

SHADOW - Hauptergebnis

Berechnung: SW25034 Salzfurkapelle Vorbelastung

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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

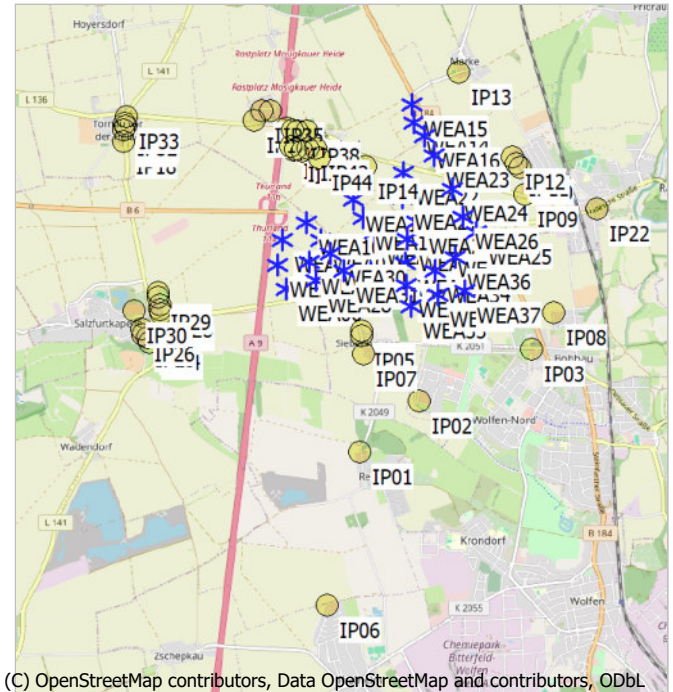
Alle Koordinatenangaben in:

UTM (north)-ETRS89 Zone: 32

WEA

WEA	Ost	Nord	Z	Beschreibung	WEA-Typ		Typ	Nennleistung	Rotor-durchmesser	NH	Schattendaten	
					Aktuell	Hersteller					Beschatt.-Bereich	U/min
			[m]					[kW]	[m]	[m]	[m]	[U/min]
WEA06	722.169	5.732.387	85,2	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	113,5	1.642	20,0
WEA07	722.080	5.733.039	89,5	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	113,5	1.642	20,0
WEA08	722.590	5.733.065	90,0	ENERCON E-6...	Nein	ENERCON	E-66/20.70-2.000	2.000	70,0	93,8	1.486	22,0
WEA09	722.036	5.732.699	87,0	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	113,5	1.642	20,0
WEA10	722.393	5.733.279	90,0	ENERCON E-8...	Ja	ENERCON	E-82 E2-2.300	2.300	82,0	85,0	1.602	18,0
WEA11	723.314	5.733.195	90,0	ENERCON E-6...	Nein	ENERCON	E-66/20.70-2.000	2.000	70,0	114,1	1.484	22,0
WEA12	723.145	5.733.385	90,0	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	114,1	1.642	20,0
WEA13	723.008	5.733.608	90,0	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	85,0	1.643	20,0
WEA14	723.769	5.734.666	89,5	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	98,8	1.643	20,0
WEA15	723.718	5.734.900	88,8	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	98,2	1.643	20,0
WEA16	723.921	5.734.491	89,6	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	113,5	1.642	20,0
WEA17	723.745	5.733.125	90,0	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	100,0	1.642	20,0
WEA18	723.737	5.732.804	90,0	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	98,0	1.643	20,0
WEA19	724.254	5.733.072	90,0	ENERCON E-6...	Nein	ENERCON	E-66/20.70-2.000	2.000	70,0	114,1	1.484	22,0
WEA20	723.860	5.733.356	90,0	ENERCON E-6...	Nein	ENERCON	E-66/20.70-2.000	2.000	70,0	114,1	1.484	22,0
WEA21	723.661	5.733.669	90,0	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	113,5	1.642	20,0
WEA22	723.656	5.733.991	85,2	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	113,5	1.642	20,0
WEA23	724.052	5.734.238	90,0	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	113,5	1.642	20,0
WEA24	724.314	5.733.811	90,0	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	113,5	1.642	20,0
WEA25	724.657	5.733.249	90,0	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	113,5	1.642	20,0
WEA26	724.472	5.733.451	90,0	ENERCON E-7...	Nein	ENERCON	E-70 E4-2.000	2.000	71,0	113,5	1.642	20,0
WEA27	723.275	5.732.648	89,3	GE WIND ENE...	Nein	GE WIND ENERGY	GE 1.5sl-1.500	1.500	77,0	96,0	1.414	18,0
WEA28	722.550	5.732.527	86,9	GE WIND ENE...	Nein	GE WIND ENERGY	GE 1.5sl-1.500	1.500	77,0	96,0	1.414	18,0
WEA29	722.462	5.732.761	88,3	GE WIND ENE...	Nein	GE WIND ENERGY	GE 1.5sl-1.500	1.500	77,0	96,0	1.414	18,0
WEA30	722.730	5.732.890	89,8	GE WIND ENE...	Nein	GE WIND ENERGY	GE 1.5sl-1.500	1.500	77,0	96,0	1.414	18,0
WEA31	722.917	5.732.670	88,7	GE WIND ENE...	Nein	GE WIND ENERGY	GE 1.5sl-1.500	1.500	77,0	96,0	1.414	18,0
WEA32	723.762	5.732.511	90,0	ENERCON E-7...	Ja	ENERCON	E-70 E4 2,3 MW-2.300	2.300	71,0	114,0	1.642	21,0
WEA33	723.824	5.732.233	88,0	DEWIND D8/8...	Ja	DEWIND	D8/80-2MW-2.000	2.000	80,0	100,0	1.581	18,0
WEA34	724.132	5.732.725	90,0	DEWIND D8/8...	Ja	DEWIND	D8/80-2MW-2.000	2.000	80,0	100,0	1.581	18,0
WEA35	724.178	5.732.403	90,0	DEWIND D8/8...	Ja	DEWIND	D8/80-2MW-2.000	2.000	80,0	100,0	1.581	18,0

(Fortsetzung nächste Seite)...



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

* Existierende WEA

Maßstab 1:100.000
● Schattenrezeptor

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Hauptergebnis

Berechnung: SW25034 Salzfurkapelle Vorbelastung

...(Fortsetzung von vorheriger Seite)

	Ost	Nord	Z	Beschreibung	WEA-Typ		Typ	Nennleistung	Rotor-durchmesser	NH	Schattendaten	
					Aktuell	Hersteller					Beschatt.-Bereich	U/min
			[m]					[kW]	[m]	[m]	[m]	[U/min]
WEA36	724.397	5.732.919	90,0	DEWIND D8/8...	Ja	DEWIND	D8/80-2MW-2.000	2.000	80,0	100,0	1.581	18,0
WEA37	724.541	5.732.471	90,0	DEWIND D8/8...	Ja	DEWIND	D8/80-2MW-2.000	2.000	80,0	100,0	1.581	18,0

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
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. Beschattungsda
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	5:49	38	0:14	1:32

(Fortsetzung nächste Seite)...

SHADOW - Hauptergebnis

Berechnung: SW25034 Salzfurkapelle Vorbelastung

...(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]
IP04	Siebenhausen 14, 06766 Bitterfeld-Wolfen	45:40	102	0:42	13:01
IP05	Siebenhausen 15, 06766 Bitterfeld-Wolfen	31:00	90	0:33	8:50
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)	11:38	72	0:16	3:01
IP09	Thurländer Str. 1, 06779 Raguhn-Jeßnitz	45:52	194	0:34	9:05
IP10	Thurländer Str. 24, 06779 Raguhn-Jeßnitz	35:12	171	0:28	6:20
IP11	Thurländer Str. 28, 06779 Raguhn-Jeßnitz	35:53	191	0:28	6:47
IP12	Zerbster Str. 17, 06779 Raguhn-Jeßnitz	35:56	175	0:26	6:43
IP13	Dorfstraße 30, 06779 Raguhn-Jeßnitz	26:28	99	0:22	3:37
IP14	Holländer Mühle 1, 06779 Raguhn-Jeßnitz	109:11	258	1:02	19:01
IP15	Thurländer Dorfstraße 23, 06779 Raguhn-Jeßnitz	16:46	78	0:26	2:03
IP16	Thurländer Lindenstrasse 15, 06779 Raguhn-Jeßnitz	10:06	38	0:22	0:55
IP17	Kleinleipziger Str. 12A, 06779 Raguhn-Jeßnitz	0:00	0	0:00	0:00
IP18	Am Sportplatz 8, 06779 Raguhn-Jeßnitz	0:00	0	0:00	0:00
IP19	Vor d. Heide 10, 06779 Raguhn-Jeßnitz	0:00	0	0:00	0:00
IP20	Am Sandberg 11, 06780 Zörbig	0:00	0	0:00	0:00
IP21	Am Sandberg 24, 06780 Zörbig	1:56	15	0:10	0:32
IP22	Hallesche Str. 9, 06779 Raguhn-Jeßnitz	0:00	0	0:00	0:00
IP23	Hallesche Straße 10, 06780 Zörbig	0:00	0	0:00	0:00
IP24	Hallesche Straße 13, 06780 Zörbig	0:00	0	0:00	0:00
IP25	Hallesche Straße 15, 06780 Zörbig	0:00	0	0:00	0:00
IP26	Hallesche Straße 18, 06780 Zörbig	0:00	0	0:00	0:00
IP27	Am Sandberg 14, 06780 Zörbig	0:00	0	0:00	0:00
IP28	Am Sandberg 18, 06780 Zörbig	0:00	0	0:00	0:00
IP29	Am Sandberg 20, 06780 Zörbig	1:59	14	0:11	0:32
IP30	Am Sportpl. 15, 06780 Zörbig	0:00	0	0:00	0:00
IP31	Vor d. Heide 6, 06779 Raguhn-Jeßnitz	0:00	0	0:00	0:00
IP32	Vor d. Heide 4, 06779 Raguhn-Jeßnitz	0:00	0	0:00	0:00
IP33	Am Trappenberg 2, 06779 Raguhn-Jeßnitz	0:00	0	0:00	0:00
IP34	Kleinleipziger Str. 7, 06779 Raguhn-Jeßnitz	0:00	0	0:00	0:00
IP35	Kleinleipziger Str. 3, 06779 Raguhn-Jeßnitz	3:10	24	0:10	0:17
IP36	Thurländer Lindenstrasse 10, 06779 Raguhn-Jeßnitz	10:24	70	0:17	1:35
IP37	Thurländer Lindenstrasse 8a, 06779 Raguhn-Jeßnitz	10:12	79	0:11	1:47
IP38	Thurländer Lindenstrasse 3, 06779 Raguhn-Jeßnitz	11:23	79	0:12	2:21
IP39	Thurländer Dorfstraße 24A, 06779 Raguhn-Jeßnitz	15:52	77	0:25	1:55
IP40	Thurländer Dorfstraße 21, 06779 Raguhn-Jeßnitz	23:02	118	0:27	3:17
IP41	Thurländer Dorfstraße 19, 06779 Raguhn-Jeßnitz	33:19	149	0:31	4:41
IP42	Thurländer Dorfstraße 17, 06779 Raguhn-Jeßnitz	32:42	137	0:28	4:48
IP43	Thurländer Dorfstraße 12, 06779 Raguhn-Jeßnitz	24:54	142	0:18	4:42
IP44	Am Dorfe 1, 06779 Raguhn-Jeßnitz	51:30	189	0:36	8:09

Gesamtdauer Beschattung an Rezeptoren pro WEA

Nr.	Name	Maximal	Erwartet
		[h/a]	[h/a]
WEA06	ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (206)	19:14	4:57
WEA07	ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (207)	3:59	0:30
WEA08	ENERCON E-66/20.70 2000 70.0 !-! NH: 93,8 m (Ges:128,8 m) (208)	0:00	0:00
WEA09	ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (209)	3:55	1:04
WEA10	ENERCON E-82 E2 2300 82.0 !O! NH: 85,0 m (Ges:126,0 m) (210)	11:07	1:20
WEA11	ENERCON E-66/20.70 2000 70.0 !-! NH: 114,1 m (Ges:149,1 m) (211)	10:22	0:57
WEA12	ENERCON E-70 E4 2000 71.0 !O! NH: 114,1 m (Ges:149,6 m) (212)	37:15	3:38
WEA13	ENERCON E-70 E4 2000 71.0 !O! NH: 85,0 m (Ges:120,5 m) (213)	78:42	8:03
WEA14	ENERCON E-70 E4 2000 71.0 !O! NH: 98,8 m (Ges:134,3 m) (214)	33:13	6:23
WEA15	ENERCON E-70 E4 2000 71.0 !O! NH: 98,2 m (Ges:133,7 m) (215)	29:40	7:29
WEA16	ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (216)	40:40	11:08
WEA17	ENERCON E-70 E4 2000 71.0 !O! NH: 100,0 m (Ges:135,5 m) (217)	3:22	0:20
WEA18	ENERCON E-70 E4 2000 71.0 !O! NH: 98,0 m (Ges:133,5 m) (218)	0:00	0:00
WEA19	ENERCON E-66/20.70 2000 70.0 !-! NH: 114,1 m (Ges:149,1 m) (219)	23:49	2:45
WEA20	ENERCON E-66/20.70 2000 70.0 !-! NH: 114,1 m (Ges:149,1 m) (220)	12:47	1:30
WEA21	ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (221)	34:25	5:30
WEA22	ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (222)	34:51	7:22

(Fortsetzung nächste Seite)...

SHADOW - Hauptergebnis

Berechnung: SW25034 Salzfurtkapelle Vorbelastung

...(Fortsetzung von vorheriger Seite)

Nr.	Name	Maximal [h/a]	Erwartet [h/a]
WEA23	ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (223)	24:44	6:22
WEA24	ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (224)	23:20	4:53
WEA25	ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (225)	10:55	1:36
WEA26	ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (226)	37:13	5:08
WEA27	GE WIND ENERGY GE 1.5sl 1500 77.0 !O! NH: 96,0 m (Ges:134,5 m) (227)	0:00	0:00
WEA28	GE WIND ENERGY GE 1.5sl 1500 77.0 !O! NH: 96,0 m (Ges:134,5 m) (228)	0:00	0:00
WEA29	GE WIND ENERGY GE 1.5sl 1500 77.0 !O! NH: 96,0 m (Ges:134,5 m) (229)	0:00	0:00
WEA30	GE WIND ENERGY GE 1.5sl 1500 77.0 !O! NH: 96,0 m (Ges:134,5 m) (230)	0:00	0:00
WEA31	GE WIND ENERGY GE 1.5sl 1500 77.0 !O! NH: 96,0 m (Ges:134,5 m) (231)	0:00	0:00
WEA32	ENERCON E-70 E4 2,3 MW 2300 71.0 !O! NH: 114,0 m (Ges:149,5 m) (232)	0:00	0:00
WEA33	DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (233)	28:51	8:28
WEA34	DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (234)	3:19	0:25
WEA35	DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (235)	30:36	8:47
WEA36	DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (236)	12:35	2:19
WEA37	DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (237)	11:01	3:07

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung **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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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	04:58	05:36	06:26	07:14	07:08	07:57
	16:14	17:03	17:54	19:47	20:37	21:21	21:33	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	17:55	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	05:35	04:56	05:01	05:41	06:30	07:19	07:13	08:01
	16:17	17:08	17:59	19:52	20:42	21:24	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	21:31	20:52	19:47	18:38	16:35	16:03
8	08:17	07:41	06:44	06:33	05:32	04:55	05:03	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	18:35	16:34	16:02
9	08:16	07:39	06:41	06:31	05:30	04:55	05:04	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	05:29	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	21:29	20:46	19:40	18:31	16:30	16:02
11	08:15	07:35	06:37	06:26	05:27	04:54	05:06	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
	16:25	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
	16:28	17:23	18:13	20:06	20:55	21:31	21:25	20:38	19:31	18:22	16:24	16:02
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
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	16:32	17:27	18:16	20:09	20:58	21:32	21:23	20:34	19:26	18:18	16:21	16:02
17	08:10	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	20:59	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	05:14	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	08:09	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	18:12	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
	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	08:06	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	21:33	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	04:53	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	16:05
26	08:00	07:05	06:03	05:55	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	20:13	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	07:49	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	21:15	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		19:39	20:31	21:16	21:34	21:07	20:07	18:56	16:51	16:07	16:09
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	16:50	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	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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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	06:25 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 21:22	04:59 21:32	05:38 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 21:23	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 20:51	06:32 19:47	07:21 18:38	07:15 16:35	08:02 16:03
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	05:03 21:30	05:44 20:50	06:33 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	05:03 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 18:09	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 20:05	05:22 20:55	04:53 21:31	05:09 21:25	05:53 20:38	06:43 19:31	07:32 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	08:09 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 18:11	07:36 16:18	08:14 16:02
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 16:40	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	05:54 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	08:17 16:06
27	07:59 16:50	07:03 17:47	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 19:01	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 19:38	05:49 20:31	05:03 21:16	04:56 21:34	05:29 21:06	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 21:33	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)

SW25034 Salzfurtkapelle

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



Berechnung: SW25034 Salzfurtpkapelle Vorbelastung **Schattenrezeptor:** IP03 - Siebenhausener Str. 8, 06766 Bitterfeld-Wolfen

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
---	-----	-----	---	-----	-----	---	-----	-----	---	-----	-----	-------

378 352 573 577 403 485 1.015 1.027 1.396 804 662 639 8.311

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	
	16:11	16:59	17:50	19:43	20:34			21:19	11	20:29 (WEA35)	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		05:34	06:24	07:12	07:06	07:56	
	16:13	17:01	17:52	19:45	20:36			21:20	10	20:29 (WEA35)	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	07:07	07:57	
	16:14	17:03	17:54	19:47	20:37			21:21	8	20:39 (WEA35)	21:32	20:58	19:56	18:47	16:42	16:04	
4	08:18	07:47	06:52	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			21:22	7	20:38 (WEA35)	21:32	20:57	19:53	18:44	16:40	16:04	
5	08:18	07:45	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	20:40			21:23	5	20:33 (WEA35)	21:32	20:55	19:51	18:42	16:38	16:03	
6	08:17	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			21:24	2	20:34 (WEA35)	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	08:02	
	16:18	17:10	18:01	19:54	20:44			21:25		21:30	4	20:44 (WEA35)	20:51	19:47	18:38	16:35	16:03
8	08:16	07:40	06:44	06:33	05:32			04:55		05:02		05:44	06:33	07:22	07:16	08:04	
	16:20	17:12	18:02	19:55	20:45			21:26		21:30	6	20:45 (WEA35)	20:50	19:44	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	8	20:46 (WEA35)	20:48	19:42	18:33	16:32	16:02
10	08:15	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		21:28	9	20:47 (WEA35)	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		05:48	06:38	07:27	07:22	08:07	
	16:24	17:17	18:08	20:00	20:50			21:29		21:28	10	20:48 (WEA35)	20:44	19:37	18:29	16:29	16:02
12	08:14	07:33	06:35	06:24	05:25			04:53		05:06		05:50	06:40	07:29	07:23	08:08	
	16:25	17:19	18:09	20:02	20:52			21:29		21:27	12	20:49 (WEA35)	20:42	19:35	18:26	16:27	16:01
13	08:14	07:31	06:32	06:22	05:23			04:53		05:03		05:41	06:31	07:20	07:14	08:01	
	16:27	17:21	18:11	20:04	20:53			21:30		21:26	12	20:49 (WEA35)	20:40	19:33	18:24	16:26	16:01
14	08:13	07:29	06:30	06:20	05:22			04:53		05:09		05:53	06:43	07:32	07:27	08:10	
	16:28	17:23	18:13	20:05	20:55			21:30		21:25	12	20:49 (WEA35)	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	20:56			21:31		21:24	13	20:50 (WEA35)	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	07:30	08:12	
	16:31	17:26	18:16	20:09	20:58			21:32		21:23	14	20:50 (WEA35)	20:34	19:26	18:18	16:21	16:02
17	08:10	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	20:10	20:59			21:32		21:22	14	20:50 (WEA35)	20:32	19:24	18:16	16:20	16:02
18	08:09	07:22	06:21	06:11	05:16			04:53		05:13		06:00	06:49	07:39	07:34	08:13	
	16:35	17:30	18:20	20:12	21:01			21:32		21:21	13	20:49 (WEA35)	20:30	19:21	18:13	16:19	16:02
19	08:08	07:20	06:19	06:09	05:14		20:30 (WEA35)	04:53		05:15		06:01	06:51	07:41	07:35	08:14	
	16:36	17:32	18:21	20:14	21:02	2	20:32 (WEA35)	05:13		05:15	12	20:48 (WEA35)	20:28	19:11	18:11	16:17	16:01
20	08:07	07:18	06:16	06:07	05:13		20:29 (WEA35)	04:53		05:16		06:03	06:53	07:43	07:37	08:15	
	16:38	17:34	18:23	20:16	21:04	4	20:33 (WEA35)	21:33		21:19	11	20:48 (WEA35)	20:26	19:17	18:09	16:16	16:03
21	08:06	07:16	06:14	06:05	05:12		20:28 (WEA35)	04:53		05:17		06:04	06:54	07:44	07:39	08:15	
	16:39	17:36	18:25	20:17	21:05	7	20:35 (WEA35)	21:33		21:18	9	20:46 (WEA35)	20:24	19:14	18:07	16:15	16:03
22	08:05	07:14	06:12	06:03	05:10		20:27 (WEA35)	04:53		05:19		06:06	06:56	07:46	07:40	08:16	
	16:41	17:37	18:27	20:19	21:07	8	20:35 (WEA35)	21:34		21:16	7	20:45 (WEA35)	20:22	19:12	18:05	16:14	16:04
23	08:04	07:12	06:09	06:01	05:09		20:27 (WEA35)	04:53		05:20		06:08	06:58	07:48	07:42	08:16	
	16:43	17:39	18:28	20:21	21:08	10	20:37 (WEA35)	21:34		21:15	6	20:44 (WEA35)	20:20	19:10	18:03	16:13	16:04
24	08:03	07:10	06:07	05:58	05:08		20:27 (WEA35)	04:53		05:21		06:09	06:59	07:50	07:44	08:17	
	16:45	17:41	18:30	20:22	21:09	11	20:38 (WEA35)	21:34		21:14	3	20:43 (WEA35)	20:18	19:07	18:01	16:12	16:05
25	08:02	07:07	06:05	05:56	05:07		20:27 (WEA35)	04:54		05:23		06:11	07:01	06:51	07:45	08:17	
	16:46	17:43	18:33	20:24	21:11	12	20:39 (WEA35)	21:34		21:12	1	20:42 (WEA35)	20:16	19:05	16:59	16:11	16:05
26	08:00	07:05	06:03	05:54	05:06		20:27 (WEA35)	04:54		05:24		06:12	07:02	06:53	07:47	08:17	
	16:48	17:45	18:35	20:26	21:12	13	20:40 (WEA35)	21:12		21:11		06:01	06:51	07:41	07:35	08:17	
27	07:59	07:03	06:00	05:52	05:05		20:27 (WEA35)	04:55		05:26		06:14	07:04	06:55	07:48	08:18	
	16:50	17:46	18:35	20:27	21:13	13	20:40 (WEA35)	21:34		21:09		20:11	19:00	16:55	16:09	16:07	
28	07:58	07:01	05:58	05:50	05:04		20:27 (WEA35)	04:55		05:27		06:16	07:06	06:57	07:50	08:18	
	16:52	17:48	18:37	20:29	21:14	13	20:40 (WEA35)	21:34		21:08		20:09	18:58	16:53	16:08	16:07	
29	07:56		06:56	05:48	05:03		20:27 (WEA35)	04:56		05:28		06:17	07:07	06:59	07:51	08:18	
	16:53		19:38	20:31	21:16	13	20:40 (WEA35)	21:34		21:06		20:07	18:56	16:51	16:07	16:08	
30	07:55		06:53	05:46	05:02		20:28 (WEA35)	04:56		05:30		06:19	07:09	07:00	07:53	08:18	
	16:55		19:40	20:32	21:17	13	20:41 (WEA35)	21:33		21:05		20:05	18:54	16:49	16:06	16:09	
31	07:53		06:51		05:01		20:29 (WEA35)			05:31		06:21		07:02		08:18	
	16:57		19:42		21:18	11	20:40 (WEA35)			21:03		20:02		16:47		16:10	
Sonnenscheinstunden	260	278	367	416	484			497		501		453	381	332	267	245	
astr.max.mögl.Beschattung						130		43		176							
Red.Sonnenscheinwahrsch.						0,48		0,47									
Reduktion Betriebsdauer						0,95		0,95		0,95							
Reduktion Windrichtung						0,59		0,59		0,59							
Gesamte Reduktion						0,27		0,25		0,26							
Met.wahrsch.Beschattung						35		11		46							

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

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	
1	08:18	07:52	06:59	06:49	05:45	06:09 (WEA37)	05:00
	16:12	16:59	17:50	19:44	20:34	06:11 (WEA37)	21:19
2	08:18	07:50	06:57	06:47	05:43	06:07 (WEA37)	04:59
	16:13	17:01	17:52	19:45	20:36	06:13 (WEA37)	21:20
3	08:18	07:49	06:55	06:44	05:41	06:05 (WEA37)	04:58
	16:14	17:03	17:54	19:47	20:37	06:14 (WEA37)	21:22
4	08:18	07:47	06:53	06:42	05:39	06:04 (WEA37)	04:58
	16:15	17:04	17:55	19:49	20:39	06:15 (WEA37)	21:23
5	08:18	07:46	06:50	06:40	05:37	06:02 (WEA37)	04:57
	16:16	17:06	17:57	19:50	20:41	06:15 (WEA37)	21:24
6	08:17	07:44	06:48	06:38	05:35	06:02 (WEA37)	04:56
	16:17	17:08	17:59	19:52	20:42	06:15 (WEA37)	21:25
7	08:17	07:42	06:46	06:35	05:34	06:03 (WEA37)	04:56
	16:19	17:10	18:01	19:54	20:44	06:15 (WEA37)	21:25
8	08:17	07:41	06:44	06:33	05:32	06:02 (WEA37)	04:55
	16:20	17:12	18:03	19:55	20:45	06:15 (WEA37)	21:26
9	08:16	07:39	06:41	06:31	05:30	06:03 (WEA37)	04:55
	16:21	17:14	18:04	19:57	20:47	06:14 (WEA37)	21:27
10	08:16	07:37	06:39	06:29	05:28	06:04 (WEA37)	04:54
	16:23	17:16	18:06	19:59	20:49	06:13 (WEA37)	21:28
11	08:15	07:35	06:37	06:26	05:27	06:05 (WEA37)	04:54
	16:24	17:17	18:08	20:00	20:50	06:11 (WEA37)	21:29
12	08:14	07:33	06:35	06:24	05:25		04:54
	16:25	17:19	18:10	20:02	20:52		21:29
13	08:14	07:32	06:32	06:22	05:24	05:53 (WEA35)	04:53
	16:27	17:21	18:11	20:04	20:53	7	06:00 (WEA35)
14	08:13	07:30	06:30	06:20	05:22		21:30
	16:28	17:23	18:13	20:06	20:55	10	05:52 (WEA35)
15	08:12	07:28	06:28	06:18	05:20		04:53
	16:30	17:25	18:15	20:07	20:56	13	06:02 (WEA35)
16	08:11	07:26	06:26	06:15	05:19		21:31
	16:31	17:27	18:16	20:09	20:58	15	05:49 (WEA35)
17	08:10	07:24	06:23	06:13	05:17		04:53
	16:33	17:28	18:18	20:11	20:59	16	06:04 (WEA35)
18	08:10	07:22	06:21	06:11	05:16		21:32
	16:35	17:30	18:20	20:12	21:01	17	05:48 (WEA35)
19	08:09	07:20	06:19	06:09	05:15		04:53
	16:36	17:32	18:22	20:14	21:02	17	06:05 (WEA35)
20	08:08	07:18	06:17	06:07	05:13		21:33
	16:38	17:34	18:23	20:16	21:04	18	05:48 (WEA35)
21	08:06	07:16	06:14	06:05	05:12		04:53
	16:40	17:36	18:25	20:17	21:05	18	06:06 (WEA35)
22	08:05	07:14	06:12	06:03	05:11		21:33
	16:41	17:38	18:27	20:19	21:07	17	05:49 (WEA35)
23	08:04	07:12	06:10	06:01	05:09		04:53
	16:43	17:39	18:28	20:21	21:08	23	06:06 (WEA35)
24	08:03	07:10	06:07	05:59	05:08		21:34
	16:45	17:41	18:30	20:22	21:09	27	05:48 (WEA35)
25	08:02	07:08	06:05	05:57	05:07		04:54
	16:46	17:43	18:32	20:24	21:11	29	05:49 (WEA35)
26	08:00	07:05	06:03	05:55	05:06		21:34
	16:48	17:45	18:33	20:26	21:12	31	05:49 (WEA35)
27	07:59	07:03	06:00	05:53	05:05		04:54
	16:50	17:47	18:35	20:27	21:13	33	05:51 (WEA33)
28	07:58	07:01	05:58	05:51	05:04		21:34
	16:52	17:48	18:37	20:29	21:15	35	05:48 (WEA33)
29	07:56		06:56	05:49	05:03		04:55
	16:54		19:39	20:31	21:16	36	05:49 (WEA33)
30	07:55		06:54	05:47	05:02		21:34
	16:55		19:40	20:32	21:17	38	05:52 (WEA33)
31	07:53		06:51		05:01		21:34
	16:57		19:42		21:18	39	05:48 (WEA33)
Sonnenscheinstunden	260	278	367	416	484		497
astr.max.mögl.Beschattung					544		1184
Red.Sonnenscheinwahrsch.					0,48		0,45
Reduktion Betriebsdauer					0,95		0,95
Reduktion Windrichtung					0,65		0,64
Gesamte Reduktion					0,29		0,28
Met.wahrsch.Beschattung					160		328

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli		August		September		Oktober	November	Dezember
1	04:57	05:52 (WEA33)	05:33		06:17 (WEA37)	06:22	07:11	07:04	07:55
	21:33	40 20:40 (WEA06)	21:02	4	06:21 (WEA37)	20:00	18:51	16:46	16:06
2	04:58	05:52 (WEA33)	05:35		06:15 (WEA37)	06:24	07:12	07:06	07:56
	21:33	42 20:41 (WEA06)	21:00	7	06:22 (WEA37)	19:58	18:49	16:44	16:05
3	04:58	05:53 (WEA33)	05:36		06:14 (WEA37)	06:25	07:14	07:08	07:57
	21:33	40 20:41 (WEA06)	20:59	10	06:24 (WEA37)	19:56	18:47	16:42	16:05
4	04:59	05:53 (WEA33)	05:38		06:13 (WEA37)	06:27	07:16	07:09	07:59
	21:32	41 20:42 (WEA06)	20:57	11	06:24 (WEA37)	19:54	18:45	16:40	16:04
5	05:00	05:53 (WEA33)	05:39		06:12 (WEA37)	06:29	07:17	07:11	08:00
	21:32	41 20:41 (WEA06)	20:55	12	06:24 (WEA37)	19:51	18:42	16:39	16:04
6	05:01	05:53 (WEA33)	05:41		06:12 (WEA37)	06:30	07:19	07:13	08:01
	21:31	42 20:42 (WEA06)	20:53	13	06:25 (WEA37)	19:49	18:40	16:37	16:03
7	05:02	05:54 (WEA33)	05:42		06:11 (WEA37)	06:32	07:21	07:15	08:03
	21:31	40 20:42 (WEA06)	20:52	13	06:24 (WEA37)	19:47	18:38	16:35	16:03
8	05:03	05:54 (WEA33)	05:44		06:12 (WEA37)	06:34	07:22	07:16	08:04
	21:30	41 20:43 (WEA06)	20:50	13	06:25 (WEA37)	19:45	18:35	16:34	16:02
9	05:03	05:55 (WEA33)	05:45		06:13 (WEA37)	06:35	07:24	07:18	08:05
	21:29	41 20:43 (WEA06)	20:48	11	06:24 (WEA37)	19:42	18:33	16:32	16:02
10	05:04	05:55 (WEA33)	05:47		06:15 (WEA37)	06:37	07:26	07:20	08:06
	21:29	41 20:43 (WEA06)	20:46	8	06:23 (WEA37)	19:40	18:31	16:30	16:02
11	05:05	05:56 (WEA33)	05:49		06:16 (WEA37)	06:38	07:27	07:22	08:07
	21:28	39 20:43 (WEA06)	20:44	5	06:21 (WEA37)	19:38	18:29	16:29	16:02
12	05:07	05:56 (WEA33)	05:50			06:40	07:29	07:24	08:08
	21:27	39 20:44 (WEA06)	20:42			19:35	18:27	16:27	16:02
13	05:08	05:57 (WEA33)	05:52			06:42	07:31	07:25	08:09
	21:26	38 20:44 (WEA06)	20:40			19:33	18:24	16:26	16:02
14	05:09	05:57 (WEA33)	05:53			06:43	07:33	07:27	08:10
	21:25	37 20:43 (WEA06)	20:38			19:31	18:22	16:24	16:02
15	05:10	05:58 (WEA33)	05:55			06:45	07:34	07:29	08:11
	21:24	35 20:43 (WEA06)	20:36			19:28	18:20	16:23	16:02
16	05:11	05:58 (WEA33)	05:57			06:46	07:36	07:30	08:12
	21:23	34 20:43 (WEA06)	20:34			19:26	18:18	16:21	16:02
17	05:12	05:59 (WEA33)	05:58			06:48	07:38	07:32	08:13
	21:22	31 20:42 (WEA06)	20:32			19:24	18:16	16:20	16:02
18	05:14	05:58 (WEA35)	06:00			06:50	07:39	07:34	08:13
	21:21	31 20:42 (WEA06)	20:30			19:21	18:14	16:19	16:02
19	05:15	05:58 (WEA35)	06:01			06:51	07:41	07:36	08:14
	21:20	28 20:41 (WEA06)	20:28			19:19	18:12	16:18	16:02
20	05:16	05:59 (WEA35)	06:03			06:53	07:43	07:37	08:15
	21:19	25 20:41 (WEA06)	20:26			19:17	18:09	16:16	16:03
21	05:17	05:58 (WEA35)	06:05			06:54	07:45	07:39	08:15
	21:18	21 20:38 (WEA06)	20:24			19:14	18:07	16:15	16:03
22	05:19	05:58 (WEA35)	06:06			06:56	07:46	07:41	08:16
	21:16	18 06:16 (WEA35)	20:22			19:12	18:05	16:14	16:04
23	05:20	05:58 (WEA35)	06:08			06:58	07:48	07:42	08:16
	21:15	17 06:15 (WEA35)	20:20			19:10	18:03	16:13	16:04
24	05:21	05:59 (WEA35)	06:09			06:59	07:50	07:44	08:17
	21:14	17 06:16 (WEA35)	20:18			19:08	18:01	16:12	16:05
25	05:23	05:59 (WEA35)	06:11			07:01	06:52	07:45	08:17
	21:12	16 06:15 (WEA35)	20:16			19:05	16:59	16:11	16:05
26	05:24	05:59 (WEA35)	06:13			07:03	06:53	07:47	08:18
	21:11	16 06:15 (WEA35)	20:14			19:03	16:57	16:10	16:06
27	05:26	06:00 (WEA35)	06:14			07:04	06:55	07:49	08:18
	21:10	15 06:15 (WEA35)	20:11			19:01	16:55	16:09	16:07
28	05:27	06:00 (WEA35)	06:16			07:06	06:57	07:50	08:18
	21:08	14 06:14 (WEA35)	20:09			18:58	16:53	16:08	16:08
29	05:29	06:01 (WEA35)	06:17			07:07	06:59	07:52	08:18
	21:07	12 06:13 (WEA35)	20:07			18:56	16:51	16:07	16:08
30	05:30	06:03 (WEA35)	06:19			07:09	07:00	07:53	08:18
	21:05	9 06:12 (WEA35)	20:05			18:54	16:49	16:07	16:09
31	05:32	06:05 (WEA35)	06:21				07:02		08:18
	21:03	4 06:09 (WEA35)	20:03				16:48		16:10
Sonnenscheinstunden	501		453			381	332	267	245
astr.max.mögl.Beschattung	905		107						
Red.Sonnenscheinwahrsch.	0,47		0,50						
Reduktion Betriebsdauer	0,95		0,95						
Reduktion Windrichtung	0,65		0,65						
Gesamte Reduktion	0,29		0,31						
Met.wahrsch.Beschattung	261		33						

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung **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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	
1	08:18	07:52	06:59	06:49	05:45	05:00	05:39 (WEA35)
	16:12	16:59	17:50	19:44	20:34	21:19	25 20:41 (WEA06)
2	08:18	07:50	06:57	06:47	05:43	04:59	05:40 (WEA35)
	16:13	17:01	17:52	19:45	20:36	21:20	26 20:42 (WEA06)
3	08:18	07:49	06:55	06:44	05:41	04:58	05:40 (WEA35)
	16:14	17:03	17:54	19:47	20:37	21:22	28 20:43 (WEA06)
4	08:18	07:47	06:53	06:42	05:39	04:58	05:40 (WEA35)
	16:15	17:04	17:55	19:49	20:39	21:23	28 20:43 (WEA06)
5	08:18	07:46	06:50	06:40	05:37	04:57	05:41 (WEA35)
	16:16	17:06	17:57	19:50	20:41	21:24	28 20:44 (WEA06)
6	08:17	07:44	06:48	06:38	05:35	06:00 (WEA37)	04:56 05:41 (WEA35)
	16:17	17:08	17:59	19:52	20:42	5 06:05 (WEA37)	28 20:44 (WEA06)
7	08:17	07:42	06:46	06:35	05:34	05:59 (WEA37)	04:56 05:42 (WEA33)
	16:19	17:10	18:01	19:54	20:44	7 06:06 (WEA37)	29 20:45 (WEA06)
8	08:17	07:41	06:44	06:33	05:32	05:57 (WEA37)	04:55 05:41 (WEA33)
	16:20	17:12	18:03	19:55	20:45	10 06:07 (WEA37)	29 20:45 (WEA06)
9	08:16	07:39	06:41	06:31	05:30	05:55 (WEA37)	04:55 05:40 (WEA33)
	16:21	17:14	18:04	19:57	20:47	12 06:07 (WEA37)	31 20:45 (WEA06)
10	08:16	07:37	06:39	06:29	05:28	05:55 (WEA37)	04:54 05:40 (WEA33)
	16:23	17:16	18:06	19:59	20:49	13 06:08 (WEA37)	31 20:46 (WEA06)
11	08:15	07:35	06:37	06:26	05:27	05:54 (WEA37)	04:54 05:39 (WEA33)
	16:24	17:17	18:08	20:00	20:50	13 06:07 (WEA37)	32 20:46 (WEA06)
12	08:14	07:33	06:35	06:24	05:25	05:55 (WEA37)	04:54 05:39 (WEA33)
	16:25	17:19	18:10	20:02	20:52	12 06:07 (WEA37)	32 20:46 (WEA06)
13	08:14	07:32	06:32	06:22	05:24	05:55 (WEA37)	04:53 05:39 (WEA33)
	16:27	17:21	18:11	20:04	20:53	12 06:07 (WEA37)	31 20:46 (WEA06)
14	08:13	07:30	06:30	06:20	05:22	05:55 (WEA37)	04:53 05:39 (WEA33)
	16:28	17:23	18:13	20:06	20:55	11 06:06 (WEA37)	33 20:47 (WEA06)
15	08:12	07:28	06:28	06:18	05:20	05:56 (WEA37)	04:53 05:39 (WEA33)
	16:30	17:25	18:15	20:07	20:56	9 06:05 (WEA37)	33 20:47 (WEA06)
16	08:11	07:26	06:26	06:15	05:19	05:57 (WEA37)	04:53 05:39 (WEA33)
	16:31	17:27	18:16	20:09	20:58	7 06:04 (WEA37)	32 20:47 (WEA06)
17	08:10	07:24	06:23	06:13	05:17	06:00 (WEA37)	04:53 05:39 (WEA33)
	16:33	17:28	18:18	20:11	20:59	2 06:02 (WEA37)	33 20:48 (WEA06)
18	08:10	07:22	06:21	06:11	05:16		04:53 05:39 (WEA33)
	16:35	17:30	18:20	20:12	21:01		33 20:48 (WEA06)
19	08:09	07:20	06:19	06:09	05:15		04:53 05:39 (WEA33)
	16:36	17:32	18:22	20:14	21:02		33 20:48 (WEA06)
20	08:08	07:18	06:17	06:07	05:13		04:53 05:39 (WEA33)
	16:38	17:34	18:23	20:16	21:04	8 05:51 (WEA35)	33 20:48 (WEA06)
21	08:06	07:16	06:14	06:05	05:12	05:42 (WEA35)	04:53 05:39 (WEA33)
	16:40	17:36	18:25	20:17	21:05	10 05:52 (WEA35)	33 20:48 (WEA06)
22	08:05	07:14	06:12	06:03	05:11	05:41 (WEA35)	04:53 05:39 (WEA33)
	16:41	17:38	18:27	20:19	21:07	13 05:54 (WEA35)	33 20:48 (WEA06)
23	08:04	07:12	06:10	06:01	05:09	05:40 (WEA35)	04:53 05:40 (WEA33)
	16:43	17:39	18:28	20:21	21:08	14 05:54 (WEA35)	33 20:49 (WEA06)
24	08:03	07:10	06:07	05:59	05:08	05:39 (WEA35)	04:54 05:40 (WEA33)
	16:45	17:41	18:30	20:22	21:09	15 05:54 (WEA35)	33 20:49 (WEA06)
25	08:02	07:08	06:05	05:57	05:07	05:39 (WEA35)	04:54 05:40 (WEA33)
	16:46	17:43	18:32	20:24	21:11	16 05:55 (WEA35)	33 20:49 (WEA06)
26	08:00	07:05	06:03	05:55	05:06	05:39 (WEA35)	04:54 05:41 (WEA33)
	16:48	17:45	18:33	20:26	21:12	16 05:55 (WEA35)	33 20:50 (WEA06)
27	07:59	07:03	06:00	05:53	05:05	05:39 (WEA35)	04:55 05:41 (WEA33)
	16:50	17:47	18:35	20:27	21:13	16 05:55 (WEA35)	33 20:49 (WEA06)
28	07:58	07:01	05:58	05:51	05:04	05:39 (WEA35)	04:55 05:42 (WEA33)
	16:52	17:48	18:37	20:29	21:15	17 05:56 (WEA35)	33 20:50 (WEA06)
29	07:56		06:56	05:49	05:03	05:39 (WEA35)	04:56 05:42 (WEA33)
	16:54		19:39	20:31	21:16	18 05:57 (WEA35)	32 20:50 (WEA06)
30	07:55		06:54	05:47	05:02	05:39 (WEA35)	04:56 05:43 (WEA33)
	16:55		19:40	20:32	21:17	18 05:57 (WEA35)	31 20:50 (WEA06)
31	07:53		06:51		05:01	05:39 (WEA35)	
	16:57		19:42		21:18	23 20:39 (WEA06)	
Sonnenscheinstunden	260	278	367	416	484	497	
astr.max.mögl.Beschattung					297		935
Red.Sonnenscheinwahrsch.					0,48		0,45
Reduktion Betriebsdauer					0,95		0,95
Reduktion Windrichtung					0,66		0,64
Gesamte Reduktion					0,30		0,28
Met.wahrsch.Beschattung					89		258

