
	16:13	17:01	17:52	19:45		20:36	37 07:16 (WEA05)	21:21
3	08:18	07:49	06:55	06:45		05:41	06:39 (WEA05)	04:58
	16:14	17:03	17:54	19:47		20:37	36 07:15 (WEA05)	21:22
4	08:18	07:47	06:53	06:42		05:39	06:40 (WEA05)	04:58
	16:15	17:05	17:56	19:49		20:39	35 07:15 (WEA05)	21:23
5	08:18	07:46	06:51	06:40		05:37	06:40 (WEA05)	04:57
	16:16	17:06	17:57	19:51		20:41	34 07:14 (WEA05)	21:24
6	08:18	07:44	06:48	06:38		05:36	06:40 (WEA05)	04:56
	16:17	17:08	17:59	19:52		20:42	33 07:13 (WEA05)	21:25
7	08:17	07:42	06:46	06:36		05:34	06:41 (WEA05)	04:56
	16:19	17:10	18:01	19:54		20:44	32 07:13 (WEA05)	21:26
8	08:17	07:41	06:44	06:33		05:32	06:42 (WEA05)	04:55
	16:20	17:12	18:03	19:56		20:46	30 07:12 (WEA05)	21:26
9	08:16	07:39	06:42	06:31		05:30	06:42 (WEA05)	04:55
	16:21	17:14	18:04	19:57		20:47	28 07:10 (WEA05)	21:27
10	08:16	07:37	06:39	06:29		05:29	06:44 (WEA05)	04:54
	16:23	17:16	18:06	19:59		20:49	26 07:10 (WEA05)	21:28
11	08:15	07:35	06:37	06:27		05:27	06:44 (WEA05)	04:54
	16:24	17:18	18:08	20:01		20:50	24 07:08 (WEA05)	21:29
12	08:15	07:34	06:35	06:24		05:25	06:46 (WEA05)	04:54
	16:26	17:19	18:10	20:02		20:52	21 07:07 (WEA05)	21:30
13	08:14	07:32	06:33	06:22		05:24	06:48 (WEA05)	04:53
	16:27	17:21	18:11	20:04		20:54	16 07:04 (WEA05)	21:30
14	08:13	07:30	06:30	06:20		05:22	06:51 (WEA05)	04:53
	16:29	17:23	18:13	20:06		20:55	11 07:02 (WEA05)	21:31
15	08:12	07:28	06:28	06:18	06:54 (WEA05)	05:21	04:53	05:32 (WEA04)
	16:30	17:25	18:15	20:07	14 07:08 (WEA05)	20:57	21:31	23 05:55 (WEA04)
16	08:12	07:26	06:26	06:16	06:51 (WEA05)	05:19	04:53	05:32 (WEA04)
	16:32	17:27	18:17	20:09	20 07:11 (WEA05)	20:58	21:32	23 05:55 (WEA04)
17	08:11	07:24	06:24	06:13	06:48 (WEA05)	05:18	04:53	05:32 (WEA04)
	16:33	17:29	18:18	20:11	24 07:12 (WEA05)	21:00	21:32	24 05:56 (WEA04)
18	08:10	07:22	06:21	06:11	06:46 (WEA05)	05:16	04:53	05:32 (WEA04)
	16:35	17:30	18:20	20:12	28 07:14 (WEA05)	21:01	21:33	24 05:56 (WEA04)
19	08:09	07:20	06:19	06:09	06:45 (WEA05)	05:15	04:53	05:32 (WEA04)
	16:36	17:32	18:22	20:14	30 07:15 (WEA05)	21:03	21:33	24 05:56 (WEA04)
20	08:08	07:18	06:17	06:07	06:44 (WEA05)	05:13	04:53	05:32 (WEA04)
	16:38	17:34	18:23	20:16	32 07:16 (WEA05)	21:04	21:33	24 05:56 (WEA04)
21	08:07	07:16	06:14	06:05	06:42 (WEA05)	05:12	04:53	05:32 (WEA04)
	16:40	17:36	18:25	20:17	34 07:16 (WEA05)	21:05	21:34	24 05:56 (WEA04)
22	08:06	07:14	06:12	06:03	06:42 (WEA05)	05:11	04:53	05:33 (WEA04)
	16:41	17:38	18:27	20:19	35 07:17 (WEA05)	21:07	21:34	24 05:57 (WEA04)
23	08:04	07:12	06:10	06:01	06:41 (WEA05)	05:09	04:53	05:33 (WEA04)
	16:43	17:40	18:29	20:21	36 07:17 (WEA05)	21:08	21:34	24 05:57 (WEA04)
24	08:03	07:10	06:07	05:59	06:40 (WEA05)	05:08	04:54	05:33 (WEA04)
	16:45	17:41	18:30	20:23	37 07:17 (WEA05)	21:10	21:34	24 05:57 (WEA04)
25	08:02	07:08	06:05	05:57	06:39 (WEA05)	05:07	04:54	05:33 (WEA04)
	16:47	17:43	18:32	20:24	38 07:17 (WEA05)	21:11	21:34	24 05:57 (WEA04)
26	08:01	07:06	06:03	05:55	06:39 (WEA05)	05:06	04:54	05:34 (WEA04)
	16:48	17:45	18:34	20:26	38 07:17 (WEA05)	21:12	21:34	24 05:58 (WEA04)
27	07:59	07:04	06:01	05:53	06:39 (WEA05)	05:05	04:55	05:34 (WEA04)
	16:50	17:47	18:35	20:28	38 07:17 (WEA05)	21:14	21:34	23 05:57 (WEA04)
28	07:58	07:01	05:58	05:51	06:39 (WEA05)	05:04	04:55	05:35 (WEA04)
	16:52	17:49	18:37	20:29	39 07:18 (WEA05)	21:15	21:34	23 05:58 (WEA04)
29	07:57		06:56	05:49	06:39 (WEA05)	05:03	04:56	05:34 (WEA04)
	16:54		19:39	20:31	39 07:18 (WEA05)	21:16	21:34	23 05:57 (WEA04)
30	07:55		06:54	05:47	06:39 (WEA05)	05:02	04:56	05:35 (WEA04)
	16:56		19:40	20:33	38 07:17 (WEA05)	21:17	21:34	22 05:57 (WEA04)
31	07:54		06:51			05:01		
	16:57		19:42			21:18		
Sonnenscheinstunden	260	278	367	416		484		497
astr.max.mögl.Beschattung				520		401		586
Red.Sonnenscheinwahrsch.				0,42		0,48		0,45
Reduktion Betriebsdauer				0,98		0,98		0,98
Reduktion Windrichtung				0,64		0,64		0,68
Gesamte Reduktion				0,26		0,30		0,30
Met.wahrsch.Beschattung				135		119		176

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
--------------	-----------------------	-------------------------	----------------------	----------------------------------	--------------------------------	---------------------------	----------------------------

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP28 - Am Sandberg 18, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Juli		August		September		Oktober		November		Dezember	
1	04:57	05:36 (WEA04)	05:33	06:56 (WEA05)	06:22	07:11	07:04	07:55			
	21:33	22	05:58 (WEA04)	21:02	22	07:18 (WEA05)	20:00	18:52	16:46	16:06	
2	04:58	05:36 (WEA04)	05:35	06:54 (WEA05)	06:24	07:13	07:06	07:56			
	21:33	21	05:57 (WEA04)	21:00	25	07:19 (WEA05)	19:58	18:49	16:44	16:05	
3	04:58	05:37 (WEA04)	05:36	06:54 (WEA05)	06:26	07:14	07:08	07:58			
	21:33	20	05:57 (WEA04)	20:59	26	07:20 (WEA05)	19:56	18:47	16:42	16:05	
4	04:59	05:38 (WEA04)	05:38	06:52 (WEA05)	06:27	07:16	07:10	07:59			
	21:32	19	05:57 (WEA04)	20:57	29	07:21 (WEA05)	19:54	18:45	16:40	16:04	
5	05:00	05:38 (WEA04)	05:39	06:52 (WEA05)	06:29	07:18	07:11	08:00			
	21:32	18	05:56 (WEA04)	20:55	31	07:23 (WEA05)	19:51	18:42	16:39	16:04	
6	05:01	05:39 (WEA04)	05:41	06:50 (WEA05)	06:30	07:19	07:13	08:01			
	21:31	16	05:55 (WEA04)	20:54	33	07:23 (WEA05)	19:49	18:40	16:37	16:03	
7	05:02	05:41 (WEA04)	05:42	06:49 (WEA05)	06:32	07:21	07:15	08:03			
	21:31	14	05:55 (WEA04)	20:52	34	07:23 (WEA05)	19:47	18:38	16:35	16:03	
8	05:03	05:42 (WEA04)	05:44	06:49 (WEA05)	06:34	07:23	07:17	08:04			
	21:30	12	05:54 (WEA04)	20:50	35	07:24 (WEA05)	19:45	18:36	16:34	16:02	
9	05:04	05:44 (WEA04)	05:46	06:48 (WEA05)	06:35	07:24	07:18	08:05			
	21:30	8	05:52 (WEA04)	20:48	36	07:24 (WEA05)	19:42	18:33	16:32	16:02	
10	05:05	05:48 (WEA04)	05:47	06:48 (WEA05)	06:37	07:26	07:20	08:06			
	21:29	1	05:49 (WEA04)	20:46	37	07:25 (WEA05)	19:40	18:31	16:30	16:02	
11	05:06		05:49	06:47 (WEA05)	06:39	07:28	07:22	08:07			
	21:28		20:44	38	07:25 (WEA05)	19:38	18:29	16:29	16:02		
12	05:07		05:50	06:47 (WEA05)	06:40	07:29	07:24	08:08			
	21:27		20:42	38	07:25 (WEA05)	19:35	18:27	16:27	16:02		
13	05:08		05:52	06:46 (WEA05)	06:42	07:31	07:25	08:09			
	21:26		20:40	39	07:25 (WEA05)	19:33	18:25	16:26	16:02		
14	05:09		05:53	06:46 (WEA05)	06:43	07:33	07:27	08:10			
	21:25		20:39	39	07:25 (WEA05)	19:31	18:22	16:24	16:02		
15	05:10		05:55	06:46 (WEA05)	06:45	07:34	07:29	08:11			
	21:24		20:37	39	07:25 (WEA05)	19:29	18:20	16:23	16:02		
16	05:11		05:57	06:46 (WEA05)	06:47	07:36	07:31	08:12			
	21:23		20:35	39	07:25 (WEA05)	19:26	18:18	16:22	16:02		
17	05:12		05:58	06:46 (WEA05)	06:48	07:38	07:32	08:13			
	21:22		20:33	38	07:24 (WEA05)	19:24	18:16	16:20	16:02		
18	05:14		06:00	06:46 (WEA05)	06:50	07:40	07:34	08:14			
	21:21		20:31	38	07:24 (WEA05)	19:22	18:14	16:19	16:02		
19	05:15		06:01	06:46 (WEA05)	06:51	07:41	07:36	08:14			
	21:20		20:28	37	07:23 (WEA05)	19:19	18:12	16:18	16:03		
20	05:16		06:03	06:47 (WEA05)	06:53	07:43	07:37	08:15			
	21:19		20:26	36	07:23 (WEA05)	19:17	18:10	16:16	16:03		
21	05:18		06:05	06:47 (WEA05)	06:55	07:45	07:39	08:16			
	21:18		20:24	35	07:22 (WEA05)	19:15	18:07	16:15	16:03		
22	05:19		06:06	06:47 (WEA05)	06:56	07:47	07:41	08:16			
	21:17		20:22	34	07:21 (WEA05)	19:12	18:05	16:14	16:04		
23	05:20		06:08	06:48 (WEA05)	06:58	07:48	07:42	08:17			
	21:15		20:20	32	07:20 (WEA05)	19:10	18:03	16:13	16:04		
24	05:22		06:10	06:49 (WEA05)	06:59	07:50	07:44	08:17			
	21:14		20:18	29	07:18 (WEA05)	19:08	18:01	16:12	16:05		
25	05:23		06:11	06:50 (WEA05)	07:01	06:52	07:46	08:17			
	21:13		20:16	27	07:17 (WEA05)	19:05	16:59	16:11	16:06		
26	05:24		06:13	06:51 (WEA05)	07:03	06:54	07:47	08:18			
	21:11		20:14	24	07:15 (WEA05)	19:03	16:57	16:10	16:06		
27	05:26		06:14	06:53 (WEA05)	07:04	06:55	07:49	08:18			
	21:10		20:12	20	07:13 (WEA05)	19:01	16:55	16:09	16:07		
28	05:27		06:16	06:56 (WEA05)	07:06	06:57	07:50	08:18			
	21:08		20:09	13	07:09 (WEA05)	18:58	16:53	16:08	16:08		
29	05:29	07:04 (WEA05)	06:18			07:08	06:59	07:52	08:18		
	21:07	6	07:10 (WEA05)	20:07		18:56	16:52	16:07	16:09		
30	05:30	07:00 (WEA05)	06:19			07:09	07:01	07:53	08:19		
	21:05	14	07:14 (WEA05)	20:05		18:54	16:50	16:07	16:09		
31	05:32	06:57 (WEA05)	06:21				07:02		08:19		
	21:04	18	07:15 (WEA05)	20:03			16:48		16:10		
Sonnenscheinstunden	501		453			381	332	267	245		
astr.max.mögl.Beschattung	189		903								
Red.Sonnenscheinwahrsch.	0,47		0,50								
Reduktion Betriebsdauer	0,98		0,98								
Reduktion Windrichtung	0,67		0,64								
Gesamte Reduktion	0,31		0,31								
Met.wahrsch.Beschattung	58		282								

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
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Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP29 - Am Sandberg 20, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April		Mai		Juni
1	08:19	07:52	06:59	06:49		05:45	07:03 (WEA05)	05:00
	16:12	16:59	17:50	19:44		20:34	20:23 (WEA05)	21:20
2	08:18	07:51	06:57	06:47		05:43	07:05 (WEA05)	04:59
	16:13	17:01	17:52	19:45		20:36	07:20 (WEA05)	21:21
3	08:18	07:49	06:55	06:45		05:41	07:09 (WEA05)	04:58
	16:14	17:03	17:54	19:47		20:37	07:15 (WEA05)	21:22
4	08:18	07:47	06:53	06:42		05:39		04:58
	16:15	17:05	17:56	19:49		20:39		21:23
5	08:18	07:46	06:51	06:40		05:37		04:57
	16:16	17:06	17:57	19:51		20:41		21:24
6	08:18	07:44	06:48	06:38		05:36		04:56
	16:17	17:08	17:59	19:52	7	07:15 (WEA05)		21:25
						07:22 (WEA05)		21:25
7	08:17	07:42	06:46	06:36		05:34		04:56
	16:19	17:10	18:01	19:54	16	07:27 (WEA05)		21:26
						07:08 (WEA05)		04:55
8	08:17	07:41	06:44	06:33		05:32		04:55
	16:20	17:12	18:03	19:56	22	07:30 (WEA05)		21:26
9	08:16	07:39	06:42	06:31		05:30		04:55
	16:21	17:14	18:04	19:57	25	07:31 (WEA05)		21:27
10	08:16	07:37	06:39	06:29		05:29		04:54
	16:23	17:16	18:06	19:59	29	07:32 (WEA05)		21:28
						07:02 (WEA05)		04:54
11	08:15	07:35	06:37	06:27		05:27		04:54
	16:24	17:18	18:08	20:01	31	07:33 (WEA05)		21:29
						07:01 (WEA05)		04:54
12	08:15	07:34	06:35	06:24		05:25		04:54
	16:26	17:19	18:10	20:02	33	07:34 (WEA05)		21:30
						07:00 (WEA05)		04:53
13	08:14	07:32	06:33	06:22		05:24		04:53
	16:27	17:21	18:11	20:04	35	07:35 (WEA05)		21:30
14	08:13	07:30	06:30	06:20		05:22		04:53
	16:29	17:23	18:13	20:06	36	07:35 (WEA05)		21:31
15	08:12	07:28	06:28	06:18		05:21		04:53
	16:30	17:25	18:15	20:07	36	07:35 (WEA05)		21:31
16	08:12	07:26	06:26	06:16		05:19		04:53
	16:32	17:27	18:17	20:09	38	07:36 (WEA05)		21:32
17	08:11	07:24	06:24	06:13		05:18		04:53
	16:33	17:29	18:18	20:11	38	07:35 (WEA05)		21:32
						06:56 (WEA05)		04:53
18	08:10	07:22	06:21	06:11		05:16		04:53
	16:35	17:30	18:20	20:12	39	07:35 (WEA05)		21:33
19	08:09	07:20	06:19	06:09		05:15		04:53
	16:36	17:32	18:22	20:14	38	07:34 (WEA05)		21:33
20	08:08	07:18	06:17	06:07		05:13		04:53
	16:38	17:34	18:23	20:16	38	07:34 (WEA05)		21:33
21	08:07	07:16	06:14	06:05		05:12	05:50 (WEA04)	04:53
	16:40	17:36	18:25	20:17	38	07:34 (WEA05)	05:56 (WEA04)	21:34
22	08:06	07:14	06:12	06:03		05:11	05:48 (WEA04)	04:53
	16:41	17:38	18:27	20:19	37	07:33 (WEA05)	06:00 (WEA04)	21:34
23	08:04	07:12	06:10	06:01		05:09	05:46 (WEA04)	04:53
	16:43	17:40	18:29	20:21	36	07:32 (WEA05)	06:02 (WEA04)	21:34
24	08:03	07:10	06:07	05:59		05:08	05:44 (WEA04)	04:54
	16:45	17:41	18:30	20:23	36	07:32 (WEA05)	06:02 (WEA04)	21:34
25	08:02	07:08	06:05	05:57		05:07	05:43 (WEA04)	04:54
	16:47	17:43	18:32	20:24	34	07:31 (WEA05)	06:03 (WEA04)	21:34
26	08:01	07:06	06:03	05:55		05:06	05:42 (WEA04)	04:54
	16:48	17:45	18:34	20:26	33	07:30 (WEA05)	06:04 (WEA04)	21:34
27	07:59	07:04	06:01	05:53		05:05	05:41 (WEA04)	04:55
	16:50	17:47	18:35	20:28	31	07:29 (WEA05)	06:05 (WEA04)	21:34
28	07:58	07:01	05:58	05:51		05:04	05:41 (WEA04)	04:55
	16:52	17:49	18:37	20:29	29	07:28 (WEA05)	06:07 (WEA04)	21:34
29	07:57		06:56	05:49		05:03	05:41 (WEA04)	04:56
	16:54		19:39	20:31	27	07:27 (WEA05)	06:08 (WEA04)	21:34
30	07:55		06:54	05:47		05:02	05:40 (WEA04)	04:56
	16:55		19:40	20:33	24	07:25 (WEA05)	06:08 (WEA04)	21:34
31	07:54		06:51			05:01	05:40 (WEA04)	
	16:57		19:42			21:18	06:08 (WEA04)	
Sonnenscheinstunden	260	278	367	416		484		498
astr.max.mögl.Beschattung				786		268		991
Red.Sonnenscheinwahrsch.				0,42		0,48		0,45
Reduktion Betriebsdauer				0,98		0,98		0,98
Reduktion Windrichtung				0,64		0,67		0,67
Gesamte Reduktion				0,26		0,31		0,30
Met.wahrsch.Beschattung				204		83		295

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP29 - Am Sandberg 20, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Juli			August			September			Oktober			November			Dezember		
1	04:57	05:44 (WEA04)	05:33			06:22	07:01 (WEA05)	07:11	07:04	07:55							
	21:33	33	06:17 (WEA04)	21:02		20:00	31	07:32 (WEA05)	18:52	16:46	16:06						
2	04:58	05:44 (WEA04)	05:35			06:24		07:02 (WEA05)	07:13	07:06	07:56						
	21:33	33	06:17 (WEA04)	21:00		19:58	29	07:31 (WEA05)	18:49	16:44	16:05						
3	04:58	05:44 (WEA04)	05:36			06:26		07:03 (WEA05)	07:14	07:08	07:58						
	21:33	33	06:17 (WEA04)	20:59		19:56	25	07:28 (WEA05)	18:47	16:42	16:05						
4	04:59	05:45 (WEA04)	05:38			06:27		07:05 (WEA05)	07:16	07:10	07:59						
	21:32	33	06:18 (WEA04)	20:57		19:54	22	07:27 (WEA05)	18:45	16:40	16:04						
5	05:00	05:44 (WEA04)	05:39			06:29		07:08 (WEA05)	07:18	07:11	08:00						
	21:32	33	06:17 (WEA04)	20:55		19:51	16	07:24 (WEA05)	18:42	16:39	16:04						
6	05:01	05:45 (WEA04)	05:41			06:30		07:11 (WEA05)	07:19	07:13	08:01						
	21:31	32	06:17 (WEA04)	20:54		19:49	8	07:19 (WEA05)	18:40	16:37	16:03						
7	05:02	05:46 (WEA04)	05:42			06:32			07:21	07:15	08:03						
	21:31	31	06:17 (WEA04)	20:52		19:47			18:38	16:35	16:03						
8	05:03	05:46 (WEA04)	05:44			06:34			07:23	07:17	08:04						
	21:30	31	06:17 (WEA04)	20:50		19:45			18:36	16:34	16:02						
9	05:04	05:46 (WEA04)	05:46			06:35			07:24	07:18	08:05						
	21:30	31	06:17 (WEA04)	20:48		19:42			18:33	16:32	16:02						
10	05:05	05:47 (WEA04)	05:47		07:17 (WEA05)	06:37			07:26	07:20	08:06						
	21:29	30	06:17 (WEA04)	20:46	9	07:26 (WEA05)	19:40		18:31	16:30	16:02						
11	05:06	05:47 (WEA04)	05:49		07:13 (WEA05)	06:39			07:28	07:22	08:07						
	21:28	30	06:17 (WEA04)	20:44	16	07:29 (WEA05)	19:38		18:29	16:29	16:02						
12	05:07	05:48 (WEA04)	05:50		07:11 (WEA05)	06:40			07:29	07:24	08:08						
	21:27	29	06:17 (WEA04)	20:42	21	07:32 (WEA05)	19:35		18:27	16:27	16:02						
13	05:08	05:48 (WEA04)	05:52		07:09 (WEA05)	06:42			07:31	07:25	08:09						
	21:26	29	06:17 (WEA04)	20:40	24	07:33 (WEA05)	19:33		18:25	16:26	16:02						
14	05:09	05:49 (WEA04)	05:53		07:08 (WEA05)	06:43			07:33	07:27	08:10						
	21:25	27	06:16 (WEA04)	20:39	27	07:35 (WEA05)	19:31		18:22	16:24	16:02						
15	05:10	05:50 (WEA04)	05:55		07:06 (WEA05)	06:45			07:34	07:29	08:11						
	21:24	26	06:16 (WEA04)	20:37	29	07:35 (WEA05)	19:29		18:20	16:23	16:02						
16	05:11	05:50 (WEA04)	05:57		07:05 (WEA05)	06:47			07:36	07:31	08:12						
	21:23	25	06:15 (WEA04)	20:35	31	07:36 (WEA05)	19:26		18:18	16:22	16:02						
17	05:12	05:51 (WEA04)	05:58		07:04 (WEA05)	06:48			07:38	07:32	08:13						
	21:22	23	06:14 (WEA04)	20:33	33	07:37 (WEA05)	19:24		18:16	16:20	16:02						
18	05:14	05:52 (WEA04)	06:00		07:03 (WEA05)	06:50			07:40	07:34	08:14						
	21:21	22	06:14 (WEA04)	20:31	35	07:38 (WEA05)	19:22		18:14	16:19	16:02						
19	05:15	05:54 (WEA04)	06:01		07:02 (WEA05)	06:51			07:41	07:36	08:14						
	21:20	19	06:13 (WEA04)	20:28	35	07:37 (WEA05)	19:19		18:12	16:18	16:03						
20	05:16	05:55 (WEA04)	06:03		07:02 (WEA05)	06:53			07:43	07:37	08:15						
	21:19	17	06:12 (WEA04)	20:26	36	07:38 (WEA05)	19:17		18:10	16:16	16:03						
21	05:18	05:56 (WEA04)	06:05		07:02 (WEA05)	06:55			07:45	07:39	08:16						
	21:18	14	06:10 (WEA04)	20:24	37	07:39 (WEA05)	19:15		18:07	16:15	16:03						
22	05:19	05:58 (WEA04)	06:06		07:01 (WEA05)	06:56			07:47	07:41	08:16						
	21:17	10	06:08 (WEA04)	20:22	37	07:38 (WEA05)	19:12		18:05	16:14	16:04						
23	05:20		06:08		07:01 (WEA05)	06:58			07:48	07:42	08:17						
	21:15		20:20	38	07:39 (WEA05)	19:10			18:03	16:13	16:04						
24	05:22		06:10		07:00 (WEA05)	06:59			07:50	07:44	08:17						
	21:14		20:18	38	07:38 (WEA05)	19:08			18:01	16:12	16:05						
25	05:23		06:11		07:00 (WEA05)	07:01			06:52	07:46	08:17						
	21:13		20:16	38	07:38 (WEA05)	19:05			16:59	16:11	16:06						
26	05:24		06:13		06:59 (WEA05)	07:03			06:54	07:47	08:18						
	21:11		20:14	38	07:37 (WEA05)	19:03			16:57	16:10	16:06						
27	05:26		06:14		07:00 (WEA05)	07:04			06:55	07:49	08:18						
	21:10		20:12	37	07:37 (WEA05)	19:01			16:55	16:09	16:07						
28	05:27		06:16		06:59 (WEA05)	07:06			06:57	07:50	08:18						
	21:08		20:09	37	07:36 (WEA05)	18:58			16:53	16:08	16:08						
29	05:29		06:18		07:00 (WEA05)	07:08			06:59	07:52	08:18						
	21:07		20:07	36	07:36 (WEA05)	18:56			16:52	16:07	16:09						
30	05:30		06:19		07:00 (WEA05)	07:09			07:01	07:53	08:19						
	21:05		20:05	34	07:34 (WEA05)	18:54			16:50	16:07	16:09						
31	05:32		06:21		07:01 (WEA05)				07:02		08:19						
	21:04		20:03	33	07:34 (WEA05)				16:48		16:10						
Sonnenscheinstunden	501		453			381			332	267	245						
astr.max.mögl.Beschattung		591		699		131											
Red.Sonnenscheinwahrsch.		0,47		0,50		0,42											
Reduktion Betriebsdauer		0,98		0,98		0,98											
Reduktion Windrichtung		0,67		0,64		0,64											
Gesamte Reduktion		0,31		0,31		0,26											
Met.wahrsch.Beschattung		183		218		34											

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)	Zeitpunkt (SS:MM) Schattenende	(WEA mit letztem Schatten)
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Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP30 - Am Sportpl. 15, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April		Mai		Juni
1	08:19	07:52	06:59	06:49		05:45	06:37 (WEA05)	05:00
	16:12	16:59	17:50	19:44		20:34	23 07:00 (WEA05)	21:20
2	08:18	07:51	06:57	06:47		05:43	06:38 (WEA05)	04:59
	16:13	17:01	17:52	19:45		20:36	21 06:59 (WEA05)	21:21
3	08:18	07:49	06:55	06:45		05:41	06:39 (WEA05)	04:58
	16:14	17:03	17:54	19:47		20:38	18 06:57 (WEA05)	21:22
4	08:18	07:47	06:53	06:42		05:39	06:42 (WEA05)	04:58
	16:15	17:05	17:56	19:49		20:39	14 06:56 (WEA05)	21:23
5	08:18	07:46	06:51	06:40		05:37	06:44 (WEA05)	04:57
	16:16	17:06	17:57	19:51		20:41	8 06:52 (WEA05)	21:24
6	08:18	07:44	06:48	06:38		05:36		04:56
	16:17	17:08	17:59	19:52		20:42		21:25
7	08:17	07:42	06:46	06:36		05:34		04:56
	16:19	17:10	18:01	19:54		20:44		21:26
8	08:17	07:41	06:44	06:33		05:32		04:55
	16:20	17:12	18:03	19:56		20:46		21:26
9	08:16	07:39	06:42	06:31		05:30		04:55
	16:21	17:14	18:04	19:57		20:47		21:27
10	08:16	07:37	06:39	06:29		05:29		04:54
	16:23	17:16	18:06	19:59		20:49		21:28
11	08:15	07:35	06:37	06:27		05:27		04:54
	16:24	17:18	18:08	20:01		20:50		21:29
12	08:15	07:34	06:35	06:24		05:25		04:54
	16:26	17:19	18:10	20:02		20:52		21:30
13	08:14	07:32	06:33	06:22		05:24		04:53
	16:27	17:21	18:11	20:04		20:54		21:30
14	08:13	07:30	06:30	06:20	06:49 (WEA05)	05:22		04:53
	16:29	17:23	18:13	20:06	7 06:56 (WEA05)	20:55		21:31
15	08:12	07:28	06:28	06:18	06:45 (WEA05)	05:21		04:53
	16:30	17:25	18:15	20:07	15 07:00 (WEA05)	20:57		21:31
16	08:12	07:26	06:26	06:16	06:43 (WEA05)	05:19		04:53
	16:32	17:27	18:17	20:09	19 07:02 (WEA05)	20:58		21:32
17	08:11	07:24	06:24	06:13	06:40 (WEA05)	05:18		04:53
	16:33	17:29	18:18	20:11	22 07:02 (WEA05)	21:00		21:32
18	08:10	07:22	06:21	06:11	06:39 (WEA05)	05:16	05:46 (WEA04)	04:53
	16:35	17:30	18:20	20:12	24 07:03 (WEA05)	21:01	7 05:53 (WEA04)	21:33
19	08:09	07:20	06:19	06:09	06:38 (WEA05)	05:15	05:43 (WEA04)	04:53
	16:36	17:32	18:22	20:14	26 07:04 (WEA05)	21:03	11 05:54 (WEA04)	21:33
20	08:08	07:18	06:17	06:07	06:37 (WEA05)	05:13	05:42 (WEA04)	04:53
	16:38	17:34	18:23	20:16	27 07:04 (WEA05)	21:04	14 05:56 (WEA04)	21:33
21	08:07	07:16	06:14	06:05	06:37 (WEA05)	05:12	05:41 (WEA04)	04:53
	16:40	17:36	18:25	20:17	28 07:05 (WEA05)	21:05	17 05:58 (WEA04)	21:34
22	08:06	07:14	06:12	06:03	06:36 (WEA05)	05:11	05:40 (WEA04)	04:53
	16:41	17:38	18:27	20:19	29 07:05 (WEA05)	21:07	19 05:59 (WEA04)	21:34
23	08:04	07:12	06:10	06:01	06:36 (WEA05)	05:09	05:39 (WEA04)	04:53
	16:43	17:40	18:29	20:21	29 07:05 (WEA05)	21:08	21 06:00 (WEA04)	21:34
24	08:03	07:10	06:07	05:59	06:35 (WEA05)	05:08	05:38 (WEA04)	04:54
	16:45	17:41	18:30	20:23	29 07:04 (WEA05)	21:10	22 06:00 (WEA04)	21:34
25	08:02	07:08	06:05	05:57	06:35 (WEA05)	05:07	05:38 (WEA04)	04:54
	16:47	17:43	18:32	20:24	29 07:04 (WEA05)	21:11	22 06:00 (WEA04)	21:34
26	08:01	07:06	06:03	05:55	06:35 (WEA05)	05:06	05:37 (WEA04)	04:54
	16:48	17:45	18:34	20:26	29 07:04 (WEA05)	21:12	24 06:01 (WEA04)	21:34
27	07:59	07:04	06:01	05:53	06:35 (WEA05)	05:05	05:38 (WEA04)	04:55
	16:50	17:47	18:35	20:28	28 07:03 (WEA05)	21:14	24 06:02 (WEA04)	21:34
28	07:58	07:01	05:58	05:51	06:36 (WEA05)	05:04	05:38 (WEA04)	04:55
	16:52	17:49	18:37	20:29	27 07:03 (WEA05)	21:15	24 06:02 (WEA04)	21:34
29	07:57		06:56	05:49	06:36 (WEA05)	05:03	05:37 (WEA04)	04:56
	16:54		19:39	20:31	26 07:02 (WEA05)	21:16	26 06:03 (WEA04)	21:34
30	07:55		06:54	05:47	06:37 (WEA05)	05:02	05:37 (WEA04)	04:57
	16:56		19:40	20:33	24 07:01 (WEA05)	21:17	26 06:03 (WEA04)	21:34
31	07:54		06:51			05:01		05:37 (WEA04)
	16:57		19:42			21:18	26 06:03 (WEA04)	
Sonnenscheinstunden	260	278	367	416		484		497
astr.max.mögl.Beschattung				418		367		769
Red.Sonnenscheinwahrsch.				0,42		0,48		0,45
Reduktion Betriebsdauer				0,98		0,98		0,98
Reduktion Windrichtung				0,64		0,66		0,67
Gesamte Reduktion				0,26		0,31		0,30
Met.wahrsch.Beschattung				109		113		229

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP30 - Am Sportpl. 15, 06780 Zörbig