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 14:35/4.1.273



SHADOW - Kalender

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

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

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Betriebsdauer je Sektor

N	NNO	ONO	O	OSO	SSO	S	SSW	WSW	W	WNW	NNW	Summe
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Juli			August			September			Oktober			November			Dezember		
1	04:57		05:43 (WEA33)	05:33		06:05 (WEA37)	06:22		07:11		07:04		07:55				
	21:33	32	20:50 (WEA06)	21:02	13	06:18 (WEA37)	20:00		18:51		16:46		16:06				
2	04:58		05:44 (WEA33)	05:35		06:05 (WEA37)	06:24		07:12		07:06		07:56				
	21:33	31	20:50 (WEA06)	21:00	13	06:18 (WEA37)	19:58		18:49		16:44		16:05				
3	04:58		05:45 (WEA33)	05:36		06:05 (WEA37)	06:25		07:14		07:08		07:57				
	21:33	32	20:51 (WEA06)	20:59	13	06:18 (WEA37)	19:56		18:47		16:42		16:05				
4	04:59		05:46 (WEA33)	05:38		06:06 (WEA37)	06:27		07:16		07:09		07:59				
	21:32	30	20:51 (WEA06)	20:57	11	06:17 (WEA37)	19:54		18:45		16:40		16:04				
5	05:00		05:47 (WEA33)	05:39		06:07 (WEA37)	06:29		07:17		07:11		08:00				
	21:32	28	20:50 (WEA06)	20:55	9	06:16 (WEA37)	19:51		18:42		16:39		16:04				
6	05:01		05:47 (WEA35)	05:41		06:09 (WEA37)	06:30		07:19		07:13		08:01				
	21:31	29	20:50 (WEA06)	20:53	7	06:16 (WEA37)	19:49		18:40		16:37		16:03				
7	05:02		05:47 (WEA35)	05:42		06:10 (WEA37)	06:32		07:21		07:15		08:03				
	21:31	28	20:50 (WEA06)	20:52	3	06:13 (WEA37)	19:47		18:38		16:35		16:03				
8	05:03		05:47 (WEA35)	05:44			06:34		07:22		07:16		08:04				
	21:30	29	20:50 (WEA06)	20:50			19:45		18:35		16:34		16:02				
9	05:03		05:48 (WEA35)	05:45			06:35		07:24		07:18		08:05				
	21:29	27	20:50 (WEA06)	20:48			19:42		18:33		16:32		16:02				
10	05:04		05:48 (WEA35)	05:47			06:37		07:26		07:20		08:06				
	21:29	26	20:50 (WEA06)	20:46			19:40		18:31		16:30		16:02				
11	05:05		05:48 (WEA35)	05:49			06:38		07:27		07:22		08:07				
	21:28	25	20:49 (WEA06)	20:44			19:38		18:29		16:29		16:02				
12	05:07		05:48 (WEA35)	05:50			06:40		07:29		07:24		08:08				
	21:27	24	20:49 (WEA06)	20:42			19:35		18:27		16:27		16:02				
13	05:08		05:48 (WEA35)	05:52			06:42		07:31		07:25		08:09				
	21:26	20	20:47 (WEA06)	20:40			19:33		18:24		16:26		16:02				
14	05:09		05:48 (WEA35)	05:53			06:43		07:33		07:27		08:10				
	21:25	17	06:05 (WEA35)	20:38			19:31		18:22		16:24		16:02				
15	05:10		05:48 (WEA35)	05:55			06:45		07:34		07:29		08:11				
	21:24	17	06:05 (WEA35)	20:36			19:28		18:20		16:23		16:02				
16	05:11		05:48 (WEA35)	05:57			06:46		07:36		07:30		08:12				
	21:23	17	06:05 (WEA35)	20:34			19:26		18:18		16:21		16:02				
17	05:12		05:48 (WEA35)	05:58			06:48		07:38		07:32		08:13				
	21:22	17	06:05 (WEA35)	20:32			19:24		18:16		16:20		16:02				
18	05:14		05:48 (WEA35)	06:00			06:50		07:39		07:34		08:13				
	21:21	16	06:04 (WEA35)	20:30			19:21		18:14		16:19		16:02				
19	05:15		05:49 (WEA35)	06:01			06:51		07:41		07:36		08:14				
	21:20	15	06:04 (WEA35)	20:28			19:19		18:12		16:18		16:02				
20	05:16		05:50 (WEA35)	06:03			06:53		07:43		07:37		08:15				
	21:19	14	06:04 (WEA35)	20:26			19:17		18:09		16:16		16:03				
21	05:17		05:51 (WEA35)	06:05			06:54		07:45		07:39		08:15				
	21:18	13	06:04 (WEA35)	20:24			19:14		18:07		16:15		16:03				
22	05:19		05:51 (WEA35)	06:06			06:56		07:46		07:41		08:16				
	21:16	12	06:03 (WEA35)	20:22			19:12		18:05		16:14		16:04				
23	05:20		05:52 (WEA35)	06:08			06:58		07:48		07:42		08:16				
	21:15	9	06:01 (WEA35)	20:20			19:10		18:03		16:13		16:04				
24	05:21		05:55 (WEA35)	06:09			06:59		07:50		07:44		08:17				
	21:14	5	06:00 (WEA35)	20:18			19:08		18:01		16:12		16:05				
25	05:23			06:11			07:01		06:52		07:45		08:17				
	21:12			20:16			19:05		16:59		16:11		16:05				
26	05:24			06:13			07:03		06:53		07:47		08:18				
	21:11			20:14			19:03		16:57		16:10		16:06				
27	05:26		06:09 (WEA37)	06:14			07:04		06:55		07:49		08:18				
	21:10	5	06:14 (WEA37)	20:11			19:01		16:55		16:09		16:07				
28	05:27		06:07 (WEA37)	06:16			07:06		06:57		07:50		08:18				
	21:08	8	06:15 (WEA37)	20:09			18:58		16:53		16:08		16:08				
29	05:29		06:06 (WEA37)	06:17			07:07		06:59		07:52		08:18				
	21:07	10	06:16 (WEA37)	20:07			18:56		16:51		16:07		16:08				
30	05:30		06:06 (WEA37)	06:19			07:09		07:00		07:53		08:18				
	21:05	11	06:17 (WEA37)	20:05			18:54		16:49		16:07		16:09				
31	05:32		06:05 (WEA37)	06:21					07:02				08:18				
	21:03	12	06:17 (WEA37)	20:03					16:48				16:10				
Sonnenscheinstunden	501			453			381		332		267		245				
astr.max.mögl.Beschattung		559		69													
Red.Sonnenscheinwahrsch.		0,47		0,50													
Reduktion Betriebsdauer		0,95		0,95													
Reduktion Windrichtung		0,65		0,66													
Gesamte Reduktion		0,29		0,31													
Met.wahrsch.Beschattung		162		21													

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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	04:59 21:32	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 17:56	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	05:36 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 21:30	05:42 20:51	06:32 19:47	07:21 18:38	07:15 16:35	08:02 16:03
8	08:17 16:20	07:40 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 18:36	07:16 16:34	08:04 16:03
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	05:46 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 21:28	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	06:27 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 16:26	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 16:29	07:30 17:23	06:30 18:13	06:20 20:06	05:22 20:55	04:53 21:30	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	05:21 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 16:22	08:12 16:02
17	08:10 16:33	07:24 17:29	06:23 18:18	06:13 20:11	05:18 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	08:09 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	08:08 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	05:18 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	04:54 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 16:06
26	08:00 16:48	07:05 17:45	06:03 18:33	05:55 20:26	05:06 21:12	04:55 21:34	05:24 21:11	06:13 20:13	07:03 19:03	06:53 18:57	07:47 16:10	08:16 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	07:48 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 21:14	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 21:06	06:18 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	04:57 21:33	05:30 21:05	06:19 20:05	07:09 18:54	07:00 18:50	07:53 16:07	08:18 16:10
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)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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 16:59	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 16:57	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 16:55	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 16:53	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 16:51	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 16:49	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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
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
2	08:18 16:12	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	11 20:41 (WEA36) 20:31 (WEA36)
3	08:18 16:14	07:49 17:02	06:55 17:54	06:44 19:47	05:41 20:37	9 20:40 (WEA36) 20:32 (WEA36)
4	08:18 16:15	07:47 17:04	06:52 17:55	06:42 19:49	05:39 20:39	9 20:41 (WEA36) 20:33 (WEA36)
5	08:18 16:16	07:45 17:06	06:50 17:57	06:40 19:50	05:37 20:40	7 20:40 (WEA36) 20:34 (WEA36)
6	08:17 16:17	07:44 17:08	06:48 17:59	06:37 19:52	05:35 20:42	6 20:40 (WEA36) 20:35 (WEA36)
7	08:17 16:18	07:42 17:10	06:46 18:01	06:35 19:54	05:33 20:44	3 20:38 (WEA36) 21:25
8	08:16 16:20	07:40 17:12	06:44 18:02	06:33 19:55	05:32 20:45	21:26
9	08:16 16:21	07:39 17:14	06:41 18:04	06:31 19:57	19:27 (WEA35) 19:31 (WEA35)	05:30 20:47
10	08:15 16:22	07:37 17:15	06:39 18:06	06:29 19:59	19:26 (WEA35) 19:32 (WEA35)	05:28 20:49
11	08:15 16:24	07:35 17:17	06:37 18:08	06:26 20:00	19:25 (WEA35) 19:34 (WEA35)	05:27 20:50
12	08:14 16:25	07:33 17:19	06:35 18:09	06:24 20:02	19:25 (WEA35) 19:36 (WEA35)	05:25 20:52
13	08:14 16:27	07:31 17:21	06:32 18:11	06:22 20:04	19:25 (WEA35) 19:36 (WEA35)	05:23 20:53
14	08:13 16:28	07:29 17:23	06:30 18:13	06:20 20:05	19:25 (WEA35) 19:34 (WEA35)	05:22 20:55
15	08:12 16:30	07:28 17:25	06:28 18:15	06:17 20:07	19:27 (WEA35) 19:32 (WEA35)	05:20 20:56
16	08:11 16:31	07:26 17:26	06:26 18:16	06:15 20:09	05:19 20:58	21:31 21:32
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
18	08:09 16:34	07:22 17:30	06:21 18:20	06:11 20:12	19:39 (WEA37) 19:45 (WEA37)	05:16 21:01
19	08:08 16:36	07:20 17:32	06:19 18:21	06:09 20:14	19:37 (WEA37) 19:47 (WEA37)	05:14 21:02
20	08:07 16:38	07:18 17:34	06:16 18:23	06:07 20:15	19:36 (WEA37) 19:49 (WEA37)	05:13 21:04
21	08:06 16:39	07:16 17:36	06:14 18:25	06:05 20:17	19:35 (WEA37) 19:49 (WEA37)	05:12 21:05
22	08:05 16:41	07:14 17:37	06:12 18:27	06:03 20:19	19:34 (WEA37) 19:50 (WEA37)	05:10 21:07
23	08:04 16:43	07:12 17:39	06:09 18:28	06:00 20:21	19:34 (WEA37) 19:49 (WEA37)	05:09 21:08
24	08:03 16:45	07:10 17:41	06:07 18:30	05:58 20:22	19:34 (WEA37) 19:49 (WEA37)	05:08 21:09
25	08:02 16:46	07:07 17:43	06:05 18:32	05:56 20:24	19:34 (WEA37) 19:48 (WEA37)	05:07 21:11
26	08:00 16:48	07:05 17:45	06:03 18:33	05:54 20:26	19:35 (WEA37) 19:47 (WEA37)	05:06 21:12
27	07:59 16:50	07:03 17:46	06:00 18:35	05:52 20:27	19:36 (WEA37) 19:46 (WEA37)	05:05 21:13
28	07:58 16:52	07:01 17:48	05:58 18:37	05:50 20:29	19:37 (WEA37) 19:44 (WEA37)	05:03 21:14
29	07:56 16:53		06:56 19:38	05:48 20:31	05:02 21:16	12 20:41 (WEA36) 20:29 (WEA36)
30	07:55 16:55		06:53 19:40	05:46 20:32	05:02 21:17	12 20:41 (WEA36) 20:30 (WEA36)
31	07:53 16:57		06:51 19:42		05:01 21:18	12 20:42 (WEA36) 20:30 (WEA36)
Sonnenscheinstunden	260	278	367	416	484	497
astr.max.mögl.Beschattung				187	115	45
Red.Sonnenscheinwahrsch.				0,42	0,48	0,45
Reduktion Betriebsdauer				0,95	0,95	0,95
Reduktion Windrichtung				0,60	0,59	0,59
Gesamte Reduktion				0,24	0,27	0,25
Met.wahrsch.Beschattung				44	31	11

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung **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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Juli		August		September		Oktober		November		Dezember	
1	04:57 21:33		05:33 21:02		06:22 20:00		19:24 (WEA35) 19:33 (WEA35)	07:11 18:51	07:04 16:46	07:54 16:06	
2	04:57 21:33		05:34 21:00		06:24 19:58	9	19:25 (WEA35) 19:31 (WEA35)	07:12 18:49	07:06 16:44	07:56 16:05	
3	04:58 21:32		05:36 20:58		06:25 19:56	6	19:25 (WEA35) 19:29 (WEA35)	07:14 18:47	07:07 16:42	07:57 16:04	
4	04:59 21:32		05:37 20:57		06:27 19:53	4		07:16 18:44	07:09 16:40	07:59 16:04	
5	05:00 21:32		05:39 20:55		06:29 19:51			07:17 18:42	07:11 16:38	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	08:01 16:03	
7	05:01 21:30	20:41 (WEA36)	05:42 20:51		06:32 19:47			07:21 18:38	07:15 16:35	08:02 16:03	
8	05:02 21:30	4 20:40 (WEA36)	05:44 20:50		06:33 19:44			07:22 18:35	07:16 16:33	08:04 16:02	
9	05:03 21:29	7 20:40 (WEA36)	05:45 20:48		06:35 19:42			07:24 18:33	07:18 16:32	08:05 16:02	
10	05:04 21:28	8 20:48 (WEA36)	05:47 20:46		06:37 19:40			07:26 18:31	07:20 16:30	08:06 16:02	
11	05:05 21:28	10 20:38 (WEA36)	05:48 20:44		06:38 19:37			07:27 18:29	07:22 16:29	08:07 16:02	
12	05:06 21:27	10 20:48 (WEA36)	05:50 20:42		06:40 19:35			07:29 18:26	07:23 16:27	08:08 16:01	
13	05:07 21:26	11 20:50 (WEA36)	05:52 20:40		06:41 19:33			07:31 18:24	07:25 16:26	08:09 16:01	
14	05:09 21:25	12 20:50 (WEA36)	05:53 20:38		06:43 19:31			07:32 18:22	07:27 16:24	08:10 16:01	
15	05:10 21:24	13 20:51 (WEA36)	05:55 20:36	19:44 (WEA37)	06:45 19:28			07:34 18:20	07:29 16:23	08:11 16:01	
16	05:11 21:23	13 20:51 (WEA36)	05:56 20:34	8 19:52 (WEA37)	06:46 19:26			07:36 18:18	07:30 16:21	08:12 16:02	
17	05:12 21:22	13 20:51 (WEA36)	05:58 20:32	11 19:54 (WEA37)	06:48 19:24			07:38 18:16	07:32 16:20	08:13 16:02	
18	05:13 21:21	12 20:50 (WEA36)	06:00 20:30	13 19:54 (WEA37)	06:49 19:21			07:39 18:13	07:34 16:19	08:13 16:02	
19	05:15 21:20	11 20:49 (WEA36)	06:01 20:28	14 19:55 (WEA37)	06:51 19:19			07:41 18:11	07:35 16:17	08:14 16:02	
20	05:16 21:19	10 20:48 (WEA36)	06:03 20:26	15 19:55 (WEA37)	06:53 19:17			07:43 18:09	07:37 16:16	08:15 16:03	
21	05:17 21:18	9 20:48 (WEA36)	06:04 20:24	15 19:55 (WEA37)	06:54 19:14			07:44 18:07	07:39 16:15	08:15 16:03	
22	05:19 21:16	8 20:47 (WEA36)	06:06 20:22	15 19:54 (WEA37)	06:56 19:12			07:46 18:05	07:40 16:14	08:16 16:04	
23	05:20 21:15	6 20:45 (WEA36)	06:08 20:20	14 19:54 (WEA37)	06:58 19:10			07:48 18:03	07:42 16:13	08:16 16:04	
24	05:21 21:14	4 20:44 (WEA36)	06:09 20:18	12 19:52 (WEA37)	06:59 19:07			07:50 18:01	07:44 16:12	08:17 16:05	
25	05:23 21:12	1 20:43 (WEA36)	06:11 20:16	9 19:50 (WEA37)	07:01 19:05			07:51 18:01	07:45 16:11	08:17 16:05	
26	05:24 21:11		06:12 20:13	6 19:48 (WEA37)	07:02 19:03			07:53 18:01	07:47 16:10	08:18 16:06	
27	05:26 21:09		06:14 20:11		07:04 19:00			07:55 18:00	07:48 16:09	08:18 16:07	
28	05:27 21:08		06:16 20:09		07:06 18:58			07:57 18:00	07:50 16:08	08:18 16:07	
29	05:28 21:06		06:17 20:07	7 19:35 (WEA35)	07:07 18:56			07:59 18:00	07:51 16:07	08:18 16:08	
30	05:30 21:05		06:19 20:05	9 19:35 (WEA35)	07:09 18:54			08:00 18:00	08:00 16:06	08:18 16:09	
31	05:31 21:03		06:21 20:02	11 19:36 (WEA35)				08:02 18:02	08:02 16:06	08:18 16:10	
Sonnenscheinstunden		501	453		381			332	267	245	
astr.max.mögl.Beschattung		162	170		19						
Red.Sonnenscheinwahrsch.		0,47	0,50		0,42						
Reduktion Betriebsdauer		0,95	0,95		0,95						
Reduktion Windrichtung		0,59	0,60		0,61						
Gesamte Reduktion		0,26	0,28		0,24						
Met.wahrsch.Beschattung		43	48		5						

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar		Februar		März		April		Mai		Juni	
1	08:18	07:52	15:54 (WEA25)	06:59	16:58 (WEA26)	06:49	05:45	05:00	20:31 (WEA16)		
	16:11	16:59	15:53 (WEA25)	17:50	17:10 (WEA26)	19:43	20:34	21:19	20:42 (WEA16)		
2	08:18	07:50	15:53 (WEA25)	06:57	16:56 (WEA26)	06:47	05:43	04:59	20:31 (WEA16)		
	16:12	17:01	16:10 (WEA25)	17:52	17:11 (WEA26)	19:45	20:36	21:20	20:42 (WEA16)		
3	08:18	07:49	15:53 (WEA25)	06:55	16:55 (WEA26)	06:44	05:41	04:58	20:32 (WEA16)		
	16:14	17:02	16:11 (WEA25)	17:54	17:12 (WEA26)	19:47	20:37	21:21	20:42 (WEA16)		
4	08:18	07:47	15:52 (WEA25)	06:52	16:55 (WEA26)	06:42	05:39	04:57	20:32 (WEA16)		
	16:15	17:04	16:30 (WEA19)	17:55	17:13 (WEA26)	19:49	20:39	21:23	20:42 (WEA16)		
5	08:18	07:46	15:52 (WEA25)	06:50	16:54 (WEA26)	06:40	05:37	04:57	20:33 (WEA16)		
	16:16	17:06	16:32 (WEA19)	17:57	17:31 (WEA20)	19:50	20:41	21:24	20:42 (WEA16)		
6	08:17	07:44	15:52 (WEA25)	06:48	16:54 (WEA26)	06:37	05:35	04:56	20:33 (WEA16)		
	16:17	17:08	16:33 (WEA19)	17:59	17:32 (WEA20)	19:52	20:42	21:24	20:41 (WEA16)		
7	08:17	07:42	15:52 (WEA25)	06:46	16:54 (WEA26)	06:35	05:33	04:55	20:34 (WEA16)		
	16:18	17:10	16:34 (WEA19)	18:01	17:33 (WEA20)	19:54	20:44	21:25	20:41 (WEA16)		
8	08:17	07:40	15:53 (WEA25)	06:44	16:55 (WEA26)	06:33	05:32	04:55	20:35 (WEA16)		
	16:20	17:12	16:35 (WEA19)	18:02	17:33 (WEA20)	19:55	20:45	21:26	20:41 (WEA16)		
9	08:16	07:39	15:53 (WEA25)	06:41	16:55 (WEA26)	06:31	05:30	04:54	20:36 (WEA16)		
	16:21	17:14	16:35 (WEA19)	18:04	17:32 (WEA20)	19:57	20:47	21:27	20:40 (WEA16)		
10	08:16	07:37	15:54 (WEA25)	06:39	16:56 (WEA26)	06:29	05:28	04:54	20:36 (WEA16)		
	16:22	17:15	16:35 (WEA19)	18:06	17:31 (WEA20)	19:59	20:49	21:28	20:36 (WEA16)		
11	08:15	07:35	15:54 (WEA25)	06:37	16:59 (WEA26)	06:26	05:27	04:54	20:36 (WEA16)		
	16:24	17:17	16:35 (WEA19)	18:08	17:28 (WEA20)	20:00	20:50	21:29	20:36 (WEA16)		
12	08:14	07:33	15:56 (WEA25)	06:35		06:24	05:25	04:53			
	16:25	17:19	16:34 (WEA19)	18:09		20:02	20:52	21:29			
13	08:14	07:31	15:57 (WEA25)	06:32		06:22	05:23	04:53			
	16:27	17:21	16:32 (WEA19)	18:11		20:04	20:53	21:30			
14	08:13	07:30	16:01 (WEA25)	06:30		06:20	05:22	04:53			
	16:28	17:23	16:04 (WEA25)	18:13		20:05	20:55	21:31			
15	08:12	07:28		06:28		06:17	05:20	04:53			
	16:30	17:25		18:15		20:07	20:56	21:31			
16	08:11	07:26		06:26		06:15	05:19	04:52			
	16:31	17:26		18:16		20:09	20:58	21:32			
17	08:10	07:24		06:23		06:13	05:17	04:52			
	16:33	17:28		18:18		20:11	20:59	21:32			
18	08:10	07:22		06:21		06:11	05:16	04:52			
	16:34	17:30		18:20		20:12	21:01	21:33			
19	08:09	07:20		06:19		06:09	05:14	04:52			
	16:36	17:32		18:21		20:14	21:02	21:33			
20	08:07	07:18		06:16		06:07	05:13	04:53			
	16:38	17:34		18:23		20:16	21:04	21:33			
21	08:06	07:16		06:14		06:05	05:12	04:53			
	16:39	17:36		18:25		20:17	21:05	21:33			
22	08:05	07:14		06:12		06:03	05:10	04:53			
	16:41	17:37		18:27		20:19	21:07	21:34			
23	08:04	07:12		06:09		06:00	05:09	04:53			
	16:43	17:39		18:28		20:21	21:08	21:34			
24	08:03	07:10		06:07		05:58	05:08	04:53			
	16:45	17:41		18:30		20:22	21:09	21:34			
25	08:02	07:07		06:05		05:56	05:07	04:54			
	16:46	17:43		18:32		20:24	21:11	21:34			
26	08:00	07:05		06:03		05:54	05:06	04:54			
	16:48	17:45		18:33		20:26	21:12	21:34			
27	07:59	07:03		06:00		05:52	05:04	04:55			
	16:50	17:46		18:35		20:27	21:13	21:34			
28	07:58	07:01	17:00 (WEA26)	05:58		05:50	05:03	04:55			
	16:52	17:48	17:07 (WEA26)	05:56		05:48	05:02	21:34			
29	07:56			06:56		05:48	05:02	21:34			
	16:53			19:38		20:31	21:16	21:34			
30	07:55	15:56 (WEA25)		06:53		05:46	05:01	21:33			
	16:55	16:05 (WEA25)		19:40		20:32	21:17	21:33			
31	07:53	15:55 (WEA25)		06:51			05:01	21:33			
	16:57	16:08 (WEA25)		19:42			21:18	21:33			
Sonnenscheinstunden	260	278		367		416	484	498			
astr.max.mögl.Beschattung				271		178	209	79			
Red.Sonnenscheinwahrsch.	0,19	0,26		0,33		0,42	0,48	0,45			
Reduktion Betriebsdauer	0,95	0,95		0,95		0,95	0,95	0,95			
Reduktion Windrichtung	0,68	0,68		0,64		0,62	0,60	0,59			
Gesamte Reduktion	0,12	0,17		0,20		0,24	0,27	0,25			
Met.wahrsch.Beschattung	34	58		54		43	56	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)	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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

		Juli		August		September		Oktober		November		Dezember	
1	04:57		05:33		20:12 (WEA23)	06:22	19:01 (WEA24)	07:11		07:04	15:23 (WEA25)	07:55	15:25 (WEA36)
2	21:33		21:02	13	20:25 (WEA23)	20:00	19:33 (WEA22)	18:51		16:46	32 16:05 (WEA19)	16:06	7 15:32 (WEA36)
3	04:57		05:34		20:13 (WEA23)	06:24	19:01 (WEA24)	07:12		17:39 (WEA26)	07:06	15:23 (WEA25)	07:56
4	21:33		21:00	13	20:26 (WEA23)	19:58	19:17 (WEA24)	18:49	3	17:42 (WEA26)	16:44	32 16:05 (WEA19)	16:05
5	04:58		05:36		20:13 (WEA23)	06:25	19:00 (WEA24)	07:14		17:35 (WEA26)	07:07	15:21 (WEA25)	07:57
6	21:33	4	20:45 (WEA16)	20:58	12	20:25 (WEA23)	19:56	14	19:16 (WEA24)	18:47	16 18:08 (WEA20)	16:42	34 16:04 (WEA19)
7	04:59		05:37		20:14 (WEA23)	06:27	19:01 (WEA24)	07:16		17:33 (WEA26)	07:09	15:21 (WEA25)	07:59
8	21:32	5	20:45 (WEA16)	20:57	11	20:25 (WEA23)	19:53	13	19:16 (WEA24)	18:44	23 18:09 (WEA20)	16:40	34 16:04 (WEA19)
9	05:00		05:39		20:14 (WEA23)	06:29	19:01 (WEA24)	07:17		17:31 (WEA26)	07:11	15:21 (WEA25)	08:00
10	21:32	7	20:47 (WEA16)	20:55	9	20:23 (WEA23)	19:51	12	19:14 (WEA24)	18:42	27 18:09 (WEA20)	16:38	32 16:03 (WEA19)
11	05:01		05:41		20:17 (WEA23)	06:30	19:03 (WEA24)	07:19		17:30 (WEA26)	07:13	15:22 (WEA25)	08:01
12	21:31	7	20:47 (WEA16)	20:53	5	20:22 (WEA23)	19:49	7	19:11 (WEA24)	18:40	29 18:09 (WEA20)	16:37	28 16:02 (WEA19)
13	05:01		05:42			06:32	19:06 (WEA24)	07:21		17:30 (WEA26)	07:15	15:22 (WEA25)	08:03
14	21:31	8	20:48 (WEA16)	20:51		19:47	1 19:07 (WEA24)	18:38	28	18:09 (WEA20)	16:35	24 16:00 (WEA19)	16:02
15	05:02		05:44			06:33		07:22		17:30 (WEA26)	07:16	15:23 (WEA25)	08:04
16	21:30	10	20:49 (WEA16)	20:50		19:44		18:35	27	18:08 (WEA20)	16:33	18 15:41 (WEA25)	16:02
17	05:03		05:45			06:35		07:24		17:29 (WEA26)	07:18	15:24 (WEA25)	08:05
18	21:29	10	20:49 (WEA16)	20:48		19:42		18:33	23	18:05 (WEA20)	16:32	17 15:41 (WEA25)	16:02
19	05:04		05:46		20:38 (WEA16)	05:47		07:26		17:29 (WEA26)	07:20	15:25 (WEA25)	08:06
20	21:29	11	20:49 (WEA16)	20:46		19:40		18:31	18	17:47 (WEA26)	16:30	15 15:40 (WEA25)	16:02
21	05:05		05:48		20:38 (WEA16)	05:48		07:27		17:30 (WEA26)	07:22	15:26 (WEA25)	08:07
22	21:28	11	20:49 (WEA16)	20:44		19:38		18:29	16	17:46 (WEA26)	16:29	13 15:39 (WEA25)	16:01
23	05:06		05:50		20:38 (WEA16)	05:50		07:29		17:31 (WEA26)	07:23	15:28 (WEA25)	08:08
24	21:27	12	20:50 (WEA16)	20:42		19:35		18:26	14	17:45 (WEA26)	16:27	9 15:37 (WEA25)	16:01
25	05:07		05:52		20:39 (WEA16)	05:52		07:31		17:32 (WEA26)	07:25		08:09
26	21:26	12	20:51 (WEA16)	20:40		19:33		18:24	10	17:42 (WEA26)	16:26		16:01
27	05:09		05:53		20:39 (WEA16)	05:53		07:32		17:36 (WEA26)	07:27		08:10
28	21:25	12	20:51 (WEA16)	20:38		19:31	6 18:55 (WEA21)	18:22	2	17:38 (WEA26)	16:24		16:01
29	05:10		05:55		20:40 (WEA16)	05:55		07:34			07:29	15:24 (WEA36)	08:11
30	21:24	11	20:51 (WEA16)	20:36		19:28	9 18:57 (WEA21)	18:20			16:23	5 15:29 (WEA36)	16:01
31	05:11		05:56		20:40 (WEA16)	05:56		07:36			07:30	15:21 (WEA36)	08:12
1	21:23	11	20:51 (WEA16)	20:34		19:26	8 18:56 (WEA21)	18:18			16:21	9 15:30 (WEA36)	16:02
2	05:12		05:58		20:40 (WEA16)	05:58		07:38			07:32	15:20 (WEA36)	08:13
3	21:22	10	20:50 (WEA16)	20:32		19:24	9 18:56 (WEA21)	18:16			16:20	17 15:37 (WEA36)	16:02
4	05:13		06:00		20:40 (WEA16)	06:00		07:39			07:34	15:20 (WEA36)	08:13
5	21:21	9	20:49 (WEA16)	20:30		19:21	8 18:55 (WEA21)	18:13			16:19	19 15:39 (WEA36)	16:02
6	05:15		06:01		20:41 (WEA16)	06:01		07:41			07:36	15:20 (WEA36)	08:14
7	21:20	7	20:48 (WEA16)	20:28		19:19	5 18:52 (WEA21)	18:11			16:17	20 15:40 (WEA36)	16:02
8	05:16		06:03		20:41 (WEA16)	06:03		07:43			07:37	15:20 (WEA36)	08:15
9	21:19	6	20:47 (WEA16)	20:26		19:17		18:09			16:16	21 15:41 (WEA36)	16:03
10	05:17		06:04		20:44 (WEA16)	06:04		07:45			07:39	15:20 (WEA36)	08:15
11	21:18	3	20:47 (WEA16)	20:24		19:14		18:07			16:15	22 15:42 (WEA36)	16:03
12	05:19		06:06			06:56		07:46			07:41	15:19 (WEA36)	08:16
13	21:16		20:22			19:12		18:05			16:14	22 15:41 (WEA36)	16:03
14	05:20		06:08			06:58		07:48			07:42	15:20 (WEA36)	08:16
15	21:15		20:20			19:10		18:03			16:13	20 15:40 (WEA36)	16:04
16	05:21		06:09			06:59		07:50			07:44	15:20 (WEA36)	08:17
17	21:14		20:18			19:07		18:01			16:12	19 15:39 (WEA36)	16:05
18	05:23		20:19 (WEA23)	06:11		07:01		06:52			07:45	15:21 (WEA36)	08:17
19	21:12	1	20:20 (WEA23)	06:16		19:05		16:59			16:11	18 15:39 (WEA36)	16:05
20	05:24		20:16 (WEA23)	06:12		19:34 (WEA22)	07:02	06:53			07:47	15:21 (WEA36)	08:18
21	21:11	7	20:23 (WEA23)	06:13	3	19:37 (WEA22)	19:03	16:57			16:10	16 15:37 (WEA36)	16:06
22	05:25		20:15 (WEA23)	06:14		19:07 (WEA24)	07:04	06:55			07:49	15:22 (WEA36)	08:18
23	21:10	9	20:24 (WEA23)	06:11	14	19:38 (WEA22)	19:00	16:55			16:09	14 15:36 (WEA36)	16:07
24	05:27		20:14 (WEA23)	06:16		19:05 (WEA24)	07:06	06:57			07:50	15:23 (WEA36)	08:18
25	21:08	11	20:25 (WEA23)	20:09	20	19:39 (WEA22)	18:58	16:53	6	15:35 (WEA25)	16:08	12 15:35 (WEA36)	16:07
26	05:28		20:13 (WEA23)	06:17		19:05 (WEA24)	07:07	06:59			15:26 (WEA25)	07:52	15:23 (WEA36)
27	21:07	12	20:25 (WEA23)	20:07	21	19:39 (WEA22)	18:56	16:51	20	16:02 (WEA19)	16:07	11 15:34 (WEA36)	16:08
28	05:30		20:13 (WEA23)	06:19		19:02 (WEA24)	07:09	07:00			15:25 (WEA25)	07:53	15:25 (WEA36)
29	21:05	13	20:26 (WEA23)	20:05	22	19:38 (WEA22)	18:54	16:49	26	16:04 (WEA19)	16:06	8 15:33 (WEA36)	16:09
30	05:31		20:13 (WEA23)	06:21		19:02 (WEA24)		07:02			15:24 (WEA25)		08:18
31	21:03	13	20:26 (WEA23)	20:02	19	19:36 (WEA22)		16:47	29	16:04 (WEA19)			16:10
Sonnenscheinstunden		501		453			381		332		267		245
astr.max.mögl.Beschattung		232		162			123		317		541		13
Red.Sonnenscheinwahrsch.		0,47		0,50			0,42		0,35		0,21		0,16
Reduktion Betriebsdauer		0,95		0,95			0,95		0,95		0,95		0,95
Reduktion Windrichtung		0,59		0,61			0,62		0,65		0,68		0,68
Gesamte Reduktion		0,26		0,29			0,25		0,22		0,13		0,11
Met.wahrsch.Beschattung		61		46			30		69		72		1

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar			Februar			März			April			Mai			Juni		
1	08:18	15:23 (WEA19)	07:52	15:46 (WEA26)	06:59				06:49			05:45			19:47 (WEA16)	05:00	
	16:11	10 15:33 (WEA19)	16:59	15 16:01 (WEA26)	17:50				19:44			20:34	13		20:00 (WEA16)	21:19	
2	08:18	15:23 (WEA19)	07:50	15:47 (WEA26)	06:57			17:09 (WEA24)	06:47			05:43			19:47 (WEA16)	04:59	
	16:12	11 15:34 (WEA19)	17:01	13 16:00 (WEA26)	17:52	4		17:13 (WEA24)	19:45			20:36	12		19:59 (WEA16)	21:20	
3	08:18	15:24 (WEA19)	07:49	15:49 (WEA26)	06:55			17:06 (WEA24)	06:44			05:41			19:47 (WEA16)	04:58	
	16:14	11 15:35 (WEA19)	17:02	11 16:00 (WEA26)	17:54	10		17:16 (WEA24)	19:47			20:37	11		19:58 (WEA16)	21:22	
4	08:18	15:24 (WEA19)	07:47	15:51 (WEA26)	06:52			17:04 (WEA24)	06:42			05:39			19:47 (WEA16)	04:57	
	16:15	12 15:36 (WEA19)	17:04	7 15:58 (WEA26)	17:55	19		17:30 (WEA21)	19:49			20:39	12		20:10 (WEA14)	21:23	
5	08:18	15:24 (WEA19)	07:46		06:50			17:02 (WEA24)	06:40			05:37			19:49 (WEA16)	04:57	
	16:16	12 15:36 (WEA19)	17:06		17:57	24		17:31 (WEA21)	19:50			20:41	13		20:12 (WEA14)	21:24	
6	08:17	15:25 (WEA19)	07:44		06:48			17:02 (WEA24)	06:37			05:35			19:50 (WEA16)	04:56	
	16:17	12 15:37 (WEA19)	17:08		17:59	26		17:32 (WEA21)	19:52			20:42	11		20:13 (WEA14)	21:24	
7	08:17	15:25 (WEA19)	07:42		06:46			17:01 (WEA24)	06:35			05:33			20:05 (WEA14)	04:55	
	16:18	12 15:37 (WEA19)	17:10		18:01	28		17:32 (WEA21)	19:54			20:44	9		20:14 (WEA14)	21:25	
8	08:17	15:26 (WEA19)	07:40		06:44			17:02 (WEA24)	06:33			05:32			20:06 (WEA14)	04:55	
	16:20	12 15:38 (WEA19)	17:12		18:02	26		17:32 (WEA21)	19:55			20:45	11		20:17 (WEA14)	21:26	
9	08:16	15:26 (WEA19)	07:39		06:41			17:01 (WEA24)	06:31		19:21 (WEA23)	05:30			20:06 (WEA14)	04:54	
	16:21	12 15:38 (WEA19)	17:14		18:04	22		17:29 (WEA21)	19:57	3	19:24 (WEA23)	20:47	10		20:16 (WEA14)	21:27	
10	08:16	15:26 (WEA19)	07:37		06:39			17:02 (WEA24)	06:29		19:17 (WEA23)	05:28			20:06 (WEA14)	04:54	
	16:22	12 15:38 (WEA19)	17:15		18:06	15		17:17 (WEA24)	19:59	10	19:27 (WEA23)	20:49	10		20:12 (WEA14)	21:28	
11	08:15	15:26 (WEA19)	07:35		06:37			17:03 (WEA24)	06:26		19:16 (WEA23)	05:27			20:07 (WEA14)	04:54	
	16:24	12 15:38 (WEA19)	17:17		18:08	13		17:16 (WEA24)	20:00	12	19:28 (WEA23)	20:50	8		20:13 (WEA14)	21:29	
12	08:14	15:28 (WEA19)	07:33		06:35			17:04 (WEA24)	06:24		19:15 (WEA23)	05:25			20:07 (WEA14)	04:53	
	16:25	11 15:39 (WEA19)	17:19		18:09	9		17:13 (WEA24)	20:02	14	19:29 (WEA23)	20:52	6		20:13 (WEA14)	21:29	
13	08:14	15:28 (WEA19)	07:31		06:32				06:22		19:15 (WEA23)	05:23				04:53	
	16:27	11 15:39 (WEA19)	17:21		18:11				20:04	14	19:29 (WEA23)	20:53				21:30	
14	08:13	15:29 (WEA19)	07:30		06:30				06:20		19:14 (WEA23)	05:22				04:53	
	16:28	9 15:38 (WEA19)	17:23		18:13				20:05	14	19:28 (WEA23)	20:55				21:31	
15	08:12	15:30 (WEA19)	07:28		06:28				06:17		19:14 (WEA23)	05:20				04:53	
	16:30	8 15:38 (WEA19)	17:25		18:15				20:07	13	19:27 (WEA23)	20:56				21:31	
16	08:11	15:32 (WEA19)	07:26		06:26				06:15		19:14 (WEA23)	05:19				04:52	
	16:31	5 15:37 (WEA19)	17:26		18:16				20:09	13	19:27 (WEA23)	20:58				21:32	
17	08:10		07:24		06:23				06:13		19:15 (WEA23)	05:17				04:52	
	16:33		17:28		18:18				20:11	10	19:25 (WEA23)	20:59				21:32	
18	08:10		07:22		06:21				06:11		19:17 (WEA23)	05:16				04:52	
	16:34		17:30		18:20				20:12	6	19:23 (WEA23)	21:01				21:33	
19	08:09		07:20		06:19				06:09			05:14				04:52	
	16:36		17:32		18:21				20:14			21:02				21:33	
20	08:08		07:18		06:16				06:07			05:13				04:53	
	16:38		17:34		18:23				20:16			21:04				21:33	
21	08:06	15:47 (WEA26)	07:16		06:14			17:59 (WEA22)	06:05			05:12				04:53	
	16:39	8 15:55 (WEA26)	17:36		18:25	1		18:00 (WEA22)	20:17			21:05				21:33	
22	08:05	15:46 (WEA26)	07:14		06:12			17:55 (WEA22)	06:03			05:10				04:53	
	16:41	11 15:57 (WEA26)	17:37		18:27	6		18:01 (WEA22)	20:19			21:07				21:34	
23	08:04	15:46 (WEA26)	07:12		06:09			17:54 (WEA22)	06:00			05:09				04:53	
	16:43	12 15:58 (WEA26)	17:39		18:28	9		18:03 (WEA22)	20:21			21:08				21:34	
24	08:03	15:45 (WEA26)	07:10		06:07			17:54 (WEA22)	05:58			05:08				04:53	
	16:45	14 15:59 (WEA26)	17:41		18:30	10		18:04 (WEA22)	20:22			21:09				21:34	
25	08:02	15:45 (WEA26)	07:07		06:05			17:53 (WEA22)	05:56			05:07				04:54	
	16:46	15 16:00 (WEA26)	17:43		18:32	10		18:03 (WEA22)	20:24			21:11				21:34	
26	08:00	15:44 (WEA26)	07:05		06:03			17:54 (WEA22)	05:54			05:06				04:54	
	16:48	16 16:00 (WEA26)	17:45		18:33	9		18:03 (WEA22)	20:26			21:12				21:34	
27	07:59	15:44 (WEA26)	07:03		06:00			17:55 (WEA22)	05:52		19:50 (WEA16)	05:04				04:55	
	16:50	17 16:01 (WEA26)	17:46		18:35	6		18:01 (WEA22)	20:27	7	19:57 (WEA16)	21:13				21:34	
28	07:58	15:44 (WEA26)	07:01		05:58				05:50		19:48 (WEA16)	05:03				04:55	
	16:52	17 16:01 (WEA26)	17:48		18:37				20:29	10	19:58 (WEA16)	21:15				21:34	
29	07:56	15:45 (WEA26)			06:56				05:48		19:47 (WEA16)	05:02				04:56	
	16:53	17 16:02 (WEA26)			19:38				20:31	12	19:59 (WEA16)	21:16				21:34	
30	07:55	15:45 (WEA26)			06:53				05:46		19:47 (WEA16)	05:01				04:56	
	16:55	16 16:01 (WEA26)			19:40				20:32	13	20:00 (WEA16)	21:17				21:34	
31	07:53	15:46 (WEA26)			06:51							05:01					
	16:57	16 16:02 (WEA26)			19:42							21:18					
Sonnenscheinstunden			260		367				416			484				498	
astr.max.mögl.Beschattung			331		247				151								
Red.Sonnenscheinwahrsch.			0,19		0,33				0,42								
Reduktion Betriebsdauer			0,95		0,95				0,95								
Reduktion Windrichtung			0,68		0,63				0,61								
Gesamte Reduktion			0,12		0,20				0,24								
Met.wahrsch.Beschattung			40		49				36								