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli		August		September		Oktober	November	Dezember
1	04:57	05:44 (WEA04)	05:33		06:22	07:11	07:04	07:55	
	21:33	26	06:10 (WEA04)	21:02	20:01	18:52	16:46	16:06	
2	04:58	05:43 (WEA04)	05:35		06:24	07:13	07:06	07:56	
	21:33	26	06:09 (WEA04)	21:00	19:58	18:49	16:44	16:05	
3	04:59	05:44 (WEA04)	05:36		06:26	07:14	07:08	07:58	
	21:33	26	06:10 (WEA04)	20:59	19:56	18:47	16:42	16:05	
4	04:59	05:44 (WEA04)	05:38		06:27	07:16	07:10	07:59	
	21:32	26	06:10 (WEA04)	20:57	19:54	18:45	16:41	16:04	
5	05:00	05:43 (WEA04)	05:39		06:29	07:18	07:11	08:00	
	21:32	27	06:10 (WEA04)	20:55	19:52	18:42	16:39	16:04	
6	05:01	05:44 (WEA04)	05:41		06:30	07:19	07:13	08:02	
	21:31	26	06:10 (WEA04)	20:54	19:49	18:40	16:37	16:03	
7	05:02	05:44 (WEA04)	05:42		06:32	07:21	07:15	08:03	
	21:31	26	06:10 (WEA04)	20:52	19:47	18:38	16:35	16:03	
8	05:03	05:44 (WEA04)	05:44	06:53 (WEA05)	06:34	07:23	07:17	08:04	
	21:30	27	06:11 (WEA04)	20:50	10	07:03 (WEA05)	19:45	18:36	16:34
9	05:04	05:45 (WEA04)	05:46	06:50 (WEA05)	06:35	07:24	07:18	08:05	
	21:30	26	06:11 (WEA04)	20:48	15	07:05 (WEA05)	19:42	18:33	16:32
10	05:05	05:45 (WEA04)	05:47	06:48 (WEA05)	06:37	07:26	07:20	08:06	
	21:29	26	06:11 (WEA04)	20:46	19	07:07 (WEA05)	19:40	18:31	16:30
11	05:06	05:45 (WEA04)	05:49	06:46 (WEA05)	06:39	07:28	07:22	08:07	
	21:28	26	06:11 (WEA04)	20:44	21	07:07 (WEA05)	19:38	18:29	16:29
12	05:07	05:45 (WEA04)	05:50	06:46 (WEA05)	06:40	07:29	07:24	08:08	
	21:27	26	06:11 (WEA04)	20:42	23	07:09 (WEA05)	19:35	18:27	16:27
13	05:08	05:46 (WEA04)	05:52	06:44 (WEA05)	06:42	07:31	07:25	08:09	
	21:26	25	06:11 (WEA04)	20:41	25	07:09 (WEA05)	19:33	18:25	16:26
14	05:09	05:46 (WEA04)	05:54	06:44 (WEA05)	06:43	07:33	07:27	08:10	
	21:25	25	06:11 (WEA04)	20:39	26	07:10 (WEA05)	19:31	18:22	16:24
15	05:10	05:46 (WEA04)	05:55	06:43 (WEA05)	06:45	07:34	07:29	08:11	
	21:24	25	06:11 (WEA04)	20:37	27	07:10 (WEA05)	19:29	18:20	16:23
16	05:11	05:46 (WEA04)	05:57	06:43 (WEA05)	06:47	07:36	07:31	08:12	
	21:23	25	06:11 (WEA04)	20:35	28	07:11 (WEA05)	19:26	18:18	16:22
17	05:12	05:47 (WEA04)	05:58	06:42 (WEA05)	06:48	07:38	07:32	08:13	
	21:22	23	06:10 (WEA04)	20:33	28	07:10 (WEA05)	19:24	18:16	16:20
18	05:14	05:47 (WEA04)	06:00	06:42 (WEA05)	06:50	07:40	07:34	08:14	
	21:21	23	06:10 (WEA04)	20:31	29	07:11 (WEA05)	19:22	18:14	16:19
19	05:15	05:48 (WEA04)	06:02	06:42 (WEA05)	06:51	07:41	07:36	08:14	
	21:20	22	06:10 (WEA04)	20:28	29	07:11 (WEA05)	19:19	18:12	16:18
20	05:16	05:49 (WEA04)	06:03	06:41 (WEA05)	06:53	07:43	07:37	08:15	
	21:19	21	06:10 (WEA04)	20:26	29	07:10 (WEA05)	19:17	18:10	16:16
21	05:18	05:49 (WEA04)	06:05	06:42 (WEA05)	06:55	07:45	07:39	08:16	
	21:18	20	06:09 (WEA04)	20:24	28	07:10 (WEA05)	19:15	18:08	16:15
22	05:19	05:50 (WEA04)	06:06	06:41 (WEA05)	06:56	07:47	07:41	08:16	
	21:17	18	06:08 (WEA04)	20:22	28	07:09 (WEA05)	19:12	18:05	16:14
23	05:20	05:52 (WEA04)	06:08	06:42 (WEA05)	06:58	07:48	07:42	08:17	
	21:15	16	06:08 (WEA04)	20:20	27	07:09 (WEA05)	19:10	18:03	16:13
24	05:22	05:53 (WEA04)	06:10	06:42 (WEA05)	06:59	07:50	07:44	08:17	
	21:14	13	06:06 (WEA04)	20:18	25	07:07 (WEA05)	19:08	18:01	16:12
25	05:23	05:54 (WEA04)	06:11	06:43 (WEA05)	07:01	06:52	07:46	08:17	
	21:13	10	06:04 (WEA04)	20:16	24	07:07 (WEA05)	19:05	16:59	16:11
26	05:24		06:13	06:43 (WEA05)	07:03	06:54	07:47	08:18	
	21:11		20:14	22	07:05 (WEA05)	19:03	16:57	16:10	16:06
27	05:26		06:14	06:45 (WEA05)	07:04	06:55	07:49	08:18	
	21:10		20:12	18	07:03 (WEA05)	19:01	16:55	16:09	16:07
28	05:27		06:16	06:46 (WEA05)	07:06	06:57	07:50	08:18	
	21:08		20:09	14	07:00 (WEA05)	18:58	16:53	16:08	16:08
29	05:29		06:18	06:50 (WEA05)	07:08	06:59	07:52	08:18	
	21:07		20:07	7	06:57 (WEA05)	18:56	16:52	16:07	16:09
30	05:30		06:19		07:09	07:01	07:53	08:19	
	21:05		20:05		18:54	16:50	16:07	16:10	
31	05:32		06:21			07:02		08:19	
	21:04		20:03			16:48		16:10	
Sonnenscheinstunden	501		453		381	332	267	245	
astr.max.mögl.Beschattung	580		502						
Red.Sonnenscheinwahrsch.	0,47		0,50						
Reduktion Betriebsdauer	0,98		0,98						
Reduktion Windrichtung	0,67		0,64						
Gesamte Reduktion	0,31		0,31						
Met.wahrsch.Beschattung	179		156						

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende
			(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP31 - Vor d. Heide 6, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar		Februar		März		April		Mai		Juni	
1	08:19	08:59 (WEA01)	07:52	09:11 (WEA01)	06:59	06:49	05:45	05:00			
	16:12	24	09:23 (WEA01)	16:59	20	09:31 (WEA01)	17:50	19:44	20:34	21:20	
2	08:19	09:00 (WEA01)	07:51	09:13 (WEA01)	06:57	06:47	05:43	04:59			
	16:13	24	09:24 (WEA01)	17:01	17	09:30 (WEA01)	17:52	19:46	20:36	21:21	
3	08:18	08:59 (WEA01)	07:49	09:16 (WEA01)	06:55	06:45	05:41	04:58			
	16:14	25	09:24 (WEA01)	17:03	11	09:27 (WEA01)	17:54	19:47	20:38	21:22	
4	08:18	08:59 (WEA01)	07:48		06:53	06:42	05:39	04:58			
	16:15	26	09:25 (WEA01)	17:05		17:56	19:49	20:39	21:23		
5	08:18	08:59 (WEA01)	07:46		06:51	06:40	05:37	04:57			
	16:16	27	09:26 (WEA01)	17:06		17:57	19:51	20:41	21:24		
6	08:18	08:59 (WEA01)	07:44		06:48	06:38	05:36	04:56			
	16:17	28	09:27 (WEA01)	17:08		17:59	19:52	20:42	21:25		
7	08:17	08:59 (WEA01)	07:43		06:46	06:36	05:34	04:56			
	16:19	28	09:27 (WEA01)	17:10		18:01	19:54	20:44	21:26		
8	08:17	09:00 (WEA01)	07:41		06:44	06:33	05:32	04:55			
	16:20	29	09:29 (WEA01)	17:12		18:03	19:56	20:46	21:27		
9	08:16	08:59 (WEA01)	07:39		06:42	06:31	05:30	04:55			
	16:21	30	09:29 (WEA01)	17:14		18:04	19:57	20:47	21:27		
10	08:16	09:00 (WEA01)	07:37		06:39	06:29	05:29	04:54			
	16:23	30	09:30 (WEA01)	17:16		18:06	19:59	20:49	21:28		
11	08:15	09:00 (WEA01)	07:35		06:37	06:27	05:27	04:54			
	16:24	31	09:31 (WEA01)	17:17		18:08	20:01	20:51	21:29		
12	08:15	09:00 (WEA01)	07:34		06:35	06:24	05:25	04:54			
	16:25	31	09:31 (WEA01)	17:19		18:10	20:02	20:52	21:30		
13	08:14	09:00 (WEA01)	07:32		06:33	06:22	05:24	04:53			
	16:27	32	09:32 (WEA01)	17:21		18:11	20:04	20:54	21:30		
14	08:13	09:00 (WEA01)	07:30		06:30	06:20	05:22	04:53			
	16:28	32	09:32 (WEA01)	17:23		18:13	20:06	20:55	21:31		
15	08:13	09:00 (WEA01)	07:28		06:28	06:18	05:21	04:53			
	16:30	33	09:33 (WEA01)	17:25		18:15	20:07	20:57	21:31		
16	08:12	09:00 (WEA01)	07:26		06:26	06:16	05:19	04:53			
	16:32	33	09:33 (WEA01)	17:27		18:17	20:09	20:58	21:32		
17	08:11	09:01 (WEA01)	07:24		06:24	06:13	05:18	04:53			
	16:33	33	09:34 (WEA01)	17:29		18:18	20:11	21:00	21:32		
18	08:10	09:01 (WEA01)	07:22		06:21	06:11	05:16	04:53			
	16:35	33	09:34 (WEA01)	17:30		18:20	20:13	21:01	21:33		
19	08:09	09:01 (WEA01)	07:20		06:19	06:09	05:15	04:53			
	16:36	34	09:35 (WEA01)	17:32		18:22	20:14	21:03	21:33		
20	08:08	09:02 (WEA01)	07:18		06:17	06:07	05:13	04:53			
	16:38	33	09:35 (WEA01)	17:34		18:23	20:16	21:04	21:34		
21	08:07	09:02 (WEA01)	07:16		06:14	06:05	05:12	04:53			
	16:40	33	09:35 (WEA01)	17:36		18:25	20:18	21:06	21:34		
22	08:06	09:02 (WEA01)	07:14		06:12	06:03	05:11	04:53			
	16:41	33	09:35 (WEA01)	17:38		18:27	20:19	21:07	21:34		
23	08:04	09:03 (WEA01)	07:12		06:10	06:01	05:09	04:53			
	16:43	33	09:36 (WEA01)	17:39		18:29	20:21	21:08	21:34		
24	08:03	09:03 (WEA01)	07:10		06:07	05:59	05:08	04:54			
	16:45	32	09:35 (WEA01)	17:41		18:30	20:23	21:10	21:34		
25	08:02	09:04 (WEA01)	07:08		06:05	05:57	05:07	04:54			
	16:47	31	09:35 (WEA01)	17:43		18:32	20:24	21:11	21:34		
26	08:01	09:05 (WEA01)	07:06		06:03	05:55	05:06	04:54			
	16:48	31	09:36 (WEA01)	17:45		18:34	20:26	21:12	21:34		
27	07:59	09:05 (WEA01)	07:04		06:01	05:53	05:05	04:55			
	16:50	30	09:35 (WEA01)	17:47		18:35	20:28	21:14	21:34		
28	07:58	09:06 (WEA01)	07:01		05:58	05:51	05:04	04:55			
	16:52	29	09:35 (WEA01)	17:49		18:37	20:29	21:15	21:34		
29	07:57	09:07 (WEA01)			06:56	05:49	05:03	04:56			
	16:54	27	09:34 (WEA01)		19:39	20:31	21:16	21:34			
30	07:55	09:09 (WEA01)			06:54	05:47	05:02	04:56			
	16:55	25	09:34 (WEA01)		19:40	20:33	21:17	21:34			
31	07:54	09:10 (WEA01)			06:51		05:01				
	16:57	22	09:32 (WEA01)		19:42		21:19				
Sonnenscheinstunden	260		278		367	416	484	498			
astr.max.mögl.Beschattung	922		48								
Red.Sonnenscheinwahrsch.	0,19		0,26								
Reduktion Betriebsdauer	0,98		0,98								
Reduktion Windrichtung	0,58		0,58								
Gesamte Reduktion	0,11		0,15								
Met.wahrsch.Beschattung	97		7								

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung

Schattenrezeptor: IP31 - Vor d. Heide 6, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober	November	Dezember
1	04:57	05:33	06:22	07:11	07:04	07:55
	21:34	21:02	20:01	18:52	16:46	16:06
2	04:58	05:35	06:24	07:13	07:06	07:56
	21:33	21:00	19:58	18:49	16:44	16:05
3	04:58	05:36	06:26	07:14	07:08	07:58
	21:33	20:59	19:56	18:47	16:42	16:05
4	04:59	05:38	06:27	07:16	07:10	07:59
	21:32	20:57	19:54	18:45	16:40	16:04
5	05:00	05:39	06:29	07:18	07:11	08:00
	21:32	20:55	19:52	18:42	16:39	16:04
6	05:01	05:41	06:30	07:19	07:13	08:02
	21:32	20:54	19:49	18:40	16:37	16:03
7	05:02	05:42	06:32	07:21	07:15	08:03
	21:31	20:52	19:47	18:38	16:35	16:03
8	05:03	05:44	06:34	07:23	07:17	08:04
	21:30	20:50	19:45	18:36	16:34	16:02
9	05:04	05:46	06:35	07:24	07:19	08:05
	21:30	20:48	19:42	18:33	16:32	16:02
10	05:05	05:47	06:37	07:26	07:20	08:06
	21:29	20:46	19:40	18:31	16:30	16:02
11	05:06	05:49	06:39	07:28	07:22	08:07
	21:28	20:44	19:38	18:29	16:29	16:02
12	05:07	05:50	06:40	07:29	07:24	08:08
	21:27	20:43	19:36	18:27	16:27	16:02
13	05:08	05:52	06:42	07:31	07:26	08:09
	21:26	20:41	19:33	18:25	16:26	16:02
14	05:09	05:53	06:43	07:33	07:27	08:10
	21:26	20:39	19:31	18:22	16:24	16:02
15	05:10	05:55	06:45	07:34	07:29	08:11
	21:25	20:37	19:29	18:20	16:23	16:02
16	05:11	05:57	06:47	07:36	07:31	08:12
	21:24	20:35	19:26	18:18	16:22	16:02
17	05:12	05:58	06:48	07:38	07:32	08:13
	21:23	20:33	19:24	18:16	16:20	16:02
18	05:14	06:00	06:50	07:40	07:34	08:14
	21:21	20:31	19:22	18:14	16:19	16:02
19	05:15	06:01	06:51	07:41	07:36	08:14
	21:20	20:29	19:19	18:12	16:18	16:02
20	05:16	06:03	06:53	07:43	07:38	08:15
	21:19	20:26	19:17	18:10	16:16	16:03
21	05:17	06:05	06:55	07:45	07:39	08:16
	21:18	20:24	19:15	18:07	16:15	16:03
22	05:19	06:06	06:56	07:47	07:41	08:16
	21:17	20:22	19:12	18:05	16:14	16:04
23	05:20	06:08	06:58	07:48	07:43	08:17
	21:15	20:20	19:10	18:03	16:13	16:04
24	05:22	06:10	06:59	07:50	07:44	08:17
	21:14	20:18	19:08	18:01	16:12	16:05
25	05:23	06:11	07:01	07:52	07:46	08:18
	21:13	20:16	19:05	16:59	16:11	16:05
26	05:24	06:13	07:03	07:54	07:47	08:18
	21:11	20:14	19:03	16:57	16:10	16:06
27	05:26	06:14	07:04	06:55	07:49	08:18
	21:10	20:12	19:01	16:55	16:09	16:07
28	05:27	06:16	07:06	06:57	07:50	08:18
	21:08	20:09	18:58	16:53	16:08	16:08
29	05:29	06:18	07:08	06:59	07:52	08:19
	21:07	20:07	18:56	16:51	16:07	16:09
30	05:30	06:19	07:09	07:01	07:53	08:19
	21:05	20:05	18:54	16:50	16:07	16:09
31	05:32	06:21		07:02		08:19
	21:04	20:03		16:48		16:10
Sonnenscheinstunden	501	453	381	332	267	245
astr.max.mögl.Beschattung					672	711
Red.Sonnenscheinwahrsch.					0,21	0,16
Reduktion Betriebsdauer					0,98	0,98
Reduktion Windrichtung					0,58	0,58
Gesamte Reduktion					0,12	0,09
Met.wahrsch.Beschattung					79	66

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
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Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP32 - Vor d. Heide 4, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar		Februar		März		April		Mai		Juni	
1	08:19	09:01 (WEA01)	07:52	09:19 (WEA01)	06:59	06:49	05:45	05:00			
	16:12	26	09:27 (WEA01)	16:59	9	09:28 (WEA01)	17:50	19:44	20:34	21:20	
2	08:19		09:01 (WEA01)	07:51			06:57	06:47	05:43	04:59	
	16:13	27	09:28 (WEA01)	17:01			17:52	19:46	20:36	21:21	
3	08:18		09:00 (WEA01)	07:49			06:55	06:45	05:41	04:58	
	16:14	28	09:28 (WEA01)	17:03			17:54	19:47	20:38	21:22	
4	08:18		09:01 (WEA01)	07:48			06:53	06:42	05:39	04:58	
	16:15	28	09:29 (WEA01)	17:05			17:56	19:49	20:39	21:23	
5	08:18		09:01 (WEA01)	07:46			06:51	06:40	05:37	04:57	
	16:16	28	09:29 (WEA01)	17:06			17:57	19:51	20:41	21:24	
6	08:18		09:01 (WEA01)	07:44			06:48	06:38	05:36	04:56	
	16:17	29	09:30 (WEA01)	17:08			17:59	19:52	20:43	21:25	
7	08:17		09:01 (WEA01)	07:43			06:46	06:36	05:34	04:56	
	16:19	30	09:31 (WEA01)	17:10			18:01	19:54	20:44	21:26	
8	08:17		09:02 (WEA01)	07:41			06:44	06:33	05:32	04:55	
	16:20	30	09:32 (WEA01)	17:12			18:03	19:56	20:46	21:27	
9	08:16		09:01 (WEA01)	07:39			06:42	06:31	05:30	04:55	
	16:21	31	09:32 (WEA01)	17:14			18:04	19:57	20:47	21:27	
10	08:16		09:02 (WEA01)	07:37			06:39	06:29	05:29	04:54	
	16:23	31	09:33 (WEA01)	17:16			18:06	19:59	20:49	21:28	
11	08:15		09:02 (WEA01)	07:35			06:37	06:27	05:27	04:54	
	16:24	32	09:34 (WEA01)	17:17			18:08	20:01	20:51	21:29	
12	08:15		09:02 (WEA01)	07:34			06:35	06:24	05:25	04:54	
	16:25	32	09:34 (WEA01)	17:19			18:10	20:02	20:52	21:30	
13	08:14		09:02 (WEA01)	07:32			06:33	06:22	05:24	04:53	
	16:27	33	09:35 (WEA01)	17:21			18:11	20:04	20:54	21:30	
14	08:13		09:03 (WEA01)	07:30			06:30	06:20	05:22	04:53	
	16:28	32	09:35 (WEA01)	17:23			18:13	20:06	20:55	21:31	
15	08:13		09:03 (WEA01)	07:28			06:28	06:18	05:21	04:53	
	16:30	32	09:35 (WEA01)	17:25			18:15	20:07	20:57	21:31	
16	08:12		09:03 (WEA01)	07:26			06:26	06:16	05:19	04:53	
	16:32	33	09:36 (WEA01)	17:27			18:17	20:09	20:58	21:32	
17	08:11		09:03 (WEA01)	07:24			06:24	06:13	05:18	04:53	
	16:33	33	09:36 (WEA01)	17:29			18:18	20:11	21:00	21:32	
18	08:10		09:04 (WEA01)	07:22			06:21	06:11	05:16	04:53	
	16:35	33	09:37 (WEA01)	17:30			18:20	20:13	21:01	21:33	
19	08:09		09:04 (WEA01)	07:20			06:19	06:09	05:15	04:53	
	16:36	33	09:37 (WEA01)	17:32			18:22	20:14	21:03	21:33	
20	08:08		09:05 (WEA01)	07:18			06:17	06:07	05:13	04:53	
	16:38	32	09:37 (WEA01)	17:34			18:23	20:16	21:04	21:34	
21	08:07		09:05 (WEA01)	07:16			06:14	06:05	05:12	04:53	
	16:40	32	09:37 (WEA01)	17:36			18:25	20:18	21:06	21:34	
22	08:06		09:06 (WEA01)	07:14			06:12	06:03	05:11	04:53	
	16:41	31	09:37 (WEA01)	17:38			18:27	20:19	21:07	21:34	
23	08:04		09:07 (WEA01)	07:12			06:10	06:01	05:09	04:53	
	16:43	30	09:37 (WEA01)	17:39			18:29	20:21	21:08	21:34	
24	08:03		09:07 (WEA01)	07:10			06:07	05:59	05:08	04:54	
	16:45	29	09:36 (WEA01)	17:41			18:30	20:23	21:10	21:34	
25	08:02		09:08 (WEA01)	07:08			06:05	05:57	05:07	04:54	
	16:47	29	09:37 (WEA01)	17:43			18:32	20:24	21:11	21:34	
26	08:01		09:09 (WEA01)	07:06			06:03	05:55	05:06	04:54	
	16:48	28	09:37 (WEA01)	17:45			18:34	20:26	21:12	21:34	
27	07:59		09:10 (WEA01)	07:04			06:01	05:53	05:05	04:55	
	16:50	26	09:36 (WEA01)	17:47			18:35	20:28	21:14	21:34	
28	07:58		09:11 (WEA01)	07:01			05:58	05:51	05:04	04:55	
	16:52	24	09:35 (WEA01)	17:49			18:37	20:29	21:15	21:34	
29	07:57		09:12 (WEA01)				06:56	05:49	05:03	04:56	
	16:54	22	09:34 (WEA01)				19:39	20:31	21:16	21:34	
30	07:55		09:14 (WEA01)				06:54	05:47	05:02	04:56	
	16:55	19	09:33 (WEA01)				19:40	20:33	21:17	21:34	
31	07:54		09:16 (WEA01)				06:51		05:01		
	16:57	15	09:31 (WEA01)				19:42		21:19		
Sonnenscheinstunden		260		278			367	416	484	498	
astr.max.mögl.Beschattung		898		9							
Red.Sonnenscheinwahrsch.		0,19		0,26							
Reduktion Betriebsdauer		0,98		0,98							
Reduktion Windrichtung		0,58		0,58							
Gesamte Reduktion		0,11		0,15							
Met.wahrsch.Beschattung		95		1							

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
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Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung

Schattenrezeptor: IP32 - Vor d. Heide 4, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober	November	Dezember
1	04:57	05:33	06:22	07:11	07:04	07:55
	21:34	21:02	20:01	18:52	16:46	16:06
2	04:58	05:35	06:24	07:13	07:06	07:56
	21:33	21:00	19:58	18:49	16:44	16:05
3	04:58	05:36	06:26	07:14	07:08	07:58
	21:33	20:59	19:56	18:47	16:42	16:05
4	04:59	05:38	06:27	07:16	07:10	07:59
	21:32	20:57	19:54	18:45	16:40	16:04
5	05:00	05:39	06:29	07:18	07:11	08:00
	21:32	20:55	19:52	18:42	16:39	16:04
6	05:01	05:41	06:30	07:19	07:13	08:02
	21:32	20:54	19:49	18:40	16:37	16:03
7	05:02	05:42	06:32	07:21	07:15	08:03
	21:31	20:52	19:47	18:38	16:35	16:03
8	05:03	05:44	06:34	07:23	07:17	08:04
	21:30	20:50	19:45	18:36	16:34	16:02
9	05:04	05:46	06:35	07:24	07:19	08:05
	21:30	20:48	19:42	18:33	16:32	16:02
10	05:05	05:47	06:37	07:26	07:20	08:06
	21:29	20:46	19:40	18:31	16:30	16:02
11	05:06	05:49	06:39	07:28	07:22	08:07
	21:28	20:44	19:38	18:29	16:29	16:02
12	05:07	05:50	06:40	07:29	07:24	08:08
	21:27	20:43	19:36	18:27	16:27	16:02
13	05:08	05:52	06:42	07:31	07:26	08:09
	21:26	20:41	19:33	18:25	16:26	16:02
14	05:09	05:53	06:43	07:33	07:27	08:10
	21:26	20:39	19:31	18:22	16:24	16:02
15	05:10	05:55	06:45	07:34	07:29	08:11
	21:25	20:37	19:29	18:20	16:23	16:02
16	05:11	05:57	06:47	07:36	07:31	08:12
	21:24	20:35	19:26	18:18	16:22	16:02
17	05:12	05:58	06:48	07:38	07:32	08:13
	21:23	20:33	19:24	18:16	16:20	16:02
18	05:14	06:00	06:50	07:40	07:34	08:14
	21:21	20:31	19:22	18:14	16:19	16:02
19	05:15	06:01	06:51	07:41	07:36	08:14
	21:20	20:29	19:19	18:12	16:18	16:02
20	05:16	06:03	06:53	07:43	07:38	08:15
	21:19	20:26	19:17	18:10	16:16	16:03
21	05:17	06:05	06:55	07:45	07:39	08:16
	21:18	20:24	19:15	18:07	16:15	16:03
22	05:19	06:06	06:56	07:47	07:41	08:16
	21:17	20:22	19:12	18:05	16:14	16:04
23	05:20	06:08	06:58	07:48	07:43	08:17
	21:15	20:20	19:10	18:03	16:13	16:04
24	05:22	06:10	06:59	07:50	07:44	08:17
	21:14	20:18	19:08	18:01	16:12	16:05
25	05:23	06:11	07:01	07:52	07:46	08:18
	21:13	20:16	19:05	16:59	16:11	16:05
26	05:24	06:13	07:03	07:54	07:47	08:18
	21:11	20:14	19:03	16:57	16:10	16:06
27	05:26	06:14	07:04	07:55	07:49	08:18
	21:10	20:12	19:01	16:55	16:09	16:07
28	05:27	06:16	07:06	07:57	07:50	08:18
	21:08	20:09	18:58	16:53	16:08	16:08
29	05:29	06:18	07:08	07:59	07:52	08:19
	21:07	20:07	18:56	16:51	16:07	16:09
30	05:30	06:19	07:09	07:01	07:53	08:19
	21:05	20:05	18:54	16:50	16:07	16:09
31	05:32	06:21		07:02		08:19
	21:04	20:03		16:48		16:10
Sonnenscheinstunden	501	453	381	332	267	245
astr.max.mögl.Beschattung					587	804
Red.Sonnenscheinwahrsch.					0,21	0,16
Reduktion Betriebsdauer					0,98	0,98
Reduktion Windrichtung					0,58	0,58
Gesamte Reduktion					0,12	0,09
Met.wahrsch.Beschattung					69	75

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
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SW25034 Salzfurtkapelle

windtest grevenbroich gmbh

Florian Schmidt

14.10.2025 14:38/4.1.273



Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP33 - Am Trappenberg 2, 06779 Raguhn-Jeßnitz

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Betriebsdauer je Sektor

[illegible]

390 372 588 603 418 487 1.048 1.054 1.436 834 690 673 8.592

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

Projekt:

SW25034 Salzfurthkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurthkapelle Zusatzbelastung Schattenrezeptor: IP34 - Kleinleipziger Str. 7, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	834	690	673	8.592	

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember	
1	08:19	14:56 (WEA01)	07:52	06:59	05:45	05:00	04:57	05:33	06:22	07:11	07:04	07:55	14:42 (WEA01)
	16:12	28	15:24 (WEA01)	16:59	17:50	19:44	20:34	21:20	21:33	21:02	20:00	18:51	16:46
2	08:19	14:56 (WEA01)	07:51	06:57	05:43	04:59	04:58	05:35	06:24	07:12	07:06	07:56	14:42 (WEA01)
	16:13	28	15:24 (WEA01)	17:01	17:52	19:45	20:36	21:21	21:33	21:00	19:58	18:49	16:44
3	08:18	14:56 (WEA01)	07:49	06:55	05:41	04:58	04:58	05:36	06:26	07:14	07:08	07:58	14:43 (WEA01)
	16:14	29	15:25 (WEA01)	17:03	17:54	19:47	20:37	21:22	21:33	20:59	19:56	18:47	16:42
4	08:18	14:57 (WEA01)	07:47	06:53	05:42	04:59	04:57	05:38	06:27	07:16	07:10	07:59	14:43 (WEA01)
	16:15	29	15:26 (WEA01)	17:04	17:56	19:49	20:39	21:23	21:32	20:57	19:54	18:45	16:40
5	08:18	14:57 (WEA01)	07:46	06:50	05:40	04:57	05:00	05:39	06:29	07:17	07:11	08:00	14:44 (WEA01)
	16:16	29	15:26 (WEA01)	17:06	17:57	19:50	20:41	21:24	21:32	20:55	19:51	18:42	16:39
6	08:18	14:58 (WEA01)	07:44	06:48	05:38	04:56	05:01	05:41	06:30	07:19	07:13	08:02	14:44 (WEA01)
	16:17	28	15:26 (WEA01)	17:08	17:59	19:52	20:42	21:25	21:31	20:54	19:49	18:40	16:37
7	08:17	14:57 (WEA01)	07:42	06:46	05:35	04:56	05:02	05:42	06:32	07:21	07:15	08:03	14:44 (WEA01)
	16:18	29	15:26 (WEA01)	17:10	18:01	19:54	20:44	21:26	21:31	20:52	19:47	18:38	16:35
8	08:17	14:58 (WEA01)	07:41	06:44	05:33	04:55	05:02	05:44	06:34	07:22	07:17	08:04	14:44 (WEA01)
	16:20	29	15:27 (WEA01)	17:12	18:03	19:56	20:46	21:27	21:30	20:50	19:45	18:36	16:34
9	08:16	14:59 (WEA01)	07:39	06:42	05:31	04:55	05:03	05:45	06:35	07:24	07:18	08:05	14:45 (WEA01)
	16:21	29	15:28 (WEA01)	17:14	18:04	19:57	20:47	21:27	21:30	20:48	19:42	18:33	16:32
10	08:16	14:59 (WEA01)	07:37	06:39	05:28	04:54	05:04	05:47	06:37	07:26	07:20	08:06	14:46 (WEA01)
	16:23	29	15:28 (WEA01)	17:16	18:06	19:59	20:49	21:28	21:29	20:46	19:40	18:31	16:30
11	08:15	15:00 (WEA01)	07:35	06:37	05:27	04:54	05:05	05:49	06:38	07:28	07:22	08:07	14:46 (WEA01)
	16:24	29	15:29 (WEA01)	17:17	18:08	20:01	20:50	21:29	21:28	20:44	19:38	18:29	16:29
12	08:15	15:00 (WEA01)	07:34	06:35	05:24	04:53	05:06	05:50	06:40	07:29	07:24	08:08	14:46 (WEA01)
	16:25	29	15:29 (WEA01)	17:19	18:10	20:02	20:52	21:30	21:27	20:42	19:35	18:27	16:27
13	08:14	15:01 (WEA01)	07:32	06:33	05:24	04:53	05:08	05:52	06:42	07:31	07:25	08:09	14:47 (WEA01)
	16:27	28	15:29 (WEA01)	17:21	18:11	20:04	20:54	21:30	21:26	20:40	19:33	18:24	16:26
14	08:13	15:01 (WEA01)	07:30	06:30	05:22	04:53	05:09	05:53	06:43	07:33	07:27	08:10	14:48 (WEA01)
	16:28	28	15:29 (WEA01)	17:23	18:13	20:06	20:55	21:31	21:25	20:39	19:31	18:22	16:24
15	08:12	15:02 (WEA01)	07:28	06:28	05:20	04:53	05:10	05:55	06:45	07:34	07:29	08:11	14:48 (WEA01)
	16:30	27	15:29 (WEA01)	17:25	18:15	20:07	20:57	21:31	21:25	20:37	19:28	18:20	16:23
16	08:12	15:02 (WEA01)	07:26	06:26	05:19	04:53	05:11	05:57	06:46	07:36	07:31	08:12	14:49 (WEA01)
	16:31	27	15:29 (WEA01)	17:27	18:16	20:09	20:58	21:32	21:24	20:35	19:26	18:18	16:21
17	08:11	15:03 (WEA01)	07:24	06:23	05:17	04:53	05:12	05:58	06:48	07:38	07:32	08:13	14:49 (WEA01)
	16:33	26	15:29 (WEA01)	17:28	18:18	20:11	21:00	21:32	21:22	20:33	19:24	18:16	16:20
18	08:10	15:04 (WEA01)	07:22	06:21	05:16	04:53	05:13	06:00	06:50	07:40	07:34	08:14	14:49 (WEA01)
	16:35	25	15:29 (WEA01)	17:30	18:20	20:12	21:01	21:33	21:21	20:31	19:22	18:14	16:19
19	08:09	15:05 (WEA01)	07:20	06:19	05:15	04:53	05:15	06:01	06:51	07:41	07:36	08:14	14:50 (WEA01)
	16:36	24	15:29 (WEA01)	17:32	18:22	20:14	21:03	21:33	21:20	20:28	19:19	18:12	16:17
20	08:08	15:06 (WEA01)	07:18	06:17	05:13	04:53	05:16	06:03	06:53	07:43	07:37	08:15	14:50 (WEA01)
	16:38	23	15:29 (WEA01)	17:34	18:23	20:16	21:04	21:33	21:19	20:26	19:17	18:09	16:16
21	08:07	15:07 (WEA01)	07:16	06:14	05:12	04:53	05:17	06:05	06:55	07:45	07:39	08:16	14:51 (WEA01)
	16:40	21	15:28 (WEA01)	17:36	18:25	20:17	21:05	21:34	21:18	20:24	19:15	18:07	16:15
22	08:06	15:08 (WEA01)	07:14	06:12	05:11	04:53	05:19	06:06	06:56	07:46	07:41	08:16	14:51 (WEA01)
	16:41	19	15:27 (WEA01)	17:38	18:27	20:19	21:07	21:34	21:17	20:22	19:12	18:05	16:14
23	08:04	15:10 (WEA01)	07:12	06:10	05:09	04:53	05:20	06:08	06:58	07:48	07:42	08:17	14:52 (WEA01)
	16:43	17	15:27 (WEA01)	17:39	18:28	20:21	21:08	21:34	21:15	20:20	19:10	18:03	16:13
24	08:03	15:12 (WEA01)	07:10	06:07	05:09	04:54	05:21	06:09	06:59	07:50	07:44	08:17	14:52 (WEA01)
	16:45	13	15:25 (WEA01)	17:41	18:30	20:22	21:10	21:34	21:14	20:18	19:08	18:01	16:12
25	08:02	15:15 (WEA01)	07:08	06:05	05:07	04:54	05:23	06:11	07:01	07:51	07:46	08:17	14:53 (WEA01)
	16:46	7	15:22 (WEA01)	17:43	18:32	20:24	21:11	21:34	21:13	20:16	19:05	18:00	16:11
26	08:01	17:45	07:06	06:03	05:05	04:54	05:24	06:13	07:03	07:54	07:47	08:18	14:54 (WEA01)
	16:48		17:45	18:34	20:26	21:12	21:34	21:11	20:14	19:03	18:00	17:00	16:10
27	07:59	17:47	07:03	06:00	05:03	04:55	05:26	06:14	07:04	07:55	07:49	08:18	14:54 (WEA01)
	16:50		17:47	18:35	20:28	21:14	21:34	21:10	20:11	19:01	18:00	17:00	16:09
28	07:58	17:48	07:01	05:58	05:01	04:54	05:27	06:16	07:06	07:57	07:50	08:18	14:54 (WEA01)
	16:52		17:48	18:37	20:29	21:15	21:34	21:08	20:09	18:58	18:00	17:00	16:08
29	07:57			06:56	05:49	05:03	04:56	05:29	06:17	07:08	07:52	08:18	14:54 (WEA01)
	16:54			19:39	20:31	21:16	21:34	21:07	20:07	18:56	18:00	17:00	16:08
30	07:55			06:54	05:47	05:02	04:56	05:30	06:19	07:09	07:53	08:18	14:55 (WEA01)
	16:55			19:40	20:33	21:17	21:34	21:05	20:05	18:54	18:00	17:00	16:08
31	07:54			06:51	05:01	05:01	05:32	06:21	07:10	08:00	07:54	08:19	14:55 (WEA01)
	16:57			19:42	21:18	21:18	21:04	20:03	07:02	08:00	07:54	08:19	14:55 (WEA01)
	260	278	367	416	484	498	501	453	381	332	267	245	866
Sonnenscheinstunden													
astr.max.mögl.Beschattung	630												0,16
Red.Sonnenscheinwahrsch.	0,19												0,16
Reduktion Betriebsdauer	0,98												0,98
Reduktion Windrichtung	0,68												0,68
Gesamte Reduktion	0,12												0,11
Met.wahrsch.Beschattung	78												95