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

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

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli		August		September		Oktober		November		Dezember	
1	04:57		05:33		20:17 (WEA14)	06:22	19:15 (WEA23)	07:11	17:45 (WEA24)	07:04	07:55	15:08 (WEA19)
	21:33		21:02	7	20:24 (WEA14)	20:00	12	19:27 (WEA23)	18:51	7	17:52 (WEA24)	16:46
2	04:57		05:34		20:17 (WEA14)	06:24	19:16 (WEA23)	07:12	17:41 (WEA24)	07:06	07:56	15:09 (WEA19)
	21:33		21:00	9	20:26 (WEA14)	19:58	10	19:26 (WEA23)	18:49	12	17:53 (WEA24)	16:44
3	04:58		05:36		20:16 (WEA14)	06:25	19:19 (WEA23)	07:14	17:40 (WEA24)	07:08	07:57	15:09 (WEA19)
	21:33		20:58	10	20:26 (WEA14)	19:56	3	19:22 (WEA23)	18:47	14	17:54 (WEA24)	16:42
4	04:59		05:37		20:16 (WEA14)	06:27		07:16	17:39 (WEA24)	07:09	07:59	15:10 (WEA19)
	21:32		20:57	11	20:27 (WEA14)	19:54		18:44	20	18:06 (WEA21)	16:40	16:04
5	05:00		05:39		20:15 (WEA14)	06:29		07:17	17:38 (WEA24)	07:11	08:00	15:10 (WEA19)
	21:32		20:55	10	20:25 (WEA14)	19:51		18:42	24	18:07 (WEA21)	16:38	16:03
6	05:01		05:41		20:16 (WEA14)	06:30		07:19	17:37 (WEA24)	07:13	08:01	15:11 (WEA19)
	21:31		20:53	8	20:24 (WEA14)	19:49		18:40	28	18:08 (WEA21)	16:37	16:03
7	05:01		05:42		19:59 (WEA16)	06:32		07:21	17:38 (WEA24)	07:15	15:21 (WEA26)	08:03
	21:31		20:52	12	20:22 (WEA14)	19:47		18:38	26	18:08 (WEA21)	16:35	16:02
8	05:02		05:44		19:58 (WEA16)	06:33		07:22	17:38 (WEA24)	07:16	15:19 (WEA26)	08:04
	21:30		20:50	13	20:21 (WEA14)	19:44		18:35	26	18:08 (WEA21)	16:33	16:02
9	05:03		05:45		19:56 (WEA16)	06:35		07:24	17:38 (WEA24)	07:18	15:18 (WEA26)	08:05
	21:29		20:48	12	20:19 (WEA14)	19:42		18:33	21	18:05 (WEA21)	16:32	16:02
10	05:04		05:47		19:56 (WEA16)	06:37		07:26	17:39 (WEA24)	07:20	15:17 (WEA26)	08:06
	21:29		20:46	12	20:08 (WEA16)	19:40		18:31	15	18:03 (WEA21)	16:30	16:02
11	05:05		05:48		19:55 (WEA16)	06:38		07:27	17:41 (WEA24)	07:22	15:17 (WEA26)	08:07
	21:28		20:44	13	20:08 (WEA16)	19:38		18:29	8	17:49 (WEA24)	16:29	16:01
12	05:06		05:50		19:55 (WEA16)	06:40		07:29		07:23	15:33 (WEA26)	08:08
	21:27		20:42	13	20:08 (WEA16)	19:35		18:26		16:27	16	15:33 (WEA26)
13	05:07		05:52		19:55 (WEA16)	06:41		07:31		07:25	15:17 (WEA26)	08:09
	21:26		20:40	12	20:07 (WEA16)	19:33		18:24		16:26	17	15:34 (WEA26)
14	05:09		05:53		19:56 (WEA16)	06:43		07:32		07:27	15:17 (WEA26)	08:10
	21:25		20:38	11	20:07 (WEA16)	19:31		18:22		16:24	17	15:34 (WEA26)
15	05:10		05:55		19:56 (WEA16)	06:45		07:34		07:29	15:17 (WEA26)	08:11
	21:24		20:36	9	20:05 (WEA16)	19:28		18:20		16:23	17	15:34 (WEA26)
16	05:11		05:56		19:58 (WEA16)	06:46		07:36		07:30	15:17 (WEA26)	08:12
	21:23		20:34	6	20:04 (WEA16)	19:26	5	18:44 (WEA22)		16:21	16	15:33 (WEA26)
17	05:12		05:58			06:48		18:42 (WEA22)		07:32	15:18 (WEA26)	08:13
	21:22		20:32			19:24	9	18:51 (WEA22)		16:20	15	15:33 (WEA26)
18	05:13		06:00			06:49		18:42 (WEA22)		07:34	15:19 (WEA26)	08:13
	21:21		20:30			19:21	10	18:52 (WEA22)		16:19	14	15:33 (WEA26)
19	05:15		06:01			06:51		18:40 (WEA22)		07:36	15:20 (WEA26)	08:14
	21:20		20:28			19:19	11	18:51 (WEA22)		16:17	12	15:32 (WEA26)
20	05:16		06:03			06:53		18:41 (WEA22)		07:37	15:21 (WEA26)	08:15
	21:19		20:26			19:17	9	18:50 (WEA22)		16:16	11	15:32 (WEA26)
21	05:17		06:04			06:54		18:40 (WEA22)		07:39	15:23 (WEA26)	08:15
	21:18		20:24			19:14	7	18:47 (WEA22)		16:15	8	15:31 (WEA26)
22	05:19		06:06			06:56		18:42 (WEA22)		07:41		08:16
	21:16		20:22			19:12	3	18:45 (WEA22)		16:14		15:26 (WEA19)
23	05:20		06:08			06:58				07:42		08:16
	21:15		20:20			19:10		18:03		16:13		16:04
24	05:21		06:09			06:59		07:50		07:44		08:17
	21:14		20:18			19:07		18:01		16:12		16:05
25	05:23		06:11		19:19 (WEA23)	07:01		06:52		07:45		08:17
	21:12		20:16	8	19:27 (WEA23)	19:05		16:59		16:11		16:05
26	05:24		06:12		19:18 (WEA23)	07:02		06:53		07:47		08:18
	21:11		20:13	10	19:28 (WEA23)	19:03		16:57		16:10	5	15:15 (WEA19)
27	05:25		06:14		19:16 (WEA23)	07:04		06:55		07:49		15:10 (WEA19)
	21:10		20:11	13	19:29 (WEA23)	19:00		16:55		16:09	7	15:17 (WEA19)
28	05:27		06:16		19:15 (WEA23)	07:06		06:57		07:50		15:09 (WEA19)
	21:08		20:09	14	19:29 (WEA23)	18:58		16:53		16:08	9	15:18 (WEA19)
29	05:28		06:17		19:14 (WEA23)	07:07		06:59		07:52		15:08 (WEA19)
	21:07		20:07	15	19:29 (WEA23)	18:56		16:51		16:07	11	15:19 (WEA19)
30	05:30		06:18		19:15 (WEA23)	07:09		07:10		07:53		15:09 (WEA19)
	21:05		20:05	14	19:29 (WEA23)	18:54		16:49		16:06	11	15:20 (WEA19)
31	05:31	20:20 (WEA14)	06:21		19:15 (WEA23)			07:02				08:18
	21:03	20:23 (WEA14)	20:02	13	19:28 (WEA23)			16:47				16:10
Sonnenscheinstunden	501		453			381		332		267		245
astr.max.mögl.Beschattung	3		255			79		201		248		425
Red.Sonnenscheinwahrsch.	0,47		0,50			0,42		0,35		0,21		0,16
Reduktion Betriebsdauer	0,95		0,95			0,95		0,95		0,95		0,95
Reduktion Windrichtung	0,60		0,60			0,63		0,63		0,68		0,68
Gesamte Reduktion	0,27		0,28			0,25		0,21		0,13		0,11
Met.wahrsch.Beschattung	1		72			20		43		33		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)	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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar			Februar			März			April			Mai			Juni		
1	08:18	15:12 (WEA19)	07:52	06:59	16:49 (WEA24)	06:49	05:45	19:42 (WEA16)	05:00									
	16:11	12 15:24 (WEA19)	16:59	17:50	25 17:24 (WEA21)	19:44	20:34	12 20:06 (WEA14)	21:19									
2	08:18	15:13 (WEA19)	07:50	06:57	16:49 (WEA24)	06:47	05:43	19:42 (WEA16)	04:59									
	16:12	11 15:24 (WEA19)	17:01	17:52	28 17:26 (WEA21)	19:45	20:36	13 20:07 (WEA14)	21:20									
3	08:18	15:14 (WEA19)	07:49	06:55	16:50 (WEA24)	06:44	05:41	19:44 (WEA16)	04:58									
	16:14	11 15:25 (WEA19)	17:02	17:54	27 17:26 (WEA21)	19:47	20:37	12 20:09 (WEA14)	21:22									
4	08:18	15:15 (WEA19)	07:47	06:52	16:50 (WEA24)	06:42	05:39	20:01 (WEA14)	04:57									
	16:15	10 15:25 (WEA19)	17:04	17:55	26 17:26 (WEA21)	19:49	20:39	9 20:10 (WEA14)	21:23									
5	08:18	15:15 (WEA19)	07:46	06:50	16:50 (WEA24)	06:40	05:37	20:01 (WEA14)	04:57									
	16:16	10 15:25 (WEA19)	17:06	17:57	23 17:24 (WEA21)	19:50	20:41	11 20:12 (WEA14)	21:24									
6	08:17	15:17 (WEA19)	07:44	06:48	16:51 (WEA24)	06:37	19:11 (WEA23)	05:35	20:01 (WEA14)	04:56								
	16:17	8 15:25 (WEA19)	17:08	17:59	18 17:23 (WEA21)	19:52	8 19:19 (WEA23)	20:42	11 20:12 (WEA14)	21:24								
7	08:17	15:17 (WEA19)	07:42	06:46	16:54 (WEA24)	06:35	19:09 (WEA23)	05:33	20:01 (WEA14)	04:55								
	16:18	8 15:25 (WEA19)	17:10	18:01	7 17:01 (WEA24)	19:54	12 19:21 (WEA23)	20:44	11 20:12 (WEA14)	21:25								
8	08:17	15:19 (WEA19)	07:40	06:44		06:33	19:08 (WEA23)	05:32	20:02 (WEA14)	04:55								
	16:20	6 15:25 (WEA19)	17:12	18:02		19:55	14 19:22 (WEA23)	20:45	10 20:12 (WEA14)	21:26								
9	08:16	15:20 (WEA19)	07:39	06:41		06:31	19:07 (WEA23)	05:30	20:02 (WEA14)	04:54								
	16:21	3 15:23 (WEA19)	17:14	18:04		19:57	14 19:21 (WEA23)	20:47	8 20:10 (WEA14)	21:27								
10	08:16		07:37	06:39		06:29	19:06 (WEA23)	05:28	20:04 (WEA14)	04:54								
	16:22		17:15	18:06		19:59	15 19:21 (WEA23)	20:49	5 20:09 (WEA14)	21:28								
11	08:15	15:31 (WEA26)	07:35	06:37		06:26	19:07 (WEA23)	05:27		04:54								
	16:24	5 15:36 (WEA26)	17:17	18:08		20:00	14 19:21 (WEA23)	20:50		21:29								
12	08:14	15:30 (WEA26)	07:33	06:35		06:24	19:07 (WEA23)	05:25		04:53								
	16:25	9 15:39 (WEA26)	17:19	18:09		20:02	13 19:20 (WEA23)	20:52		21:29								
13	08:14	15:30 (WEA26)	07:31	06:32		06:22	19:08 (WEA23)	05:23		04:53								
	16:27	10 15:40 (WEA26)	17:21	18:11		20:04	11 19:19 (WEA23)	20:53		21:30								
14	08:13	15:29 (WEA26)	07:30	06:30		06:20	19:08 (WEA23)	05:22		04:53								
	16:28	12 15:41 (WEA26)	17:23	18:13		20:05	9 19:17 (WEA23)	20:55		21:31								
15	08:12	15:29 (WEA26)	07:28	06:28		06:17	19:11 (WEA23)	05:20		04:53								
	16:30	13 15:42 (WEA26)	17:25	18:15		20:07	2 19:13 (WEA23)	20:56		21:31								
16	08:11	15:29 (WEA26)	07:26	06:26		06:15		05:19		04:52								
	16:31	14 15:43 (WEA26)	17:26	18:16		20:09		20:58		21:32								
17	08:10	15:29 (WEA26)	07:24	06:23		06:13		05:17		20:28 (WEA15)	04:52							
	16:33	15 15:44 (WEA26)	17:28	18:18		20:11		20:59	1 20:29 (WEA15)	21:32								
18	08:10	15:29 (WEA26)	07:22	06:21		17:54 (WEA22)	06:11	05:16		20:28 (WEA15)	04:52							
	16:34	16 15:45 (WEA26)	17:30	18:20	1 17:55 (WEA22)	20:12		21:01	2 20:30 (WEA15)	21:33								
19	08:09	15:29 (WEA26)	07:20	06:19		17:52 (WEA22)	06:09	05:14		20:27 (WEA15)	04:52							
	16:36	17 15:46 (WEA26)	17:32	18:21	3 17:55 (WEA22)	20:14		21:02	5 20:32 (WEA15)	21:33								
20	08:08	15:28 (WEA26)	07:18	06:16		17:51 (WEA22)	06:07	05:13		20:27 (WEA15)	04:53							
	16:38	17 15:45 (WEA26)	17:34	18:23	5 17:58 (WEA22)	20:16		21:04	6 20:33 (WEA15)	21:33								
21	08:06	15:29 (WEA26)	07:16	06:14		17:49 (WEA22)	06:05	05:12		20:26 (WEA15)	04:53							
	16:39	17 15:46 (WEA26)	17:36	18:25	8 17:59 (WEA22)	20:17		21:05	8 20:34 (WEA15)	21:33								
22	08:05	15:29 (WEA26)	07:14	06:12		17:47 (WEA22)	06:03	05:10		20:26 (WEA15)	04:53							
	16:41	17 15:46 (WEA26)	17:37	18:27	10 17:58 (WEA22)	20:19		21:07	9 20:35 (WEA15)	21:34								
23	08:04	15:30 (WEA26)	07:12	06:09		17:48 (WEA22)	06:00	05:09		20:27 (WEA15)	04:53							
	16:43	17 15:47 (WEA26)	17:39	18:28	7 17:57 (WEA22)	20:21		21:08	10 20:37 (WEA15)	21:34								
24	08:03	15:30 (WEA26)	07:10	06:07		17:50 (WEA22)	05:58	05:08		20:27 (WEA15)	04:53							
	16:45	16 15:46 (WEA26)	17:41	18:30	6 17:56 (WEA22)	20:22	7 19:45 (WEA16)	21:09	10 20:37 (WEA15)	21:34								
25	08:02	15:31 (WEA26)	07:08	16:54 (WEA24)	06:05	05:56	19:43 (WEA16)	05:07		20:28 (WEA15)	04:54							
	16:46	15 15:46 (WEA26)	17:43	9 17:03 (WEA24)	18:32	20:24	10 19:53 (WEA16)	21:11	9 20:37 (WEA15)	21:34								
26	08:00	15:32 (WEA26)	07:05	16:52 (WEA24)	06:03	05:54	19:42 (WEA16)	05:06		20:28 (WEA15)	04:54							
	16:48	13 15:45 (WEA26)	17:45	13 17:05 (WEA24)	18:33	20:26	11 19:53 (WEA16)	21:12	9 20:37 (WEA15)	21:34								
27	07:59	15:33 (WEA26)	07:03	16:51 (WEA24)	06:00	05:52	19:41 (WEA16)	05:04		20:29 (WEA15)	04:55							
	16:50	12 15:45 (WEA26)	17:46	16 17:07 (WEA24)	18:35	20:27	13 19:54 (WEA16)	21:13	7 20:36 (WEA15)	21:34								
28	07:58	15:35 (WEA26)	07:01	16:50 (WEA24)	05:58	05:50	19:40 (WEA16)	05:03		20:30 (WEA15)	04:55							
	16:52	8 15:43 (WEA26)	17:48	19 17:22 (WEA21)	18:37	20:29	14 19:54 (WEA16)	21:15	5 20:35 (WEA15)	21:34								
29	07:56	15:39 (WEA26)		06:56		05:48	19:40 (WEA16)	05:02		04:56								
	16:53	2 15:41 (WEA26)		19:38		20:31	13 19:53 (WEA16)	21:16		21:34								
30	07:55			06:53		05:46	19:41 (WEA16)	05:01		04:56								
	16:55			19:40		20:32	13 19:54 (WEA16)	21:17		21:34								
31	07:53			06:51				05:01										
	16:57			19:42				21:18										
Sonnenscheinstunden			260	278	367	416	484		498									
astr.max.mögl.Beschattung			324		194	193	183											
Red.Sonnenscheinwahrsch.			0,19	0,26	0,33	0,42	0,48											
Reduktion Betriebsdauer			0,95	0,95	0,95	0,95	0,95											
Reduktion Windrichtung			0,68	0,65	0,64	0,61	0,60											
Gesamte Reduktion			0,12	0,16	0,20	0,24	0,27											
Met.wahrsch.Beschattung			39	9	39	46	49											

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Juli		August		September		Oktober		November		Dezember	
1	04:57	05:33		06:22		19:05 (WEA23)	07:11	07:04		07:55	15:13 (WEA26)
2	21:33	21:02		20:00	15	19:20 (WEA23)	18:51	16:46		16:06	6 15:19 (WEA26)
3	04:57	05:34		06:24		19:05 (WEA23)	07:12	07:06		07:56	
4	21:33	21:00		19:58	15	19:20 (WEA23)	18:49	16:44		16:05	
5	04:58	05:36	20:13 (WEA14)	06:25		19:05 (WEA23)	07:14	07:08		07:57	15:04 (WEA19)
6	21:33	20:58	6 20:19 (WEA14)	19:56	14	19:19 (WEA23)	18:47	16:42		16:04	2 15:06 (WEA19)
7	04:59	05:37	20:12 (WEA14)	06:27		19:05 (WEA23)	07:16	07:09		07:59	15:03 (WEA19)
8	21:32	20:57	9 20:21 (WEA14)	19:54	14	19:19 (WEA23)	18:44	16:40		16:04	6 15:09 (WEA19)
9	05:00	05:39	20:11 (WEA14)	06:29		19:05 (WEA23)	07:17	07:11		08:00	15:02 (WEA19)
10	21:32	20:55	10 20:21 (WEA14)	19:51	12	19:17 (WEA23)	18:42	16:38		16:03	8 15:10 (WEA19)
11	05:01	05:41	20:11 (WEA14)	06:30		19:07 (WEA23)	07:19	07:13		08:01	15:03 (WEA19)
12	21:31	20:53	11 20:22 (WEA14)	19:49	8	19:15 (WEA23)	18:40	16:37		16:03	8 15:11 (WEA19)
13	05:01	05:42	20:10 (WEA14)	06:32			07:21	17:28 (WEA24)	07:15	08:03	15:02 (WEA19)
14	21:31	20:52	12 20:22 (WEA14)	19:47			18:38	10 17:38 (WEA24)	16:35	16:02	10 15:12 (WEA19)
15	05:02	05:44	20:11 (WEA14)	06:33			07:22	17:27 (WEA24)	07:16	08:04	15:02 (WEA19)
16	21:30	20:50	10 20:21 (WEA14)	19:44			18:35	21 18:00 (WEA21)	16:33	16:02	10 15:12 (WEA19)
17	05:03	05:45	20:10 (WEA14)	06:35			07:24	17:25 (WEA24)	07:18	08:05	15:02 (WEA19)
18	21:29	20:48	9 20:19 (WEA14)	19:42			18:33	25 18:00 (WEA21)	16:32	16:02	11 15:13 (WEA19)
19	05:04	05:47	19:53 (WEA16)	06:37			07:26	17:24 (WEA24)	07:20	08:06	15:03 (WEA19)
20	21:29	20:46	13 20:18 (WEA14)	19:40			18:31	27 18:00 (WEA21)	16:30	16:02	11 15:14 (WEA19)
21	05:05	05:48	19:51 (WEA16)	06:38			07:27	17:23 (WEA24)	07:22	08:07	15:03 (WEA19)
22	21:28	20:44	12 20:15 (WEA14)	19:38			18:29	28 18:00 (WEA21)	16:29	16:01	12 15:15 (WEA19)
23	05:06	05:50	19:50 (WEA16)	06:40			07:29	17:23 (WEA24)	07:23	08:08	15:04 (WEA19)
24	21:27	20:42	11 20:01 (WEA16)	19:35			18:26	27 17:59 (WEA21)	16:27	16:01	11 15:15 (WEA19)
25	05:07	05:52	19:49 (WEA16)	06:41			07:31	17:23 (WEA24)	07:25	08:09	15:04 (WEA19)
26	21:26	20:40	12 20:01 (WEA16)	19:33			18:24	22 17:56 (WEA21)	16:26	16:01	12 15:16 (WEA19)
27	05:09	05:53	19:49 (WEA16)	06:43			07:32	17:23 (WEA24)	07:27	08:10	15:04 (WEA19)
28	21:25	20:38	13 20:02 (WEA16)	19:31			18:22	16 17:39 (WEA24)	16:24	9 15:16 (WEA26)	16:01 12 15:16 (WEA19)
29	05:10	05:55	19:48 (WEA16)	06:45			07:34	17:24 (WEA24)	07:29	15:06 (WEA26)	08:11 15:05 (WEA19)
30	21:24	20:44 (WEA15)	13 20:01 (WEA16)	19:28			18:20	14 17:38 (WEA24)	16:23	12 15:18 (WEA26)	16:01 12 15:17 (WEA19)
31	05:11	05:56	19:49 (WEA16)	06:46			07:36	17:25 (WEA24)	07:30	15:05 (WEA26)	08:12 15:04 (WEA19)
1	21:23	20:45 (WEA15)	12 20:01 (WEA16)	19:26			18:18	12 17:37 (WEA24)	16:21	13 15:18 (WEA26)	16:01 13 15:17 (WEA19)
2	05:12	20:38 (WEA15)	05:58	19:48 (WEA16)	06:48		07:38	17:26 (WEA24)	07:32	15:04 (WEA26)	08:13 15:05 (WEA19)
3	21:22	20:46 (WEA15)	20:32	12 20:00 (WEA16)	19:24		18:16	8 17:34 (WEA24)	16:20	15 15:19 (WEA26)	16:02 12 15:17 (WEA19)
4	05:13	20:37 (WEA15)	06:00	19:50 (WEA16)	06:49		07:39		07:34	15:04 (WEA26)	08:13 15:06 (WEA19)
5	21:21	20:46 (WEA15)	20:30	9 19:59 (WEA16)	19:21		18:13		16:19	16 15:20 (WEA26)	16:02 12 15:18 (WEA19)
6	05:15	20:37 (WEA15)	06:01	9 19:51 (WEA16)	06:51		18:36 (WEA22)	07:41	07:36	15:04 (WEA26)	08:14 15:07 (WEA19)
7	21:20	20:47 (WEA15)	20:28	6 19:57 (WEA16)	19:19	4	18:40 (WEA22)	18:11	16:17	17 15:21 (WEA26)	16:02 12 15:19 (WEA19)
8	05:16	20:36 (WEA15)	06:03		06:53		18:35 (WEA22)	07:43	07:37	15:04 (WEA26)	08:15 15:06 (WEA19)
9	21:19	20:47 (WEA15)	20:26		19:17	7	18:43 (WEA22)	18:09	16:16	17 15:21 (WEA26)	16:03 13 15:19 (WEA19)
10	05:17	20:37 (WEA15)	06:04		06:54		18:33 (WEA22)	07:45	07:39	15:05 (WEA26)	08:15 15:07 (WEA19)
11	21:18	20:47 (WEA15)	20:24		19:14	8	18:43 (WEA22)	18:07	16:15	17 15:22 (WEA26)	16:03 13 15:20 (WEA19)
12	05:19	20:37 (WEA15)	06:06		06:56		18:34 (WEA22)	07:46	07:41	15:04 (WEA26)	08:16 15:07 (WEA19)
13	21:16	20:45 (WEA15)	20:22		19:12	7	18:43 (WEA22)	18:05	16:14	17 15:21 (WEA26)	16:03 13 15:20 (WEA19)
14	05:20	20:37 (WEA15)	06:08		06:58		18:35 (WEA22)	07:48	07:42	15:05 (WEA26)	08:16 15:08 (WEA19)
15	21:15	20:44 (WEA15)	20:20		19:10	6	18:43 (WEA22)	18:03	16:13	17 15:22 (WEA26)	16:04 13 15:21 (WEA19)
16	05:21	20:38 (WEA15)	06:09		06:59		18:35 (WEA22)	07:50	07:44	15:06 (WEA26)	08:17 15:09 (WEA19)
17	21:14	20:43 (WEA15)	20:18		19:07	4	18:39 (WEA22)	18:01	16:12	16 15:22 (WEA26)	16:05 12 15:21 (WEA19)
18	05:23	20:38 (WEA15)	06:11		07:01		18:36 (WEA22)	06:52	07:45	15:07 (WEA26)	08:17 15:09 (WEA19)
19	21:12	20:42 (WEA15)	20:16		19:05	2	18:38 (WEA22)	16:59	16:11	15 15:22 (WEA26)	16:05 12 15:21 (WEA19)
20	05:24	20:38 (WEA15)	06:12		07:02			06:53	07:47	15:07 (WEA26)	08:18 15:09 (WEA19)
21	21:11	20:40 (WEA15)	20:13		19:03			16:57	16:10	14 15:21 (WEA26)	16:06 12 15:21 (WEA19)
22	05:25		06:14		07:04			06:55	07:49	15:08 (WEA26)	08:18 15:10 (WEA19)
23	21:10		20:11		19:00			16:55	16:09	14 15:22 (WEA26)	16:07 12 15:22 (WEA19)
24	05:27		06:16	19:13 (WEA23)	07:06			06:57	07:50	15:09 (WEA26)	08:18 15:11 (WEA19)
25	21:08		20:09	3 19:16 (WEA23)	18:58			16:53	16:08	13 15:22 (WEA26)	16:07 12 15:23 (WEA19)
26	05:28		06:17	19:09 (WEA23)	07:07			06:59	07:52	15:10 (WEA26)	08:18 15:11 (WEA19)
27	21:07		20:07	9 19:18 (WEA23)	18:56			16:51	16:07	10 15:20 (WEA26)	16:08 12 15:23 (WEA19)
28	05:30		06:19	19:07 (WEA23)	07:09			07:00	07:53	15:11 (WEA26)	08:18 15:12 (WEA19)
29	21:05		20:05	12 19:19 (WEA23)	18:54			16:49	16:06	9 15:20 (WEA26)	16:09 12 15:24 (WEA19)
30	05:31		06:21	19:07 (WEA23)				07:02			08:18 15:12 (WEA19)
31	21:03		20:02	13 19:20 (WEA23)				16:47			16:10 12 15:24 (WEA19)
Sonnenscheinstunden		501	453	381		332		267		245	
astr. max. mögl. Beschattung		84	217	116		213		244		328	
Red. Sonnenscheinwahrsch.		0,47	0,50	0,42		0,35		0,21		0,16	
Reduktion Betriebsdauer		0,95	0,95	0,95		0,95		0,95		0,95	
Reduktion Windrichtung		0,59	0,60	0,62		0,65		0,68		0,68	
Gesamte Reduktion		0,26	0,28	0,25		0,22		0,13		0,11	
Met. wahrsch. Beschattung		22	61	29		46		32		35	

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar		Februar		März		April		Mai		Juni	
1	08:18	15:01 (WEA26)	07:52	06:59	17:07 (WEA21)	06:49	18:58 (WEA23)	05:45	19:54 (WEA14)	05:00	
	16:11	15:18 (WEA26)	16:59	17:50	6	17:13 (WEA21)	19:44	11	19:09 (WEA23)	20:34	12
2	08:18	15:02 (WEA26)	07:50	06:57		06:47	18:57 (WEA23)	05:43	19:54 (WEA14)	04:59	
	16:12	15:18 (WEA26)	17:01	17:52		19:45	13	19:10 (WEA23)	20:36	12	20:06 (WEA14)
3	08:18	15:03 (WEA26)	07:49	06:55		06:44		18:56 (WEA23)	05:41	19:54 (WEA14)	04:58
	16:14	15:19 (WEA26)	17:02	17:54		19:47	15	19:11 (WEA23)	20:37	11	20:05 (WEA14)
4	08:18	15:03 (WEA26)	07:47	06:52		06:42		18:55 (WEA23)	05:39	19:54 (WEA14)	04:57
	16:15	15:20 (WEA26)	17:04	17:55		19:49	15	19:10 (WEA23)	20:39	11	20:05 (WEA14)
5	08:18	15:03 (WEA26)	07:46	06:50		06:40		18:55 (WEA23)	05:37	19:55 (WEA14)	04:57
	16:16	15:20 (WEA26)	17:06	17:57		19:50	15	19:10 (WEA23)	20:41	10	20:05 (WEA14)
6	08:17	15:04 (WEA26)	07:44	06:48		06:37		18:55 (WEA23)	05:35	19:56 (WEA14)	04:56
	16:17	15:21 (WEA26)	17:08	17:59		19:52	15	19:10 (WEA23)	20:42	7	20:03 (WEA14)
7	08:17	15:04 (WEA26)	07:42	06:46		06:35		18:56 (WEA23)	05:33		04:55
	16:18	15:21 (WEA26)	17:10	18:01		19:54	13	19:09 (WEA23)	20:44		21:25
8	08:17	15:05 (WEA26)	07:40	06:44		06:33		18:57 (WEA23)	05:32		04:55
	16:20	15:22 (WEA26)	17:12	18:02		19:55	11	19:08 (WEA23)	20:45		21:26
9	08:16	15:05 (WEA26)	07:39	06:41		06:31		18:57 (WEA23)	05:30		04:54
	16:21	15:22 (WEA26)	17:14	18:04		19:57	8	19:05 (WEA23)	20:47		21:27
10	08:16	15:05 (WEA26)	07:37	06:39		06:29		19:05 (WEA23)	05:28		04:54
	16:22	15:22 (WEA26)	17:15	18:06		19:59			20:49		21:28
11	08:15	15:06 (WEA26)	07:35	06:37		06:26			05:27		04:54
	16:24	15:22 (WEA26)	17:17	18:08		20:00			20:50		21:29
12	08:14	15:07 (WEA26)	07:33	06:35		06:24			05:25		04:53
	16:25	15:23 (WEA26)	17:19	18:09		20:02			20:52		21:29
13	08:14	15:08 (WEA26)	07:31	06:32		06:22			05:23		04:53
	16:27	15:23 (WEA26)	17:21	18:11		20:04			20:53		21:30
14	08:13	15:08 (WEA26)	07:30	06:30		06:20			05:22		04:53
	16:28	15:23 (WEA26)	17:23	18:13	3	17:47 (WEA22)	20:05		20:55	1	20:25 (WEA15)
15	08:12	15:09 (WEA26)	07:28	06:28		06:17			05:20		20:22 (WEA15)
	16:30	15:22 (WEA26)	17:25	18:15	5	17:46 (WEA22)	20:07		20:56	4	20:26 (WEA15)
16	08:11	15:10 (WEA26)	07:26	06:26		06:15			05:19		20:22 (WEA15)
	16:31	15:22 (WEA26)	17:26	18:16	1	17:43 (WEA22)	20:09		20:58	6	20:28 (WEA15)
17	08:10	15:12 (WEA26)	07:24	06:23		06:13			05:17		20:21 (WEA15)
	16:33	15:21 (WEA26)	17:28	18:18	1	17:42 (WEA22)	20:11		20:59	8	20:29 (WEA15)
18	08:10	15:14 (WEA26)	07:22	06:21		06:11			05:16		20:21 (WEA15)
	16:34	15:20 (WEA26)	17:30	18:20	2	17:41 (WEA22)	20:12		21:01	9	20:30 (WEA15)
19	08:09	15:10 (WEA26)	07:20	06:19		06:09		19:39 (WEA16)	05:14		20:21 (WEA15)
	16:36	15:22 (WEA26)	17:32	18:21	1	17:40 (WEA22)	20:14	2	19:41 (WEA16)	21:02	11
20	08:08	15:11 (WEA26)	07:18	06:16		06:07			05:13		20:21 (WEA15)
	16:38	15:23 (WEA26)	17:34	18:23		06:16	9	19:44 (WEA16)	21:04	12	20:33 (WEA15)
21	08:06	15:12 (WEA26)	07:16	06:14		06:05		19:34 (WEA16)	05:12		20:21 (WEA15)
	16:39	15:24 (WEA26)	17:36	18:25		06:17	11	19:45 (WEA16)	21:05	11	20:32 (WEA15)
22	08:05	15:13 (WEA26)	07:14	06:12		06:03		19:33 (WEA16)	05:10		20:22 (WEA15)
	16:41	15:25 (WEA26)	17:37	18:27		06:19	13	19:46 (WEA16)	21:07	9	20:31 (WEA15)
23	08:04	15:14 (WEA26)	07:12	06:10		06:00		19:32 (WEA16)	05:09		20:22 (WEA15)
	16:43	15:26 (WEA26)	17:39	18:28		06:21	14	19:46 (WEA16)	21:08	9	20:31 (WEA15)
24	08:03	15:15 (WEA26)	07:10	06:07		05:58		19:32 (WEA16)	05:08		20:23 (WEA15)
	16:45	15:27 (WEA26)	17:41	18:30		06:22	14	19:46 (WEA16)	21:09	7	20:30 (WEA15)
25	08:02	15:16 (WEA26)	07:08	06:05		05:56		19:32 (WEA16)	05:07		20:25 (WEA15)
	16:46	15:28 (WEA26)	17:43	18:32		06:24	13	19:45 (WEA16)	21:11	4	20:29 (WEA15)
26	08:00	15:17 (WEA26)	07:05	06:03		05:54		19:32 (WEA16)	05:06		04:54
	16:48	15:29 (WEA26)	17:45	18:33		06:26	13	19:45 (WEA16)	21:12		21:34
27	07:59	15:18 (WEA26)	07:03	06:00		05:52		19:32 (WEA16)	05:04		04:55
	16:50	15:30 (WEA26)	17:46	18:35		06:27	12	19:44 (WEA16)	21:13		21:34
28	07:58	15:19 (WEA26)	07:01	05:58		05:50		19:33 (WEA16)	05:03		04:55
	16:52	15:31 (WEA26)	17:48	18:37		06:29	13	20:01 (WEA14)	21:15		21:34
29	07:56	15:20 (WEA26)	07:00	05:56		05:48		19:36 (WEA16)	05:02		04:56
	16:53	15:32 (WEA26)	17:50	18:39		06:31	10	20:02 (WEA14)	21:16		21:34
30	07:55	15:21 (WEA26)	07:00	05:53		05:46		19:55 (WEA14)	05:01		04:56
	16:55	15:33 (WEA26)	17:51	18:40		06:32	10	20:05 (WEA14)	21:17		21:34
31	07:53	15:22 (WEA26)	07:00	05:51		06:31			05:01		
	16:57	15:34 (WEA26)	17:53	18:42	7	19:01 (WEA23)			21:18		
				367		19:08 (WEA23)			484		498
Sonnenscheinstunden		260	278	367		416			484		498
astr.max.mögl.Beschattung		270	226	26		250			154		
Red.Sonnenscheinwahrsch.		0,19	0,26	0,33		0,42			0,48		
Reduktion Betriebsdauer		0,95	0,95	0,95		0,95			0,95		
Reduktion Windrichtung		0,68	0,66	0,64		0,61			0,60		
Gesamte Reduktion		0,12	0,16	0,20		0,24			0,27		
Met.wahrsch.Beschattung		32	37	5		60			41		

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Jul	August	September	Oktober	November	Dezember
1	04:57	05:33	06:22	07:11	07:04	07:55
2	21:33	21:02	20:00	18:51	16:46	16:06
3	04:57	05:34	06:24	07:12	07:06	07:56
4	21:33	21:00	19:58	18:49	16:44	16:05
5	04:58	05:36	06:25	18:56 (WEA23)	07:14	07:08
6	21:33	20:58	19:56	19:03 (WEA23)	18:47	16:42
7	04:59	05:37	06:27	18:54 (WEA23)	07:16	07:09
8	21:32	20:57	19:54	19:05 (WEA23)	18:44	16:40
9	05:00	05:39	06:29	18:52 (WEA23)	07:17	07:11
10	21:32	20:55	19:51	19:05 (WEA23)	18:42	16:38
11	05:01	05:41	06:30	18:51 (WEA23)	07:19	07:13
12	21:31	20:53	19:49	19:06 (WEA23)	18:40	16:37
13	05:01	05:42	06:32	18:50 (WEA23)	07:21	07:15
14	21:31	20:52	19:47	19:05 (WEA23)	18:38	16:35
15	05:02	05:44	06:33	18:50 (WEA23)	07:22	07:16
16	21:30	20:50	19:44	19:05 (WEA23)	18:35	16:33
17	05:03	05:45	06:35	18:49 (WEA23)	07:24	07:18
18	21:29	20:48	19:42	19:04 (WEA23)	18:33	16:32
19	05:04	05:47	06:37	18:50 (WEA23)	07:26	07:20
20	21:29	20:46	19:40	19:04 (WEA23)	18:31	16:30
21	05:05	05:48	06:38	18:51 (WEA23)	07:27	07:22
22	21:28	20:44	19:38	19:03 (WEA23)	18:29	16:29
23	05:06	05:50	06:40	18:52 (WEA23)	07:29	07:23
24	21:27	20:42	19:35	19:00 (WEA23)	18:26	16:27
25	05:07	05:52	06:41	18:53	17:46 (WEA21)	16:27
26	21:26	20:40	19:33	18:24	17:39 (WEA21)	16:25
27	05:09	05:53	06:43	18:52	17:47 (WEA21)	16:26
28	21:25	20:38	19:31	18:22	17:38 (WEA21)	16:27
29	05:10	05:55	06:45	18:53	17:48 (WEA21)	16:24
30	21:24	20:36	19:28	18:20	17:07 (WEA24)	16:23
31	05:11	05:56	06:46	18:54	17:05 (WEA24)	16:20
32	21:23	20:34	19:26	18:18	17:48 (WEA21)	16:21
33	05:12	05:58	06:48	18:55	17:03 (WEA24)	16:22
34	21:22	20:32	19:24	18:16	17:47 (WEA21)	16:20
35	05:13	06:00	06:49	18:56	17:02 (WEA24)	16:23
36	21:21	20:30	19:21	18:13	17:45 (WEA21)	16:19
37	05:15	20:34 (WEA15)	19:37 (WEA16)	18:14	17:02 (WEA24)	16:36
38	21:20	20:29 (WEA15)	19:19	18:11	17:20 (WEA24)	16:17
39	05:16	20:32 (WEA15)	19:38 (WEA16)	18:12	17:02 (WEA24)	16:37
40	21:19	20:40 (WEA15)	19:17	18:09	17:20 (WEA24)	16:16
41	05:17	20:33 (WEA15)	19:38 (WEA16)	18:10	17:02 (WEA24)	16:39
42	21:18	20:42 (WEA15)	19:14	18:07	17:20 (WEA24)	16:15
43	05:19	20:32 (WEA15)	19:39 (WEA16)	18:11	17:02 (WEA24)	16:41
44	21:16	20:42 (WEA15)	19:12	18:05	17:19 (WEA24)	16:14
45	05:20	20:31 (WEA15)	19:39 (WEA16)	18:12	17:03 (WEA24)	16:42
46	21:15	20:42 (WEA15)	19:10	18:03	17:19 (WEA24)	16:13
47	05:21	20:32 (WEA15)	19:09	18:04	17:02 (WEA24)	16:44
48	21:14	20:43 (WEA15)	19:07	18:01	17:17 (WEA24)	16:12
49	05:23	20:31 (WEA15)	19:05	18:22 (WEA22)	16:04 (WEA24)	16:45
50	21:12	20:42 (WEA15)	19:02	18:23 (WEA22)	16:16 (WEA24)	16:11
51	05:24	20:31 (WEA15)	19:02	18:22 (WEA22)	16:06 (WEA24)	16:47
52	21:11	20:40 (WEA15)	19:03	18:24 (WEA22)	16:13 (WEA24)	16:10
53	05:25	20:32 (WEA15)	19:04	18:20 (WEA22)	16:13 (WEA24)	16:10
54	21:10	20:40 (WEA15)	19:00	18:26 (WEA22)	16:15	16:09
55	05:27	20:32 (WEA15)	19:06	18:21 (WEA22)	16:15	16:09
56	21:08	20:38 (WEA15)	19:09	18:26 (WEA22)	16:16	16:08
57	05:28	20:33 (WEA15)	19:07	18:21 (WEA22)	16:15	16:07
58	21:07	20:36 (WEA15)	19:07	18:26 (WEA22)	16:15	16:07
59	05:30	20:36 (WEA15)	19:09	18:26 (WEA22)	16:15	16:07
60	21:05	20:05	18:54	16:49	16:06	16:09
61	05:31	20:21	18:54	16:49	16:06	16:09
62	21:03	20:02	18:54	16:47	16:06	16:08
63	Sonnenscheinstunden	501	453	381	332	267
64	astr. max. mögl. Beschattung	91	197	137	234	86
65	Red. Sonnenscheinwahrsch.	0,47	0,50	0,42	0,35	0,21
66	Reduktion Betriebsdauer	0,95	0,95	0,95	0,95	0,95
67	Reduktion Windrichtung	0,60	0,60	0,63	0,66	0,68
68	Gesamte Reduktion	0,27	0,28	0,25	0,22	0,13
69	Met. wahrsch. Beschattung	24	55	34	52	11

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung **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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar		Februar		März	April	Mai	Juni
1	08:18	15:07 (WEA14)	07:52	06:59	06:49	05:45	05:00
	16:11	15:23 (WEA14)	16:59	17:50	19:44	20:34	21:19
2	08:18	15:07 (WEA14)	07:50	06:57	06:47	05:43	04:59
	16:12	15:23 (WEA14)	17:01	17:52	19:45	20:36	21:21
3	08:18	15:07 (WEA14)	07:49	16:14 (WEA15)	06:55	06:44	05:41
	16:14	15:24 (WEA14)	17:02	16:18 (WEA15)	17:54	19:47	20:37
4	08:18	15:08 (WEA14)	07:47	16:10 (WEA15)	06:53	06:42	05:39
	16:15	15:25 (WEA14)	17:04	16:21 (WEA15)	17:55	19:49	20:39
5	08:18	15:07 (WEA14)	07:46	16:08 (WEA15)	06:50	06:40	05:37
	16:16	15:25 (WEA14)	17:06	16:23 (WEA15)	17:57	19:50	20:41
6	08:17	15:08 (WEA14)	07:44	16:07 (WEA15)	06:48	06:38	05:35
	16:17	15:27 (WEA14)	17:08	16:24 (WEA15)	17:59	19:52	20:42
7	08:17	15:08 (WEA14)	07:42	16:07 (WEA15)	06:46	06:35	05:33
	16:18	15:27 (WEA14)	17:10	16:26 (WEA15)	18:01	19:54	20:44
8	08:17	15:09 (WEA14)	07:41	16:06 (WEA15)	06:44	06:33	05:32
	16:20	15:28 (WEA14)	17:12	16:26 (WEA15)	18:02	19:55	20:46
9	08:16	15:09 (WEA14)	07:39	16:06 (WEA15)	06:41	06:31	05:30
	16:21	15:28 (WEA14)	17:14	16:27 (WEA15)	18:04	19:57	20:47
10	08:16	15:09 (WEA14)	07:37	16:05 (WEA15)	06:39	06:29	05:28
	16:22	15:28 (WEA14)	17:15	16:27 (WEA15)	18:06	19:59	20:49
11	08:15	15:10 (WEA14)	07:35	16:05 (WEA15)	06:37	06:26	05:27
	16:24	15:29 (WEA14)	17:17	16:27 (WEA15)	18:08	20:00	20:50
12	08:14	15:10 (WEA14)	07:33	16:05 (WEA15)	06:35	06:24	05:25
	16:25	15:30 (WEA14)	17:19	16:27 (WEA15)	18:09	20:02	20:52
13	08:14	15:10 (WEA14)	07:32	16:06 (WEA15)	06:32	06:22	05:23
	16:27	15:30 (WEA14)	17:21	16:27 (WEA15)	18:11	20:04	20:53
14	08:13	15:11 (WEA14)	07:30	16:06 (WEA15)	06:30	06:20	05:22
	16:28	15:30 (WEA14)	17:23	16:26 (WEA15)	18:13	20:06	20:55
15	08:12	15:11 (WEA14)	07:28	16:07 (WEA15)	06:28	06:18	05:20
	16:30	15:30 (WEA14)	17:25	16:26 (WEA15)	18:15	20:07	20:57
16	08:11	15:12 (WEA14)	07:26	16:08 (WEA15)	06:26	06:15	05:19
	16:31	15:30 (WEA14)	17:26	16:25 (WEA15)	18:16	20:09	20:58
17	08:11	15:13 (WEA14)	07:24	16:09 (WEA15)	06:23	06:13	05:17
	16:33	15:30 (WEA14)	17:28	16:24 (WEA15)	18:18	20:11	21:00
18	08:10	15:14 (WEA14)	07:22	16:11 (WEA15)	06:21	06:11	05:16
	16:34	15:30 (WEA14)	17:30	16:22 (WEA15)	18:20	20:12	21:01
19	08:09	15:15 (WEA14)	07:20	16:19	06:19	06:09	05:14
	16:36	15:30 (WEA14)	17:32	18:21	20:14	21:02	21:33
20	08:08	15:15 (WEA14)	07:18	16:16	06:16	06:07	05:13
	16:38	15:29 (WEA14)	17:34	18:23	20:16	21:04	21:33
21	08:07	15:17 (WEA14)	07:16	16:14	06:14	06:05	05:12
	16:39	15:28 (WEA14)	17:36	18:25	20:17	21:05	21:34
22	08:05	15:19 (WEA14)	07:14	16:12	06:12	06:03	05:10
	16:41	15:27 (WEA14)	17:37	18:27	20:19	21:07	21:34
23	08:04	15:23 (WEA14)	07:12	16:10	06:10	06:00	05:09
	16:43	15:25 (WEA14)	17:39	18:28	20:21	21:08	21:34
24	08:03		07:10	16:07	06:07	05:58	05:08
	16:45		17:41	18:30	20:22	21:10	21:34
25	08:02		07:08	16:05	06:05	05:56	05:07
	16:46		07:08	18:32	20:24	21:11	21:34
26	08:01		07:05	16:03	06:03	05:54	05:06
	16:48		17:45	18:33	20:26	21:12	21:34
27	07:59		07:03	16:00	06:00	05:52	05:04
	16:50		17:46	18:35	20:27	21:13	21:34
28	07:58		07:01	16:00	05:58	05:50	05:03
	16:52		17:48	18:37	20:29	21:15	21:34
29	07:56			16:00	05:56	05:48	05:02
	16:53			19:38	20:31	21:16	21:34
30	07:55			16:00	05:53	05:46	05:01
	16:55			19:40	20:32	21:17	21:34
31	07:54			16:00	05:51		05:01
	16:57			19:42		21:18	
Sonnenscheinstunden		260	278	367	416	484	498
astr.max.mögl.Beschattung		377	276				
Red.Sonnenscheinwahrsch.		0,19	0,26				
Reduktion Betriebsdauer		0,95	0,95				
Reduktion Windrichtung		0,68	0,68				
Gesamte Reduktion		0,12	0,17				
Met.wahrsch.Beschattung		45	46				

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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	15:35 (WEA15)	07:55 16:06	14:52 (WEA14) 15:12 (WEA14)
2	04:57 21:33	05:34 21:00	06:24 19:58	07:12 18:49		07:06 16:44	15:36 (WEA15)	07:56 16:05	14:52 (WEA14) 15:11 (WEA14)
3	04:58 21:33	05:36 20:59	06:25 19:56	07:14 18:47		07:08 16:42	15:36 (WEA15)	07:57 16:04	14:53 (WEA14) 15:12 (WEA14)
4	04:59 21:32	05:37 20:57	06:27 19:54	07:16 18:44		07:09 16:40	15:36 (WEA15)	07:59 16:04	14:53 (WEA14) 15:12 (WEA14)
5	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42		07:11 16:38	15:37 (WEA15)	08:00 16:03	14:53 (WEA14) 15:12 (WEA14)
6	05:00 21:31	05:41 20:53	06:30 19:49	07:19 18:40		07:13 16:37	15:38 (WEA15)	08:01 16:03	14:54 (WEA14) 15:13 (WEA14)
7	05:01 21:31	05:42 20:52	06:32 19:47	07:21 18:38		07:15 16:35	15:40 (WEA15)	08:03 16:02	14:54 (WEA14) 15:13 (WEA14)
8	05:02 21:30	05:44 20:50	06:33 19:44	07:22 18:35		07:16 16:33	15:44 (WEA15)	08:04 16:02	14:55 (WEA14) 15:12 (WEA14)
9	05:03 21:29	05:45 20:48	06:35 19:42	07:24 18:33		07:18 16:32	15:47 (WEA15)	08:05 16:02	14:56 (WEA14) 15:13 (WEA14)
10	05:04 21:29	05:47 20:46	06:37 19:40	07:26 18:31		07:20 16:30		08:06 16:02	14:57 (WEA14) 15:13 (WEA14)
11	05:05 21:28	05:48 20:44	06:38 19:38	07:27 18:29		07:22 16:29		08:07 16:01	14:57 (WEA14) 15:14 (WEA14)
12	05:06 21:27	05:50 20:42	06:40 19:35	07:29 18:26		07:24 16:27		08:08 16:01	14:58 (WEA14) 15:14 (WEA14)
13	05:07 21:26	05:52 20:40	06:41 19:33	07:31 18:24		07:25 16:26		08:09 16:01	14:59 (WEA14) 15:14 (WEA14)
14	05:09 21:25	05:53 20:38	06:43 19:31	07:33 18:22		07:27 16:24		08:10 16:01	14:59 (WEA14) 15:14 (WEA14)
15	05:10 21:24	05:55 20:36	06:45 19:28	07:34 18:20		07:29 16:23		08:11 16:01	15:00 (WEA14) 15:14 (WEA14)
16	05:11 21:23	05:56 20:34	06:46 19:26	07:36 18:18		07:31 16:21		08:12 16:01	15:01 (WEA14) 15:15 (WEA14)
17	05:12 21:22	05:58 20:32	06:48 19:24	07:38 18:16		07:32 16:20		08:13 16:02	15:01 (WEA14) 15:14 (WEA14)
18	05:13 21:21	06:00 20:30	06:50 19:21	07:39 18:13		07:34 16:19		08:14 16:02	15:02 (WEA14) 15:15 (WEA14)
19	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:11		07:36 16:17	14:57 (WEA14)	08:14 16:02	15:03 (WEA14) 15:16 (WEA14)
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09		07:37 16:16	14:54 (WEA14)	08:15 16:03	15:03 (WEA14) 15:15 (WEA14)
21	05:17 21:18	06:04 20:24	06:54 19:14	07:45 18:07		07:39 16:15	14:53 (WEA14)	08:15 16:03	15:04 (WEA14) 15:16 (WEA14)
22	05:19 21:16	06:06 20:22	06:56 19:12	07:46 18:05		07:41 16:14	14:52 (WEA14)	08:16 16:03	15:04 (WEA14) 15:16 (WEA14)
23	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	16:44 (WEA15)	07:42 16:13	14:51 (WEA14)	08:17 16:04	15:05 (WEA14) 15:17 (WEA14)
24	05:21 21:14	06:09 20:18	06:59 19:07	07:50 18:01	16:40 (WEA15)	07:44 16:12	14:51 (WEA14)	08:17 16:05	15:05 (WEA14) 15:18 (WEA14)
25	05:23 21:12	06:11 20:16	07:01 19:05	07:52 16:59	16:52 (WEA15)	07:46 16:11	15:07 (WEA14)	08:17 16:05	15:05 (WEA14) 15:18 (WEA14)
26	05:24 21:11	06:12 20:14	07:02 19:03	07:53 16:57	15:38 (WEA15)	07:47 16:10	14:51 (WEA14)	08:17 16:06	15:06 (WEA14) 15:19 (WEA14)
27	05:25 21:10	06:14 20:11	07:04 19:00	07:55 16:55	15:55 (WEA15)	07:49 16:09	14:50 (WEA14)	08:18 16:07	15:06 (WEA14) 15:20 (WEA14)
28	05:27 21:08	06:16 20:09	07:06 18:58	07:57 16:53	15:56 (WEA15)	07:50 16:08	14:51 (WEA14)	08:18 16:07	15:06 (WEA14) 15:20 (WEA14)
29	05:28 21:07	06:17 20:07	07:07 18:56	07:59 16:51	15:57 (WEA15)	07:52 16:07	14:50 (WEA14)	08:18 16:08	15:06 (WEA14) 15:21 (WEA14)
30	05:30 21:05	06:19 20:05	07:09 18:54	08:00 16:49	15:58 (WEA15)	07:53 16:06	15:09 (WEA14)	08:18 16:09	15:07 (WEA14) 15:22 (WEA14)
31	05:31 21:03	06:21 20:03	07:02 18:47	08:02 16:47	15:59 (WEA15)		15:11 (WEA14)	08:18 16:10	15:07 (WEA14) 15:22 (WEA14)
Sonnenscheinstunden	501	453	381	332		267		245	
astr.max.mögl.Beschattung				157		304			474
Red.Sonnenscheinwahrsch.				0,35		0,21			0,16
Reduktion Betriebsdauer				0,95		0,95			0,95
Reduktion Windrichtung				0,68		0,68			0,68
Gesamte Reduktion				0,23		0,13			0,11
Met.wahrsch.Beschattung				36		40			50

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar		Februar		März		April		Mai		Juni	
1	08:18		08:52 (WEA19)	07:52	08:51 (WEA21)	06:59		06:49	08:03 (WEA22)	05:45		05:00
	16:11	44	15:37 (WEA10)	16:59	16	09:07 (WEA21)	17:50	19:44	29	08:32 (WEA22)	20:34	21:19
2	08:18		08:50 (WEA19)	07:51	08:50 (WEA21)	06:57		06:47	08:03 (WEA22)	05:43		04:59
	16:13	50	15:38 (WEA10)	17:01	18	09:08 (WEA21)	17:52	19:45	28	08:31 (WEA22)	20:36	21:21
3	08:18		08:50 (WEA19)	07:49	08:49 (WEA21)	06:55		06:44	08:04 (WEA22)	05:41		04:58
	16:14	52	15:39 (WEA10)	17:03	21	09:10 (WEA21)	17:54	19:47	26	08:30 (WEA22)	20:37	21:22
4	08:18		08:51 (WEA19)	07:47	08:48 (WEA21)	06:53		06:42	08:05 (WEA22)	05:39		04:57
	16:15	56	15:41 (WEA10)	17:04	23	09:11 (WEA21)	17:55	19:49	24	08:29 (WEA22)	20:39	21:23
5	08:18		08:50 (WEA19)	07:46	08:48 (WEA21)	06:50		06:40	08:05 (WEA22)	05:37		04:57
	16:16	56	15:41 (WEA10)	17:06	23	09:11 (WEA21)	17:57	7 07:19 (WEA24)	21	08:26 (WEA22)	20:41	21:24
6	08:18		08:51 (WEA19)	07:44	08:47 (WEA21)	06:48		06:38	08:07 (WEA22)	05:35		04:56
	16:17	58	15:43 (WEA10)	17:08	24	09:11 (WEA21)	17:59	10 07:17 (WEA24)	17	08:24 (WEA22)	20:42	21:25
7	08:17		08:50 (WEA19)	07:42	08:48 (WEA21)	06:46		06:35	08:10 (WEA22)	05:34		04:56
	16:18	61	15:44 (WEA10)	17:10	25	09:13 (WEA21)	18:01	13 07:29 (WEA24)	11	08:21 (WEA22)	20:44	21:26
8	08:17		08:51 (WEA19)	07:41	08:47 (WEA21)	06:44		06:33	08:21 (WEA22)	05:32		04:55
	16:20	61	15:46 (WEA10)	17:12	26	09:13 (WEA21)	18:03	13 07:29 (WEA24)		20:46		21:26
9	08:16		08:51 (WEA19)	07:39	08:47 (WEA21)	06:41		06:31		05:30		04:55
	16:21	61	15:47 (WEA10)	17:14	26	09:13 (WEA21)	18:04	13 07:28 (WEA24)		20:47		21:27
10	08:16		08:51 (WEA19)	07:37	08:47 (WEA21)	06:39		06:29		05:28		04:54
	16:22	61	15:48 (WEA10)	17:15	26	09:13 (WEA21)	18:06	13 07:28 (WEA24)		20:49		21:28
11	08:15		08:52 (WEA19)	07:35	08:01 (WEA26)	06:37		06:26		05:27		04:54
	16:24	62	15:51 (WEA10)	17:17	30	09:12 (WEA21)	18:08	11 07:27 (WEA24)		20:50		21:29
12	08:15		08:52 (WEA19)	07:33	07:59 (WEA26)	06:35		06:24		05:25		04:53
	16:25	60	15:51 (WEA10)	17:19	33	09:12 (WEA21)	18:09	9 07:25 (WEA24)		20:52		21:29
13	08:14		08:52 (WEA19)	07:32	07:59 (WEA26)	06:32		06:22	06:58 (WEA23)	05:23		04:53
	16:27	56	15:53 (WEA07)	17:21	33	09:11 (WEA21)	18:11	3 07:22 (WEA24)	9	07:07 (WEA23)	20:53	21:30
14	08:13		08:53 (WEA19)	07:30	07:58 (WEA26)	06:30		06:20	06:56 (WEA23)	05:22		04:53
	16:28	50	15:55 (WEA07)	17:23	33	09:11 (WEA21)	18:13	20:06	13	07:09 (WEA23)	20:55	21:31
15	08:12		08:54 (WEA19)	07:28	07:58 (WEA26)	06:28		06:18	06:54 (WEA23)	05:20		04:53
	16:30	49	15:56 (WEA07)	17:25	30	09:09 (WEA21)	18:15	20:07	15	07:09 (WEA23)	20:57	21:31
16	08:11		08:54 (WEA19)	07:26	07:58 (WEA26)	06:26		06:15	06:53 (WEA23)	05:19		04:53
	16:31	50	15:57 (WEA07)	17:27	28	09:08 (WEA21)	18:16	20:09	17	07:10 (WEA23)	20:58	21:32
17	08:11		08:56 (WEA19)	07:24	07:59 (WEA26)	06:23		06:13	06:52 (WEA23)	05:17		04:53
	16:33	46	15:58 (WEA07)	17:28	22	09:06 (WEA21)	18:18	20:11	18	07:10 (WEA23)	21:00	21:32
18	08:10		08:57 (WEA19)	07:22	08:00 (WEA26)	06:21		06:11	06:52 (WEA23)	05:16		04:53
	16:35	45	15:58 (WEA07)	17:30	12	09:02 (WEA21)	18:20	20:12	18	07:10 (WEA23)	21:01	21:33
19	08:09		09:08 (WEA20)	07:20		06:19		06:09	06:52 (WEA23)	05:14		04:53
	16:36	39	15:59 (WEA07)	17:32		18:22		20:14	18	07:10 (WEA23)	21:03	21:33
20	08:08		09:09 (WEA20)	07:18		06:17		06:07	06:52 (WEA23)	05:13		04:53
	16:38	37	16:00 (WEA07)	17:34	18:23	13 07:28 (WEA22)	20:16	17 07:09 (WEA23)	6	05:57 (WEA16)	21:33	17 06:13 (WEA16)
21	08:07		09:09 (WEA20)	07:16		06:14		06:05	06:52 (WEA23)	05:12		05:55
	16:40	35	15:59 (WEA07)	17:36	18:25	19 07:31 (WEA22)	20:17	16 07:08 (WEA23)	10	06:05 (WEA16)	21:34	17 06:13 (WEA16)
22	08:05		09:11 (WEA20)	07:14		06:12		06:03	06:53 (WEA23)	05:10		05:53
	16:41	31	15:59 (WEA07)	17:38	18:27	22 07:32 (WEA22)	20:19	14 07:07 (WEA23)	13	06:06 (WEA16)	21:34	17 06:13 (WEA16)
23	08:04		09:13 (WEA20)	07:12		06:10		06:01	06:54 (WEA23)	05:09		05:52
	16:43	26	15:59 (WEA07)	17:39	18:28	25 07:33 (WEA22)	20:21	12 07:06 (WEA23)	15	06:07 (WEA16)	21:34	17 06:14 (WEA16)
24	08:03		09:16 (WEA20)	07:10		06:07		05:59	06:55 (WEA23)	05:08		05:52
	16:45	16	15:58 (WEA07)	17:41	18:30	27 07:34 (WEA22)	20:22	9 07:04 (WEA23)	15	06:07 (WEA16)	21:34	17 06:14 (WEA16)
25	08:02		15:52 (WEA07)	07:08		06:05		05:56		05:07		05:51
	16:46	5	15:57 (WEA07)	17:43	18:32	29 07:34 (WEA22)	20:24		21:11	17 06:08 (WEA16)	21:34	16 06:13 (WEA16)
26	08:01			07:06		06:03		05:54		05:06		05:51
	16:48			17:45	18:33	29 07:34 (WEA22)	20:26		21:12	18 06:09 (WEA16)	21:34	16 06:14 (WEA16)
27	07:59			07:03		06:00		05:52		05:05		05:51
	16:50			17:47	18:35	31 07:35 (WEA22)	20:27		21:13	18 06:09 (WEA16)	21:34	17 06:14 (WEA16)
28	07:58			07:01		05:58		05:50		05:04		05:51
	16:52			17:48	18:37	31 07:35 (WEA22)	20:29		21:15	18 06:09 (WEA16)	21:34	17 06:15 (WEA16)
29	07:56					06:56		05:49		05:03		05:50
	16:53					19:39	31 08:34 (WEA22)	20:31		21:16		06:09
30	07:55		08:56 (WEA21)			06:54		05:47		05:02		05:51
	16:55	5	09:01 (WEA21)			19:40	31 08:34 (WEA22)	20:32		21:17		06:11
31	07:54		08:53 (WEA21)			06:51		08:03 (WEA22)		05:01		05:51
	16:57	12	09:05 (WEA21)			19:42	30 08:33 (WEA22)			21:18		06:11
Sonnenscheinstunden	260			278		367		416		484		498
astr.max.mögl.Beschattung	1184			449		410		332		189		529
Red.Sonnenscheinwahrsch.	0,19			0,26		0,33		0,42		0,48		0,45
Reduktion Betriebsdauer	0,95			0,95		0,95		0,95		0,95		0,95
Reduktion Windrichtung	0,64			0,57		0,60		0,62		0,67		0,67
Gesamte Reduktion	0,11			0,14		0,19		0,24		0,30		0,29
Met.wahrsch.Beschattung	133			64		77		81		57		151

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli			August			September			Oktober			November			Dezember		
1	04:57		05:58 (WEA16)	05:33		06:22			07:11	07:57 (WEA24)	07:04	08:17 (WEA21)	07:55		08:34 (WEA19)			
	21:33	17	06:15 (WEA16)	21:02		20:00			18:51	7	08:04 (WEA24)	16:46	25	08:42 (WEA21)	16:06	62	15:33 (WEA10)	
2	04:58		05:58 (WEA16)	05:35		06:24			07:12		07:54 (WEA24)	07:06		08:17 (WEA21)	07:56		08:34 (WEA19)	
	21:33	18	06:16 (WEA16)	21:00		19:58			18:49	11	08:05 (WEA24)	16:44	26	08:43 (WEA21)	16:05	62	15:32 (WEA10)	
3	04:58		05:58 (WEA16)	05:36		06:25			07:14		07:53 (WEA24)	07:08		08:17 (WEA21)	07:57		08:35 (WEA19)	
	21:33	19	06:17 (WEA16)	20:59		19:56			18:47	13	08:06 (WEA24)	16:42	26	08:43 (WEA21)	16:04	62	15:31 (WEA10)	
4	04:59		05:58 (WEA16)	05:38		06:27			07:16		07:53 (WEA24)	07:09		08:17 (WEA21)	07:59		08:35 (WEA19)	
	21:32	18	06:16 (WEA16)	20:57		19:54			18:44	13	08:06 (WEA24)	16:40	25	08:42 (WEA21)	16:04	60	15:30 (WEA10)	
5	05:00		05:58 (WEA16)	05:39		06:29		08:06 (WEA22)	07:17		07:53 (WEA24)	07:11		08:17 (WEA21)	08:00		08:35 (WEA19)	
	21:32	19	06:17 (WEA16)	20:55		19:51	11	08:17 (WEA22)	18:42	13	08:06 (WEA24)	16:39	24	08:41 (WEA21)	16:03	61	15:29 (WEA10)	
6	05:01		05:58 (WEA16)	05:41		06:30		08:03 (WEA22)	07:19		07:52 (WEA24)	07:13		08:18 (WEA21)	08:01		08:37 (WEA19)	
	21:31	19	06:17 (WEA16)	20:53		19:49	17	08:20 (WEA22)	18:40	13	08:05 (WEA24)	16:37	23	08:41 (WEA21)	16:03	59	15:29 (WEA10)	
7	05:01		05:58 (WEA16)	05:42		06:32		08:00 (WEA22)	07:21		07:53 (WEA24)	07:15		08:18 (WEA21)	08:03		08:37 (WEA19)	
	21:31	20	06:18 (WEA16)	20:52		19:47	21	08:21 (WEA22)	18:38	11	08:04 (WEA24)	16:35	22	08:40 (WEA21)	16:03	57	15:29 (WEA10)	
8	05:02		05:59 (WEA16)	05:44		06:34		07:59 (WEA22)	07:22		07:54 (WEA24)	07:17		08:19 (WEA21)	08:04		08:38 (WEA19)	
	21:30	19	06:18 (WEA16)	20:50		19:45	24	08:23 (WEA22)	18:35	9	08:03 (WEA24)	16:33	21	08:40 (WEA21)	16:02	55	15:28 (WEA10)	
9	05:03		05:59 (WEA16)	05:45		06:35		07:58 (WEA22)	07:24		07:56 (WEA24)	07:18		08:21 (WEA21)	08:05		08:40 (WEA19)	
	21:29	19	06:18 (WEA16)	20:48		19:42	26	08:24 (WEA22)	18:33	3	07:59 (WEA24)	16:32	18	08:39 (WEA21)	16:02	51	15:28 (WEA10)	
10	05:04		05:59 (WEA16)	05:47		06:37		07:56 (WEA22)	07:26			07:20		08:22 (WEA21)	08:06		08:40 (WEA19)	
	21:29	20	06:19 (WEA16)	20:46		19:40	28	08:24 (WEA22)	18:31			16:30	15	08:37 (WEA21)	16:02	50	15:28 (WEA10)	
11	05:05		05:59 (WEA16)	05:49		06:38		07:56 (WEA22)	07:27			07:22		08:24 (WEA21)	08:07		08:42 (WEA19)	
	21:28	20	06:19 (WEA16)	20:44		19:38	29	08:25 (WEA22)	18:29			16:29	12	08:36 (WEA21)	16:02	46	15:27 (WEA10)	
12	05:06		05:59 (WEA16)	05:50		06:40		07:55 (WEA22)	07:29			07:24		08:28 (WEA21)	08:08		08:43 (WEA19)	
	21:27	20	06:19 (WEA16)	20:42		19:35	30	08:25 (WEA22)	18:27			16:27	4	08:32 (WEA21)	16:01	40	15:27 (WEA10)	
13	05:08		06:00 (WEA16)	05:52		06:42		07:54 (WEA22)	07:31			07:25			08:09		08:58 (WEA20)	
	21:26	19	06:19 (WEA16)	20:40		19:33	31	08:25 (WEA22)	18:24			16:26			16:01	36	15:27 (WEA10)	
14	05:09		06:00 (WEA16)	05:53		06:43		07:53 (WEA22)	07:33			07:27			08:10		13:17 (WEA13)	
	21:25	19	06:19 (WEA16)	20:38		19:31	31	08:24 (WEA22)	18:22			16:24			16:01	32	15:27 (WEA10)	
15	05:10		06:00 (WEA16)	05:55		06:45		07:53 (WEA22)	07:34			07:29			08:11		13:17 (WEA13)	
	21:24	19	06:19 (WEA16)	20:36		19:28	31	08:24 (WEA22)	18:20			16:23			16:01	31	13:48 (WEA13)	
16	05:11		06:00 (WEA16)	05:56		06:46		07:54 (WEA22)	07:36			07:31			08:12		13:18 (WEA13)	
	21:23	19	06:19 (WEA16)	20:34		19:26	30	08:24 (WEA22)	18:18			16:21			16:02	31	13:49 (WEA13)	
17	05:12		06:00 (WEA16)	05:58		06:48		07:53 (WEA22)	07:38			07:32		15:25 (WEA07)	08:13		13:17 (WEA13)	
	21:22	18	06:18 (WEA16)	20:32		19:24	30	08:23 (WEA22)	18:16			16:20	5	15:30 (WEA07)	16:02	32	13:49 (WEA13)	
18	05:13		06:01 (WEA16)	06:00		06:50		07:54 (WEA22)	07:39			07:34		08:50 (WEA20)	08:14		13:18 (WEA13)	
	21:21	17	06:18 (WEA16)	20:30		19:21	28	08:22 (WEA22)	18:14			16:19	16	15:32 (WEA07)	16:02	32	13:50 (WEA13)	
19	05:15		06:01 (WEA16)	06:01	07:01 (WEA23)	06:51		07:53 (WEA22)	07:41			07:36		08:47 (WEA20)	08:14		13:19 (WEA13)	
	21:20	16	06:17 (WEA16)	20:28	9	07:10 (WEA23)	19:19	28	08:21 (WEA22)	18:11		16:17	26	15:33 (WEA07)	16:02	32	13:51 (WEA13)	
20	05:16		06:03 (WEA16)	06:03	06:59 (WEA23)	06:53		07:54 (WEA22)	07:43			07:37		08:46 (WEA20)	08:15		13:18 (WEA13)	
	21:19	15	06:18 (WEA16)	20:26	13	07:12 (WEA23)	19:17	26	08:20 (WEA22)	18:09		16:16	31	15:34 (WEA07)	16:03	32	13:50 (WEA13)	
21	05:17		06:03 (WEA16)	06:05	06:57 (WEA23)	06:54		07:55 (WEA22)	07:45			07:39		08:45 (WEA20)	08:15		13:19 (WEA13)	
	21:18	14	06:17 (WEA16)	20:24	15	07:12 (WEA23)	19:14	23	08:18 (WEA22)	18:07		16:15	35	15:35 (WEA07)	16:03	32	13:51 (WEA13)	
22	05:19		06:04 (WEA16)	06:06	06:57 (WEA23)	06:56		07:56 (WEA22)	07:46			07:41		08:45 (WEA20)	08:16		13:19 (WEA13)	
	21:16	11	06:15 (WEA16)	20:22	16	07:13 (WEA23)	19:12	20	08:16 (WEA22)	18:05		16:14	38	15:36 (WEA07)	16:04	32	13:51 (WEA13)	
23	05:20		06:05 (WEA16)	06:08	06:56 (WEA23)	06:58		07:59 (WEA22)	07:48		08:33 (WEA26)	07:42		08:44 (WEA20)	08:17		13:20 (WEA13)	
	21:15	9	06:14 (WEA16)	20:20	17	07:13 (WEA23)	19:10	15	08:14 (WEA22)	18:03	2	08:35 (WEA26)	16:13	39	15:35 (WEA07)	16:04	32	13:52 (WEA13)
24	05:21		06:09 (WEA16)	06:09	06:56 (WEA23)	06:59		08:02 (WEA22)	07:50			08:30 (WEA26)	07:44		08:34 (WEA19)	08:17		13:20 (WEA13)
	21:14	3	06:12 (WEA16)	20:18	17	07:13 (WEA23)	19:07	7	08:09 (WEA22)	18:01	16	09:34 (WEA21)	16:12	46	15:36 (WEA07)	16:05	33	13:53 (WEA13)
25	05:23		06:11	06:11	06:55 (WEA23)	07:01			06:52			07:28 (WEA26)	07:46		08:34 (WEA19)	08:17		13:21 (WEA13)
	21:12		06:13	20:16	18	07:13 (WEA23)	19:05		16:59	24	08:36 (WEA21)	16:11	46	15:36 (WEA07)	16:05	32	13:53 (WEA13)	
26	05:24		06:13	06:13	06:55 (WEA23)	07:03			06:53			07:28 (WEA26)	07:47		08:33 (WEA19)	08:18		13:22 (WEA13)
	21:11		06:14	20:14	18	07:13 (WEA23)	19:03		16:57	29	08:38 (WEA21)	16:10	49	15:35 (WEA07)	16:06	32	13:54 (WEA13)	
27	05:26		06:14	06:14	06:56 (WEA23)	07:04			06:55			07:27 (WEA26)	07:49		08:33 (WEA19)	08:18		13:22 (WEA13)
	21:10		06:11	20:11	16	07:12 (WEA23)	19:01		16:55	32	08:39 (WEA21)	16:09	49	15:35 (WEA07)	16:07	32	13:54 (WEA13)	
28	05:27		06:16	06:16	06:56 (WEA23)	07:06			06:57			07:28 (WEA26)	07:50		08:33 (WEA19)	08:18		13:23 (WEA13)
	21:08		06:17	20:09	15	07:11 (WEA23)	18:58		16:53	33	08:40 (WEA21)	16:08	50	15:35 (WEA07)	16:08	31	13:54 (WEA13)	
29	05:29		06:17	06:17	06:57 (WEA23)	07:07			06:59			07:28 (WEA26)	07:52		08:33 (WEA19)	08:18		13:24 (WEA13)
	21:07		06:18	20:07	13	07:10 (WEA23)	18:56		16:51	33	08:41 (WEA21)	16:07	55	15:33 (WEA07)	16:08	31	15:34 (WEA10)	
30	05:30		06:19	06:19	06:58 (WEA23)	07:09			07:01			07:29 (WEA26)	07:53		08:33 (WEA19)	08:18		13:24 (WEA13)
	21:05		06:20	20:05	9	07:07 (WEA23)	18:54		16:49	33	08:42 (WEA21)	16:09		15:35 (WEA07)	16:09	33	15:35 (WEA10)	
31	05:31		06:21	06:21					07:02			07:32 (WEA26)			08:18		09:06 (WEA20)	
	21:04		06:23	20:03					16:48	28	08:42 (WEA21)				16:10	37	15:36 (WEA10)	
Sonnenscheinstunden			501	453		381			332			267			245			
astr.max.mögl.Beschattung			407		176		486		323			786			1280			
Red.Sonnenscheinwahrsch.			0,47		0,50		0,42		0,35			0,21			0,16			
Reduktion Betriebsdauer			0,95		0,95		0,95		0,95			0,95			0,95			
Reduktion Windrichtung			0,67		0,64		0,60		0,58			0,61			0,66			
Gesamte Reduktion			0,30		0,30		0,24		0,19			0,12			0,10			
Met.wahrsch.Beschattung			121		53		115		63			95			132			

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung **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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar		Februar		März		April		Mai		Juni	
1	08:19		07:52		06:59		06:49		05:45		05:00	
	16:12		16:59		17:50		19:44		20:34		21:20	
2	08:18		07:51		06:57		06:47		05:43		04:59	
	16:13		17:01		17:52		19:45		20:36		21:21	
3	08:18		07:49		06:55		06:44		05:41		04:58	
	16:14		17:03		17:54		19:47		20:37		21:22	
4	08:18		07:47		06:53		06:42		05:39		04:57	
	16:15		17:04		17:56		19:49		20:39		21:23	
5	08:18		07:46		06:50		06:40		05:37		04:57	
	16:16		17:06		17:57		19:50		20:41		21:24	
6	08:18		07:44		06:48		06:38		05:35		04:56	
	16:17		17:08		17:59		19:52		20:42		21:25	
7	08:17	08:52 (WEA12)	07:42		06:46		06:35		05:34		04:56	
	16:18	4 08:56 (WEA12)	17:10		18:01		19:54		20:44		21:26	
8	08:17	08:52 (WEA12)	07:41		06:44		06:33		05:32		04:55	
	16:20	7 08:59 (WEA12)	17:12		18:03	6 07:13 (WEA22)	19:56		20:46		21:26	
9	08:16	08:51 (WEA12)	07:39		06:42	07:04 (WEA22)	06:31		05:30		04:55	
	16:21	9 09:00 (WEA12)	17:14		18:04	9 07:13 (WEA22)	19:57		20:47		21:27	
10	08:16	08:50 (WEA12)	07:37		06:39	07:03 (WEA22)	06:29		05:28		04:54	
	16:23	10 09:00 (WEA12)	17:16		18:06	11 07:14 (WEA22)	19:59		20:49		21:28	
11	08:15	08:51 (WEA12)	07:35		06:37	07:03 (WEA22)	06:26		05:27		04:54	
	16:24	11 09:02 (WEA12)	17:17		18:08	11 07:14 (WEA22)	20:01		20:50		21:29	
12	08:15	08:51 (WEA12)	07:33		06:35	07:03 (WEA22)	06:24		05:25		04:53	
	16:25	12 09:03 (WEA12)	17:19		18:10	10 07:13 (WEA22)	20:02		20:52		21:30	
13	08:14	08:51 (WEA12)	07:32		06:33	07:03 (WEA22)	06:22		05:24		04:53	
	16:27	12 09:03 (WEA12)	17:21		18:11	8 07:11 (WEA22)	20:04		20:54		21:30	
14	08:13	08:51 (WEA12)	07:30		06:30	07:06 (WEA22)	06:20		05:22		04:53	
	16:28	13 09:04 (WEA12)	17:23		18:13	3 07:09 (WEA22)	20:06		20:55		21:31	
15	08:12	08:51 (WEA12)	07:28		06:28		06:18		05:20		04:53	
	16:30	13 09:04 (WEA12)	17:25		18:15		20:07		20:57		21:31	
16	08:12	08:40 (WEA13)	07:26		06:26		06:15		05:19		04:53	
	16:31	18 09:05 (WEA12)	17:27		18:16		20:09		20:58		21:32	
17	08:11	08:39 (WEA13)	07:24		06:23	07:48 (WEA21)	06:13		05:17		04:53	
	16:33	21 09:05 (WEA12)	17:28	3 07:51 (WEA21)	18:18		20:11		21:00		21:32	
18	08:10	08:38 (WEA13)	07:22		06:21	07:46 (WEA21)	06:11		05:16		04:53	
	16:35	23 09:05 (WEA12)	17:30	7 07:53 (WEA21)	18:20		20:12		21:01		21:33	
19	08:09	08:37 (WEA13)	07:20		06:19	07:44 (WEA21)	06:09		05:15		04:53	
	16:36	24 09:05 (WEA12)	17:32	10 07:54 (WEA21)	18:22		20:14		21:03		21:33	
20	08:08	08:36 (WEA13)	07:18		06:17	07:44 (WEA21)	06:07		05:13		04:53	
	16:38	26 09:06 (WEA12)	17:34	10 07:54 (WEA21)	18:23		20:16		21:04		21:33	
21	08:07	08:35 (WEA13)	07:16		06:14	07:44 (WEA21)	06:05		05:12		04:53	
	16:40	25 09:04 (WEA12)	17:36	10 07:54 (WEA21)	18:25		20:17		21:05		21:34	
22	08:06	08:35 (WEA13)	07:14		06:12	07:44 (WEA21)	06:03		05:11		04:53	
	16:41	25 09:04 (WEA12)	17:38	10 07:54 (WEA21)	18:27		20:19		21:07		21:34	
23	08:04	08:35 (WEA13)	07:12		06:10	07:45 (WEA21)	06:01		05:09		04:53	
	16:43	22 09:03 (WEA12)	17:39	8 07:53 (WEA21)	18:28		20:21		21:08		21:34	
24	08:03	08:35 (WEA13)	07:10		06:07		05:59		05:08		04:54	
	16:45	17 08:52 (WEA13)	17:41		18:30		20:22		21:10		21:34	
25	08:02	08:36 (WEA13)	07:08		06:05		05:57		05:07		04:54	
	16:46	16 08:52 (WEA13)	17:43		18:32		20:24		21:11		21:34	
26	08:01	08:36 (WEA13)	07:06		06:03		05:55		05:06		04:54	
	16:48	17 08:53 (WEA13)	17:45		18:34		20:26		21:12		21:34	
27	07:59	08:36 (WEA13)	07:03		06:00		05:53		05:05		04:55	
	16:50	16 08:52 (WEA13)	17:47		18:35		20:27		21:14		21:34	
28	07:58	08:38 (WEA13)	07:01		05:58		05:51		05:04		04:55	
	16:52	14 08:52 (WEA13)	17:48		18:37		20:29		21:15		21:34	
29	07:57	08:38 (WEA13)			06:56		05:49		05:03		04:56	
	16:54	13 08:51 (WEA13)			19:39		20:31		21:16		21:34	
30	07:55	08:39 (WEA13)			06:54		05:47		05:02		04:56	
	16:55	11 08:50 (WEA13)			19:40		20:32		21:17		21:34	
31	07:54	08:41 (WEA13)			06:51				05:01			
	16:57	8 08:49 (WEA13)			19:42				21:18			
Sonnenscheinstunden	260		278		367		416		484		498	
astr.max.mögl.Beschattung	387		58		58							
Red.Sonnenscheinwahrsch.	0,19		0,26		0,33							
Reduktion Betriebsdauer	0,95		0,95		0,95							
Reduktion Windrichtung	0,57		0,60		0,60							
Gesamte Reduktion	0,10		0,15		0,19							
Met.wahrsch.Beschattung	39		9		11							

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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SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober	November	Dezember
1	04:57	05:33	06:22	07:11	07:42 (WEA22)	07:04
	21:33	21:02	20:00	18:51	10 07:52 (WEA22)	16:46
2	04:58	05:35	06:24	07:12	07:42 (WEA22)	07:06
	21:33	21:00	19:58	18:49	10 07:52 (WEA22)	16:44
3	04:58	05:36	06:26	07:14	07:41 (WEA22)	07:08
	21:33	20:59	19:56	18:47	11 07:52 (WEA22)	16:42
4	04:59	05:38	06:27	07:16	07:41 (WEA22)	07:09
	21:32	20:57	19:54	18:45	10 07:51 (WEA22)	16:40
5	05:00	05:39	06:29	07:17	07:43 (WEA22)	07:11
	21:32	20:55	19:51	18:42	7 07:50 (WEA22)	16:39
6	05:01	05:41	06:30	07:19	07:44 (WEA22)	07:13
	21:31	20:53	19:49	18:40	3 07:47 (WEA22)	16:37
7	05:02	05:42	06:32	07:21		07:15
	21:31	20:52	19:47	18:38		16:35
8	05:02	05:44	06:34	07:22		07:17
	21:30	20:50	19:45	18:36		16:34
9	05:03	05:45	06:35	07:24		07:18
	21:30	20:48	19:42	18:33		16:32
10	05:04	05:47	06:37	07:26		07:20
	21:29	20:46	19:40	18:31		16:30
11	05:05	05:49	06:38	07:28		07:22
	21:28	20:44	19:38	18:29		16:29
12	05:06	05:50	06:40	07:29		08:12 (WEA13)
	21:27	20:42	19:35	18:27	8	08:20 (WEA13)
13	05:08	05:52	06:42	07:31		08:11 (WEA13)
	21:26	20:40	19:33	18:24	11	08:22 (WEA13)
14	05:09	05:53	06:43	07:33		08:10 (WEA13)
	21:25	20:38	19:31	18:22	13	08:23 (WEA13)
15	05:10	05:55	06:45	07:34		08:10 (WEA13)
	21:24	20:37	19:28	18:20	14	08:24 (WEA13)
16	05:11	05:57	06:46	07:36		08:09 (WEA13)
	21:23	20:35	19:26	18:18	16	08:25 (WEA13)
17	05:12	05:58	06:48	07:38		08:09 (WEA13)
	21:22	20:33	19:24	18:16	17	08:26 (WEA13)
18	05:13	06:00	06:50	07:39		08:09 (WEA13)
	21:21	20:30	19:21	18:14	16	08:25 (WEA13)
19	05:15	06:01	06:51	07:41		08:11 (WEA13)
	21:20	20:28	19:19	18:12	17	08:26 (WEA13)
20	05:16	06:03	06:53	07:43		08:09 (WEA13)
	21:19	20:26	19:17	18:09	8	08:23 (WEA21)
21	05:17	06:05	06:54	07:45		08:15 (WEA13)
	21:18	20:24	19:15	18:07	10	08:24 (WEA21)
22	05:19	06:06	06:56	07:46		08:16 (WEA13)
	21:17	20:22	19:12	18:05	25	08:39 (WEA12)
23	05:20	06:08	06:58	07:48		08:11 (WEA13)
	21:15	20:20	19:10	18:03	26	08:42 (WEA12)
24	05:21	06:09	06:59	07:50		08:13 (WEA13)
	21:14	20:18	19:08	18:01	24	08:41 (WEA12)
25	05:23	06:11	07:01	06:52		08:15 (WEA13)
	21:13	20:16	19:05	16:59	23	08:42 (WEA12)
26	05:24	06:13	07:03	06:53		08:17 (WEA13)
	21:11	20:14	19:03	16:57	21	08:43 (WEA12)
27	05:26	06:14	07:04	06:55		08:19 (WEA13)
	21:10	20:11	19:01	16:55	18	08:44 (WEA12)
28	05:27	06:16	07:06	06:57		08:30 (WEA12)
	21:08	20:09	18:58	16:53	13	08:43 (WEA12)
29	05:29	06:17	07:08	06:59		08:31 (WEA12)
	21:07	20:07	18:56	16:51	13	08:44 (WEA12)
30	05:30	06:19	07:09	07:01		08:32 (WEA12)
	21:05	20:05	18:54	16:49	12	08:44 (WEA12)
31	05:32	06:21		07:02		16:09
	21:04	20:03		16:48		16:10
Sonnenscheinstunden	501	453	381	332	267	245
astr.max.mögl.Beschattung			6	109	346	42
Red.Sonnenscheinwahrsch.			0,42	0,35	0,21	0,16
Reduktion Betriebsdauer			0,95	0,95	0,95	0,95
Reduktion Windrichtung			0,60	0,60	0,57	0,56
Gesamte Reduktion			0,23	0,20	0,11	0,09
Met.wahrsch.Beschattung			1	22	38	4