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende
			(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP36 - Thurländer Lindenstrasse 10, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar		Februar		März		April		Mai		Juni	
1	08:19	14:53 (WEA02)	07:52	15:15 (WEA02)	06:59	06:49	05:45	05:00			
	16:12	29	15:22 (WEA02)	16:59	15:28 (WEA01)	17:50	19:44	20:34	21:20		
2	08:18	14:52 (WEA02)	07:51	16:16 (WEA01)	06:57	06:47	05:43	04:59			
	16:13	30	15:22 (WEA02)	17:01	16:30 (WEA01)	17:52	19:45	20:36	21:21		
3	08:18	14:53 (WEA02)	07:49	16:15 (WEA01)	06:55	06:44	05:41	04:58			
	16:14	30	15:23 (WEA02)	17:03	16:33 (WEA01)	17:54	19:47	20:37	21:22		
4	08:18	14:53 (WEA02)	07:47	16:14 (WEA01)	06:53	06:42	05:39	04:57			
	16:15	31	15:24 (WEA02)	17:04	16:34 (WEA01)	17:56	19:49	20:39	21:23		
5	08:18	14:53 (WEA02)	07:46	16:13 (WEA01)	06:50	06:40	05:37	04:57			
	16:16	31	15:24 (WEA02)	17:06	16:34 (WEA01)	17:57	19:50	20:41	21:24		
6	08:18	14:53 (WEA02)	07:44	16:12 (WEA01)	06:48	06:38	05:35	04:56			
	16:17	32	15:25 (WEA02)	17:08	16:35 (WEA01)	17:59	19:52	20:42	21:25		
7	08:17	14:53 (WEA02)	07:42	16:13 (WEA01)	06:46	06:35	05:34	04:56			
	16:18	32	15:25 (WEA02)	17:10	16:36 (WEA01)	18:01	19:54	20:44	21:26		
8	08:17	14:54 (WEA02)	07:41	16:12 (WEA01)	06:44	06:33	05:32	04:55			
	16:20	33	15:27 (WEA02)	17:12	16:37 (WEA01)	18:03	19:56	20:46	21:26		
9	08:16	14:54 (WEA02)	07:39	16:12 (WEA01)	06:42	06:31	05:30	04:55			
	16:21	33	15:27 (WEA02)	17:14	16:37 (WEA01)	18:04	19:57	20:47	21:27		
10	08:16	14:54 (WEA02)	07:37	16:12 (WEA01)	06:39	06:29	05:28	04:54			
	16:22	33	15:27 (WEA02)	17:16	16:37 (WEA01)	18:06	19:59	20:49	21:28		
11	08:15	14:55 (WEA02)	07:35	16:12 (WEA01)	06:37	06:26	05:27	04:54			
	16:24	33	15:28 (WEA02)	17:17	16:37 (WEA01)	18:08	20:01	20:50	21:29		
12	08:15	14:55 (WEA02)	07:33	16:12 (WEA01)	06:35	06:24	05:25	04:53			
	16:25	34	15:29 (WEA02)	17:19	16:37 (WEA01)	18:10	20:02	20:52	21:30		
13	08:14	14:55 (WEA02)	07:32	16:12 (WEA01)	06:33	06:22	05:24	04:53			
	16:27	34	15:29 (WEA02)	17:21	16:36 (WEA01)	18:11	20:04	20:54	21:30		
14	08:13	14:55 (WEA02)	07:30	16:13 (WEA01)	06:30	06:20	05:22	04:53			
	16:28	34	15:29 (WEA02)	17:23	16:36 (WEA01)	18:13	20:06	20:55	21:31		
15	08:12	14:56 (WEA02)	07:28	16:14 (WEA01)	06:28	06:18	05:20	04:53			
	16:30	34	15:30 (WEA02)	17:25	16:35 (WEA01)	18:15	20:07	20:57	21:31		
16	08:12	14:56 (WEA02)	07:26	16:15 (WEA01)	06:26	06:15	05:19	04:53			
	16:31	34	15:30 (WEA02)	17:27	16:34 (WEA01)	18:16	20:09	20:58	21:32		
17	08:11	14:56 (WEA02)	07:24	16:16 (WEA01)	06:23	06:13	05:17	04:53			
	16:33	34	15:30 (WEA02)	17:28	16:33 (WEA01)	18:18	20:11	21:00	21:32		
18	08:10	14:57 (WEA02)	07:22	16:18 (WEA01)	06:21	06:11	05:16	04:53			
	16:35	34	15:31 (WEA02)	17:30	16:31 (WEA01)	18:20	20:12	21:01	21:33		
19	08:09	14:58 (WEA02)	07:20	16:22 (WEA01)	06:19	06:09	05:15	04:53			
	16:36	33	15:31 (WEA02)	17:32	16:27 (WEA01)	18:22	20:14	21:03	21:33		
20	08:08	14:58 (WEA02)	07:18		06:17	06:07	05:13	04:53			
	16:38	33	15:31 (WEA02)	17:34		18:23	20:16	21:04	21:33		
21	08:07	14:58 (WEA02)	07:16		06:14	06:05	05:12	04:53			
	16:40	33	15:31 (WEA02)	17:36		18:25	20:17	21:05	21:34		
22	08:06	14:59 (WEA02)	07:14		06:12	06:03	05:11	04:53			
	16:41	32	15:31 (WEA02)	17:38		18:27	20:19	21:07	21:34		
23	08:04	15:00 (WEA02)	07:12		06:10	06:01	05:09	04:53			
	16:43	31	15:31 (WEA02)	17:39		18:28	20:21	21:08	21:34		
24	08:03	15:00 (WEA02)	07:10		06:07	05:59	05:08	04:54			
	16:45	30	15:30 (WEA02)	17:41		18:30	20:22	21:10	21:34		
25	08:02	15:01 (WEA02)	07:08		06:05	05:57	05:07	04:54			
	16:46	30	15:31 (WEA02)	17:43		18:32	20:24	21:11	21:34		
26	08:01	15:03 (WEA02)	07:06		06:03	05:55	05:06	04:54			
	16:48	28	15:31 (WEA02)	17:45		18:34	20:26	21:12	21:34		
27	07:59	15:03 (WEA02)	07:03		06:00	05:53	05:05	04:55			
	16:50	26	15:29 (WEA02)	17:47		18:35	20:27	21:14	21:34		
28	07:58	15:05 (WEA02)	07:01		05:58	05:51	05:04	04:55			
	16:52	24	15:29 (WEA02)	17:48		18:37	20:29	21:15	21:34		
29	07:57	15:06 (WEA02)			06:56	05:49	05:03	04:56			
	16:54	22	15:28 (WEA02)			19:39	20:31	21:16	21:34		
30	07:55	15:08 (WEA02)			06:54	05:47	05:02	04:56			
	16:55	18	15:26 (WEA02)			19:40	20:32	21:17	21:34		
31	07:54	15:11 (WEA02)			06:51		05:01				
	16:57	14	15:25 (WEA02)			19:42	21:18				
Sonnenscheinstunden	260		278		367	416	484	498			
astr.max.mögl.Beschattung	939		381								
Red.Sonnenscheinwahrsch.	0,19		0,26								
Reduktion Betriebsdauer	0,98		0,98								
Reduktion Windrichtung	0,68		0,68								
Gesamte Reduktion	0,12		0,17								
Met.wahrsch.Beschattung	116		66								

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende
			(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP36 - Thurländer Lindenstrasse 10, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober	November	Dezember
1	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51	07:04 16:46	15:41 (WEA01) 16:07 (WEA01)
2	04:58 21:33	05:35 21:00	06:24 19:58	07:12 18:49	07:06 16:44	15:41 (WEA01) 16:07 (WEA01)
3	04:58 21:33	05:36 20:59	06:26 19:56	07:14 18:47	07:08 16:42	15:42 (WEA01) 16:06 (WEA01)
4	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45	07:09 16:40	15:42 (WEA01) 16:06 (WEA01)
5	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	15:43 (WEA01) 16:06 (WEA01)
6	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40	07:13 16:37	15:43 (WEA01) 16:04 (WEA01)
7	05:02 21:31	05:42 20:52	06:32 19:47	07:21 18:38	07:15 16:35	15:44 (WEA01) 16:03 (WEA01)
8	05:02 21:30	05:44 20:50	06:34 19:45	07:22 18:36	07:17 16:33	15:45 (WEA01) 16:02 (WEA01)
9	05:03 21:30	05:45 20:48	06:35 19:42	07:24 18:33	07:18 16:32	15:47 (WEA01) 16:01 (WEA01)
10	05:04 21:29	05:47 20:46	06:37 19:40	07:26 18:31	07:20 16:30	14:45 (WEA02) 15:59 (WEA01)
11	05:05 21:28	05:49 20:44	06:38 19:38	07:28 18:29	07:22 16:29	14:41 (WEA02) 15:56 (WEA02)
12	05:06 21:27	05:50 20:42	06:40 19:35	07:29 18:27	07:24 16:27	14:40 (WEA02) 15:58 (WEA02)
13	05:08 21:26	05:52 20:40	06:42 19:33	07:31 18:24	07:25 16:26	14:38 (WEA02) 15:00 (WEA02)
14	05:09 21:25	05:53 20:39	06:43 19:31	07:33 18:22	07:27 16:24	14:37 (WEA02) 15:01 (WEA02)
15	05:10 21:24	05:55 20:37	06:45 19:28	07:34 18:20	07:29 16:23	14:36 (WEA02) 15:02 (WEA02)
16	05:11 21:23	05:57 20:35	06:46 19:26	07:36 18:18	07:31 16:21	14:36 (WEA02) 15:04 (WEA02)
17	05:12 21:22	05:58 20:33	06:48 19:24	07:38 18:16	07:32 16:20	14:34 (WEA02) 15:04 (WEA02)
18	05:13 21:21	06:00 20:30	06:50 19:21	07:39 18:14	07:34 16:19	14:34 (WEA02) 15:04 (WEA02)
19	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:12	07:36 16:17	14:34 (WEA02) 15:05 (WEA02)
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	07:37 16:16	14:34 (WEA02) 15:06 (WEA02)
21	05:17 21:18	06:05 20:24	06:54 19:15	07:45 18:07	07:39 16:15	14:34 (WEA02) 15:07 (WEA02)
22	05:19 21:17	06:06 20:22	06:56 19:12	07:46 18:05	07:41 16:14	14:34 (WEA02) 15:08 (WEA02)
23	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	07:42 16:13	14:34 (WEA02) 15:07 (WEA02)
24	05:21 21:14	06:09 20:18	06:59 19:08	07:50 18:01	07:44 16:12	14:34 (WEA02) 15:08 (WEA02)
25	05:23 21:13	06:11 20:16	07:01 19:05	06:52 16:59	07:46 16:11	14:34 (WEA01) 15:08 (WEA02)
26	05:24 21:11	06:13 20:14	07:03 19:03	06:53 16:57	07:47 16:10	14:35 (WEA02) 15:09 (WEA02)
27	05:26 21:10	06:14 20:11	07:04 19:01	06:55 16:55	07:49 16:09	14:35 (WEA02) 15:09 (WEA02)
28	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	07:50 16:08	14:35 (WEA02) 15:09 (WEA02)
29	05:29 21:07	06:17 20:07	07:08 18:56	06:59 16:51	07:52 16:06	14:36 (WEA02) 15:10 (WEA02)
30	05:30 21:05	06:19 20:05	07:09 18:54	07:01 16:49	07:53 16:06	14:36 (WEA02) 15:10 (WEA02)
31	05:32 21:04	06:21 20:03	07:02 16:48	07:02 16:48	07:02 16:07 (WEA01)	14:52 (WEA02) 16:10
Sonnenscheinstunden	501	453	381	332	267	245
astr.max.mögl.Beschattung				180	805	904
Red.Sonnenscheinwahrsch.				0,35	0,21	0,16
Reduktion Betriebsdauer				0,98	0,98	0,98
Reduktion Windrichtung				0,68	0,68	0,68
Gesamte Reduktion				0,23	0,14	0,11
Met.wahrsch.Beschattung				42	111	99

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP37 - Thurländer Lindenstrasse 8a, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar		Februar		März		April		Mai		Juni	
1	08:19	15:10 (WEA02)	07:52	15:17 (WEA02)	06:59	06:49	05:45	05:00			
	16:12	18	15:28 (WEA02)	16:59	24	15:41 (WEA02)	17:50	19:44	20:34	21:20	
2	08:18	15:09 (WEA02)	07:51	15:18 (WEA02)	06:57	06:47	05:43	04:59			
	16:13	19	15:28 (WEA02)	17:01	21	15:39 (WEA02)	17:52	19:45	20:36	21:21	
3	08:18	15:09 (WEA02)	07:49	15:21 (WEA02)	06:55	06:44	05:41	04:58			
	16:14	21	15:30 (WEA02)	17:03	17	15:38 (WEA02)	17:54	19:47	20:37	21:22	
4	08:18	15:09 (WEA02)	07:47	15:24 (WEA02)	06:53	06:42	05:39	04:57			
	16:15	22	15:31 (WEA02)	17:04	19	16:34 (WEA01)	17:55	19:49	20:39	21:23	
5	08:18	15:09 (WEA02)	07:46	16:24 (WEA01)	06:50	06:40	05:37	04:57			
	16:16	22	15:31 (WEA02)	17:06	13	16:37 (WEA01)	17:57	19:50	20:41	21:24	
6	08:18	15:09 (WEA02)	07:44	16:22 (WEA01)	06:48	06:38	05:35	04:56			
	16:17	24	15:33 (WEA02)	17:08	16	16:38 (WEA01)	17:59	19:52	20:42	21:25	
7	08:17	15:09 (WEA02)	07:42	16:22 (WEA01)	06:46	06:35	05:34	04:56			
	16:18	24	15:33 (WEA02)	17:10	18	16:40 (WEA01)	18:01	19:54	20:44	21:26	
8	08:17	15:09 (WEA02)	07:41	16:21 (WEA01)	06:44	06:33	05:32	04:55			
	16:20	26	15:35 (WEA02)	17:12	20	16:41 (WEA01)	18:03	19:56	20:46	21:26	
9	08:16	15:09 (WEA02)	07:39	16:20 (WEA01)	06:42	06:31	05:30	04:55			
	16:21	26	15:35 (WEA02)	17:14	22	16:42 (WEA01)	18:04	19:57	20:47	21:27	
10	08:16	15:08 (WEA02)	07:37	16:19 (WEA01)	06:39	06:29	05:28	04:54			
	16:22	28	15:36 (WEA02)	17:16	24	16:43 (WEA01)	18:06	19:59	20:49	21:28	
11	08:15	15:09 (WEA02)	07:35	16:19 (WEA01)	06:37	06:26	05:27	04:54			
	16:24	28	15:37 (WEA02)	17:17	24	16:43 (WEA01)	18:08	20:01	20:50	21:29	
12	08:15	15:09 (WEA02)	07:33	16:19 (WEA01)	06:35	06:24	05:25	04:53			
	16:25	29	15:38 (WEA02)	17:19	24	16:43 (WEA01)	18:10	20:02	20:52	21:30	
13	08:14	15:09 (WEA02)	07:32	16:19 (WEA01)	06:33	06:22	05:24	04:53			
	16:27	29	15:38 (WEA02)	17:21	24	16:43 (WEA01)	18:11	20:04	20:54	21:30	
14	08:13	15:09 (WEA02)	07:30	16:19 (WEA01)	06:30	06:20	05:22	04:53			
	16:28	30	15:39 (WEA02)	17:23	24	16:43 (WEA01)	18:13	20:06	20:55	21:31	
15	08:12	15:09 (WEA02)	07:28	16:19 (WEA01)	06:28	06:18	05:20	04:53			
	16:30	31	15:40 (WEA02)	17:25	24	16:43 (WEA01)	18:15	20:07	20:57	21:31	
16	08:12	15:09 (WEA02)	07:26	16:19 (WEA01)	06:26	06:15	05:19	04:53			
	16:31	31	15:40 (WEA02)	17:27	23	16:42 (WEA01)	18:16	20:09	20:58	21:32	
17	08:11	15:09 (WEA02)	07:24	16:20 (WEA01)	06:23	06:13	05:17	04:53			
	16:33	32	15:41 (WEA02)	17:28	22	16:42 (WEA01)	18:18	20:11	21:00	21:32	
18	08:10	15:09 (WEA02)	07:22	16:21 (WEA01)	06:21	06:11	05:16	04:53			
	16:35	33	15:42 (WEA02)	17:30	20	16:41 (WEA01)	18:20	20:12	21:01	21:33	
19	08:09	15:10 (WEA02)	07:20	16:22 (WEA01)	06:19	06:09	05:15	04:53			
	16:36	32	15:42 (WEA02)	17:32	18	16:40 (WEA01)	18:22	20:14	21:03	21:33	
20	08:08	15:10 (WEA02)	07:18	16:24 (WEA01)	06:17	06:07	05:13	04:53			
	16:38	33	15:43 (WEA02)	17:34	14	16:38 (WEA01)	18:23	20:16	21:04	21:33	
21	08:07	15:09 (WEA02)	07:16	16:27 (WEA01)	06:14	06:05	05:12	04:53			
	16:40	33	15:42 (WEA02)	17:36	8	16:35 (WEA01)	18:25	20:17	21:05	21:34	
22	08:06	15:10 (WEA02)	07:14		06:12	06:03	05:11	04:53			
	16:41	33	15:43 (WEA02)	17:38		18:27	20:19	21:07	21:34		
23	08:04	15:11 (WEA02)	07:12		06:10	06:01	05:09	04:53			
	16:43	33	15:44 (WEA02)	17:39		18:28	20:21	21:08	21:34		
24	08:03	15:11 (WEA02)	07:10		06:07	05:59	05:08	04:54			
	16:45	32	15:43 (WEA02)	17:41		18:30	20:22	21:10	21:34		
25	08:02	15:11 (WEA02)	07:08		06:05	05:57	05:07	04:54			
	16:46	33	15:44 (WEA02)	17:43		18:32	20:24	21:11	21:34		
26	08:01	15:12 (WEA02)	07:06		06:03	05:55	05:06	04:54			
	16:48	32	15:44 (WEA02)	17:45		18:34	20:26	21:12	21:34		
27	07:59	15:13 (WEA02)	07:03		06:00	05:52	05:05	04:55			
	16:50	30	15:43 (WEA02)	17:47		18:35	20:27	21:14	21:34		
28	07:58	15:14 (WEA02)	07:01		05:58	05:51	05:04	04:55			
	16:52	30	15:44 (WEA02)	17:48		18:37	20:29	21:15	21:34		
29	07:57	15:14 (WEA02)			06:56	05:49	05:03	04:56			
	16:54	29	15:43 (WEA02)			19:39	20:31	21:16	21:34		
30	07:55	15:15 (WEA02)			06:54	05:47	05:02	04:56			
	16:55	27	15:42 (WEA02)			19:40	20:32	21:17	21:34		
31	07:54	15:16 (WEA02)			06:51		05:01				
	16:57	26	15:42 (WEA02)			19:42		21:18			
Sonnenscheinstunden	260		278		367	416	484	498			
astr.max.mögl.Beschattung	876		419								
Red.Sonnenscheinwahrsch.	0,19		0,26								
Reduktion Betriebsdauer	0,98		0,98								
Reduktion Windrichtung	0,67		0,67								
Gesamte Reduktion	0,12		0,17								
Met.wahrsch.Beschattung	108		72								

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
--------------	-----------------------	-------------------------	----------------------	----------------------------------	--------------------------------	---------------------------	----------------------------

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP37 - Thurländer Lindenstrasse 8a, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober	November	Dezember
1	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51	07:04 16:46	15:49 (WEA01) 16:12 (WEA01)
2	04:58 21:33	05:35 21:00	06:24 19:58	07:12 18:49	07:06 16:44	15:50 (WEA01) 16:12 (WEA01)
3	04:58 21:33	05:36 20:59	06:26 19:56	07:14 18:47	07:08 16:42	15:51 (WEA01) 16:11 (WEA01)
4	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45	07:09 16:40	15:52 (WEA01) 16:10 (WEA01)
5	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	15:53 (WEA01) 16:09 (WEA01)
6	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40	07:13 16:37	14:58 (WEA02) 16:06 (WEA01)
7	05:02 21:31	05:42 20:52	06:32 19:47	07:21 18:38	07:15 16:35	14:53 (WEA02) 16:03 (WEA01)
8	05:02 21:30	05:44 20:50	06:34 19:45	07:22 18:36	07:17 16:33	14:51 (WEA02) 15:08 (WEA02)
9	05:03 21:30	05:45 20:48	06:35 19:42	07:24 18:33	07:18 16:32	14:49 (WEA02) 15:10 (WEA02)
10	05:04 21:29	05:47 20:46	06:37 19:40	07:26 18:31	07:20 16:30	14:48 (WEA02) 15:12 (WEA02)
11	05:05 21:28	05:49 20:44	06:38 19:38	07:28 18:29	07:22 16:29	14:47 (WEA02) 15:13 (WEA02)
12	05:06 21:27	05:50 20:42	06:40 19:35	07:29 18:27	07:24 16:27	14:46 (WEA02) 15:14 (WEA02)
13	05:08 21:26	05:52 20:40	06:42 19:33	07:31 18:24	07:25 16:26	14:46 (WEA02) 15:15 (WEA02)
14	05:09 21:25	05:53 20:38	06:43 19:31	07:33 18:22	07:27 16:24	14:46 (WEA02) 15:16 (WEA02)
15	05:10 21:24	05:55 20:37	06:45 19:28	07:34 18:20	07:29 16:23	14:45 (WEA02) 15:16 (WEA02)
16	05:11 21:23	05:57 20:35	06:46 19:26	07:36 18:18	07:31 16:21	14:45 (WEA02) 15:17 (WEA02)
17	05:12 21:22	05:58 20:33	06:48 19:24	07:38 18:16	07:32 16:20	14:44 (WEA02) 15:17 (WEA02)
18	05:13 21:21	06:00 20:30	06:50 19:21	07:39 18:14	07:34 16:19	14:45 (WEA02) 15:17 (WEA02)
19	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:12	07:36 16:17	14:45 (WEA02) 15:18 (WEA02)
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	07:37 16:16	14:45 (WEA02) 15:18 (WEA02)
21	05:17 21:18	06:05 20:24	06:54 19:15	07:45 18:07	07:39 16:15	14:46 (WEA02) 15:18 (WEA02)
22	05:19 21:17	06:06 20:22	06:56 19:12	07:46 18:05	07:41 16:14	14:46 (WEA02) 15:19 (WEA02)
23	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	07:42 16:13	14:46 (WEA02) 15:18 (WEA02)
24	05:21 21:14	06:09 20:18	06:59 19:08	07:50 18:01	07:44 16:12	14:46 (WEA02) 15:19 (WEA02)
25	05:23 21:13	06:11 20:16	07:01 19:05	06:52 16:59	07:46 16:11	14:47 (WEA02) 15:19 (WEA02)
26	05:24 21:11	06:13 20:14	07:03 19:03	06:53 16:57	07:47 16:10	14:48 (WEA02) 15:19 (WEA02)
27	05:26 21:10	06:14 20:11	07:04 19:01	06:55 16:55	07:49 16:09	14:48 (WEA02) 15:19 (WEA02)
28	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	07:50 16:08	14:49 (WEA02) 15:19 (WEA02)
29	05:29 21:07	06:17 20:07	07:08 18:56	06:59 16:51	07:52 16:07	14:50 (WEA02) 15:20 (WEA02)
30	05:30 21:05	06:19 20:05	07:09 18:54	07:01 16:49	07:53 16:06	14:50 (WEA02) 15:19 (WEA02)
31	05:32 21:04	06:21 20:03	07:02 16:48	07:02 16:12	07:54 16:12	14:51 (WEA02) 16:10
Sonnenscheinstunden	501	453	381	332	267	245
astr.max.mögl.Beschattung				232	815	522
Red.Sonnenscheinwahrsch.				0,35	0,21	0,16
Reduktion Betriebsdauer				0,98	0,98	0,98
Reduktion Windrichtung				0,67	0,67	0,67
Gesamte Reduktion				0,23	0,14	0,11
Met.wahrsch.Beschattung				54	111	57

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP38 - Thurländer Lindenstrasse 3, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar		Februar		März		April		Mai		Juni	
1	08:19		07:52	15:28 (WEA02)	06:59	06:49	05:45	05:00			
	16:12		16:59	28 15:56 (WEA02)	17:50	19:44	20:34	21:20			
2	08:18		07:51	15:28 (WEA02)	06:57	06:47	05:43	04:59			
	16:13		17:01	28 15:56 (WEA02)	17:52	19:45	20:36	21:21			
3	08:18		07:49	15:30 (WEA02)	06:55	06:44	05:41	04:58			
	16:14		17:03	26 15:56 (WEA02)	17:54	19:47	20:37	21:22			
4	08:18		07:47	15:31 (WEA02)	06:53	06:42	05:39	04:57			
	16:15		17:04	24 15:55 (WEA02)	17:55	19:49	20:39	21:23			
5	08:18		07:46	15:32 (WEA02)	06:50	06:40	05:37	04:57			
	16:16		17:06	21 15:53 (WEA02)	17:57	19:50	20:41	21:24			
6	08:18		07:44	15:33 (WEA02)	06:48	06:38	05:35	04:56			
	16:17		17:08	19 15:52 (WEA02)	17:59	19:52	20:42	21:25			
7	08:17		07:42	15:36 (WEA02)	06:46	06:35	05:34	04:56			
	16:18		17:10	15 15:51 (WEA02)	18:01	19:54	20:44	21:26			
8	08:17		07:41	15:40 (WEA02)	06:44	06:33	05:32	04:55			
	16:20		17:12	7 15:47 (WEA02)	18:03	19:56	20:46	21:26			
9	08:16		07:39		06:42	06:31	05:30	04:55			
	16:21	5	15:38 (WEA02)	17:14	18:04	19:57	20:47	21:27			
10	08:16		07:37		06:39	06:29	05:28	04:54			
	16:22	10	15:40 (WEA02)	17:16	18:06	19:59	20:49	21:28			
11	08:15		07:35		06:37	06:26	05:27	04:54			
	16:24	13	15:43 (WEA02)	17:17	18:08	20:01	20:50	21:29			
12	08:15		07:33		06:35	06:24	05:25	04:53			
	16:25	16	15:45 (WEA02)	17:19	18:10	20:02	20:52	21:30			
13	08:14		07:32		06:33	06:22	05:23	04:53			
	16:27	18	15:46 (WEA02)	17:21	18:11	20:04	20:54	21:30			
14	08:13		07:30		06:30	06:20	05:22	04:53			
	16:28	20	15:47 (WEA02)	17:23	18:13	20:06	20:55	21:31			
15	08:12		07:28		06:28	06:18	05:20	04:53			
	16:30	21	15:48 (WEA02)	17:25	18:15	20:07	20:57	21:31			
16	08:12		07:26		06:26	06:15	05:19	04:53			
	16:31	23	15:49 (WEA02)	17:27	18:16	20:09	20:58	21:32			
17	08:11		07:24		06:23	06:13	05:17	04:53			
	16:33	25	15:51 (WEA02)	17:28	18:18	20:11	21:00	21:32			
18	08:10		07:22		06:21	06:11	05:16	04:53			
	16:35	26	15:52 (WEA02)	17:30	18:20	20:12	21:01	21:33			
19	08:09		07:20		06:19	06:09	05:15	04:53			
	16:36	27	15:53 (WEA02)	17:32	18:22	20:14	21:03	21:33			
20	08:08		07:18		06:17	06:07	05:13	04:53			
	16:38	28	15:54 (WEA02)	17:34	18:23	20:16	21:04	21:33			
21	08:07		07:16		06:14	06:05	05:12	04:53			
	16:40	29	15:54 (WEA02)	17:36	18:25	20:17	21:05	21:34			
22	08:06		07:14		06:12	06:03	05:11	04:53			
	16:41	29	15:54 (WEA02)	17:38	18:27	20:19	21:07	21:34			
23	08:04		07:12		06:10	06:01	05:09	04:53			
	16:43	30	15:55 (WEA02)	17:39	18:28	20:21	21:08	21:34			
24	08:03		07:10		06:07	05:59	05:08	04:53			
	16:45	30	15:55 (WEA02)	17:41	18:30	20:22	21:10	21:34			
25	08:02		07:08		06:05	05:57	05:07	04:54			
	16:46	31	15:56 (WEA02)	17:43	18:32	20:24	21:11	21:34			
26	08:01		07:06		06:03	05:54	05:06	04:54			
	16:48	31	15:57 (WEA02)	17:45	18:34	20:26	21:12	21:34			
27	07:59		07:03		06:00	05:52	05:05	04:55			
	16:50	31	15:57 (WEA02)	17:47	18:35	20:27	21:14	21:34			
28	07:58		07:01		05:58	05:51	05:04	04:55			
	16:52	30	15:57 (WEA02)	17:48	18:37	20:29	21:15	21:34			
29	07:57				06:56	05:49	05:03	04:56			
	16:54	31	15:57 (WEA02)		19:39	20:31	21:16	21:34			
30	07:55				06:54	05:47	05:02	04:56			
	16:55	29	15:56 (WEA02)		19:40	20:32	21:17	21:34			
31	07:54				06:51		05:01				
	16:57	29	15:57 (WEA02)		19:42		21:18				
Sonnenscheinstunden	260		278		367	416	484	498			
astr.max.mögl.Beschattung	562		168								
Red.Sonnenscheinwahrsch.	0,19		0,26								
Reduktion Betriebsdauer	0,98		0,98								
Reduktion Windrichtung	0,68		0,68								
Gesamte Reduktion	0,12		0,17								
Met.wahrsch.Beschattung	70		29								

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP38 - Thurländer Lindenstrasse 3, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober	November	Dezember	
1	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51	07:04 16:46	07:55 16:06	15:12 (WEA02) 15:25 (WEA02)
2	04:58 21:33	05:35 21:00	06:24 19:58	07:12 18:49	07:06 16:44	07:56 16:05	15:13 (WEA02) 15:24 (WEA02)
3	04:58 21:33	05:36 20:59	06:26 19:56	07:14 18:47	07:08 16:42	15:09 (WEA02) 15:18 (WEA02)	07:58 16:04
4	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45	07:09 16:40	15:06 (WEA02) 15:21 (WEA02)	07:59 16:04
5	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	15:04 (WEA02) 15:23 (WEA02)	08:00 16:03
6	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40	07:13 16:37	15:02 (WEA02) 15:23 (WEA02)	08:01 16:03
7	05:02 21:31	05:42 20:52	06:32 19:47	07:21 18:38	07:15 16:35	15:01 (WEA02) 15:25 (WEA02)	08:03 16:03
8	05:02 21:30	05:44 20:50	06:34 19:45	07:22 18:36	07:17 16:33	15:00 (WEA02) 15:26 (WEA02)	08:04 16:02
9	05:03 21:30	05:45 20:48	06:35 19:42	07:24 18:33	07:18 16:32	14:59 (WEA02) 15:26 (WEA02)	08:05 16:02
10	05:04 21:29	05:47 20:46	06:37 19:40	07:26 18:31	07:20 16:30	14:59 (WEA02) 15:27 (WEA02)	08:06 16:02
11	05:05 21:28	05:49 20:44	06:38 19:38	07:28 18:29	07:22 16:29	14:59 (WEA02) 15:28 (WEA02)	08:07 16:02
12	05:06 21:27	05:50 20:42	06:40 19:35	07:29 18:27	07:24 16:27	14:58 (WEA02) 15:28 (WEA02)	08:08 16:01
13	05:08 21:26	05:52 20:40	06:42 19:33	07:31 18:24	07:25 16:26	14:58 (WEA02) 15:29 (WEA02)	08:09 16:01
14	05:09 21:25	05:53 20:38	06:43 19:31	07:33 18:22	07:27 16:24	14:58 (WEA02) 15:29 (WEA02)	08:10 16:01
15	05:10 21:24	05:55 20:37	06:45 19:28	07:34 18:20	07:29 16:23	14:59 (WEA02) 15:30 (WEA02)	08:11 16:02
16	05:11 21:23	05:57 20:35	06:46 19:26	07:36 18:18	07:31 16:21	14:59 (WEA02) 15:30 (WEA02)	08:12 16:02
17	05:12 21:22	05:58 20:33	06:48 19:24	07:38 18:16	07:32 16:20	14:58 (WEA02) 15:29 (WEA02)	08:13 16:02
18	05:13 21:21	06:00 20:30	06:50 19:21	07:39 18:14	07:34 16:19	14:59 (WEA02) 15:29 (WEA02)	08:14 16:02
19	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:12	07:36 16:17	14:59 (WEA02) 15:29 (WEA02)	08:14 16:02
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	07:37 16:16	15:00 (WEA02) 15:29 (WEA02)	08:15 16:03
21	05:17 21:18	06:05 20:24	06:54 19:15	07:45 18:07	07:39 16:15	15:01 (WEA02) 15:30 (WEA02)	08:16 16:03
22	05:19 21:17	06:06 20:22	06:56 19:12	07:46 18:05	07:41 16:14	15:02 (WEA02) 15:30 (WEA02)	08:16 16:04
23	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	07:42 16:13	15:02 (WEA02) 15:29 (WEA02)	08:17 16:04
24	05:21 21:14	06:09 20:18	06:59 19:08	07:50 18:01	07:44 16:12	15:03 (WEA02) 15:29 (WEA02)	08:17 16:05
25	05:23 21:13	06:11 20:16	07:01 19:05	06:52 16:59	07:46 16:11	15:04 (WEA02) 15:29 (WEA02)	08:17 16:05
26	05:24 21:11	06:13 20:14	07:03 19:03	06:53 16:57	07:47 16:10	15:05 (WEA02) 15:29 (WEA02)	08:18 16:06
27	05:26 21:10	06:14 20:11	07:04 19:01	06:55 16:55	07:49 16:09	15:06 (WEA02) 15:27 (WEA02)	08:18 16:07
28	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	07:50 16:08	15:07 (WEA02) 15:27 (WEA02)	08:18 16:08
29	05:29 21:07	06:17 20:07	07:08 18:56	06:59 16:51	07:52 16:07	15:09 (WEA02) 15:27 (WEA02)	08:18 16:08
30	05:30 21:05	06:19 20:05	07:09 18:54	07:01 16:49	07:53 16:06	15:10 (WEA02) 15:26 (WEA02)	08:18 16:09
31	05:32 21:04	06:21 20:03		07:02 16:48			08:19 16:10
Sonnenscheinstunden	501	453	381	332	267	245	
astr.max.mögl.Beschattung					706		29
Red.Sonnenscheinwahrsch.					0,21		0,16
Reduktion Betriebsdauer					0,98		0,98
Reduktion Windrichtung					0,68		0,68
Gesamte Reduktion					0,14		0,11
Met.wahrsch.Beschattung					97		3

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
--------------	-----------------------	-------------------------	----------------------	----------------------------------	--------------------------------	---------------------------	----------------------------