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember	
1	08:19	08:55 (WEA13)	07:52	06:59	06:49	05:45	05:00	04:57	05:33	06:22	07:11	07:04	07:55
2	16:12	17	09:14 (WEA12)	16:59	17:50	19:44	20:34	21:20	21:33	21:02	20:00	18:51	16:46
3	08:18	08:55 (WEA13)	07:51	06:57	06:47	05:43	04:59	04:58	05:35	06:24	07:12	07:06	07:56
4	16:13	12	09:07 (WEA13)	17:01	17:52	19:45	20:36	21:21	21:33	21:00	19:58	18:49	16:44
5	08:18	08:56 (WEA13)	07:49	06:55	06:44	05:41	04:58	04:58	05:36	06:26	07:14	07:08	07:58
6	16:14	12	09:08 (WEA13)	17:03	17:54	19:47	20:37	21:22	21:33	20:59	19:56	18:47	16:42
7	08:18	08:57 (WEA13)	07:47	06:53	06:42	05:39	04:57	04:59	05:38	06:27	07:16	07:09	07:59
8	16:15	11	09:08 (WEA13)	17:04	17:56	19:49	20:39	21:23	21:32	20:57	19:54	18:45	16:40
9	08:18	08:57 (WEA13)	07:46	06:50	06:40	05:37	04:57	05:00	05:39	06:29	07:17	07:11	08:00
10	16:16	11	09:08 (WEA13)	17:06	17:57	19:50	20:41	21:24	21:32	20:55	19:51	18:42	16:39
11	08:18	08:58 (WEA13)	07:44	06:48	06:38	05:35	04:56	05:01	05:41	06:30	07:19	07:13	08:01
12	16:17	10	09:08 (WEA13)	17:08	17:59	19:52	20:42	21:25	21:31	20:53	19:49	18:40	16:37
13	08:17	08:59 (WEA13)	07:42	06:46	06:35	05:34	04:56	05:02	05:42	06:32	07:21	07:15	08:03
14	16:18	9	09:08 (WEA13)	17:10	18:01	19:54	20:44	21:26	21:31	20:52	19:47	18:38	16:35
15	08:17	09:01 (WEA13)	07:41	06:44	06:33	05:32	04:55	05:02	05:44	06:34	07:22	07:17	08:04
16	16:20	7	09:08 (WEA13)	17:12	18:03	19:56	20:46	21:26	21:30	20:50	19:45	18:36	16:34
17	08:16	09:02 (WEA13)	07:39	06:42	06:31	05:30	04:55	05:03	05:45	06:35	07:24	07:18	08:05
18	16:21	5	09:07 (WEA13)	17:14	18:04	19:57	20:47	21:27	21:30	20:48	19:42	18:32	16:32
19	08:16	07:37	06:39	06:29	05:28	04:54	05:04	05:47	06:37	07:26	07:20	08:06	08:45
20	16:22	17:16	18:06	19:59	20:49	21:28	21:29	20:46	19:40	18:31	16:30	16:02	12
21	08:15	07:35	06:37	06:26	05:27	04:54	05:05	05:49	06:38	07:28	07:22	08:07	08:45
22	16:24	17:17	18:08	20:01	20:50	21:29	21:28	20:44	19:38	18:29	16:29	16:02	16
23	08:15	07:33	06:35	06:24	05:25	04:53	05:06	05:50	06:40	07:29	07:24	08:08	08:45
24	16:25	17:19	18:10	20:02	20:52	21:30	21:27	20:42	19:35	18:27	16:27	16:02	19
25	08:14	07:32	06:33	06:22	05:24	04:53	05:08	05:52	06:42	07:31	07:25	08:09	08:46
26	16:27	17:21	18:11	20:04	20:54	21:30	21:26	20:40	19:33	18:24	16:26	16:01	20
27	08:13	07:30	06:30	06:20	05:22	04:53	05:09	05:53	06:43	07:33	07:27	08:10	08:46
28	16:28	17:23	18:13	20:06	20:55	21:31	21:25	20:39	19:31	18:22	16:24	16:01	21
29	08:12	07:28	06:28	06:18	05:20	04:53	05:10	05:55	06:45	07:34	07:29	08:11	08:47
30	16:30	17:25	18:15	20:07	20:57	21:31	21:24	20:37	19:28	18:20	16:23	16:02	20
31	08:12	07:26	06:26	06:15	05:19	04:53	05:11	05:57	06:46	07:36	07:31	08:12	08:47
32	16:31	17:27	18:16	20:09	20:58	21:32	21:23	20:35	19:26	18:18	16:21	16:02	21
33	08:11	07:24	06:23	06:13	05:17	04:53	05:12	05:58	06:48	07:38	07:32	08:13	08:47
34	16:33	17:28	18:18	20:11	21:00	21:32	21:22	20:33	19:24	18:16	16:20	16:02	21
35	08:10	07:22	06:21	06:11	05:16	04:53	05:13	06:00	06:50	07:39	07:34	08:14	08:48
36	16:35	17:30	18:20	20:12	21:01	21:33	21:21	20:30	19:21	18:14	16:19	16:02	21
37	08:09	07:20	06:19	06:09	05:15	04:53	05:15	06:01	06:51	07:41	07:36	08:14	08:48
38	16:36	17:32	18:22	20:14	21:03	21:33	21:20	20:28	19:19	18:12	16:17	16:02	22
39	08:08	07:18	06:17	06:07	05:13	04:53	05:16	06:03	06:53	07:43	07:37	08:15	08:48
40	16:38	17:34	18:23	20:16	21:04	21:33	21:19	20:26	19:17	18:09	16:16	16:03	22
41	08:07	07:16	06:14	06:05	05:12	04:53	05:17	06:05	06:54	07:45	07:39	08:16	08:49
42	16:40	17:36	18:25	20:17	21:05	21:34	21:18	20:24	19:15	18:07	16:15	16:03	22
43	08:06	07:14	06:12	06:03	05:11	04:53	05:19	06:06	06:56	07:46	07:41	08:16	08:49
44	16:41	17:38	18:27	20:19	21:07	21:34	21:17	20:22	19:12	18:05	16:14	16:04	22
45	08:04	07:12	06:10	06:01	05:09	04:53	05:20	06:08	06:58	07:48	07:42	08:17	08:50
46	16:43	17:39	18:28	20:21	21:08	21:34	21:15	20:20	19:10	18:03	16:13	16:04	22
47	08:03	07:10	06:07	05:59	05:08	04:54	05:21	06:09	06:59	07:50	07:44	08:17	08:50
48	16:45	17:41	18:30	20:22	21:10	21:34	21:14	20:18	19:08	18:01	16:12	16:05	22
49	08:02	07:08	06:05	05:57	05:07	04:54	05:23	06:11	07:01	06:52	07:46	08:17	08:50
50	16:46	17:43	18:32	20:24	21:11	21:34	21:13	20:16	19:05	16:59	16:11	16:05	22
51	08:01	07:06	06:03	05:55	05:06	04:54	05:24	06:13	07:03	06:53	07:47	08:18	08:52
52	16:48	17:45	18:34	20:26	21:12	21:34	21:11	20:14	19:03	16:57	16:10	16:06	21
53	07:59	07:03	06:00	05:53	05:05	04:55	05:26	06:14	07:04	06:55	07:49	08:18	08:52
54	16:50	17:47	18:35	20:27	21:14	21:34	21:10	20:11	19:01	16:55	16:09	16:07	21
55	07:58	07:01	05:58	05:51	05:04	04:55	05:27	06:16	07:06	06:57	07:50	08:18	08:52
56	16:52	17:48	18:37	20:29	21:15	21:34	21:08	20:09	18:58	16:53	16:08	16:08	21
57	07:57	06:56	05:49	05:03	04:56	05:29	05:29	06:17	07:08	06:59	07:52	08:18	08:53
58	16:54	19:39	20:31	21:16	21:34	21:07	21:07	20:07	18:56	16:51	16:07	16:08	20
59	07:55	06:54	05:47	05:02	04:56	05:30	05:30	06:19	07:09	07:01	07:53	08:19	08:53
60	16:55	19:40	20:32	21:17	21:34	21:05	21:05	20:05	18:54	16:49	16:06	16:09	21
61	07:54	06:51	05:44	05:01	05:01	05:32	05:32	06:21	07:02	07:02	08:19	08:19	08:54
62	16:57	19:42	20:34	21:18	21:34	21:04	21:04	20:03	18:53	16:48	16:10	16:10	19
63	Sonneneinstunden	260	278	367	416	484	498	453	381	332	267	245	19
64	astr. max. mögl. Beschattung	94											512
65	Red. Sonneneinstunden	0,19											0,16
66	Reduktion Betriebsdauer	0,95											0,95
67	Reduktion Windrichtung	0,57											0,58
68	Gesamte Reduktion	0,10											0,09
69	Met. wahrsch. Beschattung	10											46

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung Schattenrezeptor: IP17 - Kleinleipziger Str. 12A, 06779 Raguhn-Jeßnitz

Annahmen für Schattenwurfberechnung

Sonnenscheinwahrscheinlichkeit S (Mittlere tägliche Sonnenstunden) [POTSDAM]

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Betriebsdauer je Sektor

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Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

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2	08:19 16:13	07:51 17:52	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:21	04:58 21:33	05:35 21:00	06:24 19:58	07:13 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	06:26 19:56	07:14 18:47	07:08 16:42	07:58 16:05
4	08:18 16:15	07:47 17:04	06:53 17:56	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	07:10 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 16:03
6	08:18 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 20:54	06:30 19:49	07:19 18:40	07:13 16:37	08:02 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 21:26	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 19:56	05:32 20:46	05:02 21:27	05:02 21:30	05:44 20:50	06:34 19:45	07:22 18:36	07:17 16:34	08:04 16:02
9	08:16 16:21	07:39 17:14	06:42 18:04	06:31 19:57	05:30 20:47	05:03 21:27	05:03 21:30	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 20:01	05:27 20:50	04:54 21:29	05:05 21:28	05:49 20:44	06:38 19:38	07:28 18:29	07:22 16:29	08:07 16:02
12	08:15 16:25	07:34 17:19	06:35 18:10	06:24 20:02	05:25 20:52	04:53 21:30	05:06 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	06:33 18:11	06:22 20:04	05:24 20:54	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 16:01
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 20:39	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 21:25	05:55 20:37	06:45 19:28	07:34 18:20	07:29 16:23	08:11 16:02
16	08:12 16:31	07:26 17:27	06:26 18:16	06:16 20:09	05:19 20:58	04:53 21:32	05:11 21:24	05:57 20:35	06:46 19:26	07:36 18:18	07:31 16:21	08:12 16:02
17	08:11 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 21:00	04:53 21:32	05:12 21:22	05:58 20:33	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	05:13 21:21	06:00 20:31	06:50 19:22	07:40 18:14	07:34 16:19	08:14 16:02
19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	05:15 21:03	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	08:07 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34	05:17 21:18	06:05 20:24	06:55 19:15	07:45 18:07	07:39 16:15	08:16 16:03
22	08:06 16:41	07:14 17:38	06:12 18:27	06:03 20:19	05:11 21:07	04:53 21:34	05:19 21:17	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	08:17 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:22	05:08 21:10	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 21:13	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	07:06 17:45	06:03 18:34	05:55 20:26	05:06 21:12	04:54 21:34	05:24 21:11	06:13 20:14	07:03 19:03	06:54 16:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:03 17:47	06:01 18:35	05:53 20:28	05:05 21:14	04:55 21:34	05:26 21:10	06:14 20:11	07:04 19:01	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	05:51 20:29	05:04 21:15	04:55 21:34	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	07:50 16:08	08:18 16:08
29	07:57 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	07:08 18:56	06:59 16:51	07:52 16:07	08:18 16:08
30	07:55 16:55		06:54 19:40	05:47 20:33	05:02 21:17	04:56 21:34	05:30 21:05	06:19 20:05	07:09 18:54	07:01 16:49	07:53 16:06	08:19 16:09
31	07:54 16:57		06:51 19:42		05:01 21:18		05:32 21:04	06:21 20:03		07:02 16:48		08:19 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		

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:19 16:12	07:52 17:50	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:20	04:57 21:34	05:33 21:02	06:22 20:01	07:11 18:52	07:04 16:46	07:55 16:06
2	08:19 16:13	07:51 17:52	06:57 17:52	06:47 19:46	05:43 20:36	04:59 21:21	04:58 21:33	05:35 21:00	06:24 19:58	07:13 18:49	07:06 16:44	07:56 16:05
3	08:18 16:14	07:49 17:03	06:55 17:54	06:45 19:47	05:41 20:38	04:58 21:22	04:58 21:33	05:36 20:59	06:26 19:56	07:14 18:47	07:08 16:42	07:58 16:05
4	08:18 16:15	07:48 17:05	06:53 17:56	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	07:10 16:40	07:59 16:04
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31	07:54 16:57		06:51 19:42		05:01 21:19		05:32 21:04	06:21 20:03		07:02 16:48		08:19 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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:19 16:12	07:52 17:50	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:20	04:57 21:34	05:33 21:02	06:22 20:01	07:11 18:52	07:04 16:46	07:55 16:06
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31	07:54 16:57		06:51 19:42		05:01 21:19		05:32 21:04	06:21 20:03		07:02 16:48		08:19 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		

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:19 16:12	07:52 17:50	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:20	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:52	07:04 16:46	07:55 16:06
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19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	05:15 21:03	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	08:08 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 18:10	07:37 16:16	08:15 16:03
21	08:07 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34	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	08:06 16:41	07:14 17:38	06:12 18:27	06:03 20:19	05:11 21:07	04:53 21:34	05:19 21:17	06:06 20:22	06:56 19:12	07:47 18:05	07:41 16:14	08:16 16:04
23	08:04 16:43	07:12 17:40	06:10 18:29	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	08:17 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:23	05:08 21:10	04:54 21:34	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	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 21:13	06:11 20:16	07:01 19:05	06:52 16:59	07:46 16:11	08:17 16:06
26	08:01 16:48	07:06 17:45	06:03 18:34	05:55 20:26	05:06 21:12	04:54 21:34	05:24 21:11	06:13 20:14	07:03 19:03	06:54 16:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:04 17:47	06:01 18:35	05:53 20:28	05:05 21:14	04:55 21:34	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	07:58 16:52	07:01 17:49	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 16:53	07:50 16:08	08:18 16:08
29	07:57 16:54		06:56 19:39	05:49 20:31	05:03 21:16	04:56 21:34	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	07:55 16:56		06:54 19:40	05:47 20:33	05:02 21:17	04:56 21:34	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	07:54 16:57		06:51 19:42		05:01 21:18		05:32 21:04	06:21 20:03		07:02 16:48		08:19 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)	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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April		Mai	Juni	Juli	August		September	Oktober	November	Dezember
1	08:19	07:52	06:59	06:49		05:45	05:00	04:57	05:33		06:22	07:11	07:04	07:55
	16:12	16:59	17:50	19:44		20:34	21:20	21:33	21:02		20:00	18:52	16:46	16:06
2	08:18	07:51	06:57	06:47		05:43	04:59	04:58	05:35		06:24	07:13	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	06:45		05:41	04:58	04:58	05:36		06:26	07:14	07:08	07:58
	16:14	17:03	17:54	19:47		20:37	21:22	21:33	20:59		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	07:10	07:59
	16:15	17:05	17:56	19:49		20:39	21:23	21:32	20:57		19:54	18:45	16:40	16:04
5	08:18	07:46	06:51	06:40		05:37	04:57	05:00	05:39		06:29	07:18	07:11	08:00
	16:16	17:06	17:57	19:51		20:41	21:24	21:32	20:55		19:51	18:42	16:39	16:04
6	08:18	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	21:25	21:31	20:54		19:49	18:40	16:37	16:03
7	08:17	07:42	06:46	06:36		05:34	04:56	05:02	05:42		06:32	07:21	07:15	08:03
	16:19	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	05:03	05:44		06:34	07:23	07:17	08:04
	16:20	17:12	18:03	19:56		20:46	21:26	21:30	20:50		19:45	18:36	16:34	16:02
9	08:16	07:39	06:42	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	21:30	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	21:29	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		06:39	07:28	07:22	08:07
	16:24	17:18	18:08	20:01		20:50	21:29	21:28	20:44		19:38	18:29	16:29	16:02
12	08:15	07:34	06:35	06:24		05:25	04:54	05:07	05:50		06:40	07:29	07:24	08:08
	16:26	17:19	18:10	20:02		20:52	21:30	21:27	20:42		19:35	18:27	16:27	16:02
13	08:14	07:32	06:33	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		20:54	21:30	21:26	20:40		19:33	18:25	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	21:31	21:25	20:39		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
	16:30	17:25	18:15	20:07		20:57	21:31	21:24	20:37		19:29	18:20	16:23	16:02
16	08:12	07:26	06:26	06:16	06:39 (WEA09)	05:19	04:53	05:11	05:57		06:47	07:36	07:31	08:12
	16:32	17:27	18:17	20:09	4 06:43 (WEA09)	20:58	21:32	21:23	20:35		19:26	18:18	16:22	16:02
17	08:11	07:24	06:24	06:13	06:36 (WEA09)	05:18	04:53	05:12	05:58		06:48	07:38	07:32	08:13
	16:33	17:29	18:18	20:11	8 06:44 (WEA09)	21:00	21:32	21:22	20:33		19:24	18:16	16:20	16:02
18	08:10	07:22	06:21	06:11	06:35 (WEA09)	05:16	04:53	05:14	06:00		06:50	07:40	07:34	08:14
	16:35	17:30	18:20	20:12	9 06:44 (WEA09)	21:01	21:33	21:21	20:31		19:22	18:14	16:19	16:02
19	08:09	07:20	06:19	06:09	06:34 (WEA09)	05:15	04:53	05:15	06:01		06:51	07:41	07:36	08:14
	16:36	17:32	18:22	20:14	10 06:44 (WEA09)	21:03	21:33	21:20	20:28		19:19	18:12	16:18	16:03
20	08:08	07:18	06:17	06:07	06:34 (WEA09)	05:13	04:53	05:16	06:03	06:43 (WEA09)	06:53	07:43	07:37	08:15
	16:38	17:34	18:23	20:16	10 06:44 (WEA09)	21:04	21:33	21:19	20:26	3 06:46 (WEA09)	19:17	18:10	16:16	16:03
21	08:07	07:16	06:14	06:05	06:34 (WEA09)	05:12	04:53	05:18	06:05	06:41 (WEA09)	06:55	07:45	07:39	08:16
	16:40	17:36	18:25	20:17	9 06:43 (WEA09)	21:05	21:34	21:18	20:24	7 06:48 (WEA09)	19:15	18:07	16:15	16:03
22	08:06	07:14	06:12	06:03	06:35 (WEA09)	05:11	04:53	05:19	06:06	06:39 (WEA09)	06:56	07:47	07:41	08:16
	16:41	17:38	18:27	20:19	7 06:42 (WEA09)	21:07	21:34	21:17	20:22	9 06:48 (WEA09)	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	06:08	06:39 (WEA09)	06:58	07:48	07:42	08:17
	16:43	17:40	18:29	20:21	21:08	21:34	21:15	20:20	20:18	10 06:49 (WEA09)	19:10	18:03	16:13	16:04
24	08:03	07:10	06:07	05:59	05:08	04:54	05:22	06:10	06:10	06:38 (WEA09)	06:59	07:50	07:44	08:17
	16:45	17:41	18:30	20:22	21:10	21:34	21:14	20:18	20:18	10 06:48 (WEA09)	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	06:11	06:38 (WEA09)	07:01	06:52	07:46	08:17
	16:47	17:43	18:32	20:24	21:11	21:34	21:13	20:16	20:16	10 06:48 (WEA09)	19:05	16:59	16:11	16:06
26	08:01	07:06	06:03	05:55	05:06	04:54	05:24	06:13	06:13	06:39 (WEA09)	07:03	06:54	07:47	08:18
	16:48	17:45	18:34	20:26	21:12	21:34	21:11	20:14	20:14	7 06:46 (WEA09)	19:03	16:57	16:10	16:06
27	07:59	07:04	06:01	05:53	05:05	04:55	05:26	06:14	06:14	06:41 (WEA09)	07:04	06:55	07:49	08:18
	16:50	17:47	18:35	20:28	21:14	21:34	21:10	20:12	20:12	3 06:44 (WEA09)	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	06:16	07:06	06:57	07:50	08:18	16:08
	16:52	17:49	18:37	20:29	21:15	21:34	21:08	20:09	20:09	18:58	16:53	16:08	16:08	16:08
29	07:57		06:56	05:49	05:03	04:56	05:29	06:18	06:18	07:08	06:59	07:52	08:18	16:09
	16:54		19:39	20:31	21:16	21:34	21:07	20:07	20:07	18:56	16:52	16:07	16:07	16:09
30	07:55		06:54	05:47	05:02	04:56	05:30	06:19	06:19	07:09	07:01	07:53	08:19	16:10
	16:55		19:40	20:33	21:17	21:34	21:05	20:05	20:05	18:54	16:50	16:07	16:09	16:10
31	07:54		06:51		05:01		05:32	06:21	06:21		07:02			16:10
	16:57		19:42		21:18		21:04	20:03	20:03		16:48			245
Sonneneinstunden	260	278	367	416		484	498	501	453		381	332	267	
astr.max.mögl.Beschattung				57					59					
Red.Sonneneinstunden				0,42					0,50					
Reduktion Betriebsdauer				0,95					0,95					
Reduktion Windrichtung				0,64					0,64					
Gesamte Reduktion				0,25					0,30					
Met.wahrsch.Beschattung				14					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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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												
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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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

Schattenrezeptor: IP23 - Hallesche Straße 10, 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
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2	08:18 16:13	07:51 17:52	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:21	04:58 21:33	05:35 21:00	06:24 19:58	07:13 18:49	07:06 16:44	07:56 16:05
3	08:18 16:14	07:49 17:03	06:55 17:54	06:45 19:47	05:41 20:37	04:58 21:22	04:59 21:33	05:36 20:59	06:26 19:56	07:14 18:47	07:08 16:42	07:58 16:05
4	08:18 16:15	07:47 17:05	06:53 17:56	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	07:10 16:41	07:59 16:04
5	08:18 16:16	07:46 17:06	06:51 17:57	06:40 19:51	05:37 20:41	04:57 21:24	04:57 21:32	05:39 20:55	06:29 19:51	07:18 18:42	07:11 16:39	08:00 16:04
6	08:18 16:17	07:44 17:08	06:48 17:59	06:38 19:52	05:36 20:42	04:56 21:25	05:01 21:31	05:41 20:54	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	06:36 19:54	05:34 20:44	04:56 21:26	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 19:56	05:32 20:46	04:55 21:26	05:03 21:30	05:44 20:50	06:34 19:45	07:23 18:36	07:17 16:34	08:04 16:03
9	08:16 16:21	07:39 17:14	06:42 18:04	06:31 19:57	05:30 20:47	04:55 21:27	05:04 21:29	05:46 20:48	06:35 19:42	07:24 18:33	07:18 16:32	08:05 16:02
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19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	05:15 21:03	04:53 21:33	05:15 21:20	06:02 20:28	06:51 19:19	07:41 18:12	07:36 16:18	08:14 16:03
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 18:10	07:37 16:16	08:15 16:03
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22	08:06 16:41	07:14 17:38	06:12 18:27	06:03 20:19	05:11 21:07	04:53 21:34	05:19 21:17	06:06 20:22	06:56 19:12	07:47 18:05	07:41 16:14	08:16 16:04
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29	07:57 16:54		06:56 19:39	05:49 20:31	05:03 21:16	04:56 21:34	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	07:55 16:56		06:54 19:40	05:47 20:33	05:02 21:17	04:57 21:34	05:30 21:05	06:19 20:05	07:09 18:54	07:01 16:50	07:53 16:07	08:18 16:10
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Sonnenscheinstunden	260	278	367	416	484	497	501	453	381	332	267	245
astr.max.mögl.Beschattung												
Red.Sonnenscheinwahrsch.												
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Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

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	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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

Schattenrezeptor: IP24 - Hallesche Straße 13, 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

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1	08:19 16:12	07:52 17:50	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:20	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:52	07:04 16:46	07:55 16:06
2	08:18 16:13	07:51 17:52	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:21	04:58 21:33	05:35 21:00	06:24 19:58	07:13 18:49	07:06 16:44	07:56 16:05
3	08:18 16:14	07:49 17:03	06:55 17:54	06:45 19:47	05:41 20:37	04:58 21:22	04:59 21:33	05:36 20:59	06:26 19:56	07:14 18:47	07:08 16:42	07:58 16:05
4	08:18 16:15	07:47 17:05	06:53 17:56	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	07:10 16:41	07:59 16:04
5	08:18 16:16	07:46 17:06	06:51 17:57	06:40 19:51	05:37 20:41	04:57 21:24	04:57 21:32	05:39 20:55	06:29 19:51	07:18 18:42	07:11 16:39	08:00 16:04
6	08:18 16:17	07:44 17:08	06:48 17:59	06:38 19:52	05:36 20:42	04:56 21:25	05:01 21:31	05:41 20:54	06:30 19:49	07:19 18:40	07:13 16:37	08:01 16:03
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Sonnenscheinstunden	260	278	367	416	484	497	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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

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
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Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

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2	08:18 16:13	07:51 17:52	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:21	04:58 21:33	05:35 21:00	06:24 19:58	07:13 18:49	07:06 16:44	07:56 16:05
3	08:18 16:14	07:49 17:03	06:55 17:54	06:45 19:47	05:41 20:37	04:58 21:22	04:59 21:33	05:36 20:59	06:26 19:56	07:14 18:47	07:08 16:42	07:58 16:05
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31	07:54 16:57		06:51 19:42		05:01 21:18		05:32 21:04	06:21 20:03		07:02 16:48		08:19 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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:19 16:12	07:52 17:50	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:20	04:57 21:33	05:33 21:02	06:22 20:01	07:11 18:52	07:04 16:46	07:55 16:06
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31	07:54 16:57		06:51 19:42		05:01 21:18		05:32 21:04	06:21 20:03		07:02 16:48		08:19 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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:19 16:12	07:52 17:50	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:20	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:52	07:04 16:46	07:55 16:06
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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 20:31	06:50 19:22	07:40 18:14	07:34 16:19	08:14 16:02
19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	05:15 21:03	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	08:08 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 18:10	07:37 16:16	08:15 16:03
21	08:07 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34	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	08:06 16:41	07:14 17:38	06:12 18:27	06:03 20:19	05:11 21:07	04:53 21:34	05:19 21:17	06:06 20:22	06:56 19:12	07:47 18:05	07:41 16:14	08:16 16:04
23	08:04 16:43	07:12 17:40	06:10 18:29	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	08:17 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:23	05:08 21:10	04:54 21:34	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	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 21:13	06:11 20:16	07:01 19:05	06:52 16:59	07:46 16:11	08:17 16:06
26	08:01 16:48	07:06 17:45	06:03 18:34	05:55 20:26	05:06 21:12	04:54 21:34	05:24 21:11	06:13 20:14	07:03 19:03	06:54 16:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:04 17:47	06:01 18:35	05:53 20:28	05:05 21:14	04:55 21:34	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	07:58 16:52	07:01 17:49	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 16:53	07:50 16:08	08:18 16:08
29	07:57 16:54		06:56 19:39	05:49 20:31	05:03 21:16	04:56 21:34	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	07:55 16:56		06:54 19:40	05:47 20:33	05:02 21:17	04:56 21:34	05:30 21:05	06:19 20:05	07:09 18:54	07:01 16:50	07:53 16:07	08:19 16:09
31	07:54 16:57		06:51 19:42		05:01 21:18		05:32 21:04	06:21 20:03		07:02 16:48		08:19 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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:19 16:12	07:52 17:50	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:20	04:57 21:33	05:33 21:02	06:22 20:00	07:11 18:52	07:04 16:46	07:55 16:06
2	08:18 16:13	07:51 17:52	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:21	04:58 21:33	05:35 21:00	06:24 19:58	07:13 18:49	07:06 16:44	07:56 16:05
3	08:18 16:14	07:49 17:03	06:55 17:54	06:45 19:47	05:41 20:37	04:58 21:22	04:58 21:33	05:36 20:59	06:26 19:56	07:14 18:47	07:08 16:42	07:58 16:05
4	08:18 16:15	07:47 17:05	06:53 17:56	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	07:10 16:40	07:59 16:04
5	08:18 16:16	07:46 17:06	06:51 17:57	06:40 19:51	05:37 20:41	04:57 21:24	04:57 21:32	05:39 20:55	06:29 19:51	07:18 18:42	07:11 16:39	08:00 16:04
6	08:18 16:17	07:44 17:08	06:48 17:59	06:38 19:52	05:36 20:42	04:56 21:25	05:01 21:31	05:41 20:54	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	06:36 19:54	05:34 20:44	04:56 21:26	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 19:56	05:32 20:46	04:55 21:26	05:03 21:30	05:44 20:50	06:34 19:45	07:23 18:36	07:17 16:34	08:04 16:02
9	08:16 16:21	07:39 17:14	06:42 18:04	06:31 19:57	05:30 20:47	04:55 21:27	05:04 21:30	05:46 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 17:18	06:37 18:08	06:27 20:01	05:27 20:50	04:54 21:29	05:06 21:28	05:49 20:44	06:39 19:38	07:28 18:29	07:22 16:29	08:07 16:02
12	08:15 16:26	07:34 17:19	06:35 18:10	06:24 20:02	05:25 20:52	04:54 21:30	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	06:33 18:11	06:22 20:04	05:24 20:54	04:53 21:30	05:08 21:26	05:52 20:40	06:42 19:33	07:31 18:25	07:25 16:26	08:09 16:02
14	08:13 16:29	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 20:39	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	05:21 20:57	04:53 21:31	05:10 21:24	05:55 20:37	06:45 19:29	07:34 18:20	07:29 16:23	08:11 16:02
16	08:12 16:32	07:26 17:27	06:26 18:17	06:16 20:09	05:19 20:58	04:53 21:32	05:11 21:23	05:57 20:35	06:47 19:26	07:36 18:18	07:31 16:22	08:12 16:02
17	08:11 16:33	07:24 17:29	06:24 18:18	06:13 20:11	05:18 21:00	04:53 21:32	05:12 21:22	05:58 20:33	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 20:31	06:50 19:22	07:40 18:14	07:34 16:19	08:14 16:02
19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	05:15 21:03	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	08:08 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 18:10	07:37 16:16	08:15 16:03
21	08:07 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34	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	08:06 16:41	07:14 17:38	06:12 18:27	06:03 20:19	05:11 21:07	04:53 21:34	05:19 21:17	06:06 20:22	06:56 19:12	07:47 18:05	07:41 16:14	08:16 16:04
23	08:04 16:43	07:12 17:40	06:10 18:29	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	08:17 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:23	05:08 21:10	04:54 21:34	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	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 21:13	06:11 20:16	07:01 19:05	06:52 16:59	07:46 16:11	08:17 16:06
26	08:01 16:48	07:06 17:45	06:03 18:34	05:55 20:26	05:06 21:12	04:54 21:34	05:24 21:11	06:13 20:14	07:03 19:03	06:54 16:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:04 17:47	06:01 18:35	05:53 20:28	05:05 21:14	04:55 21:34	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	07:58 16:52	07:01 17:49	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 16:53	07:50 16:08	08:18 16:08
29	07:57 16:54		06:56 19:39	05:49 20:31	05:03 21:16	04:56 21:34	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	07:55 16:56		06:54 19:40	05:47 20:33	05:02 21:17	04:56 21:34	05:30 21:05	06:19 20:05	07:09 18:54	07:01 16:50	07:53 16:07	08:19 16:09
31	07:54 16:57		06:51 19:42		05:01 21:18		05:32 21:04	06:21 20:03		07:02 16:48		08:19 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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:19	07:52	06:59	06:49	05:45	05:00	04:57	05:33	06:22	07:11	07:04	07:55
	16:12	16:59	17:50	19:44	20:34	21:20	21:33	21:02	20:00	18:52	16:46	16:06
2	08:18	07:51	06:57	06:47	05:43	04:59	04:58	05:35	06:24	07:13	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	06:45	05:41	04:58	04:58	05:36	06:26	07:14	07:08	07:58
	16:14	17:03	17:54	19:47	20:37	21:22	21:33	20:59	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	07:10	07:59
	16:15	17:05	17:56	19:49	20:39	21:23	21:32	20:57	19:54	18:45	16:40	16:04
5	08:18	07:46	06:51	06:40	05:37	04:57	05:00	05:39	06:29	07:18	07:11	08:00
	16:16	17:06	17:57	19:51	20:41	21:24	21:32	20:55	19:51	18:42	16:39	16:04
6	08:18	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	21:25	21:31	20:54	19:49	18:40	16:37	16:03
7	08:17	07:42	06:46	06:36	05:34	04:56	05:02	05:42	06:32	07:21	07:15	08:03
	16:19	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	05:03	05:44	06:34	07:23	07:17	08:04
	16:20	17:12	18:03	19:56	20:46	21:26	21:30	20:50	19:45	18:36	16:34	16:02
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	16:21	17:14	18:04	19:57	20:47	21:27	21:30	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	21:29	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	06:39	07:28	07:22	08:07
	16:24	17:18	18:08	20:01	20:50	21:29	21:28	20:44	19:38	18:29	16:29	16:02
12	08:15	07:34	06:35	06:24	05:25	04:54	05:07	05:50	06:40	07:29	07:24	08:08
	16:26	17:19	18:10	20:02	20:52	21:30	21:27	20:42	19:35	18:27	16:27	16:02
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	16:27	17:21	18:11	20:04	20:54	21:30	21:26	20:40	19:33	18:25	16:26	16:02
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	16:29	17:23	18:13	20:06	20:55	21:31	21:25	20:39	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	18:17	20:09	20:58	21:32	21:23	20:35	7 06:40 (WEA09)	19:26	18:18	16:22
17	08:11	07:24	06:24	06:13	05:18	04:53	05:12	05:58	06:32 (WEA09)	06:48	07:38	08:13
	16:33	17:29	18:18	20:11	21:00	21:32	21:22	20:33	8 06:40 (WEA09)	19:24	18:16	16:20
18	08:10	07:22	06:21	06:11	05:16	04:53	05:14	06:00	06:31 (WEA09)	06:50	07:40	08:14
	16:35	17:30	18:20	20:12	21:01	21:33	21:21	20:31	10 06:41 (WEA09)	19:22	18:14	16:19
19	08:09	07:20	06:19	06:09	05:15	04:53	05:15	06:01	06:30 (WEA09)	06:51	07:41	08:14
	16:36	17:32	18:22	20:14	21:03	21:33	21:20	20:28	11 06:41 (WEA09)	19:19	18:12	16:18
20	08:08	07:18	06:17	06:07	05:13	04:53	05:16	06:03	06:31 (WEA09)	06:53	07:43	08:15
	16:38	17:34	18:23	20:16	21:04	21:33	21:19	20:26	10 06:41 (WEA09)	19:17	18:10	16:16
21	08:07	07:16	06:14	06:05	05:12	04:53	05:18	06:05	06:32 (WEA09)	06:55	07:45	08:16
	16:40	17:36	18:25	20:17	6 06:34 (WEA09)	21:05	21:34	20:24	8 06:40 (WEA09)	19:15	18:07	16:15
22	08:06	07:14	06:12	06:03	05:11	04:53	05:19	06:06	06:33 (WEA09)	06:56	07:47	08:16
	16:41	17:38	18:27	20:19	9 06:35 (WEA09)	21:07	21:34	20:22	5 06:38 (WEA09)	19:12	18:05	16:14
23	08:04	07:12	06:10	06:01	05:09	04:53	05:20	06:08	06:38 (WEA09)	06:58	07:48	08:17
	16:43	17:40	18:29	20:21	10 06:35 (WEA09)	21:08	21:34	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	06:10	06:59	07:50	07:44	08:17
	16:45	17:41	18:30	20:23	10 06:35 (WEA09)	21:10	21:34	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	07:46	08:17
	16:47	17:43	18:32	20:24	10 06:35 (WEA09)	21:11	21:34	20:16	19:05	16:59	16:11	16:06
26	08:01	07:06	06:03	05:55	05:06	04:54	05:24	06:13	07:03	06:54	07:47	08:18
	16:48	17:45	18:34	20:26	9 06:34 (WEA09)	21:12	21:34	20:14	19:03	16:57	16:10	16:06
27	07:59	07:04	06:01	05:53	05:05	04:55	05:26	06:14	07:04	06:55	07:49	08:18
	16:50	17:47	18:35	20:28	6 06:32 (WEA09)	21:14	21:34	20:12	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	17:49	18:37	20:29	21:15	21:34	21:08	20:09	18:58	16:53	16:08	16:08
29	07:57		06:56	05:49	05:03	04:56	05:29	06:18	07:08	06:59	07:52	08:18
	16:54		19:39	20:31	21:16	21:34	21:07	20:07	18:56	16:52	16:07	16:09
30	07:55		06:54	05:47	05:02	04:56	05:30	06:19	07:09	07:01	07:53	08:19
	16:55		19:40	20:33	21:17	21:34	21:05	20:05	18:54	16:50	16:07	16:09
31	07:54		06:51		05:01		05:32	06:21		07:02		08:19
	16:57		19:42		21:18		21:04	20:03		16:48		16:10
Sonneneinstunden	260	278	367	416	484	498	501	453	381	332	267	245
astr.max.mögl.Beschattung				60				59				
Red.Sonneneinstunden				0,42				0,50				
Reduktion Betriebsdauer				0,95				0,95				
Reduktion Windrichtung				0,64				0,64				
Gesamte Reduktion				0,25				0,30				
Met.wahrsch.Beschattung				15				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)	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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

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

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	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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

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

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

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

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung Schattenrezeptor: IP33 - Am Trappenberg 2, 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:19 16:12	07:52 17:50	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:20	04:57 21:34	05:33 21:02	06:22 20:01	07:11 18:52	07:04 16:46	07:55 16:06
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31	07:54 16:57		06:51 19:42		05:01 21:19		05:32 21:04	06:21 20:03		07:02 16:48		08:19 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		

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:19 16:12	07:52 17:50	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:20	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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21	08:07 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34	05:17 21:18	06:05 20:24	06:55 19:15	07:45 18:07	07:39 16:15	08:16 16:03
22	08:06 16:41	07:14 17:38	06:12 18:27	06:03 20:19	05:11 21:07	04:53 21:34	05:19 21:17	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	08:17 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:22	05:08 21:10	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 21:13	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	07:06 17:45	06:03 18:34	05:55 20:26	05:06 21:12	04:54 21:34	05:24 21:11	06:13 20:14	07:03 19:03	06:54 16:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:03 17:47	06:00 18:35	05:53 20:28	05:05 21:14	04:55 21:34	05:26 21:10	06:14 20:11	07:04 19:01	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	05:51 20:29	05:04 21:15	04:55 21:34	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	07:50 16:08	08:18 16:08
29	07:57 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	07:08 18:56	06:59 16:51	07:52 16:07	08:18 16:08
30	07:55 16:55		06:54 19:40	05:47 20:33	05:02 21:17	04:56 21:34	05:30 21:05	06:19 20:05	07:09 18:54	07:01 16:49	07:53 16:06	08:19 16:09
31	07:54 16:57		06:51 19:42		05:01 21:18		05:32 21:04	06:21 20:03		07:02 16:48		08:19 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		