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP39 - Thurländer Dorfstraße 24A, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar		Februar		März		April		Mai		Juni	
1	08:19	15:10 (WEA03)	07:52	15:20 (WEA02)	06:59	16:36 (WEA01)	06:49	05:45	05:00		
	16:12	23	15:33 (WEA03)	16:59	38	15:58 (WEA02)	17:50	16	16:52 (WEA01)	19:44	20:34
2	08:18	15:10 (WEA03)	07:51	15:20 (WEA02)	06:57	16:38 (WEA01)	06:47	05:43	04:59		
	16:13	23	15:33 (WEA03)	17:01	38	15:58 (WEA02)	17:52	12	16:50 (WEA01)	19:45	20:36
3	08:18	15:10 (WEA03)	07:49	15:20 (WEA02)	06:55		06:44	05:41	04:58		
	16:14	24	15:34 (WEA03)	17:03	39	15:59 (WEA02)	17:54	19:47	20:37	21:22	
4	08:18	15:11 (WEA03)	07:47	15:21 (WEA02)	06:53		06:42	05:39	04:57		
	16:15	24	15:35 (WEA03)	17:04	38	15:59 (WEA02)	17:56	19:49	20:39	21:23	
5	08:18	15:10 (WEA03)	07:46	15:21 (WEA02)	06:50		06:40	05:37	04:57		
	16:16	25	15:35 (WEA03)	17:06	37	15:58 (WEA02)	17:57	19:50	20:41	21:24	
6	08:18	15:11 (WEA03)	07:44	15:21 (WEA02)	06:48		06:38	05:35	04:56		
	16:17	25	15:36 (WEA03)	17:08	37	15:58 (WEA02)	17:59	19:52	20:42	21:25	
7	08:17	15:11 (WEA03)	07:42	15:22 (WEA02)	06:46		06:35	05:34	04:56		
	16:18	25	15:36 (WEA03)	17:10	37	15:59 (WEA02)	18:01	19:54	20:44	21:26	
8	08:17	15:11 (WEA03)	07:41	15:23 (WEA02)	06:44		06:33	05:32	04:55		
	16:20	27	15:38 (WEA03)	17:12	35	15:58 (WEA02)	18:03	19:56	20:46	21:26	
9	08:16	15:11 (WEA03)	07:39	15:24 (WEA02)	06:42		06:31	05:30	04:55		
	16:21	27	15:38 (WEA03)	17:14	33	15:57 (WEA02)	18:04	19:57	20:47	21:27	
10	08:16	15:11 (WEA03)	07:37	15:24 (WEA02)	06:39		06:29	05:28	04:54		
	16:23	27	15:38 (WEA03)	17:16	32	15:56 (WEA02)	18:06	19:59	20:49	21:28	
11	08:15	15:12 (WEA03)	07:35	15:25 (WEA02)	06:37		06:26	05:27	04:54		
	16:24	27	15:39 (WEA03)	17:17	30	15:55 (WEA02)	18:08	20:01	20:50	21:29	
12	08:15	15:12 (WEA03)	07:33	15:27 (WEA02)	06:35		06:24	05:25	04:53		
	16:25	28	15:40 (WEA03)	17:19	27	15:54 (WEA02)	18:10	20:02	20:52	21:30	
13	08:14	15:13 (WEA03)	07:32	15:28 (WEA02)	06:33		06:22	05:24	04:53		
	16:27	27	15:40 (WEA03)	17:21	34	16:50 (WEA01)	18:11	20:04	20:54	21:30	
14	08:13	15:13 (WEA03)	07:30	15:30 (WEA02)	06:30		06:20	05:22	04:53		
	16:28	27	15:40 (WEA03)	17:23	36	16:53 (WEA01)	18:13	20:06	20:55	21:31	
15	08:12	15:13 (WEA03)	07:28	15:33 (WEA02)	06:28		06:18	05:20	04:53		
	16:30	29	15:42 (WEA02)	17:25	34	16:55 (WEA01)	18:15	20:07	20:57	21:31	
16	08:12	15:14 (WEA03)	07:26	15:40 (WEA02)	06:26		06:15	05:19	04:53		
	16:31	30	15:44 (WEA02)	17:27	22	16:56 (WEA01)	18:16	20:09	20:58	21:32	
17	08:11	15:14 (WEA03)	07:24	16:34 (WEA01)	06:23		06:13	05:17	04:53		
	16:33	32	15:46 (WEA02)	17:28	23	16:57 (WEA01)	18:18	20:11	21:00	21:32	
18	08:10	15:15 (WEA03)	07:22	16:33 (WEA01)	06:21		06:11	05:16	04:53		
	16:35	33	15:48 (WEA02)	17:30	25	16:58 (WEA01)	18:20	20:12	21:01	21:33	
19	08:09	15:15 (WEA03)	07:20	16:33 (WEA01)	06:19		06:09	05:15	04:53		
	16:36	34	15:49 (WEA02)	17:32	25	16:58 (WEA01)	18:22	20:14	21:03	21:33	
20	08:08	15:16 (WEA03)	07:18	16:32 (WEA01)	06:17		06:07	05:13	04:53		
	16:38	35	15:51 (WEA02)	17:34	27	16:59 (WEA01)	18:23	20:16	21:04	21:33	
21	08:07	15:16 (WEA03)	07:16	16:32 (WEA01)	06:14		06:05	05:12	04:53		
	16:40	35	15:51 (WEA02)	17:36	27	16:59 (WEA01)	18:25	20:17	21:05	21:34	
22	08:06	15:17 (WEA03)	07:14	16:32 (WEA01)	06:12		06:03	05:11	04:53		
	16:41	35	15:52 (WEA02)	17:38	27	16:59 (WEA01)	18:27	20:19	21:07	21:34	
23	08:04	15:18 (WEA03)	07:12	16:32 (WEA01)	06:10		06:01	05:09	04:53		
	16:43	36	15:54 (WEA02)	17:39	27	16:59 (WEA01)	18:28	20:21	21:08	21:34	
24	08:03	15:19 (WEA03)	07:10	16:31 (WEA01)	06:07		05:59	05:08	04:54		
	16:45	35	15:54 (WEA02)	17:41	27	16:58 (WEA01)	18:30	20:22	21:10	21:34	
25	08:02	15:20 (WEA03)	07:08	16:32 (WEA01)	06:05		05:57	05:07	04:54		
	16:46	35	15:55 (WEA02)	17:43	25	16:57 (WEA01)	18:32	20:24	21:11	21:34	
26	08:01	15:20 (WEA03)	07:06	16:33 (WEA01)	06:03		05:55	05:06	04:54		
	16:48	36	15:56 (WEA02)	17:45	24	16:57 (WEA01)	18:34	20:26	21:12	21:34	
27	07:59	15:20 (WEA03)	07:03	16:34 (WEA01)	06:00		05:53	05:05	04:55		
	16:50	36	15:56 (WEA02)	17:47	22	16:56 (WEA01)	18:35	20:27	21:14	21:34	
28	07:58	15:20 (WEA03)	07:01	16:35 (WEA01)	05:58		05:51	05:04	04:55		
	16:52	38	15:58 (WEA02)	17:48	20	16:55 (WEA01)	18:37	20:29	21:15	21:34	
29	07:57	15:20 (WEA03)			06:56		05:49	05:03	04:56		
	16:54	38	15:58 (WEA02)		19:39		20:31	21:16	21:34		
30	07:55	15:19 (WEA03)			06:54		05:47	05:02	04:56		
	16:55	39	15:58 (WEA02)		19:40		20:32	21:17	21:34		
31	07:54	15:20 (WEA03)			06:51			05:01			
	16:57	39	15:59 (WEA02)		19:42			21:18			
Sonnenscheinstunden	260		278		367		416	484	498		
astr.max.mögl.Beschattung	954		846		28						
Red.Sonnenscheinwahrsch.	0,19		0,26		0,33						
Reduktion Betriebsdauer	0,98		0,98		0,98						
Reduktion Windrichtung	0,68		0,67		0,66						
Gesamte Reduktion	0,12		0,17		0,22						
Met.wahrsch.Beschattung	118		146		6						

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende
			(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP39 - Thurländer Dorfstraße 24A, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

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Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
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Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober		November	Dezember
1	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51		07:04 16:46	14:54 (WEA02) 15:26 (WEA02)
2	04:58 21:33	05:35 21:00	06:24 19:58	07:12 18:49		07:06 16:44	15:27 (WEA02) 16:05
3	04:58 21:33	05:36 20:59	06:26 19:56	07:14 18:47		07:08 16:42	14:52 (WEA02) 15:28 (WEA02)
4	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45		07:09 16:40	14:52 (WEA02) 15:28 (WEA02)
5	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42		07:11 16:39	14:52 (WEA02) 15:29 (WEA02)
6	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40		07:13 16:37	14:50 (WEA02) 15:28 (WEA02)
7	05:02 21:31	05:42 20:52	06:32 19:47	07:21 18:38		07:15 16:35	14:50 (WEA02) 15:29 (WEA02)
8	05:02 21:30	05:44 20:50	06:34 19:45	07:22 18:36		07:17 16:34	14:50 (WEA02) 15:29 (WEA02)
9	05:03 21:30	05:45 20:48	06:35 19:42	07:24 18:33		07:18 16:32	14:50 (WEA02) 15:29 (WEA02)
10	05:04 21:29	05:47 20:46	06:37 19:40	07:26 18:31		07:20 16:30	14:51 (WEA02) 15:29 (WEA02)
11	05:05 21:28	05:49 20:44	06:38 19:38	07:28 18:29	17:15 (WEA01) 17:22 (WEA01)	07:22 16:29	14:51 (WEA02) 15:29 (WEA02)
12	05:06 21:27	05:50 20:42	06:40 19:35	07:29 18:27	17:11 (WEA01) 17:25 (WEA01)	07:24 16:27	14:51 (WEA02) 15:29 (WEA02)
13	05:08 21:26	05:52 20:40	06:42 19:33	07:31 18:24	17:08 (WEA01) 17:26 (WEA01)	07:25 16:26	14:52 (WEA02) 15:29 (WEA02)
14	05:09 21:25	05:53 20:38	06:43 19:31	07:33 18:22	17:07 (WEA01) 17:28 (WEA01)	07:27 16:24	14:52 (WEA02) 15:29 (WEA02)
15	05:10 21:24	05:55 20:37	06:45 19:28	07:34 18:20	17:05 (WEA01) 17:29 (WEA01)	07:29 16:23	14:53 (WEA02) 15:29 (WEA02)
16	05:11 21:23	05:57 20:35	06:46 19:26	07:36 18:18	17:05 (WEA01) 17:29 (WEA01)	07:31 16:21	14:53 (WEA02) 15:29 (WEA02)
17	05:12 21:22	05:58 20:33	06:48 19:24	07:38 18:16	17:04 (WEA01) 17:30 (WEA01)	07:32 16:20	14:53 (WEA03) 15:28 (WEA02)
18	05:13 21:21	06:00 20:30	06:50 19:21	07:39 18:14	17:03 (WEA01) 17:29 (WEA01)	07:34 16:19	14:53 (WEA03) 15:28 (WEA02)
19	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:12	17:02 (WEA01) 17:29 (WEA01)	07:36 16:17	14:52 (WEA03) 15:28 (WEA02)
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	17:02 (WEA01) 17:29 (WEA01)	07:37 16:16	14:52 (WEA03) 15:27 (WEA02)
21	05:17 21:18	06:05 20:24	06:54 19:15	07:45 18:07	17:02 (WEA01) 17:29 (WEA01)	07:39 16:15	14:52 (WEA03) 15:27 (WEA02)
22	05:19 21:17	06:06 20:22	06:56 19:12	07:46 18:05	17:03 (WEA01) 17:29 (WEA01)	07:41 16:14	14:52 (WEA03) 15:27 (WEA02)
23	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	17:03 (WEA01) 17:29 (WEA01)	07:42 16:13	14:51 (WEA03) 15:25 (WEA02)
24	05:21 21:14	06:09 20:18	06:59 19:08	07:50 18:01	17:04 (WEA01) 17:28 (WEA01)	07:44 16:12	14:52 (WEA03) 15:25 (WEA02)
25	05:23 21:13	06:11 20:16	07:01 19:05	06:52 16:59	16:04 (WEA01) 16:26 (WEA01)	07:46 16:11	14:52 (WEA03) 15:24 (WEA02)
26	05:24 21:11	06:13 20:14	07:03 19:03	06:53 16:57	15:06 (WEA02) 16:25 (WEA01)	07:47 16:10	14:53 (WEA03) 15:23 (WEA02)
27	05:26 21:10	06:14 20:11	07:04 19:01	06:55 16:55	15:02 (WEA02) 16:24 (WEA01)	07:49 16:09	14:52 (WEA03) 15:22 (WEA02)
28	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	14:59 (WEA02) 16:22 (WEA01)	07:50 16:08	14:53 (WEA03) 15:20 (WEA03)
29	05:29 21:07	06:17 20:07	07:08 18:56	06:59 16:51	14:58 (WEA02) 16:19 (WEA01)	07:52 16:07	14:54 (WEA03) 15:21 (WEA03)
30	05:30 21:05	06:19 20:05	07:09 18:54	07:01 16:49	14:56 (WEA02) 15:24 (WEA02)	07:53 16:06	14:53 (WEA03) 15:21 (WEA03)
31	05:32 21:04	06:21 20:03		07:02 16:48	14:55 (WEA02) 15:25 (WEA02)		08:19 16:10
Sonnenscheinstunden	501	453	381	332		267	245
astr.max.mögl.Beschattung				527		1042	692
Red.Sonnenscheinwahrsch.				0,35		0,21	0,16
Reduktion Betriebsdauer				0,98		0,98	0,98
Reduktion Windrichtung				0,67		0,68	0,67
Gesamte Reduktion				0,23		0,14	0,11
Met.wahrsch.Beschattung				121		143	75

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP40 - Thurländer Dorfstraße 21, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar			Februar			März			April			Mai			Juni		
1	08:19		15:30 (WEA03)	07:52		15:37 (WEA03)	06:59		16:41 (WEA01)	06:49		05:45			05:00		
	16:12	6	15:36 (WEA03)	16:59	34	16:11 (WEA02)	17:50	23	17:04 (WEA01)	19:44		20:34			21:20		
2	08:18		15:28 (WEA03)	07:51		15:37 (WEA02)	06:57		16:42 (WEA01)	06:47		05:43			04:59		
	16:13	9	15:37 (WEA03)	17:01	35	16:12 (WEA02)	17:52	21	17:03 (WEA01)	19:45		20:36			21:21		
3	08:18		15:28 (WEA03)	07:49		15:37 (WEA02)	06:55		16:43 (WEA01)	06:44		05:41			04:58		
	16:14	11	15:39 (WEA03)	17:03	36	16:13 (WEA02)	17:54	19	17:02 (WEA01)	19:47		20:37			21:22		
4	08:18		15:28 (WEA03)	07:47		15:37 (WEA02)	06:53		16:45 (WEA01)	06:42		05:39			04:57		
	16:15	12	15:40 (WEA03)	17:04	36	16:13 (WEA02)	17:56	16	17:01 (WEA01)	19:49		20:39			21:23		
5	08:18		15:27 (WEA03)	07:46		15:37 (WEA02)	06:50		16:48 (WEA01)	06:40		05:37			04:57		
	16:16	14	15:41 (WEA03)	17:06	36	16:13 (WEA02)	17:57	10	16:58 (WEA01)	19:50		20:41			21:24		
6	08:18		15:27 (WEA03)	07:44		15:36 (WEA02)	06:48			06:38		05:35			04:56		
	16:17	16	15:43 (WEA03)	17:08	37	16:13 (WEA02)	17:59			19:52		20:42			21:25		
7	08:17		15:26 (WEA03)	07:42		15:37 (WEA02)	06:46			06:35		05:34			04:56		
	16:18	17	15:43 (WEA03)	17:10	37	16:14 (WEA02)	18:01			19:54		20:44			21:26		
8	08:17		15:27 (WEA03)	07:41		15:37 (WEA02)	06:44			06:33		05:32			04:55		
	16:20	18	15:45 (WEA03)	17:12	37	16:14 (WEA02)	18:03			19:56		20:46			21:26		
9	08:16		15:26 (WEA03)	07:39		15:37 (WEA02)	06:42			06:31		05:30			04:55		
	16:21	20	15:46 (WEA03)	17:14	37	16:14 (WEA02)	18:04			19:57		20:47			21:27		
10	08:16		15:26 (WEA03)	07:37		15:37 (WEA02)	06:39			06:29		05:28			04:54		
	16:22	20	15:46 (WEA03)	17:16	37	16:14 (WEA02)	18:06			19:59		20:49			21:28		
11	08:15		15:26 (WEA03)	07:35		15:38 (WEA02)	06:37			06:26		05:27			04:54		
	16:24	22	15:48 (WEA03)	17:17	36	16:14 (WEA02)	18:08			20:01		20:50			21:29		
12	08:15		15:26 (WEA03)	07:33		15:38 (WEA02)	06:35			06:24		05:25			04:53		
	16:25	23	15:49 (WEA03)	17:19	35	16:13 (WEA02)	18:10			20:02		20:52			21:30		
13	08:14		15:26 (WEA03)	07:32		15:39 (WEA02)	06:33			06:22		05:24			04:53		
	16:27	23	15:49 (WEA03)	17:21	34	16:13 (WEA02)	18:11			20:04		20:54			21:30		
14	08:13		15:26 (WEA03)	07:30		15:40 (WEA02)	06:30			06:20		05:22			04:53		
	16:28	24	15:50 (WEA03)	17:23	32	16:12 (WEA02)	18:13			20:06		20:55			21:31		
15	08:12		15:26 (WEA03)	07:28		15:40 (WEA02)	06:28			06:18		05:20			04:53		
	16:30	25	15:51 (WEA03)	17:25	31	16:11 (WEA02)	18:15			20:07		20:57			21:31		
16	08:12		15:26 (WEA03)	07:26		15:42 (WEA02)	06:26			06:15		05:19			04:53		
	16:31	25	15:51 (WEA03)	17:27	28	16:10 (WEA02)	18:16			20:09		20:58			21:32		
17	08:11		15:26 (WEA03)	07:24		15:43 (WEA02)	06:23			06:13		05:17			04:53		
	16:33	26	15:52 (WEA03)	17:28	36	16:59 (WEA01)	18:18			20:11		21:00			21:32		
18	08:10		15:26 (WEA03)	07:22		15:45 (WEA02)	06:21			06:11		05:16			04:53		
	16:35	27	15:53 (WEA03)	17:30	37	17:02 (WEA01)	18:20			20:12		21:01			21:33		
19	08:09		15:27 (WEA03)	07:20		15:47 (WEA02)	06:19			06:09		05:15			04:53		
	16:36	26	15:53 (WEA03)	17:32	36	17:03 (WEA01)	18:22			20:14		21:03			21:33		
20	08:08		15:27 (WEA03)	07:18		15:51 (WEA02)	06:17			06:07		05:13			04:53		
	16:38	27	15:54 (WEA03)	17:34	31	17:05 (WEA01)	18:23			20:16		21:04			21:33		
21	08:07		15:27 (WEA03)	07:16		16:43 (WEA01)	06:14			06:05		05:12			04:53		
	16:40	26	15:53 (WEA03)	17:36	23	17:06 (WEA01)	18:25			20:17		21:05			21:34		
22	08:06		15:27 (WEA03)	07:14		16:42 (WEA01)	06:12			06:03		05:11			04:53		
	16:41	27	15:54 (WEA03)	17:38	24	17:06 (WEA01)	18:27			20:19		21:07			21:34		
23	08:04		15:28 (WEA03)	07:12		16:42 (WEA01)	06:10			06:01		05:09			04:53		
	16:43	31	15:59 (WEA02)	17:39	25	17:07 (WEA01)	18:28			20:21		21:08			21:34		
24	08:03		15:28 (WEA03)	07:10		16:40 (WEA01)	06:07			05:59		05:08			04:54		
	16:45	33	16:01 (WEA02)	17:41	26	17:06 (WEA01)	18:30			20:22		21:10			21:34		
25	08:02		15:29 (WEA03)	07:08		16:40 (WEA01)	06:05			05:57		05:07			04:54		
	16:46	34	16:03 (WEA02)	17:43	26	17:06 (WEA01)	18:32			20:24		21:11			21:34		
26	08:01		15:30 (WEA03)	07:06		16:40 (WEA01)	06:03			05:55		05:06			04:54		
	16:48	35	16:05 (WEA02)	17:45	26	17:06 (WEA01)	18:34			20:26		21:12			21:34		
27	07:59		15:30 (WEA03)	07:03		16:41 (WEA01)	06:00			05:53		05:05			04:55		
	16:50	36	16:06 (WEA02)	17:47	25	17:06 (WEA01)	18:35			20:27		21:14			21:34		
28	07:58		15:32 (WEA03)	07:01		16:41 (WEA01)	05:58			05:51		05:04			04:55		
	16:52	36	16:08 (WEA02)	17:48	25	17:06 (WEA01)	18:37			20:29		21:15			21:34		
29	07:57		15:32 (WEA03)				06:56			05:49		05:03			04:56		
	16:54	37	16:09 (WEA02)				19:39			20:31		21:16			21:34		
30	07:55		15:33 (WEA03)				06:54			05:47		05:02			04:56		
	16:55	36	16:09 (WEA02)				19:40			20:32		21:17			21:34		
31	07:54		15:35 (WEA03)				06:51					05:01					
	16:57	36	16:11 (WEA02)				19:42					21:18					
Sonnenscheinstunden	260			278			367			416		484			498		
astr.max.mögl.Beschattung		758			898			89									
Red.Sonnenscheinwahrsch.		0,19			0,26			0,33									
Reduktion Betriebsdauer		0,98			0,98			0,98									
Reduktion Windrichtung		0,68			0,67			0,66									
Gesamte Reduktion		0,12			0,17			0,21									
Met.wahrsch.Beschattung		94			155			19									

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP40 - Thurländer Dorfstraße 21, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Jul	August	September	Okt	November	Dezember
1	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51	07:04 16:46	15:07 (WEA02) 15:44 (WEA02)
2	04:58 21:33	05:35 21:00	06:24 19:58	07:12 18:49	07:06 16:44	15:07 (WEA02) 15:44 (WEA02)
3	04:58 21:33	05:36 20:59	06:26 19:56	07:14 18:47	07:08 16:42	15:07 (WEA02) 15:44 (WEA02)
4	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45	07:09 16:40	15:07 (WEA02) 15:44 (WEA02)
5	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	15:07 (WEA02) 15:44 (WEA02)
6	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40	07:13 16:37	15:06 (WEA02) 15:43 (WEA02)
7	05:02 21:31	05:42 20:52	06:32 19:47	07:21 18:38	07:15 16:35	15:07 (WEA02) 15:43 (WEA02)
8	05:02 21:30	05:44 20:50	06:34 19:45	07:22 18:36	07:17 16:34	15:07 (WEA02) 15:43 (WEA02)
9	05:03 21:29	05:45 20:48	06:35 19:42	07:24 18:33	07:18 16:32	15:08 (WEA02) 15:43 (WEA02)
10	05:04 21:29	05:47 20:46	06:37 19:40	07:26 18:31	07:20 16:30	15:08 (WEA03) 15:42 (WEA02)
11	05:05 21:28	05:49 20:44	06:38 19:38	07:28 18:29	07:22 16:29	15:06 (WEA03) 15:42 (WEA02)
12	05:06 21:27	05:50 20:42	06:40 19:35	07:29 18:27	07:24 16:27	15:05 (WEA03) 15:41 (WEA02)
13	05:08 21:26	05:52 20:40	06:42 19:33	07:31 18:24	07:25 16:26	15:04 (WEA03) 15:41 (WEA02)
14	05:09 21:25	05:53 20:38	06:43 19:31	07:33 18:22	07:27 16:24	15:03 (WEA03) 15:40 (WEA02)
15	05:10 21:24	05:55 20:37	06:45 19:28	07:34 18:20	07:29 16:23	15:03 (WEA03) 15:39 (WEA02)
16	05:11 21:23	05:57 20:35	06:46 19:26	07:36 18:18	07:31 16:21	15:03 (WEA03) 15:38 (WEA02)
17	05:12 21:22	05:58 20:33	06:48 19:24	07:38 18:16	07:32 16:20	15:02 (WEA03) 15:36 (WEA02)
18	05:13 21:21	06:00 20:30	06:50 19:21	07:39 18:14	07:34 16:19	15:02 (WEA03) 15:35 (WEA02)
19	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:12	07:36 16:17	15:02 (WEA03) 15:33 (WEA02)
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	07:37 16:16	15:02 (WEA03) 15:29 (WEA03)
21	05:17 21:18	06:05 20:24	06:54 19:15	07:45 18:07	07:39 16:15	15:03 (WEA03) 15:29 (WEA03)
22	05:19 21:17	06:06 20:22	06:56 19:12	07:46 18:05	07:41 16:14	15:03 (WEA03) 15:30 (WEA03)
23	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	07:42 16:13	15:03 (WEA03) 15:29 (WEA03)
24	05:21 21:14	06:09 20:18	06:59 19:08	07:50 18:01	07:44 16:12	15:03 (WEA03) 15:30 (WEA03)
25	05:23 21:13	06:11 20:16	07:01 19:05	06:52 16:59	07:46 16:11	15:04 (WEA03) 15:30 (WEA03)
26	05:24 21:11	06:13 20:14	07:03 19:03	06:53 16:57	07:47 16:10	15:05 (WEA03) 15:30 (WEA03)
27	05:26 21:10	06:14 20:11	07:04 19:01	06:55 16:55	07:49 16:09	15:05 (WEA03) 15:30 (WEA03)
28	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	07:50 16:08	15:06 (WEA03) 15:30 (WEA03)
29	05:29 21:07	06:17 20:07	07:08 18:56	06:59 16:51	07:52 16:07	15:06 (WEA03) 15:29 (WEA03)
30	05:30 21:05	06:19 20:05	07:09 18:54	07:01 16:49	07:53 16:06	15:07 (WEA03) 15:30 (WEA03)
31	05:32 21:04	06:21 20:03	07:02 16:48	07:02 16:48	07:54 16:06	15:07 (WEA03) 15:30 (WEA03)
Sonnenscheinstunden	501	453	381	332	267	245
astr.max.mögl.Beschattung				642	957	168
Red.Sonnenscheinwahrsch.				0,35	0,21	0,16
Reduktion Betriebsdauer				0,98	0,98	0,98
Reduktion Windrichtung				0,67	0,68	0,68
Gesamte Reduktion				0,23	0,14	0,11
Met.wahrsch.Beschattung				148	132	18

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP41 - Thurländer Dorfstraße 19, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar		Februar		März		April		Mai		Juni	
1	08:19	14:32 (WEA04)	07:52	15:42 (WEA03)	06:59	16:47 (WEA01)	06:49	05:45	05:00		
	16:12	4 14:36 (WEA04)	16:59	37 16:19 (WEA02)	17:50	24 17:11 (WEA01)	19:44	20:34	21:20		
2	08:18		07:51	15:43 (WEA03)	06:57	16:47 (WEA01)	06:47	05:43	04:59		
	16:13		17:01	37 16:20 (WEA02)	17:52	24 17:11 (WEA01)	19:45	20:36	21:21		
3	08:18		07:49	15:45 (WEA03)	06:55	16:48 (WEA01)	06:44	05:41	04:58		
	16:14		17:03	36 16:21 (WEA02)	17:54	22 17:10 (WEA01)	19:47	20:37	21:22		
4	08:18		07:47	15:47 (WEA03)	06:53	16:49 (WEA01)	06:42	05:39	04:57		
	16:15		17:04	35 16:22 (WEA02)	17:55	20 17:09 (WEA01)	19:49	20:39	21:23		
5	08:18		07:46	15:50 (WEA03)	06:50	16:50 (WEA01)	06:40	05:37	04:57		
	16:16		17:06	33 16:23 (WEA02)	17:57	18 17:08 (WEA01)	19:50	20:41	21:24		
6	08:18		07:44	15:51 (WEA02)	06:48	16:51 (WEA01)	06:38	05:35	04:56		
	16:17		17:08	32 16:23 (WEA02)	17:59	14 17:05 (WEA01)	19:52	20:42	21:25		
7	08:17		07:42	15:51 (WEA02)	06:46	16:55 (WEA01)	06:35	05:34	04:56		
	16:18		17:10	34 16:25 (WEA02)	18:01	7 17:02 (WEA01)	19:54	20:44	21:26		
8	08:17		07:41	15:51 (WEA02)	06:44		06:33	05:32	04:55		
	16:20		17:12	34 16:25 (WEA02)	18:03		19:56	20:46	21:26		
9	08:16		07:39	15:51 (WEA02)	06:42		06:31	05:30	04:55		
	16:21		17:14	34 16:25 (WEA02)	18:04		19:57	20:47	21:27		
10	08:16		07:37	15:50 (WEA02)	06:39		06:29	05:28	04:54		
	16:22		17:16	36 16:26 (WEA02)	18:06		19:59	20:49	21:28		
11	08:15	15:43 (WEA03)	07:35	15:50 (WEA02)	06:37		06:26	05:27	04:54		
	16:24	8 15:51 (WEA03)	17:17	36 16:26 (WEA02)	18:08		20:01	20:50	21:29		
12	08:15	15:41 (WEA03)	07:33	15:50 (WEA02)	06:35		06:24	05:25	04:53		
	16:25	11 15:52 (WEA03)	17:19	36 16:26 (WEA02)	18:10		20:02	20:52	21:30		
13	08:14	15:40 (WEA03)	07:32	15:50 (WEA02)	06:33		06:22	05:24	04:53		
	16:27	14 15:54 (WEA03)	17:21	35 16:25 (WEA02)	18:11		20:04	20:54	21:30		
14	08:13	15:39 (WEA03)	07:30	15:51 (WEA02)	06:30		06:20	05:22	04:53		
	16:28	16 15:55 (WEA03)	17:23	34 16:25 (WEA02)	18:13		20:06	20:55	21:31		
15	08:12	15:39 (WEA03)	07:28	15:51 (WEA02)	06:28		06:18	05:20	04:53		
	16:30	18 15:57 (WEA03)	17:25	34 16:25 (WEA02)	18:15		20:07	20:57	21:31		
16	08:12	15:38 (WEA03)	07:26	15:52 (WEA02)	06:26		06:15	05:19	04:53		
	16:31	20 15:58 (WEA03)	17:27	32 16:24 (WEA02)	18:16		20:09	20:58	21:32		
17	08:11	15:38 (WEA03)	07:24	15:52 (WEA02)	06:23		06:13	05:17	04:53		
	16:33	21 15:59 (WEA03)	17:28	32 16:24 (WEA02)	18:18		20:11	21:00	21:32		
18	08:10	15:38 (WEA03)	07:22	15:53 (WEA02)	06:21		06:11	05:16	04:53		
	16:35	22 16:00 (WEA03)	17:30	30 16:23 (WEA02)	18:20		20:12	21:01	21:33		
19	08:09	15:38 (WEA03)	07:20	15:54 (WEA02)	06:19		06:09	05:15	04:53		
	16:36	23 16:01 (WEA03)	17:32	31 17:02 (WEA01)	18:22		20:14	21:03	21:33		
20	08:08	15:38 (WEA03)	07:18	15:56 (WEA02)	06:17		06:07	05:13	04:53		
	16:38	24 16:02 (WEA03)	17:34	37 17:07 (WEA01)	18:23		20:16	21:04	21:33		
21	08:07	15:37 (WEA03)	07:16	15:57 (WEA02)	06:14		06:05	05:12	04:53		
	16:40	25 16:02 (WEA03)	17:36	39 17:09 (WEA01)	18:25		20:17	21:05	21:34		
22	08:05	15:37 (WEA03)	07:14	16:00 (WEA02)	06:12		06:03	05:11	04:53		
	16:41	26 16:03 (WEA03)	17:38	36 17:10 (WEA01)	18:27		20:19	21:07	21:34		
23	08:04	15:38 (WEA03)	07:12	16:03 (WEA02)	06:10		06:01	05:09	04:53		
	16:43	25 16:03 (WEA03)	17:39	32 17:11 (WEA01)	18:28		20:21	21:08	21:34		
24	08:03	15:37 (WEA03)	07:10	16:48 (WEA01)	06:07		05:59	05:08	04:54		
	16:45	26 16:03 (WEA03)	17:41	23 17:11 (WEA01)	18:30		20:22	21:10	21:34		
25	08:02	15:38 (WEA03)	07:08	16:48 (WEA01)	06:05		05:57	05:07	04:54		
	16:46	26 16:04 (WEA03)	17:43	24 17:12 (WEA01)	18:32		20:24	21:11	21:34		
26	08:01	15:38 (WEA03)	07:06	16:47 (WEA01)	06:03		05:55	05:06	04:54		
	16:48	26 16:04 (WEA03)	17:45	25 17:12 (WEA01)	18:34		20:26	21:12	21:34		
27	07:59	15:38 (WEA03)	07:03	16:47 (WEA01)	06:00		05:53	05:05	04:55		
	16:50	26 16:04 (WEA03)	17:47	25 17:12 (WEA01)	18:35		20:27	21:14	21:34		
28	07:58	15:38 (WEA03)	07:01	16:47 (WEA01)	05:58		05:51	05:04	04:55		
	16:52	26 16:04 (WEA03)	17:48	25 17:12 (WEA01)	18:37		20:29	21:15	21:34		
29	07:57	15:40 (WEA03)			06:56		05:49	05:03	04:56		
	16:54	32 16:12 (WEA02)			19:39		20:31	21:16	21:34		
30	07:55	15:40 (WEA03)			06:54		05:47	05:02	04:56		
	16:55	35 16:15 (WEA02)			19:40		20:32	21:17	21:34		
31	07:54	15:41 (WEA03)			06:51			05:01			
	16:57	36 16:17 (WEA02)			19:42			21:18			
Sonnenscheinstunden	260		278		367		416	484	498		
astr.max.mögl.Beschattung	490		914		129						
Red.Sonnenscheinwahrsch.	0,19		0,26		0,33						
Reduktion Betriebsdauer	0,98		0,98		0,98						
Reduktion Windrichtung	0,68		0,67		0,65						
Gesamte Reduktion	0,12		0,17		0,21						
Met.wahrsch.Beschattung	61		158		27						

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenende
			(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP41 - Thurländer Dorfstraße 19, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober		November		Dezember
1	04:57	05:33	06:22	07:11		07:04	15:20 (WEA02)	07:55
	21:33	21:02	20:00	18:51		16:46	35 15:55 (WEA02)	16:06
2	04:58	05:35	06:24	07:12		07:06	15:20 (WEA02)	07:56
	21:33	21:00	19:58	18:49		16:44	35 15:55 (WEA02)	16:05
3	04:58	05:36	06:26	07:14		07:08	15:21 (WEA02)	07:58
	21:33	20:59	19:56	18:47		16:42	34 15:55 (WEA02)	16:05
4	04:59	05:38	06:27	07:16		07:09	15:21 (WEA02)	07:59
	21:32	20:57	19:54	18:45		16:40	33 15:54 (WEA02)	16:04
5	05:00	05:39	06:29	07:17		07:11	15:22 (WEA02)	08:00
	21:32	20:55	19:51	18:42		16:39	32 15:54 (WEA02)	16:03
6	05:01	05:41	06:30	07:19		07:13	15:19 (WEA03)	08:01
	21:31	20:53	19:49	18:40		16:37	34 15:53 (WEA02)	16:03
7	05:02	05:42	06:32	07:21	17:29 (WEA01)	07:15	15:16 (WEA03)	08:03
	21:31	20:52	19:47	18:38	11 17:40 (WEA01)	16:35	15:52 (WEA02)	16:03
8	05:02	05:44	06:34	07:22	17:26 (WEA01)	07:17	15:15 (WEA03)	08:04
	21:30	20:50	19:45	18:36	16 17:42 (WEA01)	16:33	15:51 (WEA02)	16:02
9	05:03	05:45	06:35	07:24	17:24 (WEA01)	07:18	15:13 (WEA03)	08:05
	21:29	20:48	19:42	18:33	19 17:43 (WEA01)	16:32	15:50 (WEA02)	16:02
10	05:04	05:47	06:37	07:26	17:23 (WEA01)	07:20	15:13 (WEA03)	08:06
	21:29	20:46	19:40	18:31	21 17:44 (WEA01)	16:30	15:49 (WEA02)	16:02
11	05:05	05:49	06:38	07:28	17:22 (WEA01)	07:22	15:12 (WEA03)	08:07
	21:28	20:44	19:38	18:29	23 17:45 (WEA01)	16:29	15:48 (WEA02)	16:02
12	05:06	05:50	06:40	07:29	17:21 (WEA01)	07:24	15:12 (WEA03)	08:08
	21:27	20:42	19:35	18:27	24 17:45 (WEA01)	16:27	15:46 (WEA02)	16:02
13	05:08	05:52	06:42	07:31	17:20 (WEA01)	07:25	15:11 (WEA03)	08:09
	21:26	20:40	19:33	18:24	24 17:44 (WEA01)	16:26	15:44 (WEA02)	16:01
14	05:09	05:53	06:43	07:33	17:20 (WEA01)	07:27	15:11 (WEA03)	08:10
	21:25	20:38	19:31	18:22	25 17:45 (WEA01)	16:24	15:37 (WEA03)	16:01
15	05:10	05:55	06:45	07:34	17:20 (WEA01)	07:29	15:11 (WEA03)	08:11
	21:24	20:37	19:28	18:20	24 17:44 (WEA01)	16:23	15:37 (WEA03)	16:02
16	05:11	05:57	06:46	07:36	17:20 (WEA01)	07:31	15:12 (WEA03)	08:12
	21:23	20:35	19:26	18:18	24 17:44 (WEA01)	16:21	15:37 (WEA03)	16:02
17	05:12	05:58	06:48	07:38	17:20 (WEA01)	07:32	15:11 (WEA03)	08:13
	21:22	20:33	19:24	18:16	24 17:44 (WEA01)	16:20	15:37 (WEA03)	16:02
18	05:13	06:00	06:50	07:39	17:20 (WEA01)	07:34	15:11 (WEA03)	08:14
	21:21	20:30	19:21	18:14	22 17:42 (WEA01)	16:19	15:37 (WEA03)	16:02
19	05:15	06:01	06:51	07:41	16:32 (WEA02)	07:36	15:12 (WEA03)	08:14
	21:20	20:28	19:19	18:12	33 17:41 (WEA01)	16:17	15:37 (WEA03)	16:02
20	05:16	06:03	06:53	07:43	16:29 (WEA02)	07:37	15:12 (WEA03)	08:15
	21:19	20:26	19:17	18:09	37 17:40 (WEA01)	16:16	15:38 (WEA03)	16:03
21	05:17	06:05	06:54	07:45	16:27 (WEA02)	07:39	15:13 (WEA03)	08:16
	21:18	20:24	19:15	18:07	39 17:39 (WEA01)	16:15	15:38 (WEA03)	16:03
22	05:19	06:06	06:56	07:46	16:26 (WEA02)	07:41	15:14 (WEA03)	08:16
	21:17	20:22	19:12	18:05	36 17:36 (WEA01)	16:14	15:38 (WEA03)	16:04
23	05:20	06:08	06:58	07:48	16:24 (WEA02)	07:42	15:14 (WEA03)	08:17
	21:15	20:20	19:10	18:03	29 16:53 (WEA02)	16:13	15:37 (WEA03)	16:04
24	05:21	06:09	06:59	07:50	16:23 (WEA02)	07:44	15:15 (WEA03)	08:17
	21:14	20:18	19:08	18:01	31 16:54 (WEA02)	16:12	15:37 (WEA03)	16:05
25	05:23	06:11	07:01	06:52	15:22 (WEA02)	07:46	15:16 (WEA03)	08:17
	21:13	20:16	19:05	16:59	31 15:53 (WEA02)	16:11	15:37 (WEA03)	16:05
26	05:24	06:13	07:03	06:53	15:21 (WEA02)	07:47	15:17 (WEA03)	08:18
	21:11	20:14	19:03	16:57	33 15:54 (WEA02)	16:10	15:37 (WEA03)	16:06
27	05:26	06:14	07:04	06:55	15:20 (WEA02)	07:49	15:18 (WEA03)	08:18
	21:10	20:11	19:01	16:55	34 15:54 (WEA02)	16:09	15:36 (WEA03)	16:07
28	05:27	06:16	07:06	06:57	15:20 (WEA02)	07:50	15:19 (WEA03)	08:18
	21:08	20:09	18:58	16:53	35 15:55 (WEA02)	16:08	15:35 (WEA03)	16:08
29	05:29	06:17	07:08	06:59	15:20 (WEA02)	07:52	15:20 (WEA03)	08:18
	21:07	20:07	18:56	16:51	35 15:55 (WEA02)	16:07	15:34 (WEA03)	16:08
30	05:30	06:19	07:09	07:01	15:20 (WEA02)	07:53	15:22 (WEA03)	08:18
	21:05	20:05	18:54	16:49	35 15:55 (WEA02)	16:06	15:33 (WEA03)	16:09
31	05:32	06:21		07:02	15:20 (WEA02)		15:20 (WEA03)	08:19
	21:04	20:03		16:48	35 15:55 (WEA02)		16:10	8 14:37 (WEA04)
Sonnenscheinstunden	501	453	381	332		267		245
astr.max.mögl.Beschattung				700		825		262
Red.Sonnenscheinwahrsch.				0,35		0,21		0,16
Reduktion Betriebsdauer				0,98		0,98		0,98
Reduktion Windrichtung				0,67		0,68		0,69
Gesamte Reduktion				0,23		0,14		0,11
Met.wahrsch.Beschattung				161		114		29

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP42 - Thurländer Dorfstraße 17, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar		Februar		März		April		Mai		Juni	
1	08:19	14:35 (WEA04)	07:52	15:45 (WEA03)	06:59	16:47 (WEA01)	06:49	05:45	05:00		
	16:12	10 14:45 (WEA04)	16:59	35 16:20 (WEA02)	17:50	23 17:10 (WEA01)	19:44	20:34	21:20		
2	08:18	14:36 (WEA04)	07:51	15:46 (WEA03)	06:57	16:48 (WEA01)	06:47	05:43	04:59		
	16:13	7 14:43 (WEA04)	17:01	35 16:21 (WEA02)	17:52	21 17:09 (WEA01)	19:45	20:36	21:21		
3	08:18	14:39 (WEA04)	07:49	15:48 (WEA03)	06:55	16:49 (WEA01)	06:44	05:41	04:58		
	16:14	3 14:42 (WEA04)	17:03	35 16:23 (WEA02)	17:54	19 17:08 (WEA01)	19:47	20:37	21:22		
4	08:18		07:47	15:50 (WEA03)	06:53	16:51 (WEA01)	06:42	05:39	04:57		
	16:15		17:04	34 16:24 (WEA02)	17:55	16 17:07 (WEA01)	19:49	20:39	21:23		
5	08:18		07:46	15:53 (WEA03)	06:50	16:52 (WEA01)	06:40	05:37	04:57		
	16:16		17:06	32 16:25 (WEA02)	17:57	12 17:04 (WEA01)	19:50	20:41	21:24		
6	08:18		07:44	15:54 (WEA02)	06:48	16:57 (WEA01)	06:38	05:35	04:56		
	16:17		17:08	31 16:25 (WEA02)	17:59	1 16:58 (WEA01)	19:52	20:42	21:25		
7	08:17		07:42	15:55 (WEA02)	06:46		06:35	05:34	04:56		
	16:18		17:10	32 16:27 (WEA02)	18:01		19:54	20:44	21:26		
8	08:17		07:41	15:55 (WEA02)	06:44		06:33	05:32	04:55		
	16:20		17:12	32 16:27 (WEA02)	18:03		19:55	20:46	21:26		
9	08:16		07:39	15:54 (WEA02)	06:42		06:31	05:30	04:55		
	16:21		17:14	33 16:27 (WEA02)	18:04		19:57	20:47	21:27		
10	08:16		07:37	15:54 (WEA02)	06:39		06:29	05:28	04:54		
	16:22		17:16	33 16:27 (WEA02)	18:06		19:59	20:49	21:28		
11	08:15		07:35	15:54 (WEA02)	06:37		06:26	05:27	04:54		
	16:24		17:17	33 16:27 (WEA02)	18:08		20:01	20:50	21:29		
12	08:15	15:47 (WEA03)	07:33	15:54 (WEA02)	06:35		06:24	05:25	04:53		
	16:25	5 15:52 (WEA03)	17:19	33 16:27 (WEA02)	18:10		20:02	20:52	21:30		
13	08:14	15:45 (WEA03)	07:32	15:54 (WEA02)	06:33		06:22	05:24	04:53		
	16:27	9 15:54 (WEA03)	17:21	33 16:27 (WEA02)	18:11		20:04	20:54	21:30		
14	08:13	15:44 (WEA03)	07:30	15:55 (WEA02)	06:30		06:20	05:22	04:53		
	16:28	11 15:55 (WEA03)	17:23	31 16:26 (WEA02)	18:13		20:06	20:55	21:31		
15	08:12	15:43 (WEA03)	07:28	15:55 (WEA02)	06:28		06:18	05:20	04:53		
	16:30	14 15:57 (WEA03)	17:25	31 16:26 (WEA02)	18:15		20:07	20:57	21:31		
16	08:12	15:42 (WEA03)	07:26	15:56 (WEA02)	06:26		06:15	05:19	04:53		
	16:31	17 15:59 (WEA03)	17:27	29 16:25 (WEA02)	18:16		20:09	20:58	21:32		
17	08:11	15:42 (WEA03)	07:24	15:57 (WEA02)	06:23		06:13	05:17	04:53		
	16:33	18 16:00 (WEA03)	17:28	28 16:25 (WEA02)	18:18		20:11	21:00	21:32		
18	08:10	15:42 (WEA03)	07:22	15:58 (WEA02)	06:21		06:11	05:16	04:53		
	16:35	19 16:01 (WEA03)	17:30	26 16:24 (WEA02)	18:20		20:12	21:01	21:33		
19	08:09	15:41 (WEA03)	07:20	15:59 (WEA02)	06:19		06:09	05:15	04:53		
	16:36	22 16:03 (WEA03)	17:32	33 17:05 (WEA01)	18:22		20:14	21:03	21:33		
20	08:08	15:41 (WEA03)	07:18	16:01 (WEA02)	06:17		06:07	05:13	04:53		
	16:38	23 16:04 (WEA03)	17:34	34 17:07 (WEA01)	18:23		20:16	21:04	21:33		
21	08:07	15:41 (WEA03)	07:16	16:03 (WEA02)	06:14		06:05	05:12	04:53		
	16:40	23 16:04 (WEA03)	17:36	34 17:09 (WEA01)	18:25		20:17	21:05	21:34		
22	08:05	15:41 (WEA03)	07:14	16:07 (WEA02)	06:12		06:03	05:11	04:53		
	16:41	23 16:04 (WEA03)	17:38	28 17:10 (WEA01)	18:27		20:19	21:07	21:34		
23	08:04	15:41 (WEA03)	07:12	16:49 (WEA01)	06:10		06:01	05:09	04:53		
	16:43	24 16:05 (WEA03)	17:39	22 17:11 (WEA01)	18:28		20:21	21:08	21:34		
24	08:03	15:41 (WEA03)	07:10	16:48 (WEA01)	06:07		05:59	05:08	04:54		
	16:45	24 16:05 (WEA03)	17:41	23 17:11 (WEA01)	18:30		20:22	21:10	21:34		
25	08:02	15:41 (WEA03)	07:08	16:47 (WEA01)	06:05		05:57	05:07	04:54		
	16:46	25 16:06 (WEA03)	17:43	24 17:11 (WEA01)	18:32		20:24	21:11	21:34		
26	08:01	15:41 (WEA03)	07:06	16:47 (WEA01)	06:03		05:55	05:06	04:54		
	16:48	25 16:06 (WEA03)	17:45	24 17:11 (WEA01)	18:34		20:26	21:12	21:34		
27	07:59	15:42 (WEA03)	07:03	16:47 (WEA01)	06:00		05:52	05:05	04:55		
	16:50	24 16:06 (WEA03)	17:47	24 17:11 (WEA01)	18:35		20:27	21:14	21:34		
28	07:58	15:42 (WEA03)	07:01	16:48 (WEA01)	05:58		05:51	05:04	04:55		
	16:52	24 16:06 (WEA03)	17:48	23 17:11 (WEA01)	18:37		20:29	21:15	21:34		
29	07:57	15:43 (WEA03)			06:56		05:49	05:03	04:56		
	16:54	30 16:13 (WEA02)			19:39		20:31	21:16	21:34		
30	07:55	15:43 (WEA03)			06:54		05:47	05:02	04:56		
	16:55	33 16:16 (WEA02)			19:40		20:32	21:17	21:34		
31	07:54	15:44 (WEA03)			06:51			05:01			
	16:57	35 16:19 (WEA02)			19:42			21:18			
Sonnenscheinstunden	260		278		367		416	484	498		
astr.max.mögl.Beschattung		448		845		92					
Red.Sonnenscheinwahrsch.		0,19		0,26		0,33					
Reduktion Betriebsdauer		0,98		0,98		0,98					
Reduktion Windrichtung		0,68		0,67		0,65					
Gesamte Reduktion		0,12		0,17		0,21					
Met.wahrsch.Beschattung		56		146		19					

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
--------------	-----------------------	-------------------------	----------------------	--	---

SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP42 - Thurländer Dorfstraße 17, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober		November		Dezember
1	04:57	05:33	06:22	07:11		07:04	15:24 (WEA02)	07:55
	21:33	21:02	20:00	18:51		16:46	33 15:57 (WEA02)	16:06
2	04:58	05:35	06:24	07:12		07:06	15:24 (WEA02)	07:56
	21:33	21:00	19:58	18:49		16:44	33 15:57 (WEA02)	16:05
3	04:58	05:36	06:26	07:14		07:08	15:24 (WEA02)	07:58
	21:33	20:59	19:56	18:47		16:42	32 15:56 (WEA02)	16:04
4	04:59	05:38	06:27	07:16		07:09	15:25 (WEA02)	07:59
	21:32	20:57	19:54	18:45		16:40	31 15:56 (WEA02)	16:04
5	05:00	05:39	06:29	07:17		07:11	15:25 (WEA02)	08:00
	21:32	20:55	19:51	18:42		16:39	31 15:56 (WEA02)	16:03
6	05:01	05:41	06:30	07:19		07:13	15:22 (WEA03)	08:01
	21:31	20:53	19:49	18:40		16:37	32 15:54 (WEA02)	16:03
7	05:02	05:42	06:32	07:21		07:15	15:19 (WEA03)	08:03
	21:31	20:52	19:47	18:38		16:35	35 15:54 (WEA02)	16:03
8	05:02	05:44	06:34	07:22	17:30 (WEA01)	07:17	15:18 (WEA03)	08:04
	21:30	20:50	19:45	18:36	8 17:38 (WEA01)	16:33	35 15:53 (WEA02)	16:02
9	05:03	05:45	06:35	07:24	17:26 (WEA01)	07:18	15:16 (WEA03)	08:05
	21:29	20:48	19:42	18:33	14 17:40 (WEA01)	16:32	36 15:52 (WEA02)	16:02
10	05:04	05:47	06:37	07:26	17:24 (WEA01)	07:20	15:16 (WEA03)	08:06
	21:29	20:46	19:40	18:31	17 17:41 (WEA01)	16:30	35 15:51 (WEA02)	16:02
11	05:05	05:49	06:38	07:28	17:23 (WEA01)	07:22	15:15 (WEA03)	08:07
	21:28	20:44	19:38	18:29	20 17:43 (WEA01)	16:29	35 15:50 (WEA02)	16:02
12	05:06	05:50	06:40	07:29	17:22 (WEA01)	07:24	15:15 (WEA03)	08:08
	21:27	20:42	19:35	18:27	21 17:43 (WEA01)	16:27	33 15:48 (WEA02)	16:02
13	05:08	05:52	06:42	07:31	17:20 (WEA01)	07:25	15:15 (WEA03)	08:09
	21:26	20:40	19:33	18:24	23 17:43 (WEA01)	16:26	30 15:45 (WEA02)	16:01
14	05:09	05:53	06:43	07:33	17:20 (WEA01)	07:27	15:15 (WEA03)	08:10
	21:25	20:38	19:31	18:22	23 17:43 (WEA01)	16:24	24 15:39 (WEA03)	16:01
15	05:10	05:55	06:45	07:34	17:20 (WEA01)	07:29	15:15 (WEA03)	08:11
	21:24	20:37	19:28	18:20	23 17:43 (WEA01)	16:23	24 15:39 (WEA03)	16:02
16	05:11	05:57	06:46	07:36	17:20 (WEA01)	07:31	15:15 (WEA03)	08:12
	21:23	20:35	19:26	18:18	23 17:43 (WEA01)	16:21	25 15:40 (WEA03)	16:02
17	05:12	05:58	06:48	07:38	17:20 (WEA01)	07:32	15:14 (WEA03)	08:13
	21:22	20:33	19:24	18:16	23 17:43 (WEA01)	16:20	25 15:39 (WEA03)	16:02
18	05:13	06:00	06:50	07:39	17:19 (WEA01)	07:34	15:15 (WEA03)	08:14
	21:21	20:30	19:21	18:14	23 17:42 (WEA01)	16:19	24 15:39 (WEA03)	16:02
19	05:15	06:01	06:51	07:41	17:20 (WEA01)	07:36	15:15 (WEA03)	08:14
	21:20	20:28	19:19	18:12	21 17:41 (WEA01)	16:17	24 15:39 (WEA03)	16:02
20	05:16	06:03	06:53	07:43	16:36 (WEA02)	07:37	15:16 (WEA03)	08:15
	21:19	20:26	19:17	18:09	30 17:40 (WEA01)	16:16	23 15:39 (WEA03)	16:03
21	05:17	06:05	06:54	07:45	16:33 (WEA02)	07:39	15:17 (WEA03)	08:16
	21:18	20:24	19:15	18:07	34 17:39 (WEA01)	16:15	23 15:40 (WEA03)	16:03
22	05:19	06:06	06:56	07:46	16:31 (WEA02)	07:41	15:17 (WEA03)	08:16
	21:17	20:22	19:12	18:05	34 17:37 (WEA01)	16:14	23 15:40 (WEA03)	16:04
23	05:20	06:08	06:58	07:48	16:29 (WEA02)	07:42	15:17 (WEA03)	08:17
	21:15	20:20	19:10	18:03	32 17:34 (WEA01)	16:13	22 15:39 (WEA03)	16:04
24	05:21	06:09	06:59	07:50	16:28 (WEA02)	07:44	15:19 (WEA03)	08:17
	21:14	20:18	19:08	18:01	26 16:54 (WEA02)	16:12	20 15:39 (WEA03)	16:05
25	05:23	06:11	07:01	06:52	15:26 (WEA02)	07:46	15:20 (WEA03)	08:17
	21:13	20:16	19:05	16:59	28 15:54 (WEA02)	16:11	18 15:38 (WEA03)	16:05
26	05:24	06:13	07:03	06:53	15:25 (WEA02)	07:47	15:21 (WEA03)	08:18
	21:11	20:14	19:03	16:57	30 15:55 (WEA02)	16:10	17 15:38 (WEA03)	16:06
27	05:26	06:14	07:04	06:55	15:24 (WEA02)	07:49	15:22 (WEA03)	08:18
	21:10	20:11	19:01	16:55	32 15:56 (WEA02)	16:09	14 15:36 (WEA03)	16:07
28	05:27	06:16	07:06	06:57	15:24 (WEA02)	07:50	15:24 (WEA03)	08:18
	21:08	20:09	18:58	16:53	32 15:56 (WEA02)	16:08	11 15:35 (WEA03)	16:08
29	05:29	06:17	07:08	06:59	15:24 (WEA02)	07:52	15:25 (WEA03)	08:18
	21:07	20:07	18:56	16:51	32 15:56 (WEA02)	16:07	9 15:34 (WEA03)	16:08
30	05:30	06:19	07:09	07:01	15:24 (WEA02)	07:53	15:27 (WEA03)	08:18
	21:05	20:05	18:54	16:49	33 15:57 (WEA02)	16:06	6 15:33 (WEA03)	16:09
31	05:32	06:21	07:12	07:02	15:24 (WEA02)	08:19	13 14:33 (WEA04)	16:10
	21:04	20:03	18:48	16:48	33 15:57 (WEA02)	16:10	12 14:45 (WEA04)	16:10
Sonnenscheinstunden	501	453	381	332		267		245
astr.max.mögl.Beschattung				615		763		319
Red.Sonnenscheinwahrsch.				0,35		0,21		0,16
Reduktion Betriebsdauer				0,98		0,98		0,98
Reduktion Windrichtung				0,67		0,68		0,69
Gesamte Reduktion				0,23		0,14		0,11
Met.wahrsch.Beschattung				141		105		36

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
	Minuten mit Schatten	

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung Schattenrezeptor: IP43 - Thurländer Dorfstraße 12, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:19 16:12 20	14:43 (WEA04) 15:03 (WEA04) 16:59	07:52 16:17 (WEA02) 06:57	06:59 17:50 19:44	06:49 19:44 20:34	05:00 21:20 21:20
2	08:18 16:13 19	14:43 (WEA04) 15:02 (WEA04) 17:01	07:51 16:22 (WEA02) 17:52	06:57 17:52 19:45	06:47 19:45 20:36	05:43 21:21 21:21
3	08:18 16:14 18	14:44 (WEA04) 15:02 (WEA04) 17:03	07:49 16:27 (WEA02) 17:54	06:55 17:54 19:47	06:44 19:47 20:37	05:41 21:22 21:22
4	08:18 16:15 18	14:45 (WEA04) 15:03 (WEA04) 17:04	07:47 16:29 (WEA02) 17:55	06:53 17:55 19:49	06:42 19:49 20:39	05:39 21:23 21:23
5	08:18 16:16 17	14:45 (WEA04) 15:02 (WEA04) 17:06	07:46 16:30 (WEA02) 17:57	06:50 17:57 19:50	06:40 19:50 20:41	05:37 21:24 21:24
6	08:18 16:17 15	14:47 (WEA04) 15:02 (WEA04) 17:08	07:44 16:08 (WEA02) 17:59	06:48 17:59 19:52	06:38 19:52 20:42	05:35 21:25 21:25
7	08:17 16:18 13	14:48 (WEA04) 15:01 (WEA04) 17:10	07:42 16:08 (WEA02) 18:01	06:46 18:01 19:54	06:35 19:54 20:44	05:34 21:26 21:26
8	08:17 16:20 11	14:50 (WEA04) 15:01 (WEA04) 17:12	07:41 16:07 (WEA02) 18:03	06:44 18:03 19:55	06:33 19:55 20:46	05:32 21:26 21:26
9	08:16 16:21 9	14:51 (WEA04) 15:00 (WEA04) 17:14	07:39 16:07 (WEA02) 18:04	06:42 18:04 19:57	06:31 19:57 20:47	05:30 21:27 21:27
10	08:16 16:22 4	14:54 (WEA04) 15:58 (WEA04) 17:16	07:37 16:35 (WEA02) 18:06	06:39 18:06 19:59	06:29 19:59 20:49	05:28 21:28 21:28
11	08:15 16:24 12	14:58 (WEA04) 17:17 07:35	16:06 (WEA02) 18:08 16:36 (WEA02)	18:06 20:01 20:50	19:59 20:50 21:29	05:27 21:29 21:29
12	08:15 16:25 13	17:19 07:33 17:19	16:05 (WEA02) 18:10 16:36 (WEA02)	18:10 20:02 20:52	19:58 20:52 21:30	05:25 21:30 21:30
13	08:14 16:27 14	17:21 07:32 17:21	16:05 (WEA02) 18:11 16:36 (WEA02)	18:11 20:04 20:54	19:57 20:54 21:30	05:23 21:30 21:30
14	08:13 16:28 15	17:23 07:30 17:23	16:05 (WEA02) 18:13 16:36 (WEA02)	18:13 20:06 20:55	19:56 20:55 21:31	05:22 21:31 21:31
15	08:12 16:30 16	17:25 07:28 17:25	16:05 (WEA02) 18:15 16:36 (WEA02)	18:15 20:07 20:57	19:55 20:57 21:31	05:20 21:31 21:31
16	08:12 16:31 17	17:26 07:26 17:26	16:06 (WEA02) 18:16 16:36 (WEA02)	18:16 20:09 20:58	19:54 20:58 21:32	05:19 21:32 21:32
17	08:11 16:33 18	17:27 07:24 17:27	16:06 (WEA02) 18:18 16:35 (WEA02)	18:18 20:11 21:00	19:53 21:00 21:32	05:17 21:32 21:32
18	08:10 16:35 19	17:28 07:22 17:28	16:07 (WEA02) 18:20 16:35 (WEA02)	18:20 20:12 21:01	19:52 21:01 21:33	05:16 21:33 21:33
19	08:09 16:36 20	17:30 07:20 17:30	16:08 (WEA02) 18:22 16:36 (WEA02)	18:22 20:14 21:03	19:51 21:03 21:33	05:15 21:33 21:33
20	08:08 16:38 21	17:32 07:18 17:32	16:09 (WEA02) 18:23 16:37 (WEA02)	18:23 20:16 21:04	19:50 21:04 21:33	05:13 21:33 21:33
21	08:07 16:40 22	17:34 07:16 17:34	16:10 (WEA02) 18:24 16:38 (WEA02)	18:24 20:17 21:05	19:49 21:05 21:34	05:12 21:34 21:34
22	08:05 16:41 23	17:36 07:14 17:36	16:12 (WEA02) 18:25 16:40 (WEA02)	18:25 20:18 21:06	19:48 21:06 21:34	05:11 21:34 21:34
23	08:04 16:43 24	17:38 07:12 17:38	16:14 (WEA02) 18:26 16:42 (WEA02)	18:26 20:19 21:07	19:47 21:07 21:34	05:10 21:34 21:34
24	08:03 16:45 25	17:39 07:10 17:39	16:17 (WEA02) 18:27 16:43 (WEA02)	18:27 20:21 21:08	19:46 21:08 21:34	05:09 21:34 21:34
25	08:02 16:46 26	17:41 07:08 17:41	16:23 (WEA02) 18:30 16:45 (WEA02)	18:30 20:22 21:10	19:45 21:10 21:34	05:08 21:34 21:34
26	08:01 16:48 27	17:43 07:06 17:43	16:24 (WEA02) 18:31 16:46 (WEA02)	18:31 20:23 21:11	19:44 21:11 21:34	05:07 21:34 21:34
27	08:00 16:50 28	17:45 07:03 17:45	16:25 (WEA02) 18:32 16:47 (WEA02)	18:32 20:24 21:12	19:43 21:12 21:34	05:06 21:34 21:34
28	07:59 16:52 29	17:47 07:01 17:47	16:26 (WEA02) 18:33 16:48 (WEA02)	18:33 20:25 21:13	19:42 21:13 21:34	05:05 21:34 21:34
29	07:57 16:54 30	17:48 07:00 17:48	16:27 (WEA02) 18:34 16:49 (WEA02)	18:34 20:26 21:14	19:41 21:14 21:34	05:04 21:34 21:34
30	07:55 16:55 31	17:49 06:59 17:49	16:28 (WEA02) 18:35 16:50 (WEA02)	18:35 20:27 21:15	19:40 21:15 21:34	05:03 21:34 21:34
31	07:54 16:57	17:50 06:58 17:50	16:29 (WEA02) 18:36 16:51 (WEA02)	18:36 20:28 21:16	19:39 21:16 21:34	05:02 21:34 21:34
Sonnenscheinstunden	260	278	367	416	484	498
astr.max.mögl.Beschattung	144	538				
Red.Sonnenscheinwahrsch.	0,19	0,26				
Reduktion Betriebsdauer	0,98	0,98				
Reduktion Windrichtung	0,69	0,68				
Gesamte Reduktion	0,13	0,17				
Met.wahrsch.Beschattung	18	93				

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	(WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende	(WEA mit letztem Schatten)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP43 - Thurländer Dorfstraße 12, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober	November	Dezember
1	04:57	05:33	06:22	07:11	07:04	15:36 (WEA02)
	21:33	21:02	20:00	18:51	16:46	29 16:05 (WEA02)
2	04:58	05:35	06:24	07:12	07:06	15:37 (WEA02)
	21:33	21:00	19:58	18:49	16:44	27 16:04 (WEA02)
3	04:58	05:36	06:25	07:14	07:08	15:37 (WEA02)
	21:33	20:59	19:56	18:47	16:42	27 16:04 (WEA02)
4	04:59	05:38	06:27	07:16	07:09	15:38 (WEA02)
	21:32	20:57	19:54	18:45	16:40	25 16:03 (WEA02)
5	05:00	05:39	06:29	07:17	07:11	15:38 (WEA02)
	21:32	20:55	19:51	18:42	16:39	23 16:01 (WEA02)
6	05:01	05:41	06:30	07:19	07:13	15:40 (WEA02)
	21:31	20:53	19:49	18:40	16:37	20 16:00 (WEA02)
7	05:02	05:42	06:32	07:21	07:15	15:42 (WEA02)
	21:31	20:52	19:47	18:38	16:35	16 15:58 (WEA02)
8	05:02	05:44	06:34	07:22	07:17	15:44 (WEA02)
	21:30	20:50	19:45	18:35	16:33	12 15:56 (WEA02)
9	05:03	05:45	06:35	07:24	07:18	15:49 (WEA02)
	21:29	20:48	19:42	18:33	16:32	3 15:52 (WEA02)
10	05:04	05:47	06:37	07:26	07:20	15:52 (WEA02)
	21:29	20:46	19:40	18:31	16:30	18 16:02
11	05:05	05:49	06:38	07:28	07:22	16:02
	21:28	20:44	19:38	18:29	16:29	19 16:02
12	05:06	05:50	06:40	07:29	07:24	16:02
	21:27	20:42	19:35	18:27	16:27	20 16:01
13	05:08	05:52	06:42	07:31	07:25	16:01
	21:26	20:40	19:33	18:24	16:26	21 16:01
14	05:09	05:53	06:43	07:33	07:27	16:02
	21:25	20:38	19:31	18:22	16:24	22 16:01
15	05:10	05:55	06:45	07:34	07:29	16:02
	21:24	20:37	19:28	18:20	16:23	21 16:02
16	05:11	05:57	06:46	07:36	07:31	16:02
	21:23	20:35	19:26	18:18	16:21	22 16:02
17	05:12	05:58	06:48	07:38	07:32	16:02
	21:22	20:32	19:24	18:16	16:20	22 16:02
18	05:13	06:00	06:50	07:39	07:34	16:02
	21:21	20:30	19:21	18:14	16:19	23 16:02
19	05:15	06:01	06:51	07:41	07:36	16:02
	21:20	20:28	19:19	18:12	16:17	23 16:02
20	05:16	06:03	06:53	07:43	07:37	16:02
	21:19	20:26	19:17	18:09	16:16	23 16:03
21	05:17	06:05	06:54	07:45	07:39	16:03
	21:18	20:24	19:15	18:07	16:15	22 16:03
22	05:19	06:06	06:56	07:46	07:41	16:03
	21:17	20:22	19:12	18:05	16:14	22 16:04
23	05:20	06:08	06:58	07:48	07:42	16:04
	21:15	20:20	19:10	18:03	16:13	23 16:04
24	05:21	06:09	06:59	07:50	07:44	16:04
	21:14	20:18	19:08	18:01	16:12	23 16:05
25	05:23	06:11	07:01	06:52	07:46	16:05
	21:13	20:16	19:05	16:59	16:11	23 16:05
26	05:24	06:13	07:03	06:53	07:47	16:05
	21:11	20:14	19:03	16:57	16:10	22 16:06
27	05:26	06:14	07:04	06:55	07:49	16:06
	21:10	20:11	19:01	16:55	16:09	22 16:07
28	05:27	06:16	07:06	06:57	07:50	16:07
	21:08	20:09	18:58	16:53	16:08	22 16:08
29	05:29	06:17	07:08	06:59	07:52	16:08
	21:07	20:07	18:56	16:51	16:07	22 16:08
30	05:30	06:19	07:09	07:01	07:53	16:08
	21:05	20:05	18:54	16:49	16:06	21 16:09
31	05:32	06:21	07:10	07:02	07:55	16:09
	21:04	20:03	18:52	16:48	16:05	21 16:10
Sonnenscheinstunden	501	453	381	332	267	245
astr.max.mögl.Beschattung				361	182	585
Red.Sonnenscheinwahrsch.				0,35	0,21	0,16
Reduktion Betriebsdauer				0,98	0,98	0,98
Reduktion Windrichtung				0,68	0,68	0,69
Gesamte Reduktion				0,23	0,14	0,11
Met.wahrsch.Beschattung				84	25	65

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	(WEA mit erstem Schatten)	(WEA mit letztem Schatten)
--------------	-----------------------	-------------------------	----------------------	----------------------------------	--------------------------------	---------------------------	----------------------------

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP44 - Am Dorfe 1, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar			Februar			März			April			Mai			Juni		
1	08:19		14:55 (WEA04)	07:52		06:59		16:27 (WEA02)	06:49		05:45		05:00				
	16:12	27	15:22 (WEA04)	16:59		17:50	25	16:52 (WEA02)	19:44		20:34		21:19				
2	08:18		14:54 (WEA04)	07:51		06:57		16:28 (WEA02)	06:47		05:43		04:59				
	16:13	27	15:21 (WEA04)	17:01		17:52	23	16:51 (WEA02)	19:45		20:36		21:21				
3	08:18		14:55 (WEA04)	07:49		06:55		16:30 (WEA02)	06:44		05:41		04:58				
	16:14	27	15:22 (WEA04)	17:03		17:54	20	16:50 (WEA02)	19:47		20:37		21:22				
4	08:18		14:56 (WEA04)	07:47		06:53		16:32 (WEA02)	06:42		05:39		04:57				
	16:15	27	15:23 (WEA04)	17:04		17:55	15	16:47 (WEA02)	19:49		20:39		21:23				
5	08:18		14:56 (WEA04)	07:46		06:50		16:35 (WEA02)	06:40		05:37		04:57				
	16:16	27	15:23 (WEA04)	17:06		17:57	8	16:43 (WEA02)	19:50		20:41		21:24				
6	08:18		14:57 (WEA04)	07:44		06:48			06:38		05:35		04:56				
	16:17	27	15:24 (WEA04)	17:08		17:59			19:52		20:42		21:25				
7	08:17		14:57 (WEA04)	07:42		06:46			06:35		05:34		04:56				
	16:18	26	15:23 (WEA04)	17:10		18:01			19:54		20:44		21:26				
8	08:17		14:58 (WEA04)	07:41		06:44			06:33		05:32		04:55				
	16:20	26	15:24 (WEA04)	17:12		18:03			19:55		20:46		21:26				
9	08:16		14:58 (WEA04)	07:39		06:42			06:31		05:30		04:55				
	16:21	26	15:24 (WEA04)	17:14		18:04			19:57		20:47		21:27				
10	08:16		14:59 (WEA04)	07:37		06:39			06:29		05:28		04:54				
	16:22	25	15:24 (WEA04)	17:16		18:06			19:59		20:49		21:28				
11	08:15		15:00 (WEA04)	07:35		06:37			06:26		05:27		04:54				
	16:24	25	15:25 (WEA04)	17:17		18:08			20:01		20:50		21:29				
12	08:15		15:01 (WEA04)	07:33		06:35			06:24		05:25		04:53				
	16:25	24	15:25 (WEA04)	17:19		18:10			20:02		20:52		21:30				
13	08:14		15:01 (WEA04)	07:32	16:36 (WEA02)	06:33			06:22		05:23		04:53				
	16:27	24	15:25 (WEA04)	17:21	10	16:46 (WEA02)	18:11		20:04		20:53		21:30				
14	08:13		15:02 (WEA04)	07:30	16:33 (WEA02)	06:30			06:20		05:22		04:53				
	16:28	22	15:24 (WEA04)	17:23	16	16:49 (WEA02)	18:13		20:06		20:55		21:31				
15	08:12		15:03 (WEA04)	07:28	16:31 (WEA02)	06:28			06:18		05:20		04:53				
	16:30	21	15:24 (WEA04)	17:25	20	16:51 (WEA02)	18:15		20:07		20:57		21:31				
16	08:12		15:04 (WEA04)	07:26	16:30 (WEA02)	06:26			06:15		05:19		04:53				
	16:31	20	15:24 (WEA04)	17:27	23	16:53 (WEA02)	18:16		20:09		20:58		21:32				
17	08:11		15:05 (WEA04)	07:24	16:28 (WEA02)	06:23			06:13		05:17		04:53				
	16:33	18	15:23 (WEA04)	17:28	26	16:54 (WEA02)	18:18		20:11		21:00		21:32				
18	08:10		15:07 (WEA04)	07:22	16:27 (WEA02)	06:21			06:11		05:16		04:53				
	16:35	16	15:23 (WEA04)	17:30	28	16:55 (WEA02)	18:20		20:12		21:01		21:33				
19	08:09		15:09 (WEA04)	07:20	16:27 (WEA02)	06:19			06:09		05:15		04:53				
	16:36	13	15:22 (WEA04)	17:32	28	16:55 (WEA02)	18:22		20:14		21:03		21:33				
20	08:08		15:11 (WEA04)	07:18	16:26 (WEA02)	06:17			06:07		05:13		04:53				
	16:38	10	15:21 (WEA04)	17:34	30	16:56 (WEA02)	18:23		20:16		21:04		21:33				
21	08:07			07:16	16:26 (WEA02)	06:14			06:05		05:12		04:53				
	16:40			17:36	30	16:56 (WEA02)	18:25		20:17		21:05		21:34				
22	08:05			07:14	16:26 (WEA02)	06:12			06:03		05:11		04:53				
	16:41			17:38	31	16:57 (WEA02)	18:27		20:19		21:07		21:34				
23	08:04			07:12	16:26 (WEA02)	06:10			06:01		05:09		04:53				
	16:43			17:39	31	16:57 (WEA02)	18:28		20:21		21:08		21:34				
24	08:03			07:10	16:25 (WEA02)	06:07			05:59		05:08		04:54				
	16:45			17:41	31	16:56 (WEA02)	18:30		20:22		21:10		21:34				
25	08:02			07:08	16:25 (WEA02)	06:05			05:57		05:07		04:54				
	16:46			17:43	31	16:56 (WEA02)	18:32		20:24		21:11		21:34				
26	08:01			07:06	16:26 (WEA02)	06:03			05:54		05:06		04:54				
	16:48			17:45	29	16:55 (WEA02)	18:33		20:26		21:12		21:34				
27	07:59			07:03	16:26 (WEA02)	06:00			05:52		05:05		04:55				
	16:50			17:47	29	16:55 (WEA02)	18:35		20:27		21:14		21:34				
28	07:58			07:01	16:27 (WEA02)	05:58			05:51		05:04		04:55				
	16:52			17:48	27	16:54 (WEA02)	18:37		20:29		21:15		21:34				
29	07:56					06:56			05:49		05:03		04:56				
	16:54					19:39			20:31		21:16		21:34				
30	07:55					06:54			05:47		05:02		04:56				
	16:55					19:40			20:32		21:17		21:34				
31	07:54					06:51					05:01						
	16:57					19:42					21:18						
Sonnenscheinstunden			260		278		367		416		484		498				
astr.max.mögl.Beschattung			458		420		91										
Red.Sonnenscheinwahrsch.			0,19		0,26		0,33										
Reduktion Betriebsdauer			0,98		0,98		0,98										
Reduktion Windrichtung			0,68		0,67		0,67										
Gesamte Reduktion			0,12		0,17		0,22										
Met.wahrsch.Beschattung			57		72		20										