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung Schattenrezeptor: IP35 - Kleinleipziger Str. 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember	
1	08:19	08:58 (WEA13)	07:52	06:59	06:49	05:45	05:00	04:57	05:33	06:22	07:11	07:04	07:55
2	16:12	5 09:03 (WEA13)	16:59	17:50	19:44	20:34	21:20	21:33	21:02	20:00	18:51	16:46	16:06
3	08:19	08:58 (WEA13)	07:51	06:57	06:47	05:43	04:59	04:58	05:35	06:24	07:12	07:06	07:56
4	16:13	4 09:02 (WEA13)	17:01	17:52	19:45	20:36	21:21	21:33	21:00	19:58	18:49	16:44	16:05
5	08:18		07:49	06:55	06:44	05:41	04:58	04:58	05:36	06:26	07:14	07:08	07:58
6	16:14		17:03	17:54	19:47	20:37	21:22	21:33	20:59	19:56	18:47	16:42	16:05
7	08:18		07:47	06:53	06:42	05:39	04:57	04:59	05:38	06:27	07:16	07:10	07:59
8	16:15		17:04	17:56	19:49	20:39	21:23	21:32	20:57	19:54	18:45	16:40	16:04
9	08:18		07:46	06:50	06:40	05:37	04:57	05:00	05:39	06:29	07:17	07:11	08:00
10	16:16		17:06	17:57	19:50	20:41	21:24	21:32	20:55	19:51	18:42	16:39	16:03
11	08:18		07:44	06:48	06:38	05:35	04:56	05:01	05:41	06:30	07:19	07:13	08:02
12	16:17		17:08	17:59	19:52	20:42	21:25	21:31	20:54	19:49	18:40	16:37	16:03
13	08:17		07:42	06:46	06:35	05:34	04:56	05:02	05:42	06:32	07:21	07:15	08:03
14	16:18		17:10	18:01	19:54	20:44	21:26	21:31	20:52	19:47	18:38	16:35	16:03
15	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	16:20		17:12	18:03	19:56	20:46	21:27	21:30	20:50	19:45	18:36	16:34	16:02
17	08:16		07:39	06:42	06:31	05:30	04:55	05:03	05:45	06:35	07:24	07:18	08:05
18	16:21		17:14	18:04	19:57	20:47	21:27	21:30	20:48	19:42	18:33	16:32	16:02
19	08:16		07:37	06:39	06:29	05:28	04:54	05:04	05:47	06:37	07:26	07:20	08:06
20	16:22		17:16	18:06	19:59	20:49	21:28	21:29	20:46	19:40	18:31	16:30	16:02
21	08:15		07:35	06:37	06:26	05:27	04:54	05:05	05:49	06:38	07:28	07:22	08:07
22	16:24		17:17	18:08	20:01	20:50	21:29	21:28	20:44	19:38	18:29	16:29	16:02
23	08:15		07:34	06:35	06:24	05:25	04:53	05:06	05:50	06:40	07:29	07:24	08:08
24	16:25		17:19	18:10	20:02	20:52	21:30	21:27	20:42	19:35	18:27	16:27	16:02
25	08:14		07:32	06:33	06:22	05:24	04:53	05:08	05:52	06:42	07:31	07:25	08:09
26	16:27		17:21	18:11	20:04	20:54	21:30	21:26	20:40	19:33	18:24	16:26	16:01
27	08:13		07:30	06:30	06:20	05:22	04:53	05:09	05:53	06:43	07:33	07:27	08:10
28	16:28		17:23	18:13	20:06	20:55	21:31	21:25	20:39	19:31	18:22	16:24	16:01
29	08:12		07:28	06:28	06:18	05:20	04:53	05:10	05:55	06:45	07:34	07:29	08:11
30	16:30		17:25	18:15	20:07	20:57	21:31	21:25	20:37	19:28	18:20	16:23	16:02
31	08:12		07:26	06:26	06:15	05:19	04:53	05:11	05:57	06:46	07:36	07:31	08:12
32	16:31		17:27	18:16	20:09	20:58	21:32	21:24	20:35	19:26	18:18	16:21	16:02
33	08:11		07:24	06:23	06:13	05:17	04:53	05:12	05:58	06:48	07:38	07:32	08:13
34	16:33		17:28	18:18	20:11	21:00	21:32	21:22	20:33	19:24	18:16	16:20	16:02
35	08:10		07:22	06:21	06:11	05:16	04:53	05:13	06:00	06:50	07:40	07:34	08:14
36	16:35		17:30	18:20	20:12	21:01	21:33	21:21	20:31	19:22	18:14	16:19	16:02
37	08:09		07:20	06:19	06:09	05:15	04:53	05:15	06:01	06:51	07:41	07:36	08:14
38	16:36		17:32	18:22	20:14	21:03	21:33	21:20	20:28	19:19	18:12	16:17	16:02
39	08:08		07:18	06:17	06:07	05:13	04:53	05:16	06:03	06:53	07:43	07:37	08:15
40	16:38		17:34	18:23	20:16	21:04	21:33	21:19	20:26	19:17	18:09	16:16	16:03
41	08:07		07:16	06:14	06:05	05:12	04:53	05:17	06:05	06:55	07:45	07:39	08:16
42	16:40		17:36	18:25	20:17	21:05	21:34	21:18	20:24	19:15	18:07	16:15	16:03
43	08:06		07:14	06:12	06:03	05:11	04:53	05:19	06:06	06:56	07:46	07:41	08:16
44	16:41		17:38	18:27	20:19	21:07	21:34	21:17	20:22	19:12	18:05	16:14	16:04
45	08:04		07:12	06:10	06:01	05:09	04:53	05:20	06:08	06:58	07:48	07:42	08:17
46	16:43		17:39	18:28	20:21	21:08	21:34	21:15	20:20	19:10	18:03	16:13	16:04
47	08:03		07:10	06:07	05:59	05:08	04:54	05:21	06:09	06:59	07:50	07:44	08:17
48	16:45		17:41	18:30	20:22	21:10	21:34	21:14	20:18	19:08	18:01	16:12	16:05
49	08:02		07:08	06:05	05:57	05:07	04:54	05:23	06:11	07:01	06:52	07:46	08:17
50	16:46		17:43	18:32	20:24	21:11	21:34	21:13	20:16	19:05	16:59	16:11	16:05
51	08:01		07:06	06:03	05:55	05:06	04:54	05:24	06:13	07:03	06:53	07:47	08:18
52	16:48		17:45	18:34	20:26	21:12	21:34	21:11	20:14	19:03	16:57	16:10	16:06
53	07:59		07:03	06:00	05:53	05:05	04:55	05:26	06:14	07:04	06:55	07:49	08:18
54	16:50		17:47	18:35	20:28	21:14	21:34	21:10	20:11	19:01	16:55	16:09	16:07
55	07:58		07:01	05:58	05:51	05:04	04:55	05:27	06:16	07:06	06:57	07:50	08:18
56	16:52		17:48	18:37	20:29	21:15	21:34	21:08	20:09	18:58	16:53	16:08	16:08
57	07:57			06:56	05:49	05:03	04:56	05:29	06:17	07:08	06:59	07:52	08:18
58	16:54			19:39	20:31	21:16	21:34	21:07	20:07	18:56	16:51	16:07	16:08
59	07:55			06:54	05:47	05:02	04:56	05:30	06:19	07:09	07:01	07:53	08:19
60	16:55			19:40	20:33	21:17	21:34	21:05	20:05	18:54	16:49	16:06	16:09
61	07:54			06:51		05:01		05:32	06:21		07:02		08:19
62	16:57			19:42		21:18		21:04	20:03		16:48		16:10
63	Sonneneinstunden	260	278	367	416	484	498	501	453	381	332	267	245
64	astr.max.mögl.Beschattung	9											181
65	Red.Sonneneinstunden	0,19											0,16
66	Reduktion Betriebsdauer	0,95											0,95
67	Reduktion Windrichtung	0,57											0,57
68	Gesamte Reduktion	0,10											0,09
69	Met.wahrsch.Beschattung	1											16

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung **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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar		Februar		März		April		Mai		Juni	
1	08:19	09:04 (WEA13)	07:52	06:59	06:49	07:11 (WEA14)	05:45	05:00			
	16:12	11 09:15 (WEA13)	16:59	17:50	19:44	5 07:16 (WEA14)	20:34	21:20			
2	08:18	09:05 (WEA13)	07:51	06:57	06:47	07:09 (WEA14)	05:43	04:59			
	16:13	9 09:14 (WEA13)	17:01	17:52	19:45	8 07:17 (WEA14)	20:36	21:21			
3	08:18	09:06 (WEA13)	07:49	06:55	06:44	07:07 (WEA14)	05:41	04:58			
	16:14	8 09:14 (WEA13)	17:03	17:54	19:47	9 07:16 (WEA14)	20:37	21:22			
4	08:18	09:07 (WEA13)	07:47	06:53	06:42	07:07 (WEA14)	05:39	04:57			
	16:15	7 09:14 (WEA13)	17:04	17:56	19:49	9 07:16 (WEA14)	20:39	21:23			
5	08:18	09:08 (WEA13)	07:46	06:50	06:40	07:07 (WEA14)	05:37	04:57			
	16:16	5 09:13 (WEA13)	17:06	17:57	19:50	7 07:14 (WEA14)	20:41	21:24			
6	08:18		07:44	06:48	06:38		05:35	04:56			
	16:17		17:08	17:59	19:52		20:42	21:25			
7	08:17		07:42	06:46	06:35		05:34	04:56			
	16:18		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		05:28	04:54			
	16:22		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		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		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		05:22	04:53			
	16:28		17:23	18:13	20:06	2 06:43 (WEA15)	20:55	21:31			
15	08:12		07:28	06:28	06:18	06:41 (WEA15)	05:20	04:53			
	16:30		17:25	18:15	20:07	5 06:46 (WEA15)	20:57	21:31			
16	08:12		07:26	06:26	06:15	06:38 (WEA15)	05:19	04:53			
	16:31		17:27	18:16	20:09	7 06:45 (WEA15)	20:58	21:32			
17	08:11		07:24	06:23	06:13	06:36 (WEA15)	05:17	04:53			
	16:33		17:28	18:18	20:11	9 06:45 (WEA15)	21:00	21:32			
18	08:10		07:22	06:21	06:11	06:35 (WEA15)	05:16	04:53			
	16:35		17:30	18:20	20:12	10 06:45 (WEA15)	21:01	21:33			
19	08:09		07:20	06:19	06:09	06:36 (WEA15)	05:15	04:53			
	16:36		17:32	18:22	20:14	8 06:44 (WEA15)	21:03	21:33			
20	08:08		07:18	06:17	06:07	06:38 (WEA15)	05:13	04:53			
	16:38		17:34	18:23	20:16	3 06:41 (WEA15)	21:04	21:33			
21	08:07		07:16	06:14	06:05		05:12	04:53			
	16:40		17:36	5 07:45 (WEA22)	20:17		21:05	21:34			
22	08:06		07:14	06:12	06:03		05:11	04:53			
	16:41		17:38	8 07:46 (WEA22)	20:19		21:07	21:34			
23	08:04		07:12	06:10	06:01		05:09	04:53			
	16:43		17:39	11 07:47 (WEA22)	20:21		21:08	21:34			
24	08:03		07:10	06:07	05:59		05:08	04:54			
	16:45		17:41	11 07:46 (WEA22)	20:22		21:10	21:34			
25	08:02		07:08	06:05	05:57		05:07	04:54			
	16:46		17:43	9 07:45 (WEA22)	20:24		21:11	21:34			
26	08:01		07:06	06:03	05:55		05:06	04:54			
	16:48		17:45	7 07:44 (WEA22)	20:26		21:12	21:34			
27	07:59		07:03	06:00	05:53		05:05	04:55			
	16:50		17:47	2 07:42 (WEA22)	20:27		21:14	21:34			
28	07:58		07:01	05:58	05:51		05:04	04:55			
	16:52		17:48	18:37	20:29		21:15	21:34			
29	07:57			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	07:14 (WEA14)		05:01				
	16:57			19:42	2 07:16 (WEA14)		21:18				
Sonnenscheinstunden		260	278	367	416		484	498			
astr.max.mögl.Beschattung		40	53	2	82						
Red.Sonnenscheinwahrsch.		0,19	0,26	0,33	0,42						
Reduktion Betriebsdauer		0,95	0,95	0,95	0,95						
Reduktion Windrichtung		0,58	0,60	0,64	0,64						
Gesamte Reduktion		0,10	0,15	0,20	0,25						
Met.wahrsch.Beschattung		4	8	0	21						

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung **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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli		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			06:26		07:14		07:08		07:58	
	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	07:04 (WEA14)	07:21		07:15		08:03	08:55 (WEA13)
	21:31	20:52			19:47	07:10 (WEA14)	18:38		16:35		16:03	5 09:00 (WEA13)
8	05:02	05:44			06:34	07:01 (WEA14)	07:22		07:17		08:04	08:54 (WEA13)
	21:30	20:50			19:45	9 07:10 (WEA14)	18:36		16:33		16:02	7 09:01 (WEA13)
9	05:03	05:45			06:35	07:01 (WEA14)	07:24		07:18		08:05	08:55 (WEA13)
	21:30	20:48			19:42	10 07:11 (WEA14)	18:33		16:32		16:02	8 09:03 (WEA13)
10	05:04	05:47			06:37	07:02 (WEA14)	07:26		07:20		08:06	08:55 (WEA13)
	21:29	20:46			19:40	8 07:10 (WEA14)	18:31		16:30		16:02	9 09:04 (WEA13)
11	05:05	05:49			06:38	07:04 (WEA14)	07:28		07:22		08:07	08:55 (WEA13)
	21:28	20:44			19:38	5 07:09 (WEA14)	18:29		16:29		16:02	10 09:05 (WEA13)
12	05:06	05:50			06:40	07:05 (WEA14)	07:29		07:24		08:08	08:55 (WEA13)
	21:27	20:42			19:35	3 07:08 (WEA14)	18:27		16:27		16:02	10 09:05 (WEA13)
13	05:08	05:52			06:42		07:31		07:25		08:09	08:55 (WEA13)
	21:26	20:40			19:33		18:24		16:26		16:01	11 09:06 (WEA13)
14	05:09	05:53			06:43		07:33		07:27		08:10	08:55 (WEA13)
	21:25	20:39			19:31		18:22		16:24		16:01	12 09:07 (WEA13)
15	05:10	05:55			06:45		07:34	08:10 (WEA22)	07:29		08:11	08:55 (WEA13)
	21:24	20:37			19:28		18:20	6 08:16 (WEA22)	16:23		16:02	12 09:07 (WEA13)
16	05:11	05:57			06:46		07:36	08:09 (WEA22)	07:31		08:12	08:56 (WEA13)
	21:23	20:35			19:26		18:18	8 08:17 (WEA22)	16:21		16:02	12 09:08 (WEA13)
17	05:12	05:58			06:48		07:38	08:08 (WEA22)	07:32		08:13	08:55 (WEA13)
	21:22	20:33			19:24		18:16	10 08:18 (WEA22)	16:20		16:02	13 09:08 (WEA13)
18	05:13	06:00			06:50		07:39	08:07 (WEA22)	07:34		08:14	08:56 (WEA13)
	21:21	20:30			19:21		18:14	10 08:17 (WEA22)	16:19		16:02	14 09:12 (WEA12)
19	05:15	06:01			06:51		07:41	08:07 (WEA22)	07:36		08:14	08:57 (WEA13)
	21:20	20:28			19:19		18:12	10 08:17 (WEA22)	16:17		16:02	16 09:14 (WEA12)
20	05:16	06:03			06:53		07:43	08:09 (WEA22)	07:37		08:15	08:57 (WEA13)
	21:19	20:26			19:17		18:09	7 08:16 (WEA22)	16:16		16:03	16 09:14 (WEA12)
21	05:17	06:05			06:54		07:45	08:11 (WEA22)	07:39		08:16	08:58 (WEA13)
	21:18	20:24			19:15		18:07	4 08:15 (WEA22)	16:15		16:03	17 09:15 (WEA12)
22	05:19	06:06			06:56		07:46		07:41		08:16	08:58 (WEA13)
	21:17	20:22			19:12		18:05		16:14		16:04	17 09:15 (WEA12)
23	05:20	06:08		06:41 (WEA15)	06:58		07:48		07:42		08:17	08:59 (WEA13)
	21:15	20:20	4	06:45 (WEA15)	19:10		18:03		16:13		16:04	16 09:16 (WEA12)
24	05:21	06:09		06:40 (WEA15)	06:59		07:50		07:44		08:17	08:59 (WEA13)
	21:14	20:18	7	06:47 (WEA15)	19:08		18:01		16:12		16:05	16 09:16 (WEA12)
25	05:23	06:11		06:39 (WEA15)	07:01		06:52		07:46		08:17	08:59 (WEA13)
	21:13	20:16	9	06:48 (WEA15)	19:05		16:59		16:11		16:05	15 09:16 (WEA12)
26	05:24	06:13		06:39 (WEA15)	07:03		06:53		07:47		08:18	09:00 (WEA13)
	21:11	20:14	9	06:48 (WEA15)	19:03		16:57		16:10		16:06	13 09:13 (WEA13)
27	05:26	06:14		06:41 (WEA15)	07:04		06:55		07:49		08:18	09:01 (WEA13)
	21:10	20:11	7	06:48 (WEA15)	19:01		16:55		16:09		16:07	12 09:13 (WEA13)
28	05:27	06:16		06:42 (WEA15)	07:06		06:57		07:50		08:18	09:01 (WEA13)
	21:08	20:09	5	06:47 (WEA15)	18:58		16:53		16:08		16:08	12 09:13 (WEA13)
29	05:29	06:17		06:44 (WEA15)	07:08		06:59		07:52		08:18	09:02 (WEA13)
	21:07	20:07	2	06:46 (WEA15)	18:56		16:51		16:07		16:08	12 09:14 (WEA13)
30	05:30	06:19			07:09		07:01		07:53		08:19	09:02 (WEA13)
	21:05	20:05			18:54		16:49		16:06		16:09	12 09:14 (WEA13)
31	05:32	06:21					07:02				08:19	09:03 (WEA13)
	21:04	20:03					16:48				16:10	11 09:14 (WEA13)
Sonnenscheinstunden	501	453			381		332		267		245	
astr.max.mögl.Beschattung			43		41		55				308	
Red.Sonnenscheinwahrsch.			0,50		0,42		0,35				0,16	
Reduktion Betriebsdauer			0,95		0,95		0,95				0,95	
Reduktion Windrichtung			0,64		0,64		0,60				0,58	
Gesamte Reduktion			0,30		0,25		0,20				0,09	
Met.wahrsch.Beschattung			13		10		11				28	

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung **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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:19	07:52	06:59	06:49	05:45	05:00
	16:12	16:59	17:50	19:44	20:34	21:20
2	08:18	07:51	08:16 (WEA21)	06:57	06:47	07:09 (WEA14)
	16:13	17:01	08:20 (WEA21)	17:52	19:45	07:13 (WEA14)
3	08:18	07:49	08:15 (WEA21)	06:55	06:44	07:07 (WEA14)
	16:14	17:03	08:23 (WEA21)	17:54	19:47	07:14 (WEA14)
4	08:18	07:47	08:14 (WEA21)	06:53	06:42	07:05 (WEA14)
	16:15	17:04	08:23 (WEA21)	17:55	19:49	07:15 (WEA14)
5	08:18	07:46	08:13 (WEA21)	06:50	06:40	07:03 (WEA14)
	16:16	17:06	08:23 (WEA21)	17:57	19:50	07:14 (WEA14)
6	08:18	07:44	08:13 (WEA21)	06:48	06:38	07:04 (WEA14)
	16:17	17:08	08:23 (WEA21)	17:59	19:52	07:13 (WEA14)
7	08:17	07:42	08:14 (WEA21)	06:46	06:35	07:05 (WEA14)
	16:18	17:10	08:24 (WEA21)	18:01	19:54	07:11 (WEA14)
8	08:17	07:41	08:15 (WEA21)	06:44	06:33	05:32
	16:20	17:12	08:23 (WEA21)	18:03	19:56	20:46
9	08:16	07:39	08:17 (WEA21)	06:42	06:31	05:30
	16:21	17:14	08:21 (WEA21)	18:04	19:57	20:47
10	08:16	07:37		06:39	06:29	05:28
	16:22	17:16		18:06	19:59	20:49
11	08:15	07:35		06:37	06:26	05:27
	16:24	17:17		18:08	20:01	20:50
12	08:15	07:33		06:35	06:24	05:25
	16:25	17:19		18:10	20:02	20:52
13	08:14	07:32		06:33	06:22	05:24
	16:27	17:21		18:11	20:04	20:54
14	08:13	07:30		06:30	06:20	05:22
	16:28	17:23		18:13	20:06	20:55
15	08:12	07:28		06:28	06:18	05:20
	16:30	17:25		18:15	20:07	20:57
16	08:12	07:26		06:26	06:15	05:19
	16:31	17:27		18:16	20:09	06:40 (WEA15)
17	08:11	07:24		06:23	06:13	06:36 (WEA15)
	16:33	17:28		18:18	20:11	06:41 (WEA15)
18	08:10	07:22		06:21	06:11	06:34 (WEA15)
	16:35	17:30		18:20	20:12	06:42 (WEA15)
19	08:09	07:20		06:19	06:09	06:32 (WEA15)
	16:36	17:32		18:22	20:14	06:42 (WEA15)
20	08:08	07:18	07:42 (WEA22)	06:17	06:07	06:31 (WEA15)
	16:38	17:34	07:44 (WEA22)	18:23	20:16	06:41 (WEA15)
21	08:07	07:16	07:40 (WEA22)	06:14	06:05	06:31 (WEA15)
	16:40	17:36	07:47 (WEA22)	18:25	20:17	06:41 (WEA15)
22	08:06	07:14	07:38 (WEA22)	06:12	06:03	06:32 (WEA15)
	16:41	17:38	07:48 (WEA22)	18:27	20:19	06:40 (WEA15)
23	08:04	07:12	07:38 (WEA22)	06:10	06:01	06:34 (WEA15)
	16:43	17:39	07:49 (WEA22)	18:28	20:21	06:37 (WEA15)
24	08:03	07:10	07:37 (WEA22)	06:07	05:59	05:08
	16:45	17:41	07:48 (WEA22)	18:30	20:22	21:10
25	08:02	07:08	07:37 (WEA22)	06:05	05:57	05:07
	16:46	17:43	07:48 (WEA22)	18:32	20:24	21:11
26	08:01	07:06	07:38 (WEA22)	06:03	05:55	05:06
	16:48	17:45	07:47 (WEA22)	18:34	20:26	21:12
27	07:59	07:03	07:40 (WEA22)	06:00	05:52	05:05
	16:50	17:47	07:45 (WEA22)	18:35	20:27	21:14
28	07:58	07:01		05:58	05:51	05:04
	16:52	17:48		18:37	20:29	21:15
29	07:57			05:56	05:49	05:03
	16:54			19:39	20:31	21:16
30	07:55			06:54	05:47	05:02
	16:55			19:40	20:32	21:17
31	07:54			06:51		05:01
	16:57			19:42		21:18
Sonnenscheinstunden	260	278	367	416	484	498
astr.max.mögl.Beschattung		129		103		
Red.Sonnenscheinwahrsch.		0,26		0,42		
Reduktion Betriebsdauer		0,95		0,95		
Reduktion Windrichtung		0,59		0,64		
Gesamte Reduktion		0,15		0,25		
Met.wahrsch.Beschattung		19		26		

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Jul	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
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
3	04:58 21:33	05:36 20:59	06:26 19:56	07:14 18:47	07:08 16:42	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	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	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	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	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	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	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	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	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	08:08 16:02
13	05:08 21:26	05:52 20:40	06:42 19:33	07:31 18:24	07:25 16:26	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	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	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	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	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	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	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	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	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	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	05:21 21:14	06:09 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 16:05
26	05:24 21:11	06:13 20:14	07:03 19:03	06:53 16:57	07:47 16:10	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	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	08:19 16:08
29	05:29 21:07	06:17 20:07	07:08 18:56	06:59 16:51	07:52 16:07	08:19 16:08
30	05:30 21:05	06:19 20:05	07:09 18:54	07:01 16:49	07:53 16:06	08:19 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		54	50	63	64	149
Red.Sonnenscheinwahrsch.		0,50	0,42	0,35	0,21	0,16
Reduktion Betriebsdauer		0,95	0,95	0,95	0,95	0,95
Reduktion Windrichtung		0,64	0,64	0,60	0,59	0,59
Gesamte Reduktion		0,30	0,25	0,20	0,12	0,09
Met.wahrsch.Beschattung		16	13	13	7	14

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar		Februar		März		April		Mai		Juni	
1	08:19 16:12	07:52 16:59	10	08:21 (WEA21) 08:31 (WEA21)	06:59 17:50	06:49 19:44		05:45 20:34		05:00 21:20	
2	08:18 16:13	07:51 17:01	11	08:20 (WEA21) 08:31 (WEA21)	06:57 17:52	06:47 19:45		05:43 20:36		04:59 21:21	
3	08:18 16:14	07:49 17:03	11	08:21 (WEA21) 08:32 (WEA21)	06:55 17:54	06:44 19:47	07:07 (WEA14) 07:13 (WEA14)	05:41 20:37		04:58 21:22	
4	08:18 16:15	07:47 17:04	11	08:21 (WEA21) 08:32 (WEA21)	06:53 17:55	06:42 19:49	07:05 (WEA14) 07:14 (WEA14)	05:39 20:39		04:57 21:23	
5	08:18 16:16	07:46 17:06	9	08:22 (WEA21) 08:31 (WEA21)	06:50 17:57	06:40 19:50	07:03 (WEA14) 07:14 (WEA14)	05:37 20:41		04:57 21:24	
6	08:18 16:17	07:44 17:08	7	08:23 (WEA21) 08:30 (WEA21)	06:48 17:59	06:38 19:52	07:02 (WEA14) 07:14 (WEA14)	05:35 20:42		04:56 21:25	
7	08:17 16:18	07:42 17:10			06:46 18:01	06:35 19:54	07:03 (WEA14) 07:13 (WEA14)	05:34 20:44		04:56 21:26	
8	08:17 16:20	07:41 17:12			06:44 18:03	06:33 19:56	07:03 (WEA14) 07:12 (WEA14)	05:32 20:46		04:55 21:26	
9	08:16 16:21	07:39 17:14			06:42 18:04	06:31 19:57	07:05 (WEA14) 07:11 (WEA14)	05:30 20:47		04:55 21:27	
10	08:16 16:22	07:37 17:16			06:39 18:06	06:29 19:59		05:28 20:49		04:54 21:28	
11	08:15 16:24	07:35 17:17			06:37 18:08	06:26 20:01		05:27 20:50		04:54 21:29	
12	08:15 16:25	07:33 17:19			06:35 18:10	06:24 20:02		05:25 20:52		04:53 21:30	
13	08:14 16:27	07:32 17:21			06:33 18:11	06:22 20:04		05:23 20:54		04:53 21:30	
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	
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	
16	08:12 16:31	07:26 17:27			06:26 18:16	06:15 20:09		05:19 20:58		04:53 21:32	
17	08:11 16:33	07:24 17:28			06:23 18:18	06:13 20:11		05:17 21:00		04:53 21:32	
18	08:10 16:35	07:22 17:30			06:21 18:20	06:11 20:12	06:34 (WEA15) 06:35 (WEA15)	05:16 21:01		04:53 21:33	
19	08:09 16:36	07:20 17:32	7	07:46 (WEA22) 07:53 (WEA22)	06:19 18:22	06:09 20:14	1 6	06:35 (WEA15) 06:38 (WEA15)	05:15 21:03	04:53 21:33	
20	08:08 16:38	07:18 17:34	10	07:45 (WEA22) 07:55 (WEA22)	06:17 18:23	06:07 20:16	6 9	06:38 (WEA15) 06:39 (WEA15)	05:13 21:04	04:53 21:33	
21	08:07 16:40	07:16 17:36	11	07:44 (WEA22) 07:55 (WEA22)	06:14 18:25	06:05 20:17	11	06:28 (WEA15) 06:39 (WEA15)	05:12 21:05	04:53 21:34	
22	08:06 16:41	07:14 17:38	12	07:44 (WEA22) 07:56 (WEA22)	06:12 18:27	06:03 20:19	11	06:28 (WEA15) 06:39 (WEA15)	05:11 21:07	04:53 21:34	
23	08:04 16:43	07:12 17:39	11	07:44 (WEA22) 07:55 (WEA22)	06:10 18:28	06:01 20:21	12	06:27 (WEA15) 06:39 (WEA15)	05:09 21:08	04:53 21:34	
24	08:03 16:45	07:10 17:41	10	07:44 (WEA22) 07:54 (WEA22)	06:07 18:30	6 8	12 10	06:38 (WEA16) 06:39 (WEA16)	20:21 20:22	05:59 21:10	04:53 21:34
25	08:02 16:46	07:08 17:43	8	07:45 (WEA22) 07:53 (WEA22)	06:05 18:32	05:57 20:24	10	06:38 (WEA15) 06:37 (WEA15)	20:22 21:11	05:07 21:16	04:54 21:34
26	08:01 16:48	07:06 17:45			06:03 18:34	05:54 20:26	9 5	06:30 (WEA16) 06:35 (WEA15)	20:24 21:12	05:06 21:17	04:54 21:34
27	07:59 16:50	07:03 17:47			06:00 18:35	05:52 20:27			05:05 21:14	04:55 21:34	
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	
29	07:57 16:54	08:25 (WEA21) 08:27 (WEA21)			05:56 19:39	05:49 20:31	8 2	06:38 (WEA16) 07:34 (WEA16)	20:29 20:31	05:03 21:16	04:56 21:34
30	07:55 16:55	08:22 (WEA21) 08:29 (WEA21)			06:54 19:40	05:47 20:32			05:02 21:17	04:56 21:34	
31	07:54 16:57	08:22 (WEA21) 08:31 (WEA21)			06:51 19:42				05:01 21:18		
Sonnenscheinstunden		260		278		367		416		484	498
astr.max.mögl.Beschattung		18		128		54		137			
Red.Sonnenscheinwahrsch.		0,19		0,26		0,33		0,42			
Reduktion Betriebsdauer		0,95		0,95		0,95		0,95			
Reduktion Windrichtung		0,58		0,59		0,63		0,64			
Gesamte Reduktion		0,10		0,15		0,20		0,25			
Met.wahrsch.Beschattung		2		19		11		34			

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli		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			06:26	07:02 (WEA14)	07:14		07:08		07:58	
	21:33	20:59			19:56	6 07:08 (WEA14)	18:47		16:42		16:04	
4	04:59	05:38			06:27	07:00 (WEA14)	07:16		07:09	07:56 (WEA21)	07:59	
	21:32	20:57			19:54	9 07:09 (WEA14)	18:45		16:40	2 07:58 (WEA21)	16:04	
5	05:00	05:39			06:29	06:59 (WEA14)	07:17		07:11	07:53 (WEA21)	08:00	
	21:32	20:55			19:51	10 07:09 (WEA14)	18:42		16:39	8 08:01 (WEA21)	16:03	
6	05:01	05:41			06:30	06:58 (WEA14)	07:19		07:13	07:52 (WEA21)	08:01	
	21:31	20:53			19:49	12 07:10 (WEA14)	18:40		16:37	9 08:01 (WEA21)	16:03	
7	05:02	05:42			06:32	06:59 (WEA14)	07:21		07:15	07:51 (WEA21)	08:03	
	21:31	20:52			19:47	11 07:10 (WEA14)	18:38		16:35	11 08:02 (WEA21)	16:03	
8	05:02	05:44			06:34	06:59 (WEA14)	07:22		07:17	07:51 (WEA21)	08:04	
	21:30	20:50			19:45	9 07:08 (WEA14)	18:36		16:33	11 08:02 (WEA21)	16:02	
9	05:03	05:45			06:35	07:01 (WEA14)	07:24		07:18	07:51 (WEA21)	08:05	
	21:30	20:48			19:42	6 07:07 (WEA14)	18:33		16:32	11 08:02 (WEA21)	16:02	
10	05:04	05:47			06:37	07:02 (WEA14)	07:26		07:20	07:52 (WEA21)	08:06	
	21:29	20:46			19:40	2 07:04 (WEA14)	18:31		16:30	10 08:02 (WEA21)	16:02	
11	05:05	05:49			06:38		07:28		07:22	07:53 (WEA21)	08:07	
	21:28	20:44			19:38		18:29		16:29	9 08:02 (WEA21)	16:02	
12	05:06	05:50			06:40		07:29		07:24	07:54 (WEA21)	08:08	
	21:27	20:42			19:35		18:27		16:27	7 08:01 (WEA21)	16:01	
13	05:08	05:52			06:42		07:31		07:25	07:57 (WEA21)	08:09	
	21:26	20:40			19:33		18:24		16:26	1 07:58 (WEA21)	16:01	
14	05:09	05:53			06:43		07:33		07:27		08:10	
	21:25	20:38			19:31		18:22		16:24		16:01	
15	05:10	05:55			06:45	07:20 (WEA16)	07:34		07:29		08:11	
	21:24	20:37			19:28	7 07:27 (WEA16)	18:20		16:23		16:02	
16	05:11	05:57			06:46	07:19 (WEA16)	07:36	08:19 (WEA22)	07:31		08:12	
	21:23	20:35			19:26	9 07:28 (WEA16)	18:18	4 08:23 (WEA22)	16:21		16:02	
17	05:12	05:58	06:36 (WEA15)	06:48	07:17 (WEA16)	07:38	08:17 (WEA22)	07:32			08:13	
	21:22	20:33	6 06:42 (WEA15)	19:24	11 07:28 (WEA16)	18:16	8 08:25 (WEA22)	16:20			16:02	
18	05:13	06:00	06:35 (WEA15)	06:50	07:17 (WEA16)	07:39	08:15 (WEA22)	07:34			08:14	
	21:21	20:30	9 06:44 (WEA15)	19:21	11 07:28 (WEA16)	18:14	10 08:25 (WEA22)	16:19			16:02	
19	05:15	06:01	06:33 (WEA15)	06:51	07:17 (WEA16)	07:41	08:14 (WEA22)	07:36			08:14	
	21:20	20:28	11 06:44 (WEA15)	19:19	9 07:26 (WEA16)	18:12	12 08:26 (WEA22)	16:17			16:02	
20	05:16	06:03	06:33 (WEA15)	06:53	07:18 (WEA16)	07:43	08:14 (WEA22)	07:37			08:15	
	21:19	20:26	12 06:45 (WEA15)	19:17	7 07:25 (WEA16)	18:09	12 08:26 (WEA22)	16:16			16:03	
21	05:17	06:05	06:32 (WEA15)	06:54		07:45	08:14 (WEA22)	07:39			08:16	
	21:18	20:24	12 06:44 (WEA15)	19:15		18:07	12 08:26 (WEA22)	16:15			16:03	
22	05:19	06:06	06:33 (WEA15)	06:56		07:46	08:15 (WEA22)	07:41			08:16	
	21:17	20:22	11 06:44 (WEA15)	19:12		18:05	10 08:25 (WEA22)	16:14			16:04	
23	05:20	06:08	06:34 (WEA15)	06:58		07:48	08:17 (WEA22)	07:42			08:17	
	21:15	20:20	8 06:42 (WEA15)	19:10		18:03	6 08:23 (WEA22)	16:13			16:04	
24	05:21	06:09	06:36 (WEA15)	06:59		07:50		07:44			08:17	
	21:14	20:18	5 06:41 (WEA15)	19:08		18:01		16:12			16:05	
25	05:23	06:11		07:01		06:52		07:46			08:17	
	21:13	20:16		19:05		16:59		16:11			16:05	
26	05:24	06:13		07:03		06:53		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	20:11		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	06:17		07:08		06:59		07:52			08:18	
	21:07	20:07		18:56		16:51		16:07			16:08	
30	05:30	06:19		07:09		07:01		07:53			08:18	
	21:05	20:05		18:54		16:49		16:06			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		74		119		74		79				
Red.Sonnenscheinwahrsch.		0,50		0,42		0,35		0,21				
Reduktion Betriebsdauer		0,95		0,95		0,95		0,95				
Reduktion Windrichtung		0,64		0,63		0,60		0,58				
Gesamte Reduktion		0,30		0,25		0,20		0,11				
Met.wahrsch.Beschattung		22		30		15		9				

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung **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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar		Februar		März		April		Mai		Juni	
1	08:19		07:52		06:59		06:49		05:45		05:00	
	16:12		16:59		17:50		19:44		20:34		21:20	
2	08:18		07:51		06:57		06:47		05:43		04:59	
	16:13		17:01		17:52		19:45		20:36		21:21	
3	08:18		07:49		06:55		06:44		05:41		04:58	
	16:14		17:03		17:54		19:47		20:37		21:22	
4	08:18		07:47		06:53		06:42		05:39		04:57	
	16:15		17:04		17:56		19:49		20:39		21:23	
5	08:18	08:52 (WEA12)	07:46		06:50		06:40		05:37		04:57	
	16:16	4 08:56 (WEA12)	17:06		17:57		19:50		20:41		21:24	
6	08:18	08:52 (WEA12)	07:44		06:48		06:38		05:35		04:56	
	16:17	6 08:58 (WEA12)	17:08		17:59	6 07:17 (WEA22)	19:52		20:42		21:25	
7	08:17	08:51 (WEA12)	07:42		06:46	07:09 (WEA22)	06:35		05:34		04:56	
	16:18	8 08:59 (WEA12)	17:10		18:01	9 07:18 (WEA22)	19:54		20:44		21:26	
8	08:17	08:51 (WEA12)	07:41		06:44	07:08 (WEA22)	06:33		05:32		04:55	
	16:20	9 09:00 (WEA12)	17:12		18:03	10 07:18 (WEA22)	19:56		20:46		21:26	
9	08:16	08:51 (WEA12)	07:39		06:42	07:07 (WEA22)	06:31		05:30		04:55	
	16:21	10 09:01 (WEA12)	17:14		18:04	10 07:17 (WEA22)	19:57		20:47		21:27	
10	08:16	08:50 (WEA12)	07:37		06:39	07:08 (WEA22)	06:29		05:28		04:54	
	16:23	12 09:02 (WEA12)	17:16		18:06	9 07:17 (WEA22)	19:59		20:49		21:28	
11	08:15	08:51 (WEA12)	07:35		06:37	07:09 (WEA22)	06:26		05:27		04:54	
	16:24	12 09:03 (WEA12)	17:17		18:08	7 07:16 (WEA22)	20:01		20:50		21:29	
12	08:15	08:51 (WEA12)	07:33		06:35		06:24		05:25		04:53	
	16:25	12 09:03 (WEA12)	17:19		18:10		20:02		20:52		21:30	
13	08:14	08:51 (WEA12)	07:32		06:33		06:22		05:24		04:53	
	16:27	13 09:04 (WEA12)	17:21		18:11		20:04		20:54		21:30	
14	08:13	08:42 (WEA13)	07:30		06:30		06:20		05:22		04:53	
	16:28	16 09:04 (WEA12)	17:23		18:13		20:06		20:55		21:31	
15	08:12	08:41 (WEA13)	07:28		06:28		06:18		05:20		04:53	
	16:30	19 09:05 (WEA12)	17:25		18:15		20:07		20:57		21:31	
16	08:12	08:40 (WEA13)	07:26		06:26	07:50 (WEA21)	06:15		05:19		04:53	
	16:31	21 09:05 (WEA12)	17:27	5 07:55 (WEA21)	18:16		20:09		20:58		21:32	
17	08:11	08:39 (WEA13)	07:24		06:23	07:48 (WEA21)	06:13		05:17		04:53	
	16:33	22 09:05 (WEA12)	17:28	8 07:56 (WEA21)	18:18		20:11		21:00		21:32	
18	08:10	08:38 (WEA13)	07:22		06:21	07:47 (WEA21)	06:11		05:16		04:53	
	16:35	24 09:05 (WEA12)	17:30	10 07:57 (WEA21)	18:20		20:12		21:01		21:33	
19	08:09	08:37 (WEA13)	07:20		06:19	07:47 (WEA21)	06:09		05:15		04:53	
	16:36	25 09:05 (WEA12)	17:32	10 07:57 (WEA21)	18:22		20:14		21:03		21:33	
20	08:08	08:37 (WEA13)	07:18		06:17	07:47 (WEA21)	06:07		05:13		04:53	
	16:38	24 09:05 (WEA12)	17:34	9 07:56 (WEA21)	18:23		20:16		21:04		21:33	
21	08:07	08:36 (WEA13)	07:16		06:14	07:48 (WEA21)	06:05		05:12		04:53	
	16:40	23 09:03 (WEA12)	17:36	7 07:55 (WEA21)	18:25		20:17		21:05		21:34	
22	08:06	08:37 (WEA13)	07:14		06:12	07:50 (WEA21)	06:03		05:11		04:53	
	16:41	17 09:01 (WEA12)	17:38	3 07:53 (WEA21)	18:27		20:19		21:07		21:34	
23	08:04	08:37 (WEA13)	07:12		06:10		06:01		05:09		04:53	
	16:43	16 08:53 (WEA13)	17:39		18:28		20:21		21:08		21:34	
24	08:03	08:37 (WEA13)	07:10		06:07		05:59		05:08		04:54	
	16:45	16 08:53 (WEA13)	17:41		18:30		20:22		21:10		21:34	
25	08:02	08:38 (WEA13)	07:08		06:05		05:57		05:07		04:54	
	16:46	15 08:53 (WEA13)	17:43		18:32		20:24		21:11		21:34	
26	08:01	08:39 (WEA13)	07:06		06:03		05:55		05:06		04:54	
	16:48	14 08:53 (WEA13)	17:45		18:34		20:26		21:12		21:34	
27	07:59	08:40 (WEA13)	07:03		06:00		05:53		05:05		04:55	
	16:50	12 08:52 (WEA13)	17:47		18:35		20:27		21:14		21:34	
28	07:58	08:41 (WEA13)	07:01		05:58		05:51		05:04		04:55	
	16:52	11 08:52 (WEA13)	17:48		18:37		20:29		21:15		21:34	
29	07:57	08:43 (WEA13)			06:56		05:49		05:03		04:56	
	16:54	7 08:50 (WEA13)			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	368		52		51							
Red.Sonnenscheinwahrsch.	0,19		0,26		0,33							
Reduktion Betriebsdauer	0,95		0,95		0,95							
Reduktion Windrichtung	0,57		0,60		0,59							
Gesamte Reduktion	0,10		0,15		0,19							
Met.wahrsch.Beschattung	37		8		9							

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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SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung **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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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	07:49 (WEA22)	07:06		12 08:45 (WEA12)
	21:33	21:00	19:58	18:49	07:45 (WEA22)	16:44		08:33 (WEA12)
3	04:58	05:36	06:26	07:14	07:46 (WEA22)	07:08		16:05 12 08:45 (WEA12)
	21:33	20:59	19:56	18:47	07:44 (WEA22)	16:42		08:35 (WEA12)
4	04:59	05:38	06:27	07:16	07:45 (WEA22)	07:09		16:05 10 08:45 (WEA12)
	21:32	20:57	19:54	18:45	07:45 (WEA22)	16:40		08:35 (WEA12)
5	05:00	05:39	06:29	07:17	07:45 (WEA22)	07:11		16:04 10 08:45 (WEA12)
	21:32	20:55	19:51	18:42	07:44 (WEA22)	16:39		08:36 (WEA12)
6	05:01	05:41	06:30	07:19	07:44 (WEA22)	07:13		16:03 8 08:44 (WEA12)
	21:31	20:53	19:49	18:40	07:44 (WEA22)	16:37		08:01 08:38 (WEA12)
7	05:02	05:42	06:32	07:21	07:46 (WEA22)	07:15		16:03 6 08:44 (WEA12)
	21:31	20:52	19:47	18:38	07:53 (WEA22)	16:35		08:03 08:39 (WEA12)
8	05:02	05:44	06:34	07:22	07:48 (WEA22)	07:17		4 08:43 (WEA12)
	21:30	20:50	19:45	18:36	07:52 (WEA22)	16:34		16:02
9	05:03	05:45	06:35	07:24		16:18		08:05
	21:30	20:48	19:42	18:33		16:32		16:02
10	05:04	05:47	06:37	07:26		16:20		08:06
	21:29	20:46	19:40	18:31		16:30		16:02
11	05:05	05:49	06:38	07:28		16:22		08:07
	21:28	20:44	19:38	18:29		16:29		16:02
12	05:06	05:50	06:40	07:29		16:24		08:08
	21:27	20:42	19:35	18:27		16:27		16:02
13	05:08	05:52	06:42	07:31		16:25	08:14 (WEA13)	08:09
	21:26	20:40	19:33	18:24		16:26	8 08:22 (WEA13)	16:01
14	05:09	05:53	06:43	07:33		16:27	08:13 (WEA13)	08:10
	21:25	20:38	19:31	18:22		16:24	11 08:24 (WEA13)	16:01
15	05:10	05:55	06:45	07:34		16:29	08:12 (WEA13)	08:11
	21:24	20:37	19:28	18:20		16:23	13 08:25 (WEA13)	16:02
16	05:11	05:57	06:46	07:36		16:31	08:12 (WEA13)	08:12
	21:23	20:35	19:26	18:18		16:21	14 08:26 (WEA13)	16:02
17	05:12	05:58	06:48	07:38		16:32	08:11 (WEA13)	08:13
	21:22	20:33	19:24	18:16		16:20	15 08:26 (WEA13)	16:02
18	05:13	06:00	06:50	07:39		16:34	08:11 (WEA13)	08:14
	21:21	20:30	19:21	18:14		16:19	16 08:27 (WEA13)	16:02
19	05:15	06:01	06:51	07:41		16:36	08:11 (WEA13)	08:14
	21:20	20:28	19:19	18:12		16:17	16 08:27 (WEA13)	16:02
20	05:16	06:03	06:53	07:43	08:19 (WEA21)	16:37	08:12 (WEA13)	08:15
	21:19	20:26	19:17	18:09	6 08:25 (WEA21)	16:16	17 08:36 (WEA12)	16:03
21	05:17	06:05	06:54	07:45	08:18 (WEA21)	16:39	08:12 (WEA13)	08:16
	21:18	20:24	19:15	18:07	8 08:26 (WEA21)	16:15	23 08:39 (WEA12)	16:03
22	05:19	06:06	06:56	07:46	08:17 (WEA21)	16:41	08:13 (WEA13)	08:16
	21:17	20:22	19:12	18:05	10 08:27 (WEA21)	16:14	24 08:41 (WEA12)	16:04
23	05:20	06:08	06:58	07:48	08:17 (WEA21)	16:42	08:13 (WEA13)	08:17
	21:15	20:20	19:10	18:03	10 08:27 (WEA21)	16:13	25 08:41 (WEA12)	16:04
24	05:21	06:09	06:59	07:50	08:17 (WEA21)	16:44	08:15 (WEA13)	08:17
	21:14	20:18	19:08	18:01	10 08:27 (WEA21)	16:12	24 08:42 (WEA12)	16:05
25	05:23	06:11	07:01	06:52	07:18 (WEA21)	16:46	08:17 (WEA13)	08:17
	21:13	20:16	19:05	16:59	7 07:25 (WEA21)	16:11	22 08:43 (WEA12)	16:05
26	05:24	06:13	07:03	06:53	07:20 (WEA21)	16:47	08:19 (WEA13)	08:18
	21:11	20:14	19:03	16:57	4 07:24 (WEA21)	16:10	21 08:44 (WEA12)	16:06
27	05:26	06:14	07:04	06:55		16:09	19 08:44 (WEA12)	16:07
	21:10	20:11	19:01	16:55		16:09	19 08:44 (WEA12)	16:07
28	05:27	06:16	07:06	06:57		16:08	16 08:44 (WEA12)	16:08
	21:08	20:09	18:58	16:53		16:08	16 08:44 (WEA12)	16:08
29	05:29	06:17	07:08	06:59		16:07	13 08:45 (WEA12)	16:08
	21:07	20:07	18:56	16:51		16:07	13 08:45 (WEA12)	16:08
30	05:30	06:19	07:09	07:01		16:06	13 08:45 (WEA12)	16:09
	21:05	20:05	18:54	16:49		16:06	13 08:45 (WEA12)	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					109	310		62
Red.Sonnenscheinwahrsch.					0,35	0,21		0,16
Reduktion Betriebsdauer					0,95	0,95		0,95
Reduktion Windrichtung					0,59	0,57		0,56
Gesamte Reduktion					0,20	0,11		0,09
Met.wahrsch.Beschattung					22	34		5