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Minuten mit Schatten	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)
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Projekt:

SW25034 Salzfurkapelle

Lizenziierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **Schattenrezeptor:** IP44 - Am Dorfe 1, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan Feb Mär Apr Mai Jun Jul Aug Sep Okt Nov Dez
1,56 2,60 3,92 5,75 7,42 7,51 7,59 7,27 5,27 3,77 1,84 1,30

Betriebsdauer je Sektor

N NNO ONO O OSO SSO S SSW WSW W WNW NNW Summe
390 372 588 603 418 487 1.048 1.054 1.436 834 690 673 8.592
Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober	November	Dezember
1	04:57	05:33	06:22	07:11	07:04	07:55
	21:33	21:02	20:00	18:51	16:46	16:06
2	04:58	05:35	06:24	07:12	07:06	07:56
	21:33	21:00	19:58	18:49	16:44	16:05
3	04:58	05:36	06:25	07:14	07:08	07:57
	21:33	20:59	19:56	18:47	16:42	16:04
4	04:59	05:38	06:27	07:16	07:09	07:59
	21:32	20:57	19:54	18:45	16:40	16:04
5	05:00	05:39	06:29	07:17	07:11	08:00
	21:32	20:55	19:51	18:42	16:39	16:03
6	05:01	05:41	06:30	07:19	07:13	08:01
	21:31	20:53	19:49	18:40	16:37	16:03
7	05:02	05:42	06:32	07:21	07:15	08:03
	21:31	20:52	19:47	18:38	16:35	16:03
8	05:02	05:44	06:34	07:22	07:17	08:04
	21:30	20:50	19:45	18:35	16:33	16:02
9	05:03	05:45	06:35	07:24	17:08 (WEA02)	07:18
	21:29	20:48	19:42	18:33	17:20 (WEA02)	16:32
10	05:04	05:47	06:37	07:26	17:05 (WEA02)	07:20
	21:29	20:46	19:40	18:31	17:23 (WEA02)	16:30
11	05:05	05:49	06:38	07:27	17:03 (WEA02)	07:22
	21:28	20:44	19:38	18:29	17:25 (WEA02)	16:29
12	05:06	05:50	06:40	07:29	17:02 (WEA02)	07:24
	21:27	20:42	19:35	18:27	17:26 (WEA02)	16:27
13	05:08	05:52	06:42	07:31	17:00 (WEA02)	07:25
	21:26	20:40	19:33	18:24	17:26 (WEA02)	16:26
14	05:09	05:53	06:43	07:33	16:59 (WEA02)	07:27
	21:25	20:38	19:31	18:22	17:27 (WEA02)	16:24
15	05:10	05:55	06:45	07:34	16:58 (WEA02)	07:29
	21:24	20:36	19:28	18:20	17:27 (WEA02)	16:23
16	05:11	05:57	06:46	07:36	16:58 (WEA02)	07:31
	21:23	20:35	19:26	18:18	17:28 (WEA02)	16:21
17	05:12	05:58	06:48	07:38	16:57 (WEA02)	07:32
	21:22	20:32	19:24	18:16	17:28 (WEA02)	16:20
18	05:13	06:00	06:50	07:39	16:56 (WEA02)	07:34
	21:21	20:30	19:21	18:14	17:27 (WEA02)	16:19
19	05:15	06:01	06:51	07:41	16:56 (WEA02)	07:36
	21:20	20:28	19:19	18:12	17:27 (WEA02)	16:17
20	05:16	06:03	06:53	07:43	16:56 (WEA02)	07:37
	21:19	20:26	19:17	18:09	17:27 (WEA02)	16:16
21	05:17	06:05	06:54	07:45	16:56 (WEA02)	07:39
	21:18	20:24	19:14	18:07	17:27 (WEA02)	16:15
22	05:19	06:06	06:56	07:46	16:57 (WEA02)	07:41
	21:17	20:22	19:12	18:05	17:26 (WEA02)	16:14
23	05:20	06:08	06:58	07:48	16:57 (WEA02)	07:42
	21:15	20:20	19:10	18:03	17:26 (WEA02)	16:13
24	05:21	06:09	06:59	07:50	16:58 (WEA02)	07:44
	21:14	20:18	19:08	18:01	17:25 (WEA02)	16:12
25	05:23	06:11	07:01	06:52	15:58 (WEA02)	07:46
	21:13	20:16	19:05	16:59	16:23 (WEA02)	16:11
26	05:24	06:13	07:03	06:53	15:59 (WEA02)	07:47
	21:11	20:14	19:03	16:57	16:22 (WEA02)	16:10
27	05:26	06:14	07:04	06:55	16:01 (WEA02)	07:49
	21:10	20:11	19:01	16:55	16:20 (WEA02)	16:09
28	05:27	06:16	07:06	06:57	16:03 (WEA02)	07:50
	21:08	20:09	18:58	16:53	16:18 (WEA02)	16:08
29	05:29	06:17	07:08	06:59	16:06 (WEA02)	07:52
	21:07	20:07	18:56	16:51	16:15 (WEA02)	16:07
30	05:30	06:19	07:09	07:01	07:53	16:06
	21:05	20:05	18:54	16:49	16:06	16:06
31	05:32	06:21	07:11	07:02		
	21:04	20:03	18:52	16:48		
Sonnenscheinstunden	501	453	381	332	267	245
astr.max.mögl.Beschattung				520	169	827
Red.Sonnenscheinwahrsch.				0,35	0,21	0,16
Reduktion Betriebsdauer				0,98	0,98	0,98
Reduktion Windrichtung				0,67	0,68	0,68
Gesamte Reduktion				0,23	0,14	0,11
Met.wahrsch.Beschattung				120	23	91

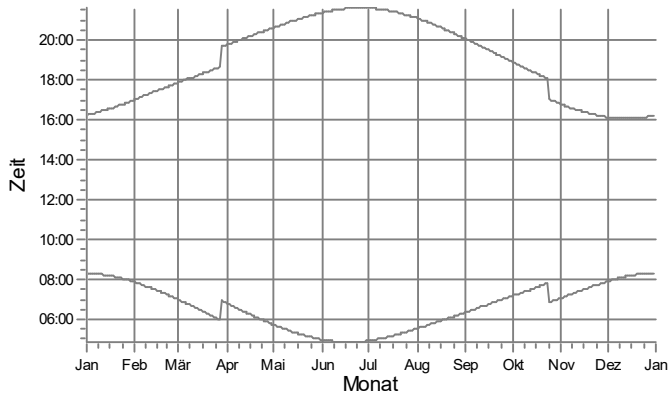
Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang (WEA mit erstem Schatten)
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenende (WEA mit letztem Schatten)

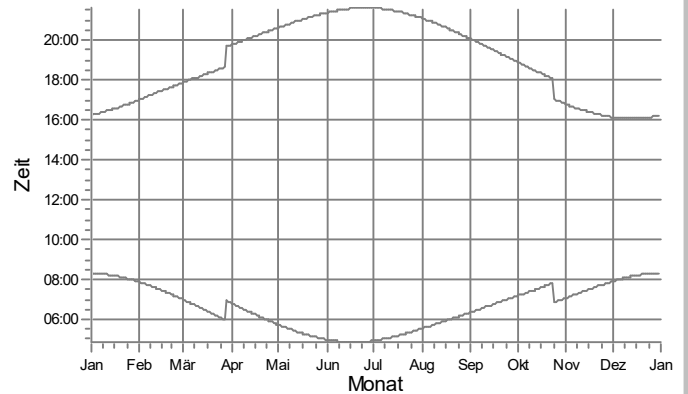
SHADOW - Grafischer Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung

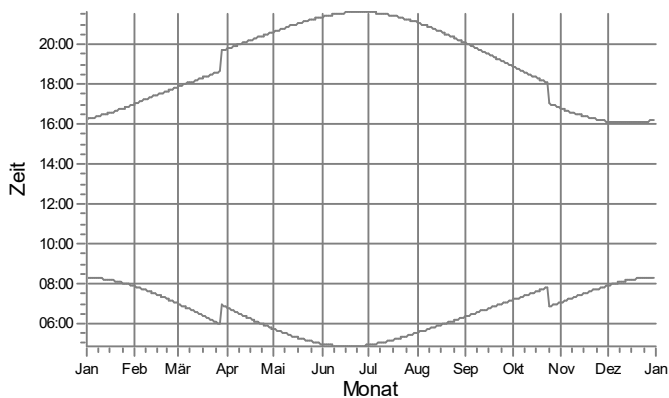
IP01: Dorfstraße 59, 06766 Bitterfeld-Wolfen



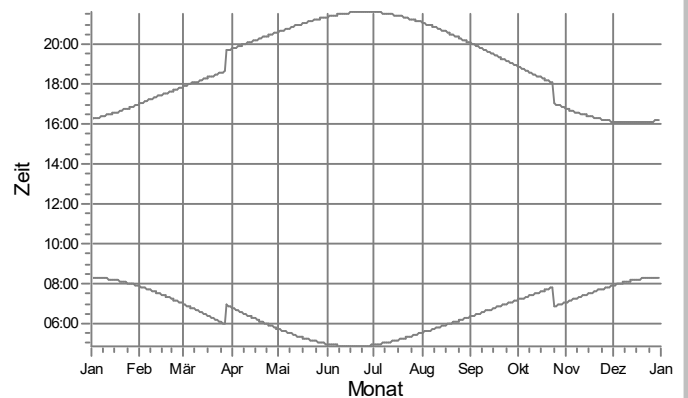
IP02: Auenstraße 24, 06766 Bitterfeld-Wolfen



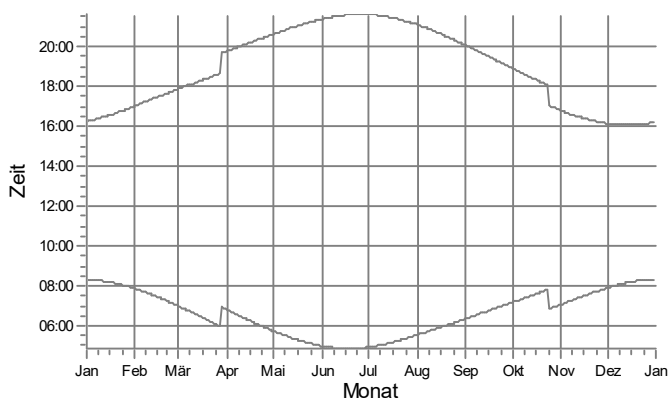
IP03: Siebenhausener Str. 8, 06766 Bitterfeld-Wolfen



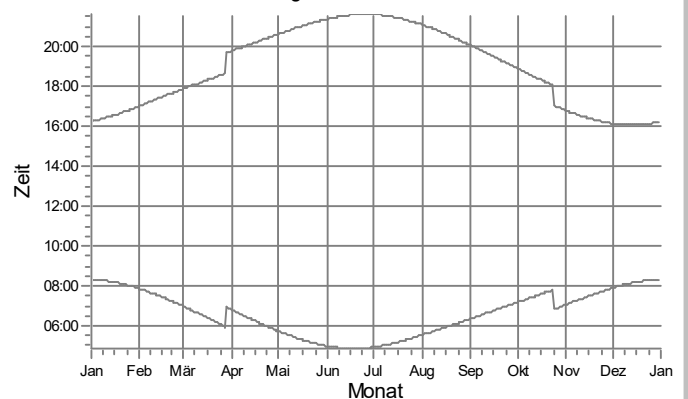
IP04: Siebenhausen 14, 06766 Bitterfeld-Wolfen



IP05: Siebenhausen 15, 06766 Bitterfeld-Wolfen



IP06: Reudener Weg 10, 06766 Bitterfeld-Wolfen

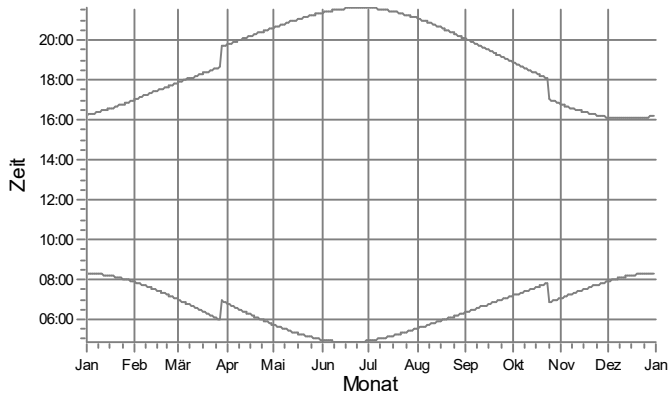


WEA

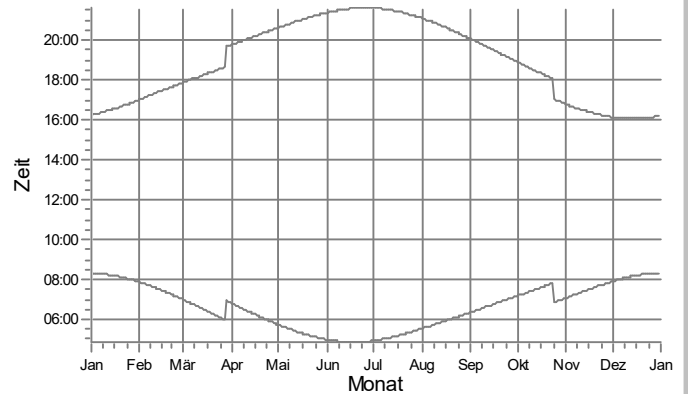
SHADOW - Grafischer Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung

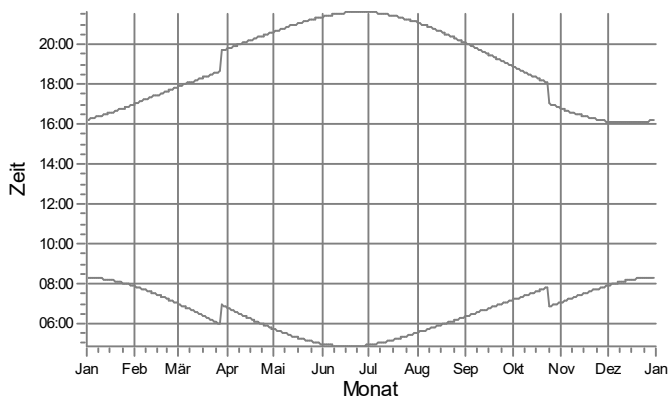
IP07: Siebenhausen 43, 06766 Bitterfeld-Wolfen



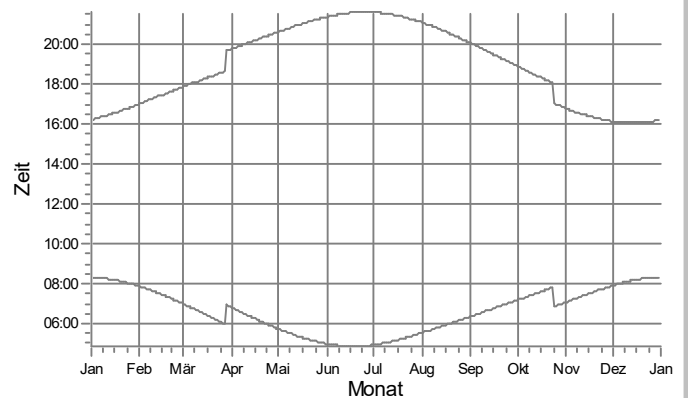
IP08: Feldrain 20, 06766 Bitterfeld-Wolfen (Gemengelage)



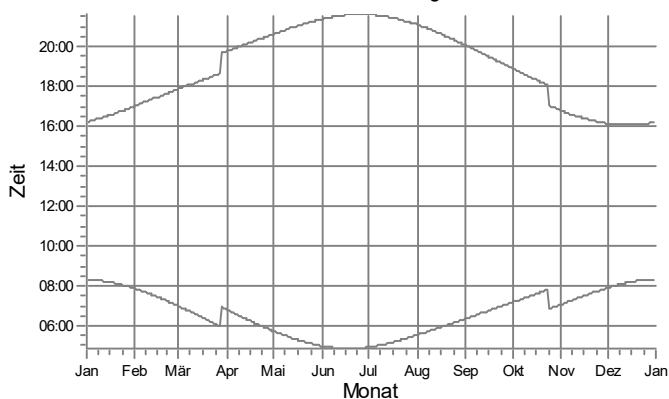
IP09: Thurländer Str. 1, 06779 Raguhn-Jeßnitz



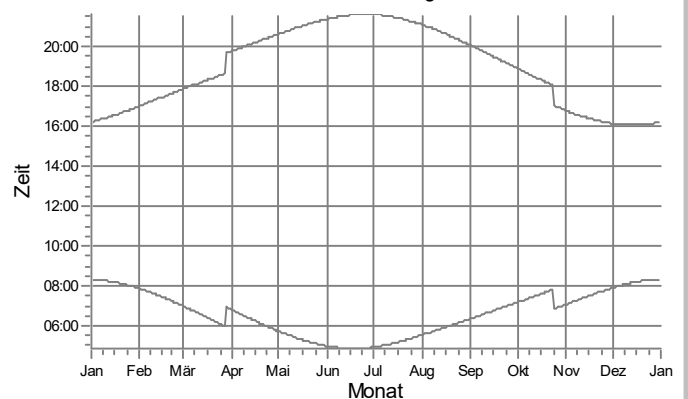
IP10: Thurländer Str. 24, 06779 Raguhn-Jeßnitz



IP11: Thurländer Str. 28, 06779 Raguhn-Jeßnitz



IP12: Zerbster Str. 17, 06779 Raguhn-Jeßnitz

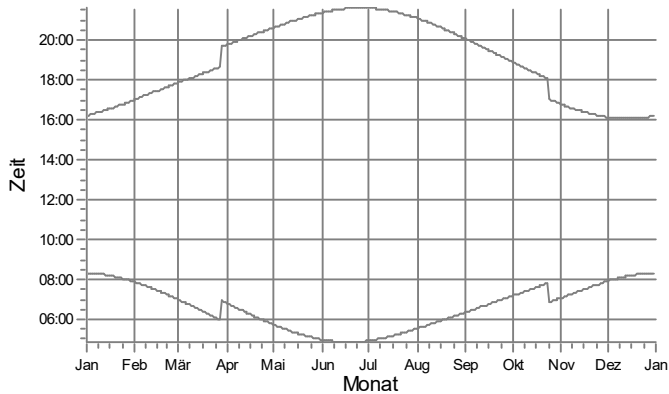


WEA

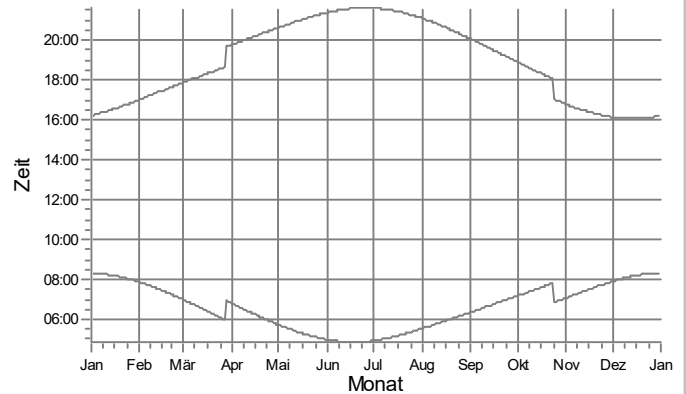
SHADOW - Grafischer Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung

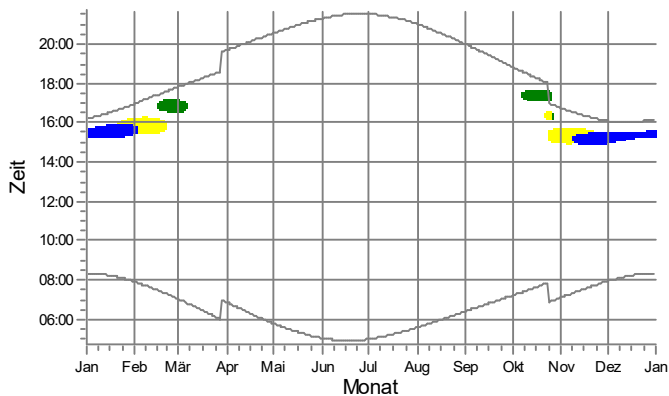
IP13: Dorfstraße 30, 06779 Raguhn-Jeßnitz



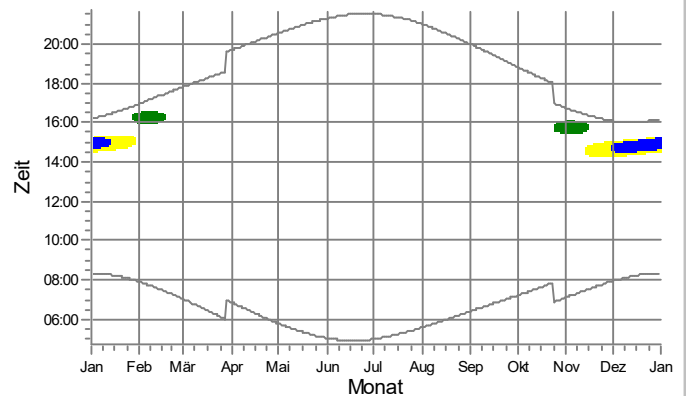
IP14: Holländer Mühle 1, 06779 Raguhn-Jeßnitz



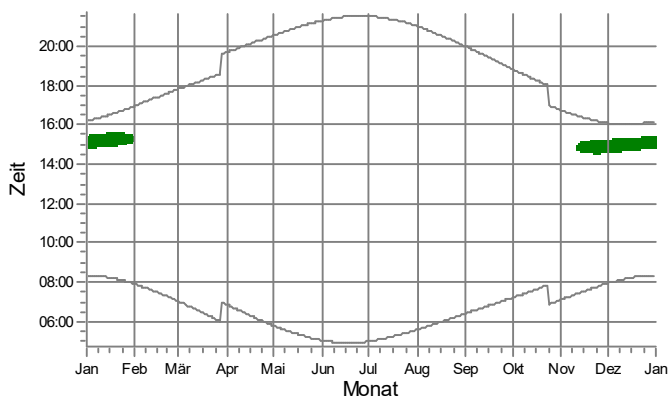
IP15: Thurländer Dorfstraße 23, 06779 Raguhn-Jeßnitz



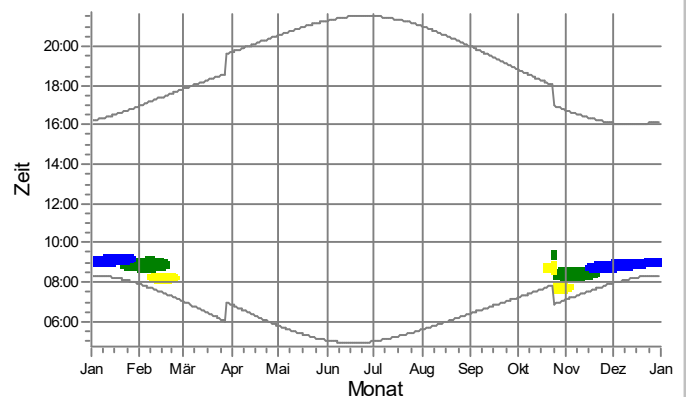
IP16: Thurländer Lindenstrasse 15, 06779 Raguhn-Jeßnitz



IP17: Kleinleipziger Str. 12A, 06779 Raguhn-Jeßnitz



IP18: Am Sportplatz 8, 06779 Raguhn-Jeßnitz



WEA



WEA01: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (1)

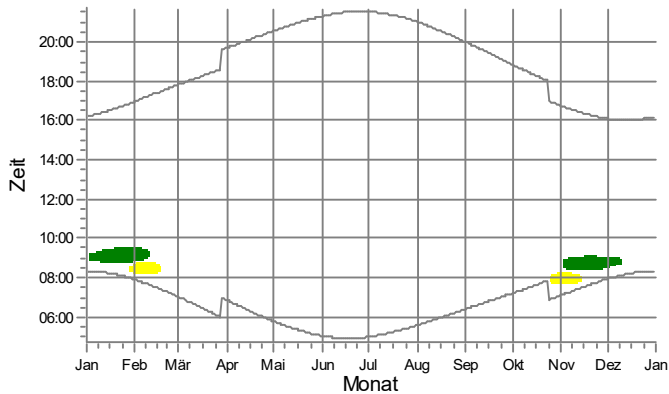
WEA02: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (2)

WEA03: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (3)

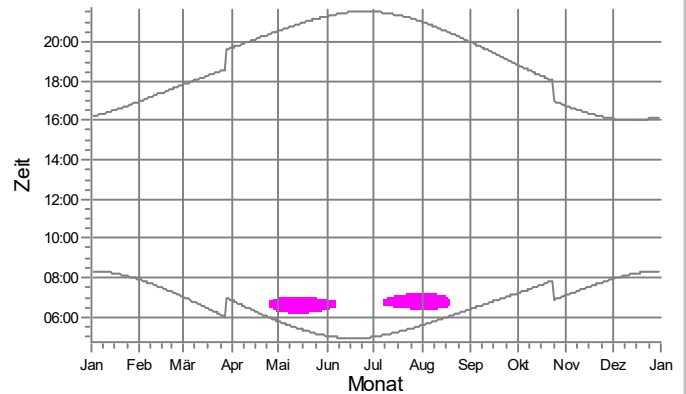
SHADOW - Grafischer Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung

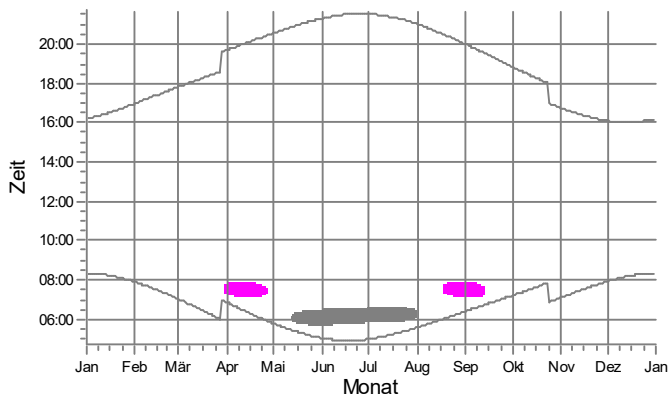
IP19: Vor d. Heide 10, 06779 Raguhn-Jeßnitz



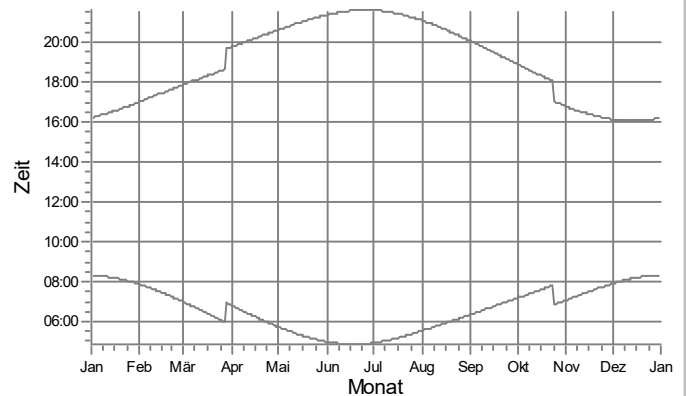
IP20: Am Sandberg 11, 06780 Zörbig



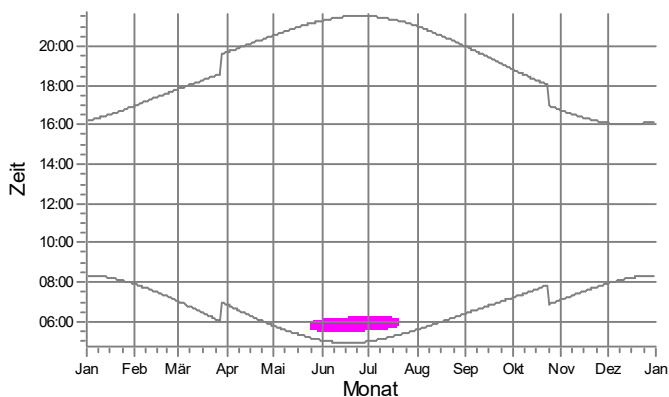
IP21: Am Sandberg 24, 06780 Zörbig



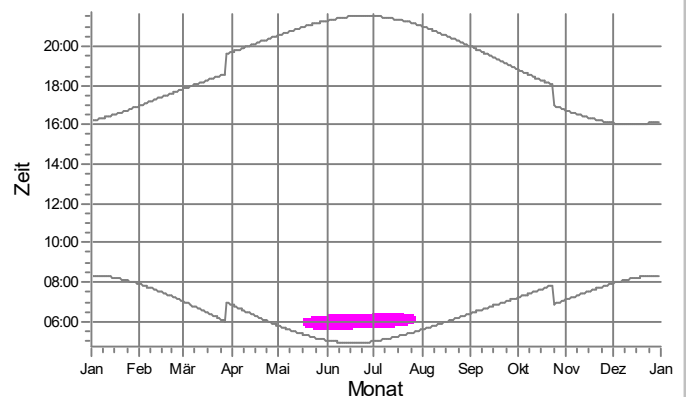
IP22: Hallesche Str. 9, 06779 Raguhn-Jeßnitz



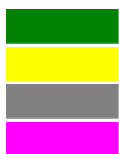
IP23: Hallesche Straße 10, 06780 Zörbig



IP24: Hallesche Straße 13, 06780 Zörbig



WEA



WEA01: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (1)

WEA02: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (2)

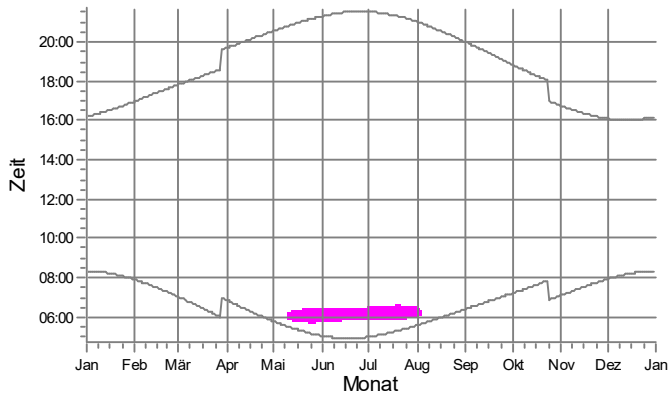
WEA04: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (4)

WEA05: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (5)

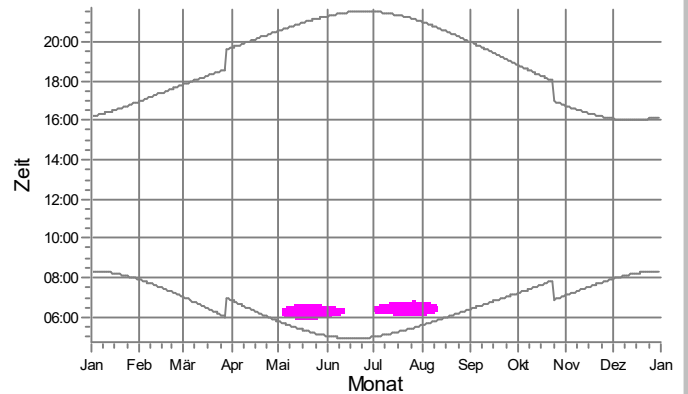
SHADOW - Grafischer Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung

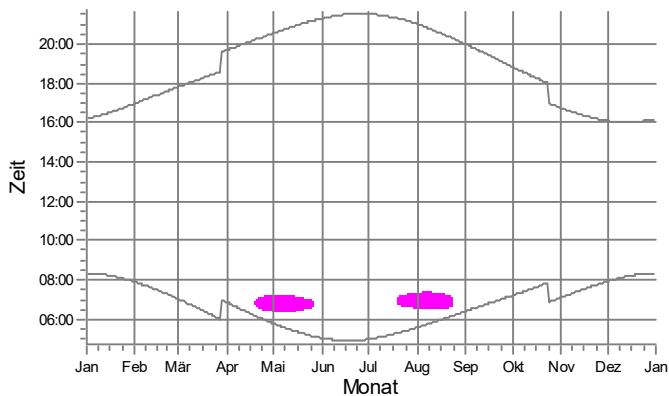
IP25: Hallesche Straße 15, 06780 Zörbig



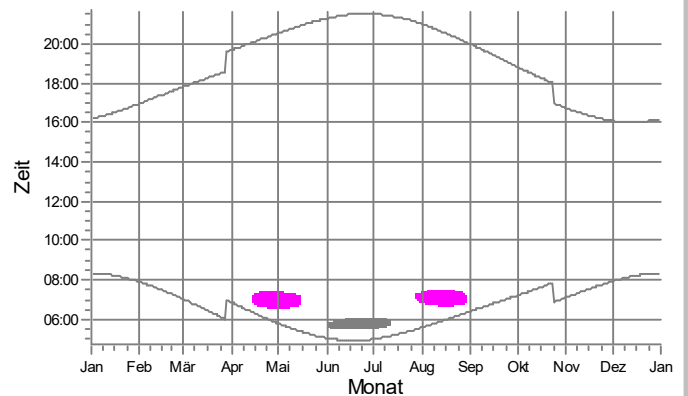
IP26: Hallesche Straße 18, 06780 Zörbig



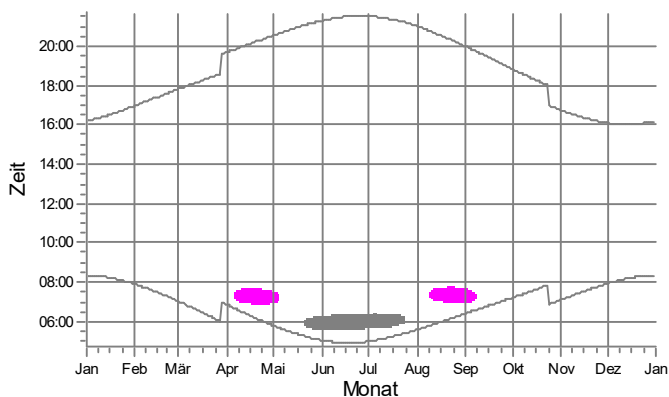
IP27: Am Sandberg 14, 06780 Zörbig



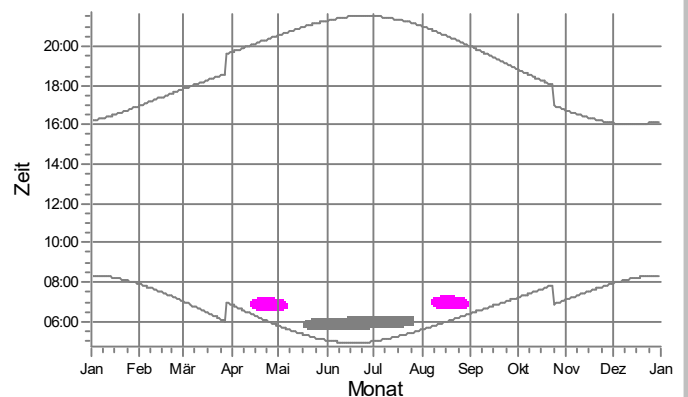
IP28: Am Sandberg 18, 06780 Zörbig



IP29: Am Sandberg 20, 06780 Zörbig



IP30: Am Sportpl. 15, 06780 Zörbig



WEA

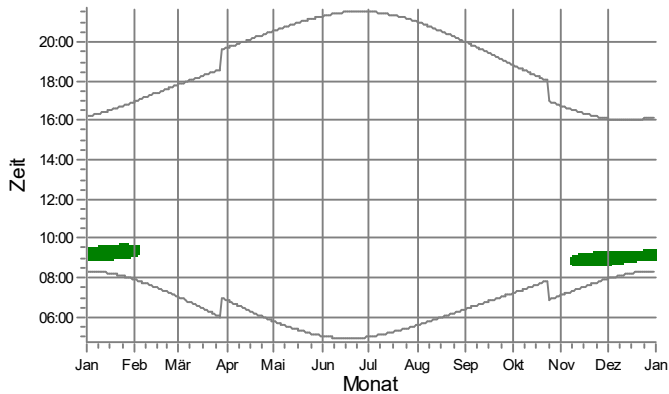


WEA04: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (4)

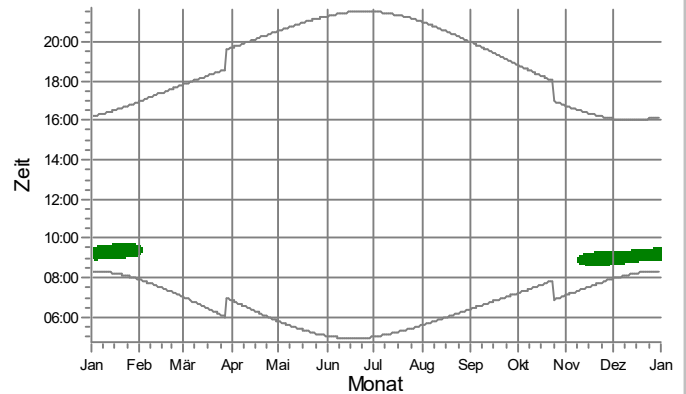
WEA05: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (5)

SHADOW - Grafischer Kalender**Berechnung:** SW25034 Salzfurkapelle Zusatzbelastung

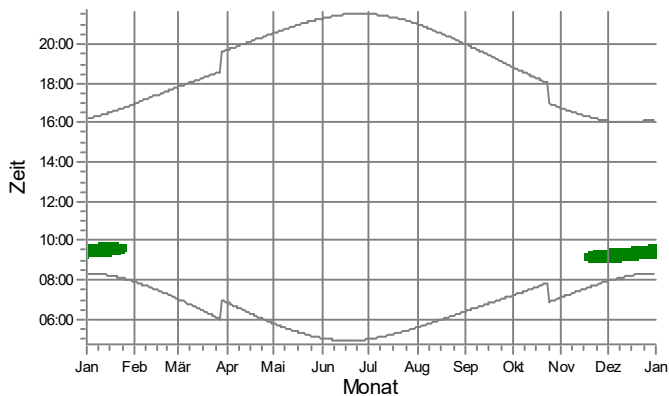
IP31: Vor d. Heide 6, 06779 Raguhn-Jeßnitz



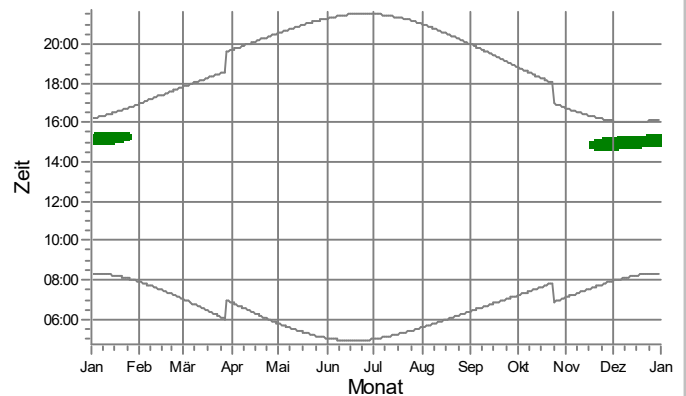
IP32: Vor d. Heide 4, 06779 Raguhn-Jeßnitz



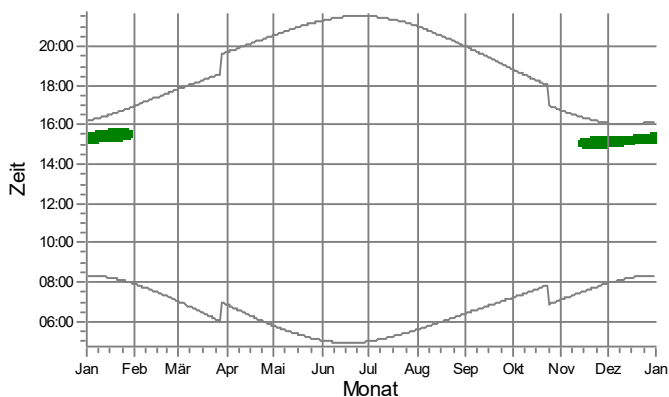
IP33: Am Trappenberg 2, 06779 Raguhn-Jeßnitz



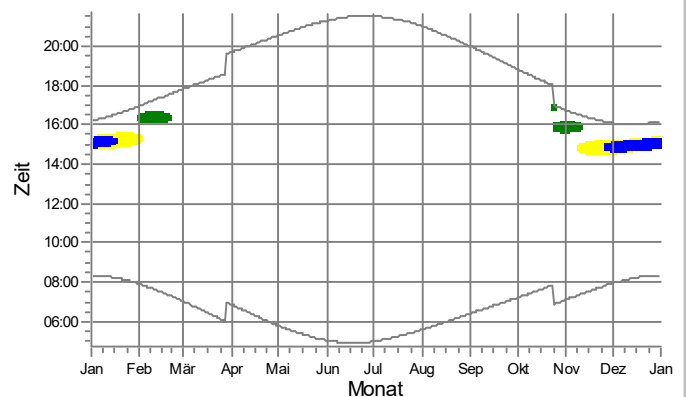
IP34: Kleinleipziger Str. 7, 06779 Raguhn-Jeßnitz



IP35: Kleinleipziger Str. 3, 06779 Raguhn-Jeßnitz



IP36: Thurländer Lindenstrasse 10, 06779 Raguhn-Jeßnitz



WEA



WEA01: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (1)

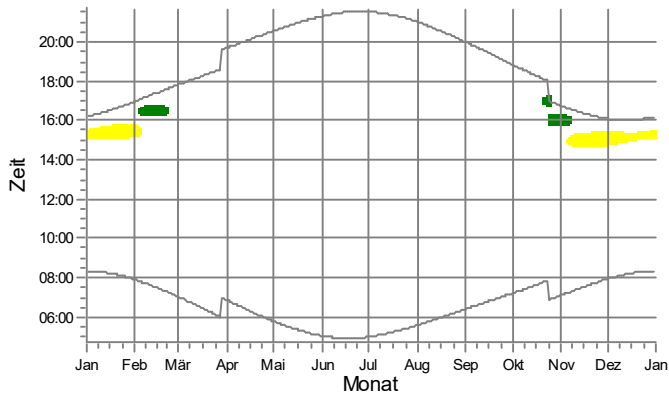
WEA02: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (2)

WEA03: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (3)

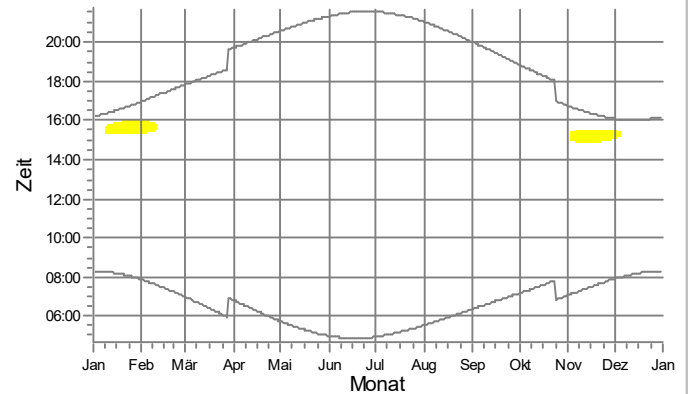
SHADOW - Grafischer Kalender

Berechnung: SW25034 Salzfurtkapelle Zusatzbelastung

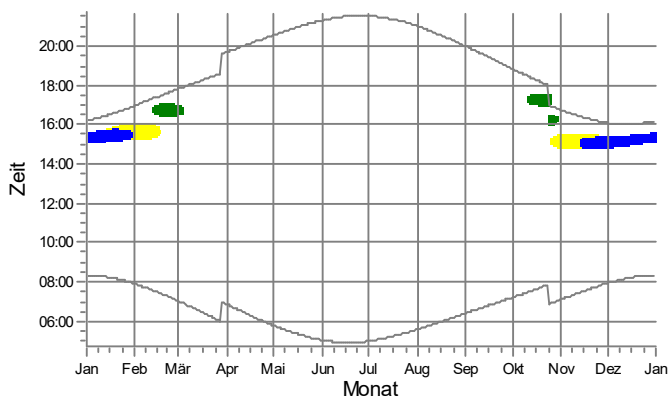
IP37: Thurländer Lindenstrasse 8a, 06779 Raguhn-Jeßnitz



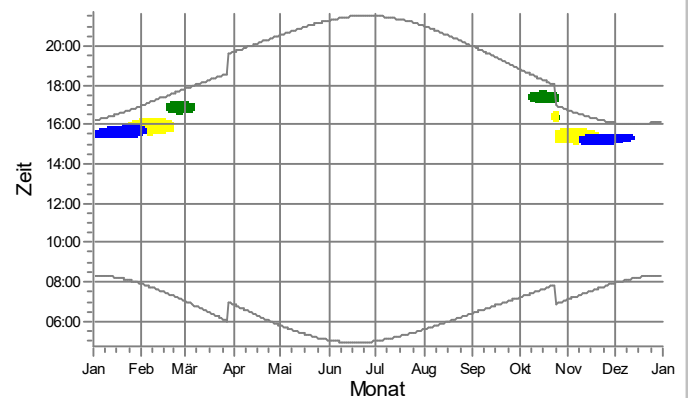
IP38: Thurländer Lindenstrasse 3, 06779 Raguhn-Jeßnitz



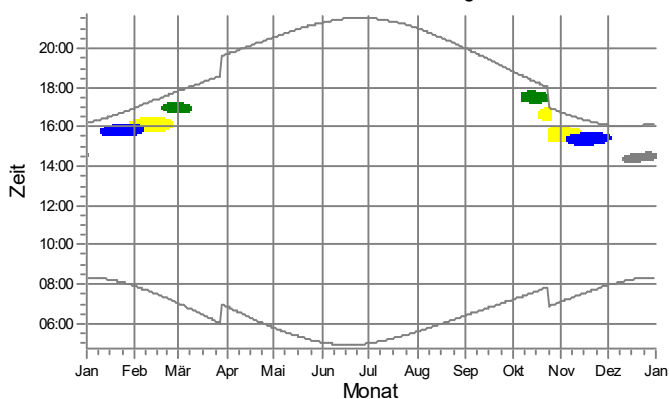
IP39: Thurländer Dorfstraße 24A, 06779 Raguhn-Jeßnitz



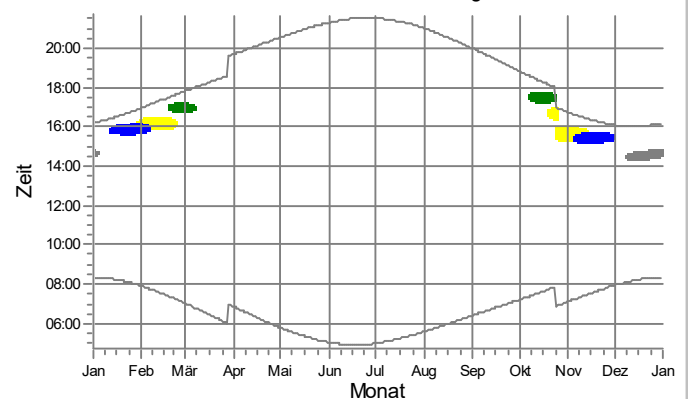
IP40: Thurländer Dorfstraße 21, 06779 Raguhn-Jeßnitz



IP41: Thurländer Dorfstraße 19, 06779 Raguhn-Jeßnitz



IP42: Thurländer Dorfstraße 17, 06779 Raguhn-Jeßnitz



WEA

- WEA01: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (1)
- WEA02: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (2)
- WEA03: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (3)
- WEA04: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (4)

Projekt:

SW25034 Salzfurkapelle

Lizenziertes Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

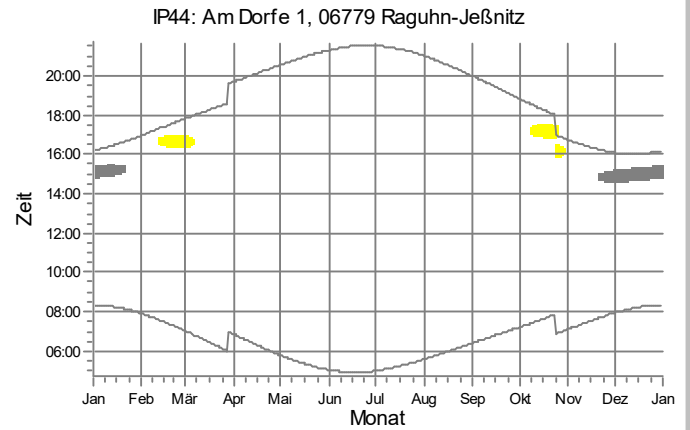
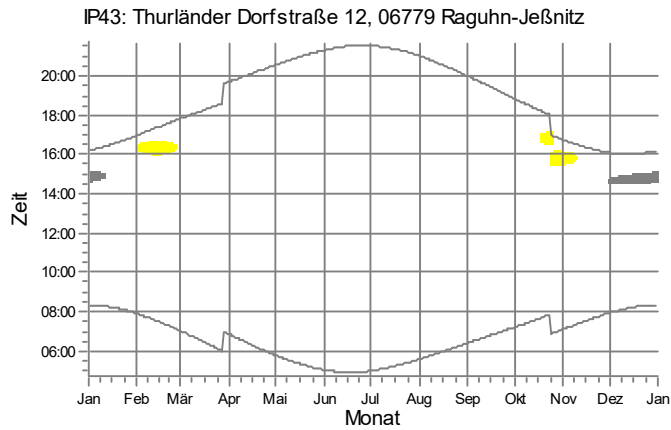
Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Grafischer Kalender

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung



WEA



WEA02: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (2)

WEA04: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (4)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **WEA:** WEA01 - ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (1)

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:19 14:55-15:33/38 16:12 08:59-09:43/44	07:52 16:05-16:28/23 16:59 08:36-09:31/55	06:59 16:36-17:11/35 17:50	06:49 19:44	05:45 20:34	05:00 21:20
2	08:19 14:54-15:33/39 16:13 09:00-09:44/44	07:51 16:04-16:30/26 17:01 08:36-09:30/54	06:57 16:38-17:11/33 17:52	06:47 19:45	05:43 20:36	04:59 21:21
3	08:18 14:55-15:34/39 16:14 08:59-09:44/45	07:49 16:04-16:33/29 17:03 08:36-09:27/51	06:55 16:41-17:10/29 17:54	06:45 19:47	05:41 20:38	04:58 21:22
4	08:18 14:55-15:35/40 16:15 08:59-09:44/45	07:47 16:04-16:34/30 17:05 08:35-09:24/49	06:53 16:43-17:09/26 17:56	06:42 19:49	05:39 20:39	04:58 21:23
5	08:18 14:55-15:35/40 16:16 08:57-09:45/48	07:46 16:03-16:37/34 17:06 08:35-09:23/48	06:51 16:46-17:08/22 17:57	06:40 19:51	05:37 20:41	04:57 21:24
6	08:18 14:56-15:36/40 16:17 08:57-09:45/48	07:44 16:03-16:38/35 17:08 08:36-09:22/46	06:48 16:51-17:05/14 17:59	06:38 19:52	05:36 20:42	04:56 21:25
7	08:17 14:56-15:37/41 16:19 08:55-09:45/50	07:42 16:04-16:40/36 17:10 08:36-09:20/44	06:46 16:55-17:02/7 18:01	06:35 19:54	05:34 20:44	04:56 21:26
8	08:17 14:56-15:38/42 16:20 08:55-09:46/51	07:41 16:04-16:41/37 17:12 08:36-09:17/41	06:44 18:03	06:33 19:56	05:32 20:46	04:55 21:27
9	08:16 14:56-15:38/42 16:21 08:55-09:46/51	07:39 16:04-16:42/38 17:14 08:36-09:11/35	06:42 18:04	06:31 19:57	05:30 20:47	04:55 21:27
10	08:16 14:56-15:38/42 16:23 08:55-09:47/52	07:37 16:04-16:43/39 17:16 08:36-09:11/35	06:39 18:06	06:29 19:59	05:29 20:49	04:54 21:28
11	08:15 14:57-15:40/43 16:24 08:54-09:47/53	07:35 16:05-16:43/38 17:17 08:37-09:10/33	06:37 18:08	06:27 20:01	05:27 20:50	04:54 21:29
12	08:15 14:58-15:40/42 16:25 08:54-09:47/53	07:34 16:06-16:43/37 17:19 08:37-09:09/32	06:35 18:10	06:24 20:02	05:25 20:52	04:54 21:30
13	08:14 14:58-15:41/43 16:27 08:53-09:47/54	07:32 16:07-16:50/43 17:21 08:38-09:09/31	06:33 18:11	06:22 20:04	05:24 20:54	04:53 21:30
14	08:13 14:58-15:41/43 16:28 08:53-09:47/54	07:30 16:08-16:53/45 17:23 08:39-09:08/29	06:30 18:13	06:20 20:06	05:22 20:55	04:53 21:31
15	08:12 14:58-15:41/43 16:30 08:53-09:47/54	07:28 16:09-16:55/46 17:25 08:40-09:06/26	06:28 18:15	06:18 20:07	05:20 20:57	04:53 21:31
16	08:12 14:59-15:42/43 16:32 08:52-09:47/55	07:26 16:12-16:56/44 17:27 08:42-09:05/23	06:26 18:17	06:16 20:09	05:19 20:58	04:53 21:32
17	08:11 14:59-15:42/43 16:33 08:52-09:47/55	07:24 16:16-16:59/43 17:29 08:44-09:03/19	06:24 18:18	06:13 20:11	05:17 21:00	04:53 21:32
18	08:10 15:00-15:43/43 16:35 08:52-09:47/55	07:22 16:18-17:02/44 17:30 08:46-09:00/14	06:21 18:20	06:11 20:12	05:16 21:01	04:53 21:33
19	08:09 15:01-15:43/42 16:36 08:52-09:47/55	07:20 16:22-17:05/43 17:32	06:19 18:22	06:09 20:14	05:15 21:03	04:53 21:33
20	08:08 15:02-15:43/41 16:38 08:53-09:47/54	07:18 16:24-17:07/43 17:34	06:17 18:23	06:07 20:16	05:13 21:04	04:53 21:33
21	08:07 15:02-15:43/41 16:40 08:47-09:46/59	07:16 16:27-17:09/42 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34
22	08:06 15:03-15:43/40 16:41 08:44-09:45/61	07:14 16:32-17:10/38 17:38	06:12 18:27	06:03 20:19	05:11 21:07	04:53 21:34
23	08:04 15:04-15:43/39 16:43 08:42-09:45/63	07:12 16:32-17:11/39 17:39	06:10 18:29	06:01 20:21	05:09 21:08	04:53 21:34
24	08:03 15:04-15:42/38 16:45 08:40-09:42/62	07:10 16:31-17:11/40 17:41	06:07 18:30	05:59 20:23	05:08 21:10	04:54 21:34
25	08:02 15:06-15:42/36 16:47 08:40-09:41/61	07:08 16:32-17:12/40 17:43	06:05 18:32	05:57 20:24	05:07 21:11	04:54 21:34
26	08:01 15:07-15:42/35 16:48 08:39-09:37/58	07:06 16:33-17:12/39 17:45	06:03 18:34	05:55 20:26	05:06 21:12	04:54 21:34
27	07:59 15:08-15:40/32 16:50 08:38-09:36/58	07:04 16:34-17:12/38 17:47	06:01 18:35	05:53 20:28	05:05 21:14	04:55 21:34
28	07:58 15:11-15:40/29 16:11-16:21/10 16:52 08:38-09:35/57	07:01 16:35-17:12/37 17:48	05:58 18:37	05:51 20:29	05:04 21:15	04:55 21:34
29	07:57 15:27-15:37/10 15:12-15:26/14 16:54 08:37-09:34/57 16:08-16:23/15		06:56 19:39	05:49 20:31	05:03 21:16	04:56 21:34
30	07:55 08:37-09:34/57 16:07-16:24/17 16:55 15:16-15:22/6		06:54 19:40	05:47 20:33	05:02 21:17	04:56 21:34
31	07:54 08:36-09:32/56 16:57 16:06-16:26/20		06:51 19:42		05:01 21:18	
Sonnenscheinstunden	260	278	367	416	484	498
Anzahl Minuten mit Schatten	2880	1731	166	0	0	0

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM)	Schattenanfang-Zeitpunkt (SS:MM)	Schattenende/Minuten mit Schatten
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM)	Schattenanfang-Zeitpunkt (SS:MM)	Schattenende/Minuten mit Schatten

SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **WEA:** WEA01 - ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (1)

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli	August	September	Oktober	November	Dezember
1	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51	07:04 15:34-16:12/38 16:46 08:06-08:40/34	07:55 14:40-15:22/42 16:06 08:36-09:29/53
2	04:58 21:33	05:35 21:00	06:24 19:58	07:13 18:49	07:06 15:34-16:12/38 16:44 08:06-08:41/35	07:56 14:39-15:22/43 16:05 08:37-09:29/52
3	04:58 21:33	05:36 20:59	06:26 19:56	07:14 18:47	07:08 15:34-16:11/37 16:42 08:06-08:47/41	07:58 14:40-15:22/42 16:05 08:39-09:30/51
4	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45	07:10 15:34-16:10/36 16:40 08:05-08:50/45	07:59 14:41-15:22/41 16:04 08:39-09:30/51
5	05:00 21:32	05:39 20:55	06:29 19:51	07:18 18:42	07:11 15:34-16:09/35 16:39 08:06-08:52/46	08:00 14:42-15:22/40 16:04 08:41-09:31/50
6	05:01 21:31	05:41 20:54	06:30 19:49	07:19 18:40	07:13 15:33-16:06/33 16:37 08:06-08:54/48	08:02 14:42-15:22/40 16:03 08:43-09:31/48
7	05:02 21:31	05:42 20:52	06:32 19:47	07:21 17:29-17:40/11 18:38	07:15 15:34-16:03/29 16:35 08:06-08:55/49	08:03 14:42-15:22/40 16:03 08:44-09:31/47
8	05:03 21:30	05:44 20:50	06:34 19:45	07:23 17:24-17:42/18 18:36	07:17 15:34-16:02/28 16:34 08:05-08:57/52	08:04 14:42-15:22/40 16:02 08:47-09:33/46
9	05:04 21:30	05:46 20:48	06:35 19:42	07:24 17:19-17:43/24 18:33	07:18 15:35-16:01/26 16:32 08:06-09:00/54	08:05 14:44-15:23/39 16:02 08:48-09:33/45
10	05:05 21:29	05:47 20:46	06:37 19:40	07:26 17:16-17:44/28 18:31	07:20 15:36-15:59/23 16:30 08:06-09:02/56	08:06 14:44-15:23/39 16:02 08:49-09:33/44
11	05:06 21:28	05:49 20:44	06:38 19:38	07:28 17:15-17:45/30 18:29	07:22 08:07-09:03/56 16:29 15:37-15:57/20	08:07 14:45-15:23/38 16:02 08:49-09:33/44
12	05:07 21:27	05:50 20:42	06:40 19:35	07:29 17:11-17:45/34 18:27	07:24 08:08-09:05/57 15:38-15:56/18 16:27 14:47-14:54/7	08:08 14:45-15:23/38 16:02 08:50-09:34/44
13	05:08 21:26	05:52 20:41	06:42 19:33	07:31 17:08-17:44/36 18:25	07:25 14:59-15:09/10 14:44-14:58/14 16:26 08:09-09:06/57 15:40-15:54/14	08:09 14:46-15:23/37 16:02 08:51-09:34/43
14	05:09 21:25	05:53 20:39	06:43 19:31	07:33 17:07-17:45/38 18:22	07:27 14:42-15:12/30 15:43-15:52/9 16:24 08:10-09:07/57	08:10 14:46-15:23/37 16:02 08:52-09:34/42
15	05:10 21:25	05:55 20:37	06:45 19:29	07:34 17:05-17:44/39 18:20	07:29 14:41-15:13/32 16:23 08:11-09:08/57	08:11 14:47-15:24/37 16:02 08:53-09:35/42
16	05:11 21:24	05:57 20:35	06:47 19:26	07:36 17:05-17:44/39 18:18	07:31 14:40-15:15/35 16:22 08:12-09:10/58	08:12 14:48-15:24/36 16:02 08:53-09:35/42
17	05:12 21:22	05:58 20:33	06:48 19:24	07:38 17:04-17:44/40 18:16	07:32 14:40-15:16/36 16:20 08:14-09:15/61	08:13 14:48-15:23/35 16:02 08:54-09:36/42
18	05:14 21:21	06:00 20:31	06:50 19:22	07:40 17:03-17:42/39 18:14	07:34 14:38-15:16/38 16:19 08:14-09:16/62	08:14 14:49-15:24/35 16:02 08:54-09:36/42
19	05:15 21:20	06:01 20:28	06:51 19:19	07:41 17:02-17:41/39 18:12	07:36 14:38-15:17/39 16:18 08:16-09:19/63	08:14 14:49-15:25/36 16:02 08:55-09:37/42
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 17:02-17:40/38 18:10	07:37 14:38-15:18/40 16:16 08:19-09:20/61	08:15 14:49-15:24/35 16:03 08:56-09:37/41
21	05:17 21:18	06:05 20:24	06:55 19:15	07:45 16:56-17:39/43 18:07	07:39 14:38-15:19/41 16:15 08:23-09:22/59	08:16 14:50-15:25/35 16:03 08:56-09:37/41
22	05:19 21:17	06:06 20:22	06:56 19:12	07:47 16:54-17:37/43 18:05	07:41 14:38-15:19/41 16:14 08:29-09:23/54	08:16 14:50-15:25/35 16:04 08:57-09:38/41
23	05:20 21:15	06:08 20:20	06:58 19:10	07:48 16:51-17:34/43 18:03 09:20-09:27/7	07:42 14:37-15:19/42 16:13 08:29-09:24/55	08:17 14:51-15:26/35 16:04 08:57-09:38/41
24	05:22 21:14	06:09 20:18	06:59 19:08	07:50 16:48-17:32/44 18:01 09:16-09:31/15	07:44 14:37-15:20/43 16:12 08:29-09:24/55	08:17 14:51-15:27/36 16:05 08:57-09:38/41
25	05:23 21:13	06:11 20:16	07:01 19:05	06:52 15:45-16:28/43 16:59 08:13-08:34/21	07:46 14:37-15:20/43 16:11 08:30-09:25/55	08:17 14:52-15:27/35 16:05 08:58-09:40/42
26	05:24 21:11	06:13 20:14	07:03 19:03	06:54 15:41-16:25/44 16:57 08:11-08:35/24	07:47 14:38-15:21/43 16:10 08:31-09:26/55	08:18 14:53-15:28/35 16:06 08:58-09:40/42
27	05:26 21:10	06:14 20:12	07:04 19:01	06:55 15:39-16:24/45 16:55 08:09-08:36/27	07:49 14:38-15:20/42 16:09 08:32-09:26/54	08:18 14:53-15:29/36 16:07 08:58-09:40/42
28	05:27 21:08	06:16 20:09	07:06 18:58	06:57 15:37-16:22/45 16:53 08:08-08:37/29	07:50 14:38-15:21/43 16:08 08:33-09:27/54	08:18 14:53-15:29/36 16:08 08:59-09:41/42
29	05:29 21:07	06:18 20:07	07:08 18:56	06:59 15:36-16:19/43 16:51 08:07-08:38/31	07:52 14:39-15:22/43 16:07 08:34-09:28/54	08:18 14:53-15:30/37 16:09 08:59-09:41/42
30	05:30 21:05	06:19 20:05	07:09 18:54	07:01 15:35-16:13/38 16:50 08:07-08:39/32	07:53 14:39-15:21/42 16:07 08:35-09:28/53	08:19 14:54-15:31/37 16:09 08:59-09:42/43
31	05:32 21:04	06:21 20:03		07:02 15:34-16:12/38 16:48 08:06-08:40/34		08:19 14:54-15:32/38 16:10 08:59-09:42/43
Sonnenscheinstunden	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	0	1142	2685	2536

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	Minuten mit Schatten

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **WEA:** WEA02 - ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (2)

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:19 14:37-15:28/51 16:12	07:52 15:15-16:20/65 16:59 08:18-08:34/16	06:59 16:27-16:52/25 17:50	06:49 19:44	05:45 20:34	05:00 21:20
2	08:18 14:37-15:28/51 16:13	07:51 15:18-16:22/64 17:01 08:17-08:36/19	06:57 16:28-16:51/23 17:52	06:47 19:45	05:43 20:36	04:59 21:21
3	08:18 14:37-15:30/53 16:14	07:49 15:20-16:27/67 17:03 08:16-08:37/21	06:55 16:30-16:50/20 17:54	06:45 19:47	05:41 20:37	04:58 21:22
4	08:18 14:38-15:31/53 16:15	07:47 15:21-16:29/68 17:05 08:15-08:37/22	06:53 16:32-16:47/15 17:56	06:42 19:49	05:39 20:39	04:58 21:23
5	08:18 14:38-15:31/53 16:16	07:46 15:21-16:30/69 17:06 08:15-08:38/23	06:50 16:35-16:43/8 17:57	06:40 19:50	05:37 20:41	04:57 21:24
6	08:18 14:39-15:33/54 16:17	07:44 15:21-16:31/70 17:08 08:15-08:39/24	06:48 17:59	06:38 19:52	05:35 20:42	04:56 21:25
7	08:17 14:39-15:33/54 16:19	07:42 15:22-16:33/71 17:10 08:08-08:39/31	06:46 18:01	06:35 19:54	05:34 20:44	04:56 21:26
8	08:17 14:40-15:35/55 16:20	07:41 15:23-16:34/71 17:12 08:06-08:39/33	06:44 18:03	06:33 19:56	05:32 20:46	04:55 21:26
9	08:16 14:40-15:38/58 16:21	07:39 15:24-16:35/71 17:14 08:04-08:39/35	06:42 18:04	06:31 19:57	05:30 20:47	04:55 21:27
10	08:16 14:40-15:40/60 16:23	07:37 15:24-16:35/71 17:16 08:03-08:38/35	06:39 18:06	06:29 19:59	05:29 20:49	04:54 21:28
11	08:15 14:41-15:43/62 16:24	07:35 15:25-16:36/71 17:17 08:02-08:38/36	06:37 18:08	06:27 20:01	05:27 20:50	04:54 21:29
12	08:15 14:42-15:45/63 16:25	07:34 15:27-16:36/69 17:19 08:01-08:37/36	06:35 18:10	06:24 20:02	05:25 20:52	04:54 21:30
13	08:14 14:42-15:46/64 16:27	07:32 15:28-16:46/78 17:21 08:00-08:36/36	06:33 18:11	06:22 20:04	05:24 20:54	04:53 21:30
14	08:13 14:42-15:47/65 16:28	07:30 15:30-16:49/79 17:23 08:00-08:35/35	06:30 18:13	06:20 20:06	05:22 20:55	04:53 21:31
15	08:12 14:43-15:48/65 16:30	07:28 15:33-16:51/78 17:25 08:00-08:33/33	06:28 18:15	06:18 20:07	05:20 20:57	04:53 21:31
16	08:12 14:44-15:49/65 16:31	07:26 15:37-16:53/76 17:27 08:00-08:30/30	06:26 18:17	06:16 20:09	05:19 20:58	04:53 21:32
17	08:11 14:44-15:51/67 16:33	07:24 15:39-16:54/75 17:28 08:00-08:24/24	06:23 18:18	06:13 20:11	05:17 21:00	04:53 21:32
18	08:10 14:45-15:52/67 16:35	07:22 15:41-16:55/74 17:30 08:00-08:24/24	06:21 18:20	06:11 20:12	05:16 21:01	04:53 21:33
19	08:09 14:46-15:53/67 16:36	07:20 15:44-16:55/71 17:32 08:01-08:24/23	06:19 18:22	06:09 20:14	05:15 21:03	04:53 21:33
20	08:08 14:47-15:54/67 16:38	07:18 15:49-16:56/67 17:34 08:02-08:23/21	06:17 18:23	06:07 20:16	05:13 21:04	04:53 21:33
21	08:07 14:47-15:54/67 16:40	07:16 15:57-16:56/59 17:36 08:03-08:22/19	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34
22	08:06 14:49-15:56/67 16:41	07:14 16:00-16:57/57 17:38 08:04-08:20/16	06:12 18:27	06:03 20:19	05:11 21:07	04:53 21:34
23	08:04 14:50-15:59/69 16:43	07:12 16:03-16:57/54 17:39 08:06-08:18/12	06:10 18:28	06:01 20:21	05:09 21:08	04:53 21:34
24	08:03 14:51-16:01/70 16:45	07:10 16:25-16:56/31 17:41 16:17-16:23/6	06:07 18:30	05:59 20:22	05:08 21:10	04:54 21:34
25	08:02 14:53-16:03/70 16:47	07:08 16:25-16:56/31 17:43	06:05 18:32	05:57 20:24	05:07 21:11	04:54 21:34
26	08:01 14:56-16:05/69 16:48	07:06 16:26-16:55/29 17:45	06:03 18:34	05:55 20:26	05:06 21:12	04:54 21:34
27	07:59 14:58-16:06/68 16:50	07:03 16:26-16:55/29 17:47	06:01 18:35	05:53 20:28	05:05 21:14	04:55 21:34
28	07:58 15:05-16:08/63 16:52	07:01 16:27-16:54/27 17:48	05:58 18:37	05:51 20:29	05:04 21:15	04:55 21:34
29	07:57 15:06-16:13/67 16:54	07:00 16:28-16:53/27 17:50	05:56 19:39	05:49 20:31	05:03 21:16	04:56 21:34
30	07:55 15:08-16:16/68 16:55	06:58 16:29-16:54/27 17:52	05:54 19:40	05:47 20:33	05:02 21:17	04:56 21:34
31	07:54 15:11-16:19/68 16:57	06:57 16:30-16:53/27 17:54	05:51 19:42	05:45 20:35	05:01 21:18	04:56 21:34
Sonnenscheinstunden	260	278	367	416	484	498
Anzahl Minuten mit Schatten	1965	2354	91	0	0	0

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM)	Schattenanfang-Zeitpunkt (SS:MM)	Schattenende/Minuten mit Schatten
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM)	Schattenanfang-Zeitpunkt (SS:MM)	Schattenende/Minuten mit Schatten

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **WEA:** WEA02 - ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (2)