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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SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar			Februar			März			April			Mai			Juni		
1	08:19		08:56 (WEA12)	07:52		06:59			06:49			05:45			06:09 (WEA15)	05:00	
	16:12	5	09:01 (WEA12)	16:59		17:50			19:44			20:34	3		06:12 (WEA15)	21:20	
2	08:18		08:55 (WEA12)	07:51		06:57			06:47			05:43			06:07 (WEA15)	04:59	
	16:13	6	09:01 (WEA12)	17:01		17:52			19:45			20:36	5		06:12 (WEA15)	21:21	
3	08:18		08:55 (WEA12)	07:49		06:55			06:44			05:41			06:05 (WEA15)	04:58	
	16:14	8	09:03 (WEA12)	17:03		17:54			19:47			20:37	7		06:12 (WEA15)	21:22	
4	08:18		08:55 (WEA12)	07:47		06:53			06:42			05:39			06:04 (WEA15)	04:57	
	16:15	9	09:04 (WEA12)	17:04		17:56			19:49			20:39	9		06:13 (WEA15)	21:23	
5	08:18		08:54 (WEA12)	07:46		06:50			06:40			05:37			06:02 (WEA15)	04:57	
	16:16	10	09:04 (WEA12)	17:06		17:57			19:50			20:41	10		06:12 (WEA15)	21:24	
6	08:18		08:55 (WEA12)	07:44		06:48			06:38			05:35			06:02 (WEA15)	04:56	
	16:17	11	09:06 (WEA12)	17:08		17:59			19:52			20:42	9		06:11 (WEA15)	21:25	
7	08:17		08:54 (WEA12)	07:42		06:46		07:09 (WEA22)	06:35			05:34			06:04 (WEA15)	04:56	
	16:18	12	09:06 (WEA12)	17:10		18:01	5	07:14 (WEA22)	19:54			20:44	7		06:11 (WEA15)	21:26	
8	08:17		08:55 (WEA12)	07:41		06:44		07:07 (WEA22)	06:33			05:32				04:55	
	16:20	12	09:07 (WEA12)	17:12		18:03	9	07:16 (WEA22)	19:56			20:46				21:26	
9	08:16		08:55 (WEA12)	07:39		06:42		07:05 (WEA22)	06:31			05:30				04:55	
	16:21	13	09:08 (WEA12)	17:14		18:04	11	07:16 (WEA22)	19:57			20:47				21:27	
10	08:16		08:55 (WEA12)	07:37		06:39		07:05 (WEA22)	06:29			05:28				04:54	
	16:22	13	09:08 (WEA12)	17:16		18:06	11	07:16 (WEA22)	19:59			20:49				21:28	
11	08:15		08:45 (WEA13)	07:35		06:37		07:05 (WEA22)	06:26			05:27				04:54	
	16:24	17	09:09 (WEA12)	17:17		18:08	11	07:16 (WEA22)	20:01			20:50				21:29	
12	08:15		08:44 (WEA13)	07:33		06:35		07:06 (WEA22)	06:24			05:25				04:53	
	16:25	21	09:10 (WEA12)	17:19		18:10	9	07:15 (WEA22)	20:02			20:52				21:30	
13	08:14		08:43 (WEA13)	07:32		06:33		07:07 (WEA22)	06:22			05:24				04:53	
	16:27	23	09:10 (WEA12)	17:21		18:11	6	07:13 (WEA22)	20:04			20:54				21:30	
14	08:13		08:42 (WEA13)	07:30		06:30			06:20			05:22				04:53	
	16:28	25	09:10 (WEA12)	17:23		18:13			20:06			20:55				21:31	
15	08:12		08:41 (WEA13)	07:28		06:28			06:18		06:41 (WEA14)	05:20				04:53	
	16:30	26	09:10 (WEA12)	17:25		18:15			20:07	1	06:42 (WEA14)	20:57				21:31	
16	08:12		08:41 (WEA13)	07:26	4	07:50 (WEA21)			06:15		06:38 (WEA14)	05:19				04:53	
	16:31	27	09:10 (WEA12)	17:27	4	07:54 (WEA21)	18:16		20:09	4	06:42 (WEA14)	20:58				21:32	
17	08:11		08:41 (WEA13)	07:24		07:48 (WEA21)	06:23		06:13		06:36 (WEA14)	05:17				04:53	
	16:33	27	09:10 (WEA12)	17:28	8	07:56 (WEA21)	18:18		20:11	6	06:42 (WEA14)	21:00				21:32	
18	08:10		08:41 (WEA13)	07:22		07:47 (WEA21)	06:21		06:11		06:34 (WEA14)	05:16				04:53	
	16:35	27	09:10 (WEA12)	17:30	10	07:57 (WEA21)	18:20		20:12	9	06:43 (WEA14)	21:01				21:33	
19	08:09		08:41 (WEA13)	07:20		07:47 (WEA21)	06:19		06:09		06:32 (WEA14)	05:15				04:53	
	16:36	27	09:10 (WEA12)	17:32	10	07:57 (WEA21)	18:22		20:14	10	06:42 (WEA14)	21:03				21:33	
20	08:08		08:41 (WEA13)	07:18		07:47 (WEA21)	06:17		06:07		06:33 (WEA14)	05:13				04:53	
	16:38	24	09:09 (WEA12)	17:34	10	07:57 (WEA21)	18:23		20:16	8	06:41 (WEA14)	21:04				21:33	
21	08:07		08:41 (WEA13)	07:16		07:47 (WEA21)	06:14		06:05		06:34 (WEA14)	05:12				04:53	
	16:40	18	09:06 (WEA12)	17:36	10	07:57 (WEA21)	18:25		20:17	6	06:40 (WEA14)	21:05				21:34	
22	08:06		08:41 (WEA13)	07:14		07:48 (WEA21)	06:12		06:03			05:11				04:53	
	16:41	17	08:58 (WEA13)	17:38	8	07:56 (WEA21)	18:27		20:19			21:07				21:34	
23	08:04		08:42 (WEA13)	07:12		06:10			06:01			05:09				04:53	
	16:43	17	08:59 (WEA13)	17:39		18:28			20:21			21:08				21:34	
24	08:03		08:42 (WEA13)	07:10		06:07			05:59			05:08				04:54	
	16:45	16	08:58 (WEA13)	17:41		18:30			20:22			21:10				21:34	
25	08:02		08:43 (WEA13)	07:08		06:05			05:57			05:07				04:54	
	16:46	15	08:58 (WEA13)	17:43		18:32			20:24			21:11				21:34	
26	08:01		08:45 (WEA13)	07:06		06:03			05:55			05:06				04:54	
	16:48	14	08:59 (WEA13)	17:45		18:34			20:26			21:12				21:34	
27	07:59		08:45 (WEA13)	07:03		06:00			05:53			05:05				04:55	
	16:50	12	08:57 (WEA13)	17:47		18:35			20:27			21:14				21:34	
28	07:58		08:47 (WEA13)	07:01		05:58			05:51			05:04				04:55	
	16:52	10	08:57 (WEA13)	17:48		18:37			20:29			21:15				21:34	
29	07:57		08:49 (WEA13)			06:56			05:49			05:03				04:56	
	16:54	5	08:54 (WEA13)			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			467		60	62			44			50					
Red.Sonnenscheinwahrsch.			0,19		0,26	0,33			0,42			0,48					
Reduktion Betriebsdauer			0,95		0,95	0,95			0,95			0,95					
Reduktion Windrichtung			0,57		0,60	0,59			0,64			0,65					
Gesamte Reduktion			0,10		0,15	0,19			0,25			0,29					
Met.wahrsch.Beschattung			47		9	12			11			15					

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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	07:45 (WEA22) 07:54 (WEA22)	07:04 16:46
2	04:58 21:33	05:35 21:00	06:24 19:58	07:12 18:49	07:44 (WEA22) 07:55 (WEA22)	07:06 16:44
3	04:58 21:33	05:36 20:59	06:26 19:56	07:14 18:47	07:43 (WEA22) 07:54 (WEA22)	07:08 16:42
4	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45	07:43 (WEA22) 07:54 (WEA22)	07:09 16:40
5	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:43 (WEA22) 07:53 (WEA22)	07:11 16:39
6	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40	07:44 (WEA22) 07:51 (WEA22)	07:13 16:37
7	05:02 21:31	05:42 20:52	06:32 19:47	07:21 18:38	07:46 (WEA22) 07:49 (WEA22)	07:15 16:35
8	05:02 21:30	05:44 20:50	06:34 19:45	07:22 18:36	07:49 (WEA22) 07:54 (WEA22)	07:17 16:34
9	05:03 21:29	05:45 20:48	06:35 19:42	07:24 18:33	07:54 (WEA22) 07:59 (WEA22)	07:18 16:32
10	05:04 21:29	05:47 20:46	06:37 19:40	07:26 18:31	07:59 (WEA22) 08:04 (WEA22)	07:19 16:30
11	05:05 21:28	05:49 20:44	06:38 19:38	07:28 18:29	08:04 (WEA22) 08:09 (WEA22)	07:21 16:29
12	05:06 21:27	05:50 20:42	06:40 19:35	07:29 18:27	08:09 (WEA22) 08:14 (WEA22)	07:22 16:27
13	05:08 21:26	05:52 20:40	06:42 19:33	07:31 18:24	08:14 (WEA22) 08:19 (WEA22)	07:24 16:26
14	05:09 21:25	05:53 20:38	06:43 19:31	07:33 18:22	08:19 (WEA22) 08:24 (WEA22)	07:25 16:25
15	05:10 21:24	05:55 20:37	06:45 19:28	07:34 18:20	08:24 (WEA22) 08:29 (WEA22)	07:26 16:24
16	05:11 21:23	05:57 20:35	06:46 19:26	07:36 18:18	08:29 (WEA22) 08:34 (WEA22)	07:27 16:23
17	05:12 21:22	05:58 20:33	06:48 19:24	07:38 18:16	08:34 (WEA22) 08:39 (WEA22)	07:28 16:22
18	05:13 21:21	06:00 20:30	06:50 19:21	07:39 18:14	08:39 (WEA22) 08:44 (WEA22)	07:29 16:21
19	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:12	08:44 (WEA22) 08:49 (WEA22)	07:30 16:20
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	08:49 (WEA22) 08:54 (WEA22)	07:31 16:19
21	05:17 21:18	06:05 20:24	06:54 19:15	07:45 18:07	08:54 (WEA22) 08:59 (WEA22)	07:32 16:18
22	05:19 21:17	06:06 20:22	06:56 19:12	07:46 18:05	08:59 (WEA22) 09:04 (WEA22)	07:33 16:17
23	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	09:04 (WEA22) 09:09 (WEA22)	07:34 16:16
24	05:21 21:14	06:09 20:18	06:59 19:08	07:50 18:01	09:09 (WEA22) 09:14 (WEA22)	07:35 16:15
25	05:23 21:13	06:11 20:16	07:01 19:05	07:52 17:59	09:14 (WEA22) 09:19 (WEA22)	07:36 16:14
26	05:24 21:11	06:13 20:14	07:03 19:03	07:53 17:57	09:19 (WEA22) 09:24 (WEA22)	07:37 16:13
27	05:26 21:10	06:14 20:11	07:04 19:01	07:55 17:55	09:24 (WEA22) 09:29 (WEA22)	07:38 16:12
28	05:27 21:08	06:16 20:09	07:06 18:58	07:57 17:53	09:29 (WEA22) 09:34 (WEA22)	07:39 16:11
29	05:29 21:07	06:17 20:07	07:08 18:56	07:59 17:51	09:34 (WEA22) 09:39 (WEA22)	07:40 16:10
30	05:30 21:05	06:19 20:05	07:09 18:54	07:51 (WEA22) 07:51 (WEA22)	09:39 (WEA22) 09:44 (WEA22)	07:41 16:09
31	05:32 21:04	06:21 20:03				
Sonneneinstrahlung	501	453	381	332	267	245
astr.max.mögl.Beschattung		94		125	354	123
Red.Sonneneinstrahlung		0,50	0,42	0,35	0,21	0,16
Reduktion Betriebsdauer		0,95	0,95	0,95	0,95	0,95
Reduktion Windrichtung		0,64	0,59	0,60	0,56	0,57
Gesamte Reduktion		0,30	0,23	0,20	0,11	0,09
Met.wahrsch.Beschattung		29	1	25	39	11

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar			Februar			März			April			Mai			Juni		
1	08:19		09:00 (WEA12)	07:52		06:59			06:49			05:45			05:00		
	16:12	14	09:14 (WEA12)	16:59		17:50			19:44			20:34			21:20		
2	08:18		09:00 (WEA12)	07:51		06:57			06:47			05:43			04:59		
	16:13	14	09:14 (WEA12)	17:01		17:52			19:45			20:36			21:21		
3	08:18		08:50 (WEA13)	07:49		06:55			06:44			05:41			04:58		
	16:14	18	09:14 (WEA11)	17:03		17:54			19:47			20:37			21:22		
4	08:18		08:50 (WEA13)	07:47		06:53			06:42			05:39		06:04 (WEA15)	04:57		
	16:15	21	09:15 (WEA12)	17:04		17:55			19:49			20:39	1	06:05 (WEA15)	21:23		
5	08:18		08:49 (WEA13)	07:46		06:50			06:40			05:37		06:02 (WEA15)	04:57		
	16:16	23	09:15 (WEA12)	17:06		17:57			19:50			20:41	4	06:06 (WEA15)	21:24		
6	08:18		08:49 (WEA13)	07:44		06:48			06:38		07:00 (WEA16)	05:35		06:00 (WEA15)	04:56		
	16:17	25	09:16 (WEA12)	17:08		17:59			19:52	4	07:04 (WEA16)	20:42	6	06:06 (WEA15)	21:25		
7	08:17		08:48 (WEA13)	07:42		06:46		07:10 (WEA22)	06:35		06:58 (WEA16)	05:34		05:58 (WEA15)	04:56		
	16:18	26	09:16 (WEA12)	17:10		18:01	4	07:14 (WEA22)	19:54	7	07:05 (WEA16)	20:44	8	06:06 (WEA15)	21:26		
8	08:17		08:48 (WEA13)	07:41		06:44		07:08 (WEA22)	06:33		06:56 (WEA16)	05:32		05:57 (WEA15)	04:55		
	16:20	28	09:17 (WEA12)	17:12		18:03	8	07:16 (WEA22)	19:56	10	07:06 (WEA16)	20:46	10	06:07 (WEA15)	21:26		
9	08:16		08:48 (WEA13)	07:39		06:42		07:06 (WEA22)	06:31		06:56 (WEA16)	05:30		05:56 (WEA15)	04:55		
	16:21	28	09:17 (WEA12)	17:14		18:04	10	07:16 (WEA22)	19:57	10	07:06 (WEA16)	20:47	10	06:06 (WEA15)	21:27		
10	08:16		08:48 (WEA13)	07:37		06:39		07:05 (WEA22)	06:29		06:55 (WEA16)	05:28		05:57 (WEA15)	04:54		
	16:22	29	09:17 (WEA12)	17:16		18:06	12	07:17 (WEA22)	19:59	9	07:04 (WEA16)	20:49	9	06:06 (WEA15)	21:28		
11	08:15		08:48 (WEA13)	07:35		06:37		07:05 (WEA22)	06:26		06:56 (WEA16)	05:27		05:57 (WEA15)	04:54		
	16:24	30	09:18 (WEA12)	17:17		18:08	12	07:17 (WEA22)	20:01	7	07:03 (WEA16)	20:50	8	06:05 (WEA15)	21:29		
12	08:15		08:48 (WEA13)	07:33		06:35		07:06 (WEA22)	06:24		06:59 (WEA16)	05:25		05:59 (WEA15)	04:53		
	16:25	30	09:18 (WEA12)	17:19		18:10	11	07:17 (WEA22)	20:02	1	07:00 (WEA16)	20:52	5	06:04 (WEA15)	21:30		
13	08:14		08:48 (WEA13)	07:32		06:33		07:06 (WEA22)	06:22			05:24			04:53		
	16:27	30	09:18 (WEA12)	17:21		18:11	9	07:15 (WEA22)	20:04			20:54			21:30		
14	08:13		08:48 (WEA13)	07:30		06:30		07:08 (WEA22)	06:20			05:22			04:53		
	16:28	30	09:18 (WEA12)	17:23		18:13	5	07:13 (WEA22)	20:06			20:55			21:31		
15	08:12		08:48 (WEA13)	07:28	07:53 (WEA21)	06:28			06:18			05:20			04:53		
	16:30	30	09:18 (WEA12)	17:25	3	07:56 (WEA21)	18:15		20:07			20:57			21:31		
16	08:12		08:49 (WEA13)	07:26	07:51 (WEA21)	06:26			06:15			05:19			04:53		
	16:31	28	09:18 (WEA12)	17:27	8	07:59 (WEA21)	18:16		20:09			20:58			21:32		
17	08:11		08:49 (WEA13)	07:24	07:50 (WEA21)	06:23			06:13			05:17			04:53		
	16:33	27	09:17 (WEA12)	17:28	10	08:00 (WEA21)	18:18		20:11			21:00			21:32		
18	08:10		08:49 (WEA13)	07:22	07:49 (WEA21)	06:21			06:11		06:34 (WEA14)	05:16			04:53		
	16:35	22	09:15 (WEA12)	17:30	11	08:00 (WEA21)	18:20		20:12	3	06:37 (WEA14)	21:01			21:33		
19	08:09		08:50 (WEA13)	07:20	07:49 (WEA21)	06:19			06:09		06:32 (WEA14)	05:15			04:53		
	16:36	18	09:08 (WEA13)	17:32	11	08:00 (WEA21)	18:22		20:14	6	06:38 (WEA14)	21:03			21:33		
20	08:08		08:51 (WEA13)	07:18	07:49 (WEA21)	06:17			06:07		06:30 (WEA14)	05:13			04:53		
	16:38	18	09:09 (WEA13)	17:34	11	08:00 (WEA21)	18:23		20:16	8	06:38 (WEA14)	21:04			21:33		
21	08:07		08:51 (WEA13)	07:16	07:50 (WEA21)	06:14			06:05		06:28 (WEA14)	05:12			04:53		
	16:40	17	09:08 (WEA13)	17:36	9	07:59 (WEA21)	18:25		20:17	10	06:38 (WEA14)	21:05			21:34		
22	08:05		08:52 (WEA13)	07:14	07:51 (WEA21)	06:12			06:03		06:27 (WEA14)	05:11			04:53		
	16:41	16	09:08 (WEA13)	17:38	7	07:58 (WEA21)	18:27		20:19	11	06:38 (WEA14)	21:07			21:34		
23	08:04		08:53 (WEA13)	07:12		06:10			06:01		06:28 (WEA14)	05:09			04:53		
	16:43	15	09:08 (WEA13)	17:39		18:28			20:21	9	06:37 (WEA14)	21:08			21:34		
24	08:03		08:53 (WEA13)	07:10		06:07			05:59		06:29 (WEA14)	05:08			04:54		
	16:45	14	09:07 (WEA13)	17:41		18:30			20:22	7	06:36 (WEA14)	21:10			21:34		
25	08:02		08:55 (WEA13)	07:08		06:05			05:57			05:07			04:54		
	16:46	11	09:06 (WEA13)	17:43		18:32			20:24			21:11			21:34		
26	08:01		08:57 (WEA13)	07:06		06:03			05:55			05:06			04:54		
	16:48	7	09:04 (WEA13)	17:45		18:34			20:26			21:12			21:34		
27	07:59			07:03		06:00			05:53			05:05			04:55		
	16:50			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			17:48		18:37			20:29			21:15			21:34		
29	07:57					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			569		70		71		102		61						
Red.Sonnenscheinwahrsch.			0,19		0,26		0,33		0,42		0,48						
Reduktion Betriebsdauer			0,95		0,95		0,95		0,95		0,95						
Reduktion Windrichtung			0,57		0,60		0,59		0,64		0,66						
Gesamte Reduktion			0,10		0,15		0,19		0,25		0,30						
Met.wahrsch.Beschattung			57		10		13		26		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)
	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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Juli		August		September		Oktober		November		Dezember	
1	04:57	05:33	06:09 (WEA15)	06:22	06:55 (WEA16)	07:11	07:45 (WEA22)	07:04	07:55	08:30 (WEA13)	
2	21:33	21:02	6 06:15 (WEA15)	20:00	7 07:02 (WEA16)	18:51	10 07:55 (WEA22)	16:46	16:06	31 09:01 (WEA12)	
3	04:58	05:35	06:07 (WEA15)	06:24	06:54 (WEA16)	07:12	07:44 (WEA22)	07:06	07:56	08:31 (WEA13)	
4	21:33	21:00	9 06:16 (WEA15)	19:58	9 07:03 (WEA16)	18:49	12 07:56 (WEA22)	16:44	16:05	30 09:01 (WEA12)	
5	04:58	05:36	06:07 (WEA15)	06:26	06:53 (WEA16)	07:14	07:43 (WEA22)	07:08	07:58	08:32 (WEA13)	
6	21:33	20:59	10 06:17 (WEA15)	19:56	10 07:03 (WEA16)	18:47	12 07:55 (WEA22)	16:42	16:05	28 09:01 (WEA12)	
7	04:59	05:38	06:06 (WEA15)	06:27	06:53 (WEA16)	07:16	07:43 (WEA22)	07:09	07:59	08:32 (WEA13)	
8	21:32	20:57	11 06:17 (WEA15)	19:54	10 07:03 (WEA16)	18:45	12 07:55 (WEA22)	16:40	16:04	28 09:01 (WEA12)	
9	05:00	05:39	06:07 (WEA15)	06:29	06:54 (WEA16)	07:17	07:44 (WEA22)	07:11	08:00	08:33 (WEA13)	
10	21:32	20:55	9 06:16 (WEA15)	19:51	8 07:02 (WEA16)	18:42	10 07:54 (WEA22)	16:39	16:03	26 09:01 (WEA12)	
11	05:01	05:41	06:09 (WEA15)	06:30	06:56 (WEA16)	07:19	07:45 (WEA22)	07:13	08:01	08:35 (WEA13)	
12	21:31	20:53	8 06:17 (WEA15)	19:49	4 07:00 (WEA16)	18:40	6 07:51 (WEA22)	16:37	16:03	25 09:02 (WEA12)	
13	05:02	05:42	06:10 (WEA15)	06:32		07:21		07:15	08:03	08:36 (WEA13)	
14	21:31	20:52	6 06:16 (WEA15)	19:47		18:38		16:35	16:03	23 09:02 (WEA12)	
15	05:02	05:44	06:12 (WEA15)	06:34		07:22		07:17	08:04	08:37 (WEA13)	
16	21:30	20:50	3 06:15 (WEA15)	19:45		18:36		16:33	16:02	21 09:02 (WEA12)	
17	05:03	05:45		06:35		07:24		07:18	08:05	08:39 (WEA13)	
18	21:29	20:48		19:42		18:33		16:32	16:02	19 09:04 (WEA12)	
19	05:04	05:47		06:37		07:26		07:20	08:06	08:50 (WEA12)	
20	21:29	20:46		19:40		18:31		16:30	16:02	14 09:04 (WEA12)	
21	05:05	05:49		06:38		07:28		07:22	08:07	08:51 (WEA12)	
22	21:28	20:44		19:38		18:29		16:29	16:02	13 09:04 (WEA12)	
23	05:06	05:50		06:40		07:29		07:24	08:08	08:51 (WEA12)	
24	21:27	20:42		19:35		18:27		16:27	16:02	13 09:04 (WEA11)	
25	05:08	05:52		06:42		07:31		07:25	08:09	08:52 (WEA11)	
26	21:26	20:40		19:33		18:24		16:26	16:01	12 09:04 (WEA11)	
27	05:09	05:53		06:43		07:33		07:27	08:10	08:52 (WEA12)	
28	21:25	20:38		19:31		18:22		16:24	16:01	13 09:05 (WEA11)	
29	05:10	05:55		06:45		07:34		07:29	08:11	08:53 (WEA11)	
30	21:24	20:37		19:28		18:20		16:23	16:02	13 09:06 (WEA11)	
31	05:11	05:57		06:46		07:36		07:31	08:12	08:54 (WEA11)	
1	21:23	20:35		19:26		18:18		16:21	7 08:31 (WEA13)	08:12	
2	05:12	05:58		06:48		07:38		07:32	08:16	08:56 (WEA11)	
3	21:22	20:33		19:24		18:16		16:20	08:28 (WEA13)	08:13	
4	05:13	06:00	06:38 (WEA14)	06:50		07:39		07:34	08:39 (WEA13)	16:02	
5	21:21	20:30	2 06:40 (WEA14)	19:21		18:14		16:19	14 08:41 (WEA13)	16:02	
6	05:15	06:01	06:34 (WEA14)	06:51		07:41		07:36	08:27 (WEA13)	08:14	
7	21:20	20:28	8 06:42 (WEA14)	19:19		18:12		16:17	15 08:42 (WEA13)	16:02	
8	05:16	06:03	06:33 (WEA14)	06:53		07:43		07:37	08:27 (WEA13)	08:15	
9	21:19	20:26	10 06:43 (WEA14)	19:17		18:09	8 08:29 (WEA21)	16:16	16 08:43 (WEA13)	16:03	
10	05:17	06:05	06:32 (WEA14)	06:54		07:45	08:20 (WEA21)	07:39	08:27 (WEA13)	08:16	
11	21:18	20:24	11 06:43 (WEA14)	19:15		18:07	10 08:30 (WEA21)	16:15	17 08:44 (WEA13)	16:03	
12	05:19	06:06	06:33 (WEA14)	06:56		07:46	08:20 (WEA21)	07:41	08:27 (WEA13)	08:16	
13	21:17	20:22	10 06:43 (WEA14)	19:12		18:05	11 08:31 (WEA21)	16:14	18 08:45 (WEA13)	16:04	
14	05:20	06:08	06:34 (WEA14)	06:58		07:48	08:19 (WEA21)	07:42	08:26 (WEA13)	08:17	
15	21:15	20:20	8 06:42 (WEA14)	19:10		18:03	12 08:31 (WEA21)	16:13	18 08:44 (WEA13)	16:04	
16	05:21	06:09	06:36 (WEA14)	06:59		07:50	08:20 (WEA21)	07:44	08:26 (WEA13)	08:17	
17	21:14	20:18	6 06:42 (WEA14)	19:08		18:01	10 08:30 (WEA21)	16:12	22 08:52 (WEA12)	16:05	
18	05:23	06:11	06:37 (WEA14)	07:01		06:52	07:19 (WEA21)	07:46	08:27 (WEA13)	08:17	
19	21:13	20:16	3 06:40 (WEA14)	19:05		16:59	10 07:29 (WEA21)	16:11	26 08:55 (WEA12)	16:05	
20	05:24	06:13		07:03		06:53	07:21 (WEA21)	07:47	08:28 (WEA13)	08:18	
21	21:11	20:14		19:03		16:57	7 07:28 (WEA21)	16:10	28 08:57 (WEA12)	16:06	
22	05:26	06:14		07:04		06:55		07:49	08:27 (WEA13)	08:18	
23	21:10	20:11		19:01		16:55		16:09	30 08:57 (WEA12)	16:07	
24	05:27	06:16		07:06		06:57		07:50	08:28 (WEA13)	08:18	
25	21:08	20:09		18:58		16:53		16:08	30 08:58 (WEA12)	16:08	
26	05:29	06:17		07:08		06:59		07:52	08:28 (WEA13)	08:18	
27	21:07	20:07		18:56		16:51		16:07	30 08:58 (WEA12)	16:08	
28	05:30	06:19		07:09		07:01		07:53	08:29 (WEA13)	08:18	
29	21:05	20:05		18:54	8 07:46 (WEA22)	16:49		16:06	30 08:59 (WEA12)	16:09	
30	05:32	06:11 (WEA15)	06:21	06:58 (WEA16)		07:02				16:10	
31	21:04	1 06:12 (WEA15)	20:03	3 07:01 (WEA16)		16:48				16:10	
Sonnenscheinstunden		501	453	381	332	267	312	245	504		
astr.max.mögl.Beschattung		1	123	56	130	312	504				
Red.Sonnenscheinwahrsch.		0,47	0,50	0,42	0,35	0,21	0,16				
Reduktion Betriebsdauer		0,95	0,95	0,95	0,95	0,95	0,95				
Reduktion Windrichtung		0,66	0,65	0,63	0,60	0,56	0,57				
Gesamte Reduktion		0,29	0,30	0,25	0,20	0,11	0,09				
Met.wahrsch.Beschattung		0	37	14	26	35	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)	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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung **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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar			Februar			März			April			Mai			Juni		
1	08:19	09:01 (WEA13)	07:52			06:59			06:49			05:45			05:00		
	16:12	28 09:29 (WEA12)	16:59			17:50			19:44			20:34			21:20		
2	08:18	09:01 (WEA13)	07:51			06:57			06:47			05:43			04:59		
	16:13	28 09:29 (WEA12)	17:01			17:52			19:45			20:36			21:21		
3	08:18	09:02 (WEA13)	07:49			06:55			06:44			05:41			04:58		
	16:14	27 09:29 (WEA12)	17:03			17:54			19:47			20:37			21:22		
4	08:18	09:03 (WEA13)	07:47			06:53			06:42			05:39			04:57		
	16:15	27 09:30 (WEA12)	17:04			17:55	6	07:18 (WEA22)	19:49	2	07:07 (WEA16)	20:39	3	06:04 (WEA15)	21:23		
5	08:18	09:02 (WEA13)	07:46			06:50		07:24 (WEA22)	19:49		07:02 (WEA16)	20:37		06:07 (WEA15)	21:23		
	16:16	27 09:29 (WEA12)	17:06			17:57	10	07:15 (WEA22)	19:50	7	07:09 (WEA16)	20:41	6	06:02 (WEA15)	21:24		
6	08:18	09:03 (WEA13)	07:44			06:48		07:25 (WEA22)	19:50		07:00 (WEA16)	20:41		06:00 (WEA15)	21:24		
	16:17	26 09:29 (WEA12)	17:08			17:59	12	07:14 (WEA22)	19:52	10	07:10 (WEA16)	20:42	8	06:08 (WEA15)	21:25		
7	08:17	09:03 (WEA13)	07:42			06:46		07:26 (WEA22)	19:54		07:00 (WEA16)	20:44		05:58 (WEA15)	21:26		
	16:18	26 09:29 (WEA12)	17:10			18:01	12	07:26 (WEA22)	19:54	10	07:10 (WEA16)	20:44	10	06:08 (WEA15)	21:26		
8	08:17	09:05 (WEA13)	07:41			06:44		07:14 (WEA22)	19:55		07:00 (WEA16)	20:46		05:57 (WEA15)	21:26		
	16:20	24 09:29 (WEA12)	17:12			18:03	12	07:13 (WEA22)	19:55	10	07:10 (WEA16)	20:46	12	06:09 (WEA15)	21:26		
9	08:16	09:05 (WEA13)	07:39			06:42		07:13 (WEA22)	19:57		07:00 (WEA16)	20:47		05:57 (WEA15)	21:27		
	16:21	22 09:27 (WEA12)	17:14			18:04	12	07:25 (WEA22)	19:57	10	07:10 (WEA16)	20:47	11	06:08 (WEA15)	21:27		
10	08:16	09:05 (WEA13)	07:37			06:39		07:14 (WEA22)	19:59		07:00 (WEA16)	20:48		05:58 (WEA15)	21:28		
	16:22	18 09:23 (WEA13)	17:16			18:06	10	07:16 (WEA22)	20:01	7	07:07 (WEA16)	20:49	10	06:07 (WEA15)	21:28		
11	08:15	09:07 (WEA13)	07:35		08:02 (WEA21)	06:37		07:22 (WEA22)	20:01			20:50		05:58 (WEA15)	21:29		
	16:24	17 09:24 (WEA13)	17:17	4	08:06 (WEA21)	18:08	6		20:02			20:52	9	06:00 (WEA15)	21:30		
12	08:15	09:07 (WEA13)	07:33		08:00 (WEA21)	06:35			20:02			20:52	6	06:06 (WEA15)	21:30		
	16:25	17 09:24 (WEA13)	17:19	8	08:08 (WEA21)	18:10			20:04			20:54			21:30		
13	08:14	09:08 (WEA13)	07:32		07:59 (WEA21)	06:33			20:06			20:55			21:31		
	16:27	16 09:24 (WEA13)	17:21	10	08:09 (WEA21)	18:11			20:06			20:55			21:31		
14	08:13	09:09 (WEA13)	07:30		07:58 (WEA21)	06:30			20:07			20:56			21:32		
	16:28	14 09:23 (WEA13)	17:23	12	08:10 (WEA21)	18:13			20:08			20:57			21:33		
15	08:12	09:10 (WEA13)	07:28		07:58 (WEA21)	06:28			20:09			20:58			21:33		
	16:30	13 09:23 (WEA13)	17:25	12	08:10 (WEA21)	18:15			20:10			20:59			21:34		
16	08:12	09:11 (WEA13)	07:26		07:58 (WEA21)	06:26			20:11			20:59			21:34		
	16:31	11 09:22 (WEA13)	17:27	12	08:10 (WEA21)	18:16			20:12			21:00			21:35		
17	08:11	09:13 (WEA13)	07:24		07:59 (WEA21)	06:23			20:13		06:36 (WEA14)	21:01			21:35		
	16:33	8 09:21 (WEA13)	17:28	10	08:09 (WEA21)	18:18			20:14	5	06:41 (WEA14)	21:02			21:36		
18	08:10		07:22		08:00 (WEA21)	06:21			20:15		06:34 (WEA14)	21:03			21:36		
	16:35		17:30	8	08:08 (WEA21)	18:20			20:16	8	06:42 (WEA14)	21:04			21:37		
19	08:09		07:20		08:02 (WEA21)	06:19			20:17		06:32 (WEA14)	21:05			21:37		
	16:36		17:32	3	08:05 (WEA21)	18:22			20:18		06:31 (WEA14)	21:06			21:38		
20	08:08		07:18			06:17			20:19	10	06:42 (WEA14)	21:07			21:39		
	16:38		17:34			18:23			20:20		06:31 (WEA14)	21:08			21:40		
21	08:07		07:16			06:14			20:21	11	06:42 (WEA14)	21:09			21:41		
	16:40		17:36			18:25			20:22		06:31 (WEA14)	21:10			21:42		
22	08:05		07:14			06:12			20:23	11	06:42 (WEA14)	21:11			21:43		
	16:41		17:38			18:27			20:24		06:31 (WEA14)	21:12			21:44		
23	08:04		07:12			06:10			20:25	10	06:41 (WEA14)	21:13			21:45		
	16:43		17:39			18:28			20:26		06:32 (WEA14)	21:14			21:46		
24	08:03		07:10			06:07			20:27	8	06:40 (WEA14)	21:15			21:47		
	16:45		17:41			18:30			20:28		06:34 (WEA14)	21:16			21:48		
25	08:02		07:08			06:05			20:29	3	06:37 (WEA14)	21:17			21:49		
	16:46		17:43			18:32			20:30			21:18			21:50		
26	08:01		07:06			06:03			20:31			21:19			21:51		
	16:48		17:45			18:34			20:32			21:20			21:52		
27	07:59		07:03			06:00			20:33			21:21			21:53		
	16:50		17:47			18:35			20:34			21:22			21:54		
28	07:58		07:01			05:58			20:35			21:23			21:55		
	16:52		17:48			18:37			20:36			21:24			21:56		
29	07:57					05:56			20:37			21:25			21:57		
	16:54					18:39			20:38			21:26			21:58		
30	07:55					05:54			20:39			21:27			21:59		
	16:55					18:40			20:40			21:28			22:00		
31	07:54					05:51			20:41			21:29			22:01		
	16:57					19:42			20:42			21:30			22:02		
Sonnenscheinstunden			260	278	367	416	484	498									
astr.max.mögl.Beschattung			349	79	80	122	75										
Red.Sonnenscheinwahrsch.			0,19	0,26	0,33	0,42	0,48										
Reduktion Betriebsdauer			0,95	0,95	0,95	0,95	0,95										
Reduktion Windrichtung			0,58	0,60	0,59	0,64	0,65										
Gesamte Reduktion			0,10	0,15	0,19	0,25	0,29										
Met.wahrsch.Beschattung			36	12	15	31	22										