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober	November	Dezember
1	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:51	07:04 14:54-16:05/71 16:46 07:32-08:08/36	07:55 14:23-15:25/62 16:06
2	04:58 21:33	05:35 21:00	06:24 19:58	07:13 18:49	07:06 14:53-16:04/71 16:44 07:34-08:08/34	07:56 14:23-15:24/61 16:05
3	04:58 21:33	05:36 20:59	06:26 19:56	07:14 18:47	07:08 14:52-16:04/72 16:42 07:36-08:09/33	07:58 14:24-15:22/58 16:05
4	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45	07:10 14:52-16:03/71 16:40 07:39-08:09/30	07:59 14:24-15:19/55 16:04
5	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 14:52-16:01/69 16:39 07:45-08:09/24	08:00 14:24-15:18/54 16:04
6	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40	07:13 14:50-16:00/70 16:37 07:46-08:08/22	08:01 14:25-15:19/54 16:03
7	05:02 21:31	05:42 20:52	06:32 19:47	07:21 18:38	07:15 14:50-15:58/68 16:35 07:46-08:08/22	08:03 14:25-15:18/53 16:03
8	05:03 21:30	05:44 20:50	06:34 19:45	07:23 18:36	07:17 14:50-15:56/66 16:34 07:46-08:07/21	08:04 14:25-15:18/53 16:02
9	05:03 21:30	05:45 20:48	06:35 19:42	07:24 17:08-17:20/12 18:33	07:18 14:49-15:52/63 16:32 07:47-08:06/19	08:05 14:27-15:19/52 16:02
10	05:04 21:29	05:47 20:46	06:37 19:40	07:26 17:05-17:23/18 18:31	07:20 14:45-15:51/66 16:30 07:49-08:05/16	08:06 14:27-15:18/51 16:02
11	05:06 21:28	05:49 20:44	06:38 19:38	07:28 17:03-17:25/22 18:29	07:22 14:41-15:50/69 16:29 07:51-08:04/13	08:07 14:27-15:18/51 16:02
12	05:07 21:27	05:50 20:42	06:40 19:35	07:29 17:02-17:26/24 18:27	07:24 14:40-15:48/68 16:27 07:53-08:02/9	08:08 14:28-15:18/50 16:02
13	05:08 21:26	05:52 20:40	06:42 19:33	07:31 17:00-17:26/26 18:24	07:25 14:38-15:45/67 16:26 07:56-07:58/2	08:09 14:28-15:18/50 16:02
14	05:09 21:25	05:53 20:39	06:43 19:31	07:33 16:59-17:27/28 18:22	07:27 14:35-15:40/65 16:24	08:10 14:29-15:18/49 16:02
15	05:10 21:24	05:55 20:37	06:45 19:28	07:34 16:58-17:27/29 18:20	07:29 14:30-15:39/69 16:23	08:11 14:29-15:18/49 16:02
16	05:11 21:23	05:57 20:35	06:46 19:26	07:36 16:58-17:28/30 18:18	07:31 14:28-15:38/70 16:21	08:12 14:30-15:18/48 16:02
17	05:12 21:22	05:58 20:33	06:48 19:24	07:38 16:57-17:28/31 18:16	07:32 14:26-15:36/70 16:20	08:13 14:30-15:17/47 16:02
18	05:14 21:21	06:00 20:31	06:50 19:22	07:40 16:47-17:27/40 18:14	07:34 14:25-15:35/70 16:19	08:14 14:30-15:18/48 16:02
19	05:15 21:20	06:01 20:28	06:51 19:19	07:41 16:32-17:27/55 18:12	07:36 14:24-15:33/69 16:18	08:14 14:31-15:18/47 16:02
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 16:29-17:27/58 18:09	07:37 14:24-15:31/67 16:16	08:15 14:31-15:18/47 16:03
21	05:17 21:18	06:05 20:24	06:55 19:15	07:45 16:27-17:27/60 18:07	07:39 14:23-15:30/67 16:15	08:16 14:32-15:19/47 16:03
22	05:19 21:17	06:06 20:22	06:56 19:12	07:46 16:17-17:26/69 18:05	07:41 14:23-15:30/67 16:14	08:16 14:32-15:19/47 16:04
23	05:20 21:15	06:08 20:20	06:58 19:10	07:48 16:13-17:26/73 18:03	07:42 14:22-15:29/67 16:13	08:17 14:33-15:20/47 16:04
24	05:21 21:14	06:09 20:18	06:59 19:08	07:50 16:11-17:25/74 18:01	07:44 14:22-15:29/67 16:12	08:17 14:33-15:20/47 16:05
25	05:23 21:13	06:11 20:16	07:01 19:05	06:52 15:08-16:23/75 16:59	07:46 14:22-15:29/67 16:11	08:17 14:33-15:21/48 16:05
26	05:24 21:11	06:13 20:14	07:03 19:03	06:54 15:06-16:22/76 16:57	07:47 14:23-15:29/66 16:10	08:18 14:35-15:22/47 16:06
27	05:26 21:10	06:14 20:11	07:04 19:01	06:55 15:02-16:20/78 16:55	07:49 14:22-15:27/65 16:09	08:18 14:35-15:23/48 16:07
28	05:27 21:08	06:16 20:09	07:06 18:58	06:57 14:59-16:18/79 16:53	07:50 14:23-15:27/64 16:08	08:18 14:35-15:24/49 16:08
29	05:29 21:07	06:18 20:07	07:08 18:56	06:59 14:58-16:15/77 16:51	07:52 14:23-15:27/64 16:07	08:18 14:36-15:25/49 16:08
30	05:30 21:05	06:19 20:05	07:09 18:54	07:01 14:56-16:05/69 16:50	07:53 14:23-15:26/63 16:07	08:19 14:36-15:26/50 16:09
31	05:32 21:04	06:21 20:03		07:02 14:55-16:05/70 16:48		08:19 14:36-15:27/51 16:10
Sonnenscheinstunden		501	453	381	332	267
Anzahl Minuten mit Schatten		0	0	0	1532	2309
						1569

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM) Schattenanfang	Zeitpunkt (SS:MM) Schattenende	Minuten mit Schatten

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **WEA:** WEA04 - ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (4)

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:19 14:32-15:22/50 16:12	07:52 16:59 17:50	06:59 17:50 19:44	06:49 19:44 20:34	05:45 20:34 21:20	05:00 05:37-06:22/45 21:20
2	08:18 14:36-15:21/45 16:13	07:51 17:01 17:52	06:57 17:52 19:45	06:47 19:45 20:36	05:43 20:36 21:21	04:59 05:38-06:23/45 21:21
3	08:18 14:44-15:22/38 16:14 14:39-14:42/3	07:49 17:03 17:54	06:55 17:54 19:47	06:45 19:47 20:37	05:41 20:37 21:22	04:58 05:37-06:23/46 21:22
4	08:18 14:45-15:23/38 16:15	07:47 17:05 17:56	06:53 17:56 19:49	06:42 19:49 20:39	05:39 20:39 21:23	04:58 05:35-06:23/48 21:23
5	08:18 14:45-15:23/38 16:16	07:46 17:06 17:57	06:50 17:57 19:50	06:40 19:50 20:41	05:37 20:41 21:24	04:57 05:35-06:23/48 21:24
6	08:18 14:47-15:24/37 16:17	07:44 17:08 17:59	06:48 17:59 19:52	06:38 19:52 20:42	05:35 20:42 21:25	04:56 05:33-06:23/50 21:25
7	08:17 14:48-15:23/35 16:19	07:42 17:10 18:01	06:46 18:01 19:54	06:35 19:54 20:44	05:34 20:44 21:26	04:56 05:33-06:24/51 21:26
8	08:17 14:50-15:24/34 16:20	07:41 17:12 18:03	06:44 18:03 19:56	06:33 19:56 20:46	05:32 20:46 21:26	04:55 05:32-06:23/51 21:26
9	08:16 14:51-15:24/33 16:21	07:39 17:14 18:04	06:42 18:04 19:57	06:31 19:57 20:47	05:30 20:47 21:27	04:55 05:32-06:24/52 21:27
10	08:16 14:59-15:24/25 16:23 14:54-14:58/4	07:37 17:16 18:06	06:39 18:06 19:59	06:29 19:59 20:49	05:29 20:49 21:28	04:54 05:32-06:24/52 21:28
11	08:15 15:00-15:25/25 16:24	07:35 17:17 18:08	06:37 18:08 20:01	06:27 20:01 20:50	05:27 20:50 21:29	04:54 05:31-06:24/53 21:29
12	08:15 15:01-15:25/24 16:25	07:33 17:19 18:10	06:35 18:10 20:02	06:24 20:02 20:52	05:25 20:52 21:30	04:54 05:31-06:24/53 21:30
13	08:14 15:01-15:25/24 16:27	07:32 17:21 18:11	06:33 18:11 20:04	06:22 20:04 20:54	05:24 20:54 21:30	06:02-06:05/3 21:30
14	08:13 15:02-15:24/22 16:28	07:30 17:23 18:13	06:30 18:13 20:06	06:20 20:06 20:55	05:22 20:55 21:31	05:58-06:10/12 21:31
15	08:12 15:03-15:24/21 16:30	07:28 17:25 18:15	06:28 18:15 20:07	06:18 20:07 20:57	05:20 20:57 21:31	05:55-06:12/17 21:31
16	08:12 15:04-15:24/20 16:32	07:26 17:27 18:16	06:26 18:16 20:09	06:16 20:09 20:58	05:19 20:58 21:32	05:54-06:14/20 21:32
17	08:11 15:05-15:23/18 16:33	07:24 17:28 18:18	06:23 18:18 20:11	06:13 20:11 21:00	05:17 21:00 21:32	05:53-06:15/22 21:32
18	08:10 15:07-15:23/16 16:35	07:22 17:30 18:20	06:21 18:20 20:12	06:11 20:12 21:01	05:16 21:01 21:33	05:46-06:16/30 21:33
19	08:09 15:09-15:22/13 16:36	07:20 17:32 18:22	06:19 18:22 20:14	06:09 20:14 21:03	05:15 21:03 21:33	05:43-06:17/34 21:33
20	08:08 15:11-15:21/10 16:38	07:18 17:34 18:23	06:17 18:23 20:16	06:07 20:16 21:04	05:13 21:04 21:33	05:42-06:18/36 21:33
21	08:07 16:40 16:40	07:16 17:36 18:25	06:14 18:25 20:17	06:05 20:17 21:05	05:12 21:05 21:34	05:41-06:19/38 21:34
22	08:05 16:41 16:41	07:14 17:38 18:27	06:12 18:27 20:19	06:03 20:19 21:07	05:11 21:07 21:34	05:40-06:20/40 21:34
23	08:04 16:43 16:43	07:12 17:39 18:28	06:10 18:28 20:21	06:01 20:21 21:08	05:09 21:08 21:34	05:39-06:20/41 21:34
24	08:03 16:45 16:45	07:10 17:41 18:30	06:07 18:30 20:22	05:59 20:22 21:10	05:08 21:10 21:34	05:38-06:20/42 21:34
25	08:02 16:47 16:47	07:08 17:43 18:32	06:05 18:32 20:24	05:57 20:24 21:11	05:07 21:11 21:34	05:38-06:20/42 21:34
26	08:01 16:48 16:48	07:06 17:45 18:34	06:03 18:34 20:26	05:55 20:26 21:12	05:06 21:12 21:34	05:37-06:21/44 21:34
27	07:59 16:50 16:50	07:03 17:47 18:35	06:01 18:35 20:27	05:53 20:27 21:14	05:05 21:14 21:34	05:38-06:21/43 21:34
28	07:58 16:52 16:52	07:01 17:48 18:37	05:58 18:37 20:29	05:51 20:29 21:15	05:04 21:15 21:34	05:38-06:22/44 21:34
29	07:57 16:54 16:54	07:00 17:49 18:38	05:56 18:38 20:30	05:49 20:30 21:16	05:03 21:16 21:34	05:37-06:22/45 21:34
30	07:55 16:55 16:55	07:00 17:50 18:39	05:54 18:39 20:31	05:47 20:31 21:17	05:02 21:17 21:34	05:37-06:22/45 21:34
31	07:54 16:57 16:57	07:00 17:51 18:40	05:51 18:40 20:32	05:45 20:32 21:18	05:01 21:18 21:34	05:37-06:22/45 21:34
Sonnenscheinstunden						498
Anzahl Minuten mit Schatten						1554

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM)	Schattenanfang-Zeitpunkt (SS:MM)	Schattenende/Minuten mit Schatten

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **WEA:** WEA04 - ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (4)

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli		August		September		Oktober		November		Dezember	
1	04:57	05:36-06:29/53	05:33	06:22	07:11	07:04	07:55	14:42-15:07/25				
	21:33		21:02	20:00	18:51	16:46	16:06					
2	04:58	05:36-06:28/52	05:35	06:24	07:13	07:06	07:56	14:42-15:07/25				
	21:33		21:00	19:58	18:49	16:44	16:05	14:37-14:41/4				
3	04:58	05:37-06:29/52	05:36	06:26	07:14	07:08	07:57	14:35-15:08/33				
	21:33		20:59	19:56	18:47	16:42	16:05					
4	04:59	05:38-06:29/51	05:38	06:27	07:16	07:09	07:59	14:34-15:08/34				
	21:32		20:57	19:54	18:45	16:40	16:04					
5	05:00	05:38-06:29/51	05:39	06:29	07:17	07:11	08:00	14:33-15:08/35				
	21:32		20:55	19:51	18:42	16:39	16:04					
6	05:01	05:39-06:29/50	05:41	06:30	07:19	07:13	08:01	14:33-15:10/37				
	21:31		20:53	19:49	18:40	16:37	16:03					
7	05:02	05:41-06:30/49	05:42	06:32	07:21	07:15	08:03	14:32-15:10/38				
	21:31		20:52	19:47	18:38	16:35	16:03					
8	05:03	05:42-06:30/48	05:44	06:34	07:22	07:17	08:04	14:32-15:10/38				
	21:30		20:50	19:45	18:36	16:34	16:02					
9	05:04	05:44-06:30/46	05:45	06:35	07:24	07:18	08:05	14:33-15:11/38				
	21:29		20:48	19:42	18:33	16:32	16:02	14:28-14:31/3				
10	05:05	05:45-06:31/46	05:47	06:37	07:26	07:20	08:06	14:26-15:12/46				
	21:29		20:46	19:40	18:31	16:30	16:02					
11	05:06	05:45-06:31/46	05:49	06:38	07:28	07:22	08:07	14:22-15:12/50				
	21:28		20:44	19:38	18:29	16:29	16:02					
12	05:07	05:45-06:31/46	05:50	06:40	07:29	07:24	08:08	14:21-15:12/51				
	21:27		20:42	19:35	18:27	16:27	16:02					
13	05:08	05:46-06:31/45	05:52	06:42	07:31	07:25	08:09	14:20-15:13/53				
	21:26		20:40	19:33	18:24	16:26	16:02					
14	05:09	05:46-06:31/45	05:53	06:43	07:33	07:27	08:10	14:20-15:13/53				
	21:25		20:38	19:31	18:22	16:24	16:02					
15	05:10	05:46-06:31/45	05:55	06:45	07:34	07:29	08:11	14:20-15:14/54				
	21:24		20:37	19:28	18:20	16:23	16:02					
16	05:11	05:46-06:31/45	05:57	06:46	07:36	07:31	08:12	14:20-15:14/54				
	21:23		20:35	19:26	18:18	16:21	16:02					
17	05:12	05:47-06:30/43	05:58	06:48	07:38	07:32	08:13	14:19-15:14/55				
	21:22		20:33	19:24	18:16	16:20	16:02					
18	05:14	05:47-06:30/43	06:00	06:50	07:40	07:34	08:14	14:20-15:15/55				
	21:21		20:30	19:22	18:14	16:19	16:02					
19	05:15	05:48-06:31/43	06:01	06:51	07:41	07:36	08:14	14:20-15:15/55				
	21:20		20:28	19:19	18:12	16:18	16:02					
20	05:16	05:49-06:30/41	06:03	06:53	07:43	07:37	08:15	14:20-15:15/55				
	21:19		20:26	19:17	18:09	16:16	16:03					
21	05:17	05:49-06:30/41	06:05	06:55	07:45	07:39	08:16	14:21-15:16/55				
	21:18		20:24	19:15	18:07	16:15	16:03					
22	05:19	05:50-06:29/39	06:06	06:56	07:46	07:41	14:47-14:57/10	08:16	14:21-15:16/55			
	21:17		20:22	19:12	18:05	16:14	16:04					
23	05:20	05:52-06:29/37	06:08	06:58	07:48	07:42	14:45-14:58/13	08:17	14:22-15:17/55			
	21:15		20:20	19:10	18:03	16:13	16:04					
24	05:21	05:53-06:28/35	06:09	06:59	07:50	07:44	14:44-15:00/16	08:17	14:22-15:17/55			
	21:14		20:18	19:08	18:01	16:12	16:05					
25	05:23	05:54-06:27/33	06:11	07:01	06:52	07:46	14:43-15:02/19	08:17	14:23-15:18/55			
	21:13		20:16	19:05	16:59	16:11	16:05					
26	05:24	06:03-06:27/24	06:13	07:03	06:53	07:47	14:43-15:03/20	08:18	14:24-15:19/55			
	21:11		20:14	19:03	16:57	16:10	16:06					
27	05:26	06:04-06:25/21	06:14	07:04	06:55	07:49	14:42-15:03/21	08:18	14:25-15:19/54			
	21:10		20:11	19:01	16:55	16:09	16:07					
28	05:27	06:05-06:24/19	06:16	07:06	06:57	07:50	14:42-15:04/22	08:18	14:25-15:19/54			
	21:08		20:09	18:58	16:53	16:08	16:08					
29	05:29	06:07-06:22/15	06:18	07:08	06:59	07:52	14:41-15:05/24	08:18	14:26-15:20/54			
	21:07		20:07	18:56	16:51	16:07	16:09					
30	05:30	06:10-06:19/9	06:19	07:09	07:01	07:53	14:42-15:06/24	08:18	14:28-15:20/52			
	21:05		20:05	18:54	16:50	16:07	16:09					
31	05:32		06:21		07:02		08:19	14:29-15:21/52				
	21:04		20:03		16:48		16:10					
Sonnenscheinstunden	501		453	381	332	267	245					
Anzahl Minuten mit Schatten	1213		0	0	0	169	1487					

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM)	Schattenanfang-Zeitpunkt (SS:MM)	Schattenende/Minuten mit Schatten
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM)	Schattenanfang-Zeitpunkt (SS:MM)	Schattenende/Minuten mit Schatten

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:38/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung WEA: WEA05 - ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (5)

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:19 16:12	07:52 16:59	06:59 17:50	06:49 19:44	07:24-07:44/20 20:34	05:45 20:34
2	08:18 16:13	07:51 17:01	06:57 17:52	06:47 19:45	07:21-07:45/24 20:36	05:43 20:36
3	08:18 16:14	07:49 17:03	06:55 17:54	06:45 19:47	07:19-07:47/28 20:37	05:41 20:37
4	08:18 16:15	07:47 17:05	06:53 17:56	06:42 19:49	07:18-07:48/30 20:39	05:39 20:39
5	08:18 16:16	07:46 17:06	06:50 17:57	06:40 19:50	07:16-07:49/33 20:41	05:37 20:41
6	08:18 16:17	07:44 17:08	06:48 17:59	06:38 19:52	07:14-07:49/35 20:42	05:36 20:42
7	08:17 16:19	07:42 17:10	06:46 18:01	06:35 19:54	07:11-07:49/38 20:44	05:34 20:44
8	08:17 16:20	07:41 17:12	06:44 18:03	06:33 19:56	07:08-07:50/42 20:46	05:32 20:46
9	08:16 16:21	07:39 17:14	06:42 18:04	06:31 19:57	07:06-07:50/44 20:47	05:30 20:47
10	08:16 16:23	07:37 17:16	06:39 18:06	06:29 19:59	07:03-07:49/46 20:49	05:29 20:49
11	08:15 16:24	07:35 17:17	06:37 18:08	06:27 20:01	07:02-07:49/47 20:50	05:27 20:50
12	08:15 16:25	07:33 17:19	06:35 18:10	06:24 20:02	07:01-07:49/48 20:52	05:25 20:52
13	08:14 16:27	07:32 17:21	06:33 18:11	06:22 20:04	07:00-07:49/49 20:53	05:24 20:53
14	08:13 16:28	07:30 17:23	06:30 18:13	06:20 20:06	06:49-06:56/7 20:55	05:22 20:55
15	08:12 16:30	07:28 17:25	06:28 18:15	06:18 20:07	06:45-07:48/63 20:57	05:20 20:57
16	08:11 16:32	07:26 17:27	06:26 18:17	06:16 20:09	06:43-07:47/64 20:58	05:19 20:58
17	08:11 16:33	07:24 17:29	06:23 18:18	06:13 20:11	06:40-07:45/65 21:00	05:18 21:00
18	08:10 16:35	07:22 17:30	06:21 18:20	06:11 20:12	06:39-07:45/66 21:01	05:16 21:01
19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	06:38-07:43/65 21:03	05:15 21:03
20	08:08 16:38	07:18 17:34	06:17 18:23	06:07 20:16	06:37-07:42/65 21:04	05:13 21:04
21	08:07 16:40	07:16 17:36	06:14 18:25	06:05 20:17	06:37-07:41/64 21:05	05:12 21:05
22	08:05 16:41	07:14 17:38	06:12 18:27	06:03 20:19	06:36-07:39/63 21:07	05:11 21:07
23	08:04 16:43	07:12 17:39	06:10 18:28	06:01 20:21	06:36-07:37/61 21:08	05:09 21:08
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:22	06:34-07:34/60 21:10	05:08 21:10
25	08:02 16:47	07:08 17:43	06:05 18:32	05:57 20:24	06:33-07:31/58 21:11	05:07 21:11
26	08:01 16:48	07:06 17:45	06:03 18:34	05:55 20:26	06:32-07:30/58 21:12	05:06 21:12
27	07:59 16:50	07:03 17:47	06:01 18:35	05:53 20:27	06:29-07:29/60 21:13	05:05 21:13
28	07:58 16:52	07:01 17:48	05:58 18:37	05:51 20:29	06:27-07:28/61 21:15	05:04 21:15
29	07:57 16:54		06:56 19:39	05:49 20:31	06:25-07:27/62 21:16	05:03 21:16
30	07:55 16:55		06:54 19:40	05:47 20:32	06:23-07:25/62 21:17	05:02 21:17
31	07:54 16:57		06:51 19:42			05:01 21:18
Sonnenscheinstunden	260	278	367	416	484	498
Anzahl Minuten mit Schatten	0	0	14	1537	2133	1464

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM)	Schattenanfang-Zeitpunkt (SS:MM)	Schattenende/Minuten mit Schatten
			Zeitpunkt (SS:MM)	Schattenanfang-Zeitpunkt (SS:MM)	Schattenende/Minuten mit Schatten



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung **WEA:** WEA05 - ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (5)

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

Jan	Feb	Mär	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
1,56	2,60	3,92	5,75	7,42	7,51	7,59	7,27	5,27	3,77	1,84	1,30

Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
390	372	588	603	418	487	1.048	1.054	1.436	834	690	673	8.592

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli		August		September		Oktober		November		Dezember	
1	04:57	05:38-06:24/46	05:33	06:07-07:18/71	06:22	07:01-07:48/47	07:11	07:04	07:55			
	21:33		21:02		20:00		18:51	16:46	16:06			
2	04:58	05:38-06:24/46	05:35	06:09-07:19/70	06:24	07:02-07:48/46	07:13	07:06	07:56			
	21:33		21:00		19:58		18:49	16:44	16:05			
3	04:58	05:39-06:26/47	05:36	06:12-07:20/68	06:26	07:03-07:47/44	07:14	07:08	07:57			
	21:33		20:59		19:56		18:47	16:42	16:05			
4	04:59	05:39-06:28/49	05:38	06:12-07:21/69	06:27	07:05-07:47/42	07:16	07:09	07:59			
	21:32		20:57		19:54		18:45	16:40	16:04			
5	05:00	05:39-06:28/49	05:39	06:14-07:23/69	06:29	07:08-07:46/38	07:17	07:11	08:00			
	21:32		20:55		19:51		18:42	16:39	16:04			
6	05:01	05:39-06:29/50	05:41	06:14-07:23/69	06:30	07:11-07:45/34	07:19	07:13	08:01			
	21:31		20:53		19:49		18:40	16:37	16:03			
7	05:02	05:40-06:30/50	05:42	06:16-07:23/67	06:32	07:11-07:44/33	07:21	07:15	08:03			
	21:31		20:52		19:47		18:38	16:35	16:03			
8	05:03	05:41-06:31/50	05:44	06:18-07:24/66	06:34	07:12-07:42/30	07:22	07:17	08:04			
	21:30	06:40-06:48/8	20:50		19:45		18:36	16:34	16:02			
9	05:04	05:41-06:32/51	05:46	06:28-07:24/56	06:35	07:13-07:41/28	07:24	07:18	08:05			
	21:29	06:39-06:51/12	20:48	06:21-06:26/5	19:42		18:33	16:32	16:02			
10	05:05	05:42-06:33/51	05:47	06:29-07:26/57	06:37	07:14-07:38/24	07:26	07:20	08:06			
	21:29	06:37-06:52/15	20:46		19:40		18:31	16:30	16:02			
11	05:06	05:42-06:34/52	05:49	06:29-07:29/60	06:38	07:16-07:36/20	07:28	07:22	08:07			
	21:28	06:36-06:54/18	20:44		19:38		18:29	16:29	16:02			
12	05:07	05:43-06:55/72	05:50	06:31-07:32/61	06:40	07:18-07:32/14	07:29	07:24	08:08			
	21:27		20:42		19:35		18:27	16:27	16:02			
13	05:08	05:44-06:56/72	05:52	06:31-07:33/62	06:42		07:31	07:25	08:09			
	21:26		20:40		19:33		18:24	16:26	16:02			
14	05:09	05:45-06:57/72	05:53	06:33-07:35/62	06:43		07:33	07:27	08:10			
	21:25		20:38		19:31		18:22	16:24	16:02			
15	05:10	05:45-06:58/73	05:55	06:34-07:35/61	06:45		07:34	07:29	08:11			
	21:24		20:37		19:28		18:20	16:23	16:02			
16	05:11	05:46-06:59/73	05:57	06:37-07:36/59	06:46		07:36	07:31	08:12			
	21:23		20:35		19:26		18:18	16:22	16:02			
17	05:12	05:48-06:59/71	05:58	06:38-07:37/59	06:48		07:38	07:32	08:13			
	21:22		20:33		19:24		18:16	16:20	16:02			
18	05:14	05:49-07:00/71	06:00	06:40-07:38/58	06:50		07:40	07:34	08:14			
	21:21		20:30		19:22		18:14	16:19	16:02			
19	05:15	05:52-07:02/70	06:01	06:40-07:40/60	06:51		07:41	07:36	08:14			
	21:20		20:28		19:19		18:12	16:18	16:03			
20	05:16	05:52-07:02/70	06:03	06:41-07:43/62	06:53		07:43	07:37	08:15			
	21:19		20:26		19:17		18:10	16:16	16:03			
21	05:17	05:53-07:03/70	06:05	06:42-07:45/63	06:55		07:45	07:39	08:16			
	21:18		20:24		19:15		18:07	16:15	16:03			
22	05:19	05:54-07:05/71	06:06	06:41-07:46/65	06:56		07:46	07:41	08:16			
	21:17		20:22		19:12		18:05	16:14	16:04			
23	05:20	05:55-07:07/72	06:08	06:42-07:47/65	06:58		07:48	07:42	08:17			
	21:15		20:20		19:10		18:03	16:13	16:04			
24	05:22	05:57-07:08/71	06:09	06:42-07:47/65	06:59		07:50	07:44	08:17			
	21:14		20:18		19:08		18:01	16:12	16:05			
25	05:23	05:58-07:09/71	06:11	06:43-07:48/65	07:01		06:52	07:46	08:17			
	21:13		20:16		19:05		16:59	16:11	16:05			
26	05:24	06:01-07:11/70	06:13	06:43-07:48/65	07:03		06:53	07:47	08:18			
	21:11		20:14		19:03		16:57	16:10	16:06			
27	05:26	06:01-07:11/70	06:14	06:45-07:49/64	07:04		06:55	07:49	08:18			
	21:10		20:11		19:01		16:55	16:09	16:07			
28	05:27	06:02-07:12/70	06:16	06:46-07:49/63	07:06		06:57	07:50	08:18			
	21:08		20:09		18:58		16:53	16:08	16:08			
29	05:29	06:03-07:13/70	06:18	06:50-06:57/7	07:08		06:59	07:52	08:18			
	21:07		20:07	07:00-07:49/49	18:56		16:51	16:07	16:09			
30	05:30	06:04-07:14/70	06:19	07:00-07:49/49	07:09		07:01	07:53	08:18			
	21:05		20:05		18:54		16:50	16:07	16:09			
31	05:32	06:05-07:15/70	06:21	07:01-07:49/48			07:02		08:18			
	21:04		20:03				16:48		16:10			
Sonnenscheinstunden	501		453		381		332		267		245	
Anzahl Minuten mit Schatten	2013		1939		400		0		0		0	

Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM)	Schattenanfang-Zeitpunkt (SS:MM)	Schattenende/Minuten mit Schatten
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM)	Schattenanfang-Zeitpunkt (SS:MM)	Schattenende/Minuten mit Schatten

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

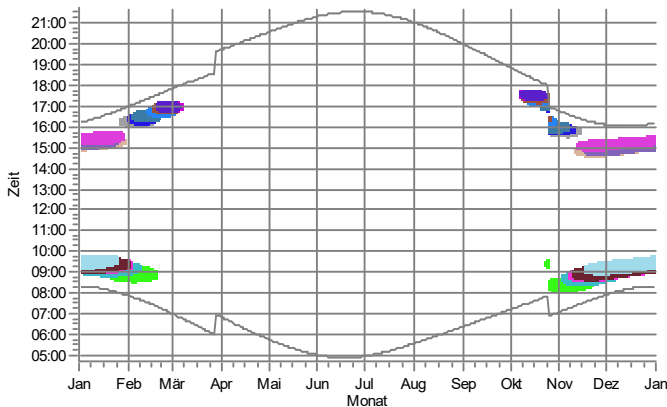
14.10.2025 14:38/4.1.273



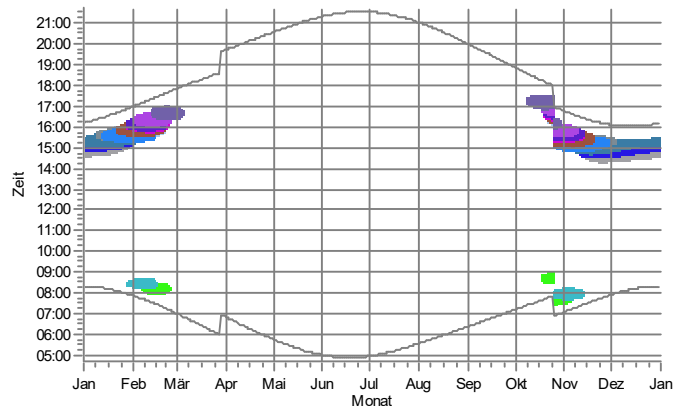
SHADOW - Grafischer Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Zusatzbelastung

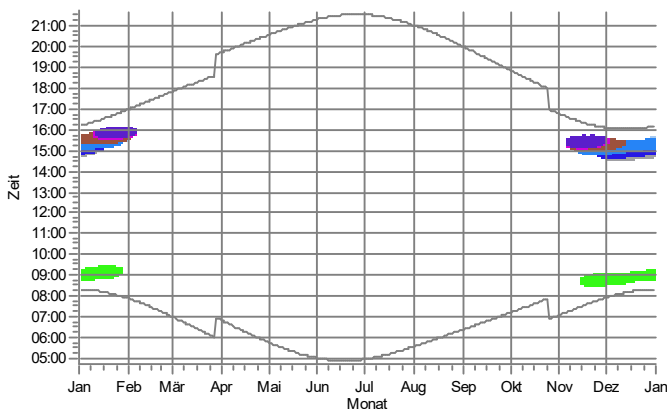
WEA01: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0



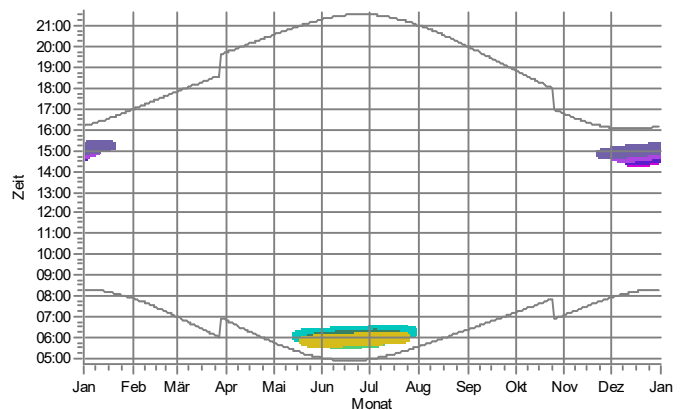
WEA02: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (2)



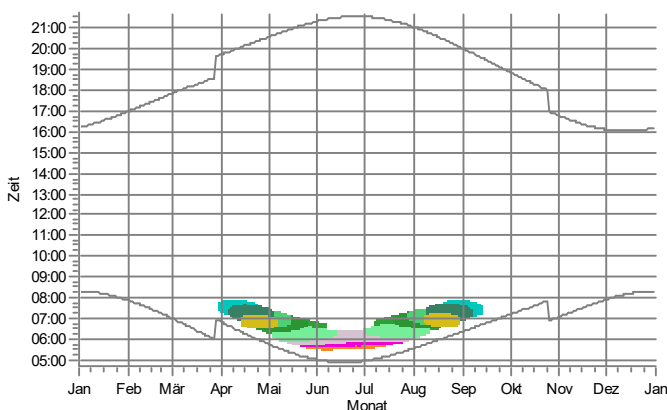
WEA03: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0



WEA04: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (4)



WEA05: ENERCON E-175 EP5 E2 7000 175.0 !O! NH: 174,5 m (Ges:262,0 m) (5)



Schattenrezeptoren

IP15: Thurländer Dorfstraße 23, 06779 Raguhn-Jeßnitz
IP16: Thurländer Lindenstrasse 15, 06779 Raguhn-Jeßnitz
IP17: Kleinleipziger Str. 12A, 06779 Raguhn-Jeßnitz
IP18: Am Sportplatz 8, 06779 Raguhn-Jeßnitz
IP19: Vor d. Heide 10, 06779 Raguhn-Jeßnitz
IP20: Am Sandberg 11, 06780 Zörbig
IP21: Am Sandberg 24, 06780 Zörbig
IP23: Hallesche Straße 10, 06780 Zörbig

IP24: Hallesche Straße 13, 06780 Zörbig
IP25: Hallesche Straße 15, 06780 Zörbig
IP26: Hallesche Straße 18, 06780 Zörbig
IP27: Am Sandberg 14, 06780 Zörbig
IP28: Am Sandberg 18, 06780 Zörbig
IP29: Am Sandberg 20, 06780 Zörbig
IP30: Am Sportpl. 15, 06780 Zörbig
IP31: Vor d. Heide 6, 06779 Raguhn-Jeßnitz

IP32: Vor d. Heide 4, 06779 Raguhn-Jeßnitz
IP33: Am Trappenberg 2, 06779 Raguhn-Jeßnitz
IP34: Kleinleipziger Str. 7, 06779 Raguhn-Jeßnitz
IP35: Kleinleipziger Str. 3, 06779 Raguhn-Jeßnitz
IP36: Thurländer Lindenstrasse 10, 06779 Raguhn-Jeßnitz
IP37: Thurländer Lindenstrasse 8a, 06779 Raguhn-Jeßnitz
IP38: Thurländer Lindenstrasse 3, 06779 Raguhn-Jeßnitz
IP39: Thurländer Dorfstraße 24A, 06779 Raguhn-Jeßnitz

IP40: Thurländer Dorfstraße 21, 06779 Raguhn-Jeßnitz
IP41: Thurländer Dorfstraße 19, 06779 Raguhn-Jeßnitz
IP42: Thurländer Dorfstraße 17, 06779 Raguhn-Jeßnitz
IP43: Thurländer Dorfstraße 12, 06779 Raguhn-Jeßnitz
IP44: Am Dorfe 1, 06779 Raguhn-Jeßnitz