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Juli		August		September		Oktober		November		Dezember	
1	04:57	05:33	06:10 (WEA15)	06:22		07:11		07:04		07:55	08:49 (WEA13)
	21:33	21:02	7 06:17 (WEA15)	20:00		18:51		16:46		16:06	17 09:06 (WEA13)
2	04:58	05:35	06:08 (WEA15)	06:24		07:12		07:56 (WEA22)		07:56	08:48 (WEA13)
	21:33	21:00	10 06:18 (WEA15)	19:58	7 06:59 (WEA16)	18:49	3 07:59 (WEA22)	16:44		16:05	18 09:06 (WEA13)
3	04:58	05:36	06:07 (WEA15)	06:26		07:14		07:53 (WEA22)		07:58	08:49 (WEA13)
	21:33	20:59	11 06:18 (WEA15)	19:56	10 07:07 (WEA16)	18:47	8 08:01 (WEA22)	16:42		16:04	21 09:11 (WEA12)
4	04:59	05:38	06:07 (WEA15)	06:27		07:16		07:51 (WEA22)		07:59	08:49 (WEA13)
	21:32	20:57	12 06:19 (WEA15)	19:54	10 07:07 (WEA16)	18:45	11 08:02 (WEA22)	16:40		16:04	24 09:13 (WEA12)
5	05:00	05:39	06:07 (WEA15)	06:29		07:17		07:51 (WEA22)		08:00	08:49 (WEA13)
	21:32	20:55	11 06:18 (WEA15)	19:51	10 07:06 (WEA16)	18:42	12 08:03 (WEA22)	16:39		16:03	25 09:14 (WEA12)
6	05:01	05:41	06:09 (WEA15)	06:30		07:19		07:50 (WEA22)		08:01	08:50 (WEA13)
	21:31	20:53	10 06:19 (WEA15)	19:49	9 07:06 (WEA16)	18:40	12 08:02 (WEA22)	16:37		16:03	25 09:15 (WEA12)
7	05:02	05:42	06:10 (WEA15)	06:32		07:21		07:50 (WEA22)		08:03	08:50 (WEA13)
	21:31	20:52	8 06:18 (WEA15)	19:47	7 07:05 (WEA16)	18:38	12 08:02 (WEA22)	16:35		16:03	26 09:16 (WEA12)
8	05:02	05:44	06:12 (WEA15)	06:34		07:22		07:51 (WEA22)		08:04	08:50 (WEA13)
	21:30	20:50	5 06:17 (WEA15)	19:45	3 07:02 (WEA16)	18:36	10 08:01 (WEA22)	16:33		16:02	27 09:17 (WEA12)
9	05:03	05:45	06:13 (WEA15)	06:35		07:24		07:51 (WEA22)		08:05	08:51 (WEA13)
	21:29	20:48	2 06:15 (WEA15)	19:42		18:33	8 07:59 (WEA22)	16:32		16:02	27 09:18 (WEA12)
10	05:04	05:47		06:37		07:26		07:20		08:06	08:51 (WEA13)
	21:29	20:46		19:40		18:31		16:30		16:02	28 09:19 (WEA12)
11	05:05	05:49		06:38		07:28		07:22		08:07	08:52 (WEA13)
	21:28	20:44		19:38		18:29		16:29		16:02	27 09:19 (WEA12)
12	05:06	05:50		06:40		07:29		07:24		08:08	08:52 (WEA13)
	21:27	20:42		19:35		18:27		16:27		16:02	28 09:20 (WEA12)
13	05:08	05:52		06:42		07:31		07:25		08:09	08:52 (WEA13)
	21:26	20:40		19:33		18:24		16:26		16:01	28 09:20 (WEA12)
14	05:09	05:53		06:43		07:33		07:27		08:10	08:53 (WEA13)
	21:25	20:38		19:31		18:22		16:24		16:01	28 09:21 (WEA12)
15	05:10	05:55		06:45		07:34		07:29		08:11	08:54 (WEA13)
	21:24	20:37		19:28		18:20		16:23		16:02	27 09:21 (WEA12)
16	05:11	05:57		06:46		07:36		07:31		08:12	08:54 (WEA13)
	21:23	20:35		19:26		18:18		16:21		16:02	28 09:22 (WEA12)
17	05:12	05:58		06:48		07:38		07:32		08:13	08:54 (WEA13)
	21:22	20:33		19:24		18:16		16:20		16:02	28 09:22 (WEA12)
18	05:13	06:00		06:50		07:39		07:34		08:14	08:55 (WEA13)
	21:21	20:30		19:21		18:14		16:19		16:02	28 09:23 (WEA12)
19	05:15	06:01	06:39 (WEA14)	06:51		07:41		07:36		08:14	08:56 (WEA13)
	21:20	20:28	5 06:44 (WEA14)	19:19		18:12		16:17		16:02	27 09:23 (WEA12)
20	05:16	06:03	06:37 (WEA14)	06:53		07:43		07:37		08:15	08:55 (WEA13)
	21:19	20:26	9 06:46 (WEA14)	19:17		18:09		16:16		16:03	28 09:23 (WEA12)
21	05:17	06:05	06:35 (WEA14)	06:54		07:45		07:39		08:16	08:56 (WEA13)
	21:18	20:24	11 06:46 (WEA14)	19:15		18:07		16:15		16:03	28 09:24 (WEA12)
22	05:19	06:06	06:35 (WEA14)	06:56		07:46		07:41		08:16	08:56 (WEA13)
	21:17	20:22	11 06:46 (WEA14)	19:12		18:05		16:14		16:04	28 09:24 (WEA12)
23	05:20	06:08	06:34 (WEA14)	06:58		07:48	08:32 (WEA21)	07:42		08:17	08:57 (WEA13)
	21:15	20:20	12 06:46 (WEA14)	19:10		18:03	5 08:37 (WEA21)	16:13		16:04	28 09:25 (WEA12)
24	05:21	06:09	06:36 (WEA14)	06:59		07:50	08:30 (WEA21)	07:44		08:17	08:58 (WEA13)
	21:14	20:18	10 06:46 (WEA14)	19:08		18:01	9 08:39 (WEA21)	16:12		16:05	27 09:25 (WEA12)
25	05:23	06:11	06:37 (WEA14)	07:01		06:52	07:28 (WEA21)	07:46	08:51 (WEA13)	08:17	08:58 (WEA13)
	21:13	20:16	7 06:44 (WEA14)	19:05		16:59	11 07:39 (WEA21)	16:11	8 08:59 (WEA13)	16:05	28 09:26 (WEA12)
26	05:24	06:13	06:39 (WEA14)	07:03		06:53	07:28 (WEA21)	07:47	08:50 (WEA13)	08:18	08:59 (WEA13)
	21:11	20:14	4 06:43 (WEA14)	19:03		16:57	11 07:39 (WEA21)	16:10	11 09:01 (WEA13)	16:06	28 09:27 (WEA12)
27	05:26	06:14		07:04		06:55	07:28 (WEA21)	07:49	08:49 (WEA13)	08:18	08:59 (WEA13)
	21:10	20:11		19:01		16:55	11 07:39 (WEA21)	16:09	13 09:02 (WEA13)	16:07	28 09:27 (WEA12)
28	05:27	06:16		07:06		06:57	07:28 (WEA21)	07:50	08:49 (WEA13)	08:18	08:59 (WEA13)
	21:08	20:09		18:58		16:53	11 07:39 (WEA21)	16:08	14 09:03 (WEA13)	16:08	28 09:27 (WEA12)
29	05:29	06:17		07:08		06:59	07:29 (WEA21)	07:52	08:48 (WEA13)	08:18	09:00 (WEA13)
	21:07	20:07		18:56		16:51	9 07:38 (WEA21)	16:07	16 09:04 (WEA13)	16:08	28 09:28 (WEA12)
30	05:30	06:19		07:09		07:01	07:30 (WEA21)	07:53	08:48 (WEA13)	08:18	09:00 (WEA13)
	21:05	20:05		18:54		16:49	7 07:37 (WEA21)	16:06	17 09:05 (WEA13)	16:09	28 09:28 (WEA12)
31	05:32	06:11 (WEA15)	06:21			07:02	7 07:33 (WEA21)			08:19	09:01 (WEA13)
	21:04	4 06:15 (WEA15)	20:03			16:48	1 07:34 (WEA21)			16:10	28 09:29 (WEA12)
Sonnenscheinstunden		501	453	381	332	267	245	822			
astr.max.mögl.Beschattung		4	145	56	151	79					
Red.Sonnenscheinwahrsch.		0,47	0,50	0,42	0,35	0,21	0,16				
Reduktion Betriebsdauer		0,95	0,95	0,95	0,95	0,95	0,95				
Reduktion Windrichtung		0,65	0,65	0,64	0,59	0,58	0,58				
Gesamte Reduktion		0,29	0,30	0,25	0,20	0,11	0,09				
Met.wahrsch.Beschattung		1	44	14	30	9	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)
	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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar			Februar			März			April			Mai			Juni		
1	08:19		09:27 (WEA13)	07:52		06:59			06:49			05:45			05:00		
	16:12	14	09:41 (WEA13)	16:59		17:50			19:44			20:34			21:20		
2	08:18		09:27 (WEA13)	07:51		06:57			06:47			05:43			04:59		
	16:13	14	09:41 (WEA13)	17:01		17:52			19:45			20:36			21:21		
3	08:18		09:28 (WEA13)	07:49		06:55		07:22 (WEA22)	06:44			05:41			04:58		
	16:14	13	09:41 (WEA13)	17:03		17:54	9	07:31 (WEA22)	19:47			20:37			21:22		
4	08:18		09:29 (WEA13)	07:47		06:53		07:21 (WEA22)	06:42			05:39			04:57		
	16:15	12	09:41 (WEA13)	17:04		17:55	11	07:32 (WEA22)	19:49			20:39			21:23		
5	08:18		09:30 (WEA13)	07:46		06:50		07:19 (WEA22)	06:40		07:05 (WEA16)	05:37			04:57		
	16:16	10	09:40 (WEA13)	17:06		17:57	13	07:32 (WEA22)	19:50	1	07:06 (WEA16)	20:41			21:24		
6	08:18		09:32 (WEA13)	07:44		06:48		07:19 (WEA22)	06:38		07:01 (WEA16)	05:35			04:56		
	16:17	8	09:40 (WEA13)	17:08		17:59	13	07:32 (WEA22)	19:52	8	07:09 (WEA16)	20:42			21:25		
7	08:17		09:33 (WEA13)	07:42		06:46		07:19 (WEA22)	06:35		07:00 (WEA16)	05:34		05:58 (WEA15)	04:56		
	16:18	5	09:38 (WEA13)	17:10		18:01	13	07:32 (WEA22)	19:54	10	07:10 (WEA16)	20:44	1	05:59 (WEA15)	21:26		
8	08:17			07:41	08:10 (WEA21)	06:44		07:19 (WEA22)	06:33		06:59 (WEA16)	05:32		05:57 (WEA15)	04:55		
	16:20			17:12	5	08:15 (WEA21)	13	07:32 (WEA22)	19:55	11	07:10 (WEA16)	20:46	5	05:57 (WEA15)	21:26		
9	08:16			07:39	9	08:08 (WEA21)	06:42		07:19 (WEA22)	06:31		06:58 (WEA16)	05:30		05:55 (WEA15)	04:55	
	16:21			17:14	9	08:17 (WEA21)	18:04	11	07:30 (WEA22)	19:57	11	07:09 (WEA16)	20:47	8	06:03 (WEA15)	21:27	
10	08:16			07:37		08:07 (WEA21)	06:39		07:21 (WEA22)	06:29		06:58 (WEA16)	05:28		05:54 (WEA15)	04:54	
	16:22			17:16	11	08:18 (WEA21)	18:06	7	07:28 (WEA22)	19:59	11	07:09 (WEA16)	20:49	10	06:04 (WEA15)	21:28	
11	08:15			07:35		08:06 (WEA21)	06:37			06:26		06:59 (WEA16)	05:27		05:52 (WEA15)	04:54	
	16:24			17:17	12	08:18 (WEA21)	18:08			20:01	9	07:08 (WEA16)	20:50	12	06:04 (WEA15)	21:29	
12	08:15			07:33		08:06 (WEA21)	06:35			06:24		07:01 (WEA16)	05:25		05:52 (WEA15)	04:53	
	16:25			17:19	13	08:19 (WEA21)	18:10			20:02	5	07:06 (WEA16)	20:52	13	06:05 (WEA15)	21:30	
13	08:14			07:32		08:06 (WEA21)	06:33			06:22			05:23		05:52 (WEA15)	04:53	
	16:27			17:21	13	08:19 (WEA21)	18:11			20:04			20:54	12	06:04 (WEA15)	21:30	
14	08:13			07:30		08:06 (WEA21)	06:30			06:20			05:22		05:52 (WEA15)	04:53	
	16:28			17:23	12	08:18 (WEA21)	18:13			20:06			20:55	12	06:04 (WEA15)	21:31	
15	08:12			07:28		08:07 (WEA21)	06:28			06:18			05:20		05:52 (WEA15)	04:53	
	16:30			17:25	10	08:17 (WEA21)	18:15			20:07			20:57	11	06:03 (WEA15)	21:31	
16	08:12			07:26		08:09 (WEA21)	06:26			06:15			05:19		05:53 (WEA15)	04:53	
	16:31			17:27	7	08:16 (WEA21)	18:16			20:09			20:58	10	06:03 (WEA15)	21:32	
17	08:11			07:24		06:23				06:13			05:17		05:54 (WEA15)	04:53	
	16:33			17:28		18:18				20:11			21:00	9	06:03 (WEA15)	21:32	
18	08:10			07:22		06:21				06:11			05:16		05:55 (WEA15)	04:53	
	16:35			17:30		18:20				20:12			21:01	5	06:00 (WEA15)	21:33	
19	08:09			07:20		06:19				06:09		06:32 (WEA14)	05:15			04:53	
	16:36			17:32		18:22				20:14	6	06:38 (WEA14)	21:03			21:33	
20	08:08			07:18		06:17		06:39 (WEA23)	06:07			06:30 (WEA14)	05:13			04:53	
	16:38			17:34		18:23	3	06:42 (WEA23)	20:16		9	06:39 (WEA14)	21:04			21:33	
21	08:07			07:16		06:14		06:37 (WEA23)	06:05			06:28 (WEA14)	05:12			04:53	
	16:40			17:36		18:25	8	06:45 (WEA23)	20:17		11	06:39 (WEA14)	21:05			21:34	
22	08:05			07:14		06:12		06:35 (WEA23)	06:03			06:27 (WEA14)	05:11			04:53	
	16:41			17:38		18:27	10	06:45 (WEA23)	20:19		13	06:40 (WEA14)	21:07			21:34	
23	08:04			07:12		06:10		06:35 (WEA23)	06:01			06:27 (WEA14)	05:09			04:53	
	16:43			17:39		18:28	10	06:45 (WEA23)	20:21		13	06:40 (WEA14)	21:08			21:34	
24	08:03			07:10		06:07		06:35 (WEA23)	05:59			06:27 (WEA14)	05:08			04:53	
	16:45			17:41		18:30	10	06:45 (WEA23)	20:22		12	06:39 (WEA14)	21:10			21:34	
25	08:02			07:08		06:05		06:35 (WEA23)	05:57			06:28 (WEA14)	05:07			04:54	
	16:46			17:43		18:32	8	06:43 (WEA23)	20:24		10	06:38 (WEA14)	21:11			21:34	
26	08:01			07:06		06:03		06:36 (WEA23)	05:54			06:28 (WEA14)	05:06			04:54	
	16:48			17:45		18:34	5	06:41 (WEA23)	20:26		9	06:37 (WEA14)	21:12			21:34	
27	07:59			07:03		06:00			05:52			06:30 (WEA14)	05:05			04:55	
	16:50			17:47		18:35			20:27		4	06:34 (WEA14)	21:14			21:34	
28	07:58			07:01		05:58			05:51				05:04			04:55	
	16:52			17:48		18:37			20:29				21:15			21:34	
29	07:57					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			76	92		144			153			108					
Red.Sonnenscheinwahrsch.			0,19	0,26		0,33			0,42			0,48					
Reduktion Betriebsdauer			0,95	0,95		0,95			0,95			0,95					
Reduktion Windrichtung			0,60	0,59		0,61			0,64			0,66					
Gesamte Reduktion			0,11	0,15		0,19			0,25			0,30					
Met.wahrsch.Beschattung			8	14		27			38			32					

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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Juli		August		September		Oktober		November		Dezember	
1	04:57	05:33	06:03 (WEA15)	06:22	06:58 (WEA16)	07:11		07:04	07:37 (WEA21)	07:55	
2	21:33	21:02	12 06:15 (WEA15)	20:00	9 07:07 (WEA16)	18:51		10 16:46	07:47 (WEA21)	16:06	
3	04:58	05:35	06:03 (WEA15)	06:24	06:57 (WEA16)	07:12		07:06	07:38 (WEA21)	07:56	
4	21:33	21:00	11 06:14 (WEA15)	19:58	11 07:08 (WEA16)	18:49		16:44	8 07:46 (WEA21)	16:05	
5	04:58	05:36	06:04 (WEA15)	06:25	06:56 (WEA16)	07:14	08:00 (WEA22)	07:08	07:40 (WEA21)	07:57	
6	21:33	20:59	9 06:13 (WEA15)	19:56	11 07:07 (WEA16)	18:47	5 08:05 (WEA22)	16:42	4 07:44 (WEA21)	16:04	
7	04:59	05:38	06:06 (WEA15)	06:27	06:56 (WEA16)	07:16		07:58 (WEA22)		07:59	
8	21:32	20:57	7 06:13 (WEA15)	19:54	11 07:07 (WEA16)	18:45	9 08:07 (WEA22)	16:40		16:04	
9	05:00	05:39	06:07 (WEA15)	06:29	06:56 (WEA16)	07:17		07:57 (WEA22)		08:00	09:19 (WEA13)
10	21:32	20:55	4 06:11 (WEA15)	19:51	10 07:06 (WEA16)	18:42	11 08:08 (WEA22)	16:39		16:03	4 09:23 (WEA13)
11	05:01	05:41		06:30	06:57 (WEA16)	07:19		07:55 (WEA22)		08:01	09:18 (WEA13)
12	21:31	20:53		19:49	8 07:05 (WEA16)	18:40	13 08:08 (WEA22)	16:37		16:03	8 09:26 (WEA13)
13	05:02	05:42		06:32	07:00 (WEA16)	07:21		07:55 (WEA22)		08:03	09:17 (WEA13)
14	21:31	20:52		19:47	2 07:02 (WEA16)	18:38	13 08:08 (WEA22)	16:35		16:03	10 09:27 (WEA13)
15	05:02	05:44		06:34		07:22		07:55 (WEA22)		08:04	09:16 (WEA13)
16	21:30	20:50		19:45		18:35	13 08:08 (WEA22)	16:33		16:02	12 09:28 (WEA13)
17	05:03	05:45		06:35		07:24		07:54 (WEA22)		08:05	09:17 (WEA13)
18	21:29	20:48		19:42		18:33	13 08:07 (WEA22)	16:32		16:02	13 09:30 (WEA13)
19	05:04	05:47		06:37		07:26		07:55 (WEA22)		08:06	09:17 (WEA13)
20	21:29	20:46		19:40		18:31	11 08:06 (WEA22)	16:30		16:02	14 09:31 (WEA13)
21	05:05	05:49		06:38		07:28		07:57 (WEA22)		08:07	09:17 (WEA13)
22	21:28	20:44		19:38		18:29	7 08:04 (WEA22)	16:29		16:02	14 09:31 (WEA13)
23	05:06	05:50		06:40		07:29		07:24		08:08	09:17 (WEA13)
24	21:27	20:42		19:35		18:27		16:27		16:01	15 09:32 (WEA13)
25	05:08	05:52		06:42		07:31		07:25		08:09	09:17 (WEA13)
26	21:26	20:40		19:33		18:24		16:26		16:01	16 09:33 (WEA13)
27	05:09	05:53		06:43		07:33		07:27		08:10	09:17 (WEA13)
28	21:25	20:38		19:31		18:22		16:24		16:01	17 09:34 (WEA13)
29	05:10	05:55		06:45		07:34		07:29		08:11	09:18 (WEA13)
30	21:24	20:37		19:28		18:20		16:23		16:02	16 09:34 (WEA13)
31	05:11	05:57	6 06:37 (WEA14)	06:46		07:36		07:31		08:12	09:18 (WEA13)
1	21:23	20:35	6 06:43 (WEA14)	19:26		18:18		16:21		16:02	17 09:35 (WEA13)
2	05:12	05:58		06:35 (WEA14)		06:48		07:32		08:13	09:18 (WEA13)
3	21:22	20:32	9 06:44 (WEA14)	19:24	4 07:25 (WEA23)	07:38		07:32		16:20	17 09:35 (WEA13)
4	05:13	06:00		06:34 (WEA14)		06:50		07:29 (WEA23)		16:16	17 09:35 (WEA13)
5	21:21	20:30	11 06:45 (WEA14)	19:21	8 07:23 (WEA23)	07:39		07:34		16:14	18 09:36 (WEA13)
6	05:15	06:01		06:33 (WEA14)		06:51		07:31 (WEA23)		16:19	18 09:36 (WEA13)
7	21:20	20:28	12 06:45 (WEA14)	19:19	10 07:21 (WEA23)	07:41		07:36		16:17	18 09:37 (WEA13)
8	05:16	06:03		06:33 (WEA14)		06:53		07:37		16:16	18 09:37 (WEA13)
9	21:19	20:26	12 06:45 (WEA14)	19:17	10 07:21 (WEA23)	07:43		07:37		16:16	18 09:37 (WEA13)
10	05:17	06:05		06:32 (WEA14)		06:54		07:39		16:16	18 09:37 (WEA13)
11	21:18	20:24	12 06:44 (WEA14)	19:15	10 07:20 (WEA23)	07:45		07:39		16:16	18 09:37 (WEA13)
12	05:19	06:06		06:33 (WEA14)		06:56		07:41		16:15	18 09:38 (WEA13)
13	21:17	20:22	11 06:44 (WEA14)	19:12	9 07:21 (WEA23)	07:46		07:41		16:15	18 09:38 (WEA13)
14	05:20	06:08		06:34 (WEA14)		06:58		07:42		16:14	18 09:38 (WEA13)
15	21:15	20:20	9 06:43 (WEA14)	19:10	5 07:23 (WEA23)	07:48		07:42		16:14	18 09:38 (WEA13)
16	05:21	06:09		06:36 (WEA14)		06:59		07:44		16:13	18 09:39 (WEA13)
17	21:14	20:18	5 06:41 (WEA14)	19:08		18:01		16:12		16:12	18 09:39 (WEA13)
18	05:23	06:11		07:01		06:52		07:41 (WEA21)		07:46	18 09:39 (WEA13)
19	21:13	20:16		19:05		16:59	1 07:42 (WEA21)	16:11		16:11	18 09:39 (WEA13)
20	05:24	06:05 (WEA15)	06:13	07:03		06:53		07:38 (WEA21)		07:47	18 09:39 (WEA13)
21	21:11	20:14		19:03		16:57	8 07:46 (WEA21)	16:10		16:10	18 09:40 (WEA13)
22	05:26	06:04 (WEA15)	06:14	07:04		06:55		07:37 (WEA21)		07:49	18 09:40 (WEA13)
23	21:10	20:11		19:01		16:55	10 07:47 (WEA21)	16:09		16:07	17 09:40 (WEA13)
24	05:27	06:03 (WEA15)	06:16	07:06		06:57		07:36 (WEA21)		07:50	18 09:40 (WEA13)
25	21:08	20:07		18:58		16:53	12 07:48 (WEA21)	16:08		16:08	17 09:40 (WEA13)
26	05:29	06:02 (WEA15)	06:17	07:08		06:59		07:36 (WEA21)		07:52	18 09:41 (WEA13)
27	21:07	20:07		18:56		16:51	12 07:48 (WEA21)	16:07		16:08	17 09:41 (WEA13)
28	05:30	06:03 (WEA15)	06:19	07:09		07:01		07:36 (WEA21)		07:53	18 09:41 (WEA13)
29	21:05	20:05		18:54		16:49	12 07:48 (WEA21)	16:06		16:09	16 09:41 (WEA13)
30	05:32	06:02 (WEA15)	06:21	07:01 (WEA16)		07:02		07:36 (WEA21)		16:09	16 09:41 (WEA13)
31	21:04	20:03	5 07:06 (WEA16)			16:48	12 07:48 (WEA21)	16:10		16:10	16 09:41 (WEA13)
Sonnenscheinstunden		501	453	381		332		267		245	
astr.max.mögl.Beschattung		66	135	118		162		22		418	
Red.Sonnenscheinwahrsch.		0,47	0,50	0,42		0,35		0,21		0,16	
Reduktion Betriebsdauer		0,95	0,95	0,95		0,95		0,95		0,95	
Reduktion Windrichtung		0,66	0,64	0,63		0,59		0,59		0,60	
Gesamte Reduktion		0,29	0,30	0,25		0,20		0,12		0,09	
Met.wahrsch.Beschattung		19	41	29		32		3		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)
	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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

Januar			Februar			März			April			Mai			Juni		
1	08:19		09:09 (WEA13)	07:52		06:59			06:49		07:16 (WEA23)	05:45		06:09 (WEA14)	05:00	05:33 (WEA15)	
	16:12	32	09:41 (WEA12)	16:59		17:50			19:44	10	07:26 (WEA23)	20:34	8	06:17 (WEA14)	21:19	05:44 (WEA15)	
2	08:18		09:09 (WEA13)	07:51		06:57			06:47		07:16 (WEA23)	05:43		06:07 (WEA14)	04:59	05:33 (WEA15)	
	16:13	31	09:40 (WEA12)	17:01		17:52			19:45	9	07:25 (WEA23)	20:36	10	06:17 (WEA14)	21:21	05:44 (WEA15)	
3	08:18		09:09 (WEA13)	07:49		06:55			06:44		07:18 (WEA23)	05:41		06:05 (WEA14)	04:58	05:35 (WEA15)	
	16:14	32	09:41 (WEA12)	17:03		17:54			19:47	6	07:24 (WEA23)	20:37	12	06:17 (WEA14)	21:22	05:44 (WEA15)	
4	08:18		09:10 (WEA13)	07:47		06:53			06:42			05:39		06:06 (WEA14)	04:57	05:35 (WEA15)	
	16:15	31	09:41 (WEA12)	17:04		17:55			19:49			20:39	12	06:18 (WEA14)	21:23	05:44 (WEA15)	
5	08:18		09:10 (WEA13)	07:46		06:50			06:40			05:37		06:05 (WEA14)	04:57	05:36 (WEA15)	
	16:16	31	09:41 (WEA12)	17:06		17:57			19:50			20:41	13	06:18 (WEA14)	21:24	05:44 (WEA15)	
6	08:18		08:48 (WEA17)	07:44		06:48			06:38			05:35		06:05 (WEA14)	04:56	05:36 (WEA15)	
	16:17	32	09:42 (WEA12)	17:08		17:59			19:52			20:42	12	06:17 (WEA14)	21:25	05:43 (WEA15)	
7	08:17		08:47 (WEA17)	07:42		06:46			06:35			05:34		06:06 (WEA14)	04:56	05:38 (WEA15)	
	16:18	33	09:41 (WEA12)	17:10		18:01			19:54			20:44	10	06:16 (WEA14)	21:26	05:43 (WEA15)	
8	08:17		08:47 (WEA17)	07:41		06:44			06:33			05:32		06:07 (WEA14)	04:55	05:39 (WEA15)	
	16:20	34	09:42 (WEA12)	17:12		18:03			19:55			20:46	9	06:16 (WEA14)	21:26	05:41 (WEA15)	
9	08:16		08:46 (WEA17)	07:39		06:42			06:31			05:30		06:08 (WEA14)	04:55		
	16:21	35	09:41 (WEA12)	17:14		18:04			19:57			20:47	6	06:14 (WEA14)	21:27		
10	08:16		08:45 (WEA17)	07:37		06:39			06:29			05:28			04:54		
	16:22	35	09:40 (WEA12)	17:16		18:06			19:59			20:49			21:28		
11	08:15		08:45 (WEA17)	07:35		06:37			06:26			05:27			04:54		
	16:24	35	09:40 (WEA12)	17:17		18:08			20:01			20:50			21:29		
12	08:15		08:44 (WEA17)	07:33		06:35		07:03 (WEA22)	06:24			05:25			04:53		
	16:25	35	09:39 (WEA12)	17:19		18:10	6	07:09 (WEA22)	20:02			20:52			21:30		
13	08:14		08:43 (WEA17)	07:32		06:33		07:00 (WEA22)	06:22			05:23			04:53		
	16:27	34	09:37 (WEA13)	17:21		18:11	10	07:10 (WEA22)	20:04			20:53			21:30		
14	08:13		08:43 (WEA17)	07:30		06:30		06:59 (WEA22)	06:20			05:22			04:53		
	16:28	33	09:37 (WEA13)	17:23		18:13	12	07:11 (WEA22)	20:06			20:55			21:31		
15	08:12		08:44 (WEA17)	07:28		06:28		06:58 (WEA22)	06:18		06:42 (WEA16)	05:20			04:53		
	16:30	32	09:37 (WEA13)	17:25		18:15	14	07:12 (WEA22)	20:07	7	06:49 (WEA16)	20:57			21:31		
16	08:12		08:45 (WEA17)	07:26		06:26		06:57 (WEA22)	06:15		06:39 (WEA16)	05:19			04:53		
	16:31	30	09:37 (WEA13)	17:27	5	08:00 (WEA21)	14	07:11 (WEA22)	20:09	10	06:49 (WEA16)	20:58			21:32		
17	08:11		08:45 (WEA17)	07:24		07:53 (WEA21)		06:57 (WEA22)	06:13		06:38 (WEA16)	05:17			04:53		
	16:33	29	09:37 (WEA13)	17:28	9	08:02 (WEA21)	14	07:11 (WEA22)	20:11	11	06:49 (WEA16)	21:00			21:32		
18	08:10		08:47 (WEA17)	07:22		07:52 (WEA21)		06:58 (WEA22)	06:11		06:38 (WEA16)	05:16			04:53		
	16:35	26	09:37 (WEA13)	17:30	11	08:03 (WEA21)	13	07:11 (WEA22)	20:12	12	06:50 (WEA16)	21:01			21:33		
19	08:09		08:48 (WEA17)	07:20		07:51 (WEA21)		06:58 (WEA22)	06:09		06:38 (WEA16)	05:15			04:53		
	16:36	22	09:36 (WEA13)	17:32	13	08:04 (WEA21)	10	07:08 (WEA22)	20:14	11	06:49 (WEA16)	21:03			21:33		
20	08:08		09:21 (WEA13)	07:18		07:51 (WEA21)		07:00 (WEA22)	06:07		06:38 (WEA16)	05:13			04:53		
	16:38	15	09:36 (WEA13)	17:34	13	08:04 (WEA21)	6	07:06 (WEA22)	20:16	11	06:49 (WEA16)	21:04			21:33		
21	08:07		09:22 (WEA13)	07:16		07:51 (WEA21)		06:05			06:39 (WEA16)	05:12		05:39 (WEA15)	04:53		
	16:40	12	09:34 (WEA13)	17:36	13	08:04 (WEA21)		20:17	8	06:47 (WEA16)	21:05	2		05:41 (WEA15)	21:34		
22	08:05		09:25 (WEA13)	07:14		07:51 (WEA21)		06:03			06:41 (WEA16)	05:11		05:37 (WEA15)	04:53		
	16:41	7	09:32 (WEA13)	17:38	13	08:04 (WEA21)		20:19	4	06:45 (WEA16)	21:07	5		05:42 (WEA15)	21:34		
23	08:04			07:12		07:52 (WEA21)		06:01			05:09			05:36 (WEA15)	04:53		
	16:43			17:39	11	08:03 (WEA21)		20:21			21:08	7		05:43 (WEA15)	21:34		
24	08:03			07:10		07:53 (WEA21)		05:59			05:08			05:35 (WEA15)	04:54		
	16:45			17:41	8	08:01 (WEA21)		20:22			21:10	8		05:43 (WEA15)	21:34		
25	08:02			07:08				05:57			05:07			05:34 (WEA15)	04:54		
	16:46			17:43				20:24			21:11	10		05:44 (WEA15)	21:34		
26	08:01			07:06				05:54			05:06			05:33 (WEA15)	04:54		
	16:48			17:45				20:26			21:12	11		05:44 (WEA15)	21:34		
27	07:59			07:03				05:52			05:05			05:32 (WEA15)	04:55		
	16:50			17:47				20:27			21:14	12		05:44 (WEA15)	21:34		
28	07:58			07:01				05:51			05:04			05:32 (WEA15)	04:55		
	16:52			17:48			4	06:21 (WEA23)	05:29		21:15	12		05:44 (WEA15)	21:34		
29	07:56							06:25 (WEA23)	05:49		05:03			05:33 (WEA15)	04:56		
	16:54						8	07:18 (WEA23)	20:31		21:16	12		05:45 (WEA15)	21:34		
30	07:55							07:17 (WEA23)	05:47		05:02			05:33 (WEA15)	04:56		
	16:55							07:27 (WEA23)	20:32	5	06:11 (WEA14)	21:17	12	05:45 (WEA15)	21:34		
31	07:54							07:17 (WEA23)			05:01			05:33 (WEA15)			
	16:57							07:27 (WEA23)			21:18	12		05:45 (WEA15)			
Sonnenscheinstunden	260			278				367		416		484			498		
astr.max.mögl.Beschattung		636		96			131		104		195				62		
Red.Sonnenscheinwahrsch.		0,19		0,26			0,33		0,42		0,48				0,45		
Reduktion Betriebsdauer		0,95		0,95			0,95		0,95		0,95				0,95		
Reduktion Windrichtung		0,58		0,60			0,61		0,64		0,66				0,67		
Gesamte Reduktion		0,10		0,15			0,19		0,25		0,30				0,29		
Met.wahrsch.Beschattung		66		14			25		26		58				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)	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 14:35/4.1.273



SHADOW - Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung 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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli		August		September		Oktober		November		Dezember					
1	04:57		05:33		06:22		07:11	8	07:41 (WEA22)	07:04		07:55		08:27 (WEA17)		
	21:33		21:02		20:00		18:51		07:49 (WEA22)	16:46		16:06	36	09:22 (WEA12)		
2	04:58		05:35		06:24		07:12			07:06		07:56		08:28 (WEA17)		
	21:33		21:00		19:58		18:49			16:44		16:05	35	09:23 (WEA12)		
3	04:58		05:36		06:25		07:14			07:08		07:57		08:30 (WEA17)		
	21:33		20:59		19:56		18:47			16:42		16:04	35	09:25 (WEA12)		
4	04:59		05:38		06:27		07:16			07:09		07:59		08:31 (WEA17)		
	21:32		20:57	7	06:25 (WEA14)	19:54	18:45			16:40		16:04	34	09:26 (WEA12)		
5	05:00		05:39		06:16 (WEA14)	06:29	07:17			07:11		08:00		08:32 (WEA17)		
	21:32	4	05:48 (WEA15)	20:55	9	06:25 (WEA14)	19:51			16:39		16:03	33	09:26 (WEA12)		
6	05:01		05:43 (WEA15)	05:41	06:16 (WEA14)	06:30	07:19			07:13		08:01		08:34 (WEA17)		
	21:31	6	05:49 (WEA15)	20:53	11	06:27 (WEA14)	19:49			16:37		16:03	32	09:28 (WEA12)		
7	05:02		05:43 (WEA15)	05:42	06:15 (WEA14)	06:32	07:21			07:15		08:03		08:57 (WEA12)		
	21:31	7	05:50 (WEA15)	20:52	12	06:27 (WEA14)	19:47			16:35		16:03	31	09:28 (WEA12)		
8	05:02		05:42 (WEA15)	05:44	06:15 (WEA14)	06:34	07:22			07:17		08:04		08:57 (WEA12)		
	21:30	9	05:51 (WEA15)	20:50	12	06:27 (WEA14)	19:45			16:33		16:02	31	09:28 (WEA12)		
9	05:03		05:42 (WEA15)	05:45	06:14 (WEA14)	06:35	07:24			07:18		08:05		08:58 (WEA12)		
	21:29	10	05:52 (WEA15)	20:48	13	06:27 (WEA14)	19:42	6	07:18 (WEA23)	18:33		16:02	32	09:30 (WEA12)		
10	05:04		05:42 (WEA15)	05:47	06:15 (WEA14)	06:37	07:10 (WEA23)			07:26		08:06		08:59 (WEA13)		
	21:29	10	05:52 (WEA15)	20:46	12	06:27 (WEA14)	19:40	8	07:18 (WEA23)	18:31		16:02	31	09:30 (WEA12)		
11	05:05		05:42 (WEA15)	05:49	06:16 (WEA14)	06:38	07:09 (WEA23)	07:27		07:22		08:07		08:59 (WEA13)		
	21:28	11	05:53 (WEA15)	20:44	10	06:26 (WEA14)	19:38	10	07:19 (WEA23)	18:29		16:02	32	09:31 (WEA12)		
12	05:06		05:42 (WEA15)	05:50	06:18 (WEA14)	06:40	07:08 (WEA23)	07:29		07:24		08:08		09:00 (WEA13)		
	21:27	11	05:53 (WEA15)	20:42	7	06:25 (WEA14)	19:35	11	07:19 (WEA23)	18:27		16:02	31	09:31 (WEA12)		
13	05:08		05:42 (WEA15)	05:52	06:19 (WEA14)	06:42	07:08 (WEA23)	07:31		07:25		08:09		09:00 (WEA13)		
	21:26	11	05:53 (WEA15)	20:40	4	06:23 (WEA14)	19:33	10	07:18 (WEA23)	18:24		16:01	32	09:32 (WEA12)		
14	05:09		05:42 (WEA15)	05:53		06:43	07:08 (WEA23)	07:33		07:27		08:10		09:01 (WEA13)		
	21:25	12	05:54 (WEA15)	20:38		19:31	9	07:17 (WEA23)	18:22	16:24		16:01	31	09:32 (WEA12)		
15	05:10		05:41 (WEA15)	05:55		06:45	07:10 (WEA23)	07:34		07:29		08:11		09:01 (WEA13)		
	21:24	13	05:54 (WEA15)	20:36		19:28	5	07:15 (WEA23)	18:20	16:23		16:02	32	09:33 (WEA12)		
16	05:11		05:41 (WEA15)	05:57		06:46		07:36		07:31		08:12		09:02 (WEA13)		
	21:23	13	05:54 (WEA15)	20:35		19:26		18:18		16:21		16:02	32	09:34 (WEA12)		
17	05:12		05:42 (WEA15)	05:58		06:48		07:38		08:27 (WEA21)	07:32	08:13		09:02 (WEA13)		
	21:22	12	05:54 (WEA15)	20:32		19:24		18:16	4	08:31 (WEA21)	16:20	16:02	31	09:33 (WEA12)		
18	05:13		05:43 (WEA15)	06:00		06:50		07:39		08:23 (WEA21)	07:34	08:14		09:03 (WEA13)		
	21:21	10	05:53 (WEA15)	20:30		19:21		18:14	10	08:33 (WEA21)	16:19	16:02	31	09:34 (WEA12)		
19	05:15		05:44 (WEA15)	06:01		06:51		07:41		08:22 (WEA21)	07:36	08:14		09:03 (WEA13)		
	21:20	9	05:53 (WEA15)	20:28		19:19		18:12	12	08:34 (WEA21)	16:17	16:02	32	09:35 (WEA12)		
20	05:16		05:46 (WEA15)	06:03		06:53		07:43		08:22 (WEA21)	07:37	09:00 (WEA13)		09:03 (WEA13)		
	21:19	8	05:54 (WEA15)	20:26		19:17		18:09	12	08:34 (WEA21)	16:16	16:03	32	09:36 (WEA12)		
21	05:17		05:47 (WEA15)	06:05		06:54		07:45		08:21 (WEA21)	07:39	08:58 (WEA13)		09:04 (WEA13)		
	21:18	6	05:53 (WEA15)	20:24	5	06:50 (WEA16)	19:14	18:07	14	08:35 (WEA21)	16:15	12	09 (WEA13)	09:36 (WEA12)		
22	05:19		05:48 (WEA15)	06:06		06:44 (WEA16)	06:56	07:46		08:21 (WEA21)	07:41	08:57 (WEA13)		09:04 (WEA13)		
	21:17	4	05:52 (WEA15)	20:22	8	06:52 (WEA16)	19:12	18:05	14	08:35 (WEA21)	16:14	15	09 (WEA13)	09:36 (WEA12)		
23	05:20		05:49 (WEA15)	06:08		06:42 (WEA16)	06:58	07:48		08:22 (WEA21)	07:42	08:25 (WEA17)		09:05 (WEA13)		
	21:15	1	05:50 (WEA15)	20:20	10	06:52 (WEA16)	19:10	5	07:45 (WEA22)	18:03	12	09 (WEA13)	20	09:37 (WEA12)		
24	05:21			06:09		06:42 (WEA16)	06:59	07:42 (WEA22)	07:50	08:22 (WEA21)	07:44	08:24 (WEA17)		09:05 (WEA13)		
	21:14			20:18	11	06:53 (WEA16)	19:08	10	07:52 (WEA22)	18:01	12	09 (WEA13)	26	09:37 (WEA12)		
25	05:23			06:11		06:41 (WEA16)	07:01	07:41 (WEA22)	06:52	07:23 (WEA21)	07:46	08:24 (WEA17)		09:05 (WEA13)		
	21:13			20:16	11	06:52 (WEA16)	19:05	12	07:53 (WEA22)	16:59	8	07:31 (WEA21)	28	09:37 (WEA12)		
26	05:24			06:13		06:41 (WEA16)	07:03	07:40 (WEA22)	06:53	07:26 (WEA21)	07:47	08:24 (WEA17)		09:07 (WEA13)		
	21:11			20:14	11	06:52 (WEA16)	19:03	14	07:54 (WEA22)	16:57	2	07:28 (WEA21)	31	09:38 (WEA12)		
27	05:26			06:14		06:42 (WEA16)	07:04	07:39 (WEA22)	06:55		07:49	08:23 (WEA17)		09:07 (WEA13)		
	21:10			20:11	10	06:52 (WEA16)	19:01	14	07:53 (WEA22)	16:55		07:50	32	09:38 (WEA12)		
28	05:27			06:16		06:43 (WEA16)	07:06	07:39 (WEA22)	06:57		07:50	08:23 (WEA17)		09:07 (WEA13)		
	21:08			20:09	7	06:50 (WEA16)	18:58	14	07:53 (WEA22)	16:53		16:08	33	09:39 (WEA12)		
29	05:29			06:17		07:08	07:38 (WEA22)	06:59		07:52		08:23 (WEA17)		09:08 (WEA13)		
	21:07			20:07		18:56	13	07:51 (WEA22)	16:51		16:07	34	09 (WEA13)	09:39 (WEA12)		
30	05:30			06:19		07:09		07:39 (WEA22)	07:01	07:53		08:25 (WEA17)		09:08 (WEA13)		
	21:05			20:05		18:54	12	07:51 (WEA22)	16:49		16:06	35	09 (WEA13)	09:40 (WEA12)		
31	05:32			06:21					07:02					08:19	09:08 (WEA13)	
	21:04			20:03					16:48					16:10	32	09:40 (WEA12)
Sonnenscheinstunden	501		453		381		332		267		273		245		995	
astr.max.mögl.Beschattung	167		170		153		108		273		0,21				0,16	
Red.Sonnenscheinwahrsch.	0,47		0,50		0,42		0,35		0,21		0,95				0,95	
Reduktion Betriebsdauer	0,95		0,95		0,95		0,95		0,95		0,58				0,59	
Reduktion Windrichtung	0,67		0,64		0,61		0,60		0,58		0,11				0,09	
Gesamte Reduktion	0,30		0,30		0,24		0,20		0,11		0,31				0,22	
Met.wahrsch.Beschattung	50		52		37		22		31						92	

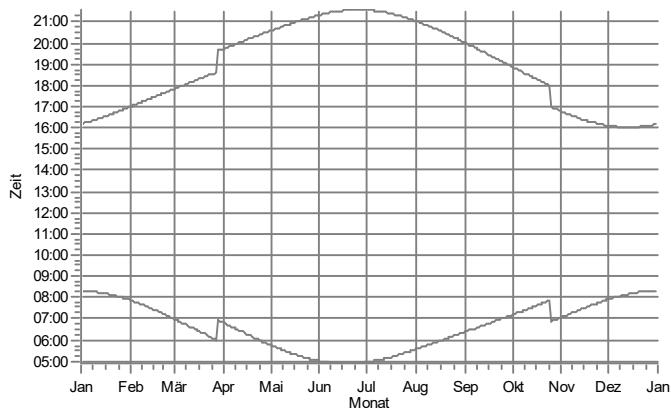
Tabellen-Layout: Die Daten für jeden Tag sind in folgender Matrix wiedergegeben (Sommerzeit wie Bezugsjahr):

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		

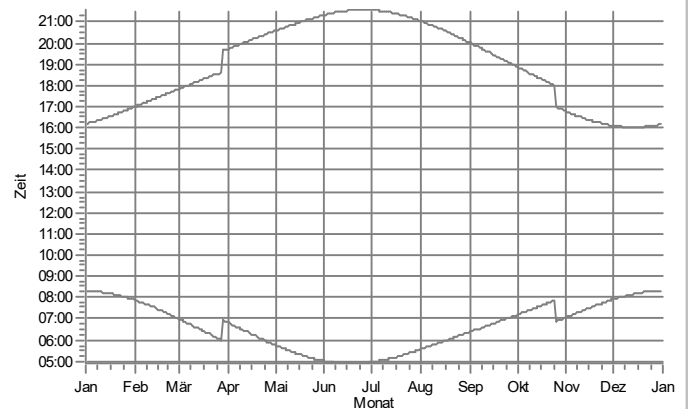
SHADOW - Grafischer Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

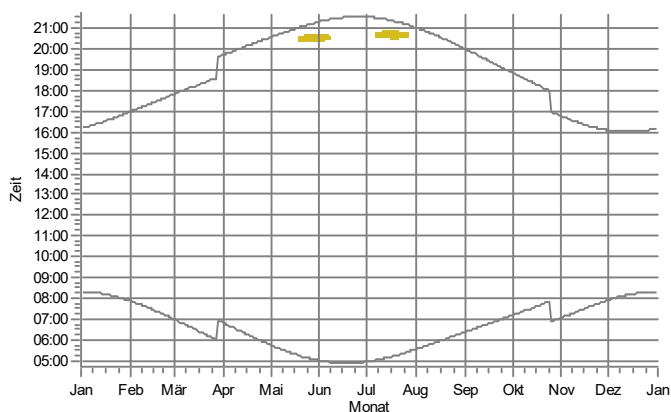
IP01: Dorfstraße 59, 06766 Bitterfeld-Wolfen



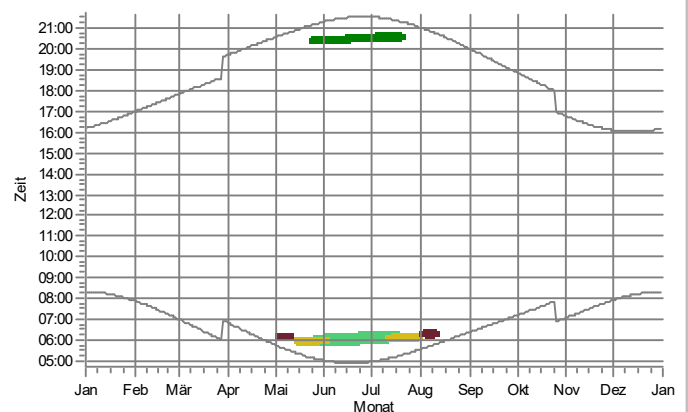
IP02: Auenstraße 24, 06766 Bitterfeld-Wolfen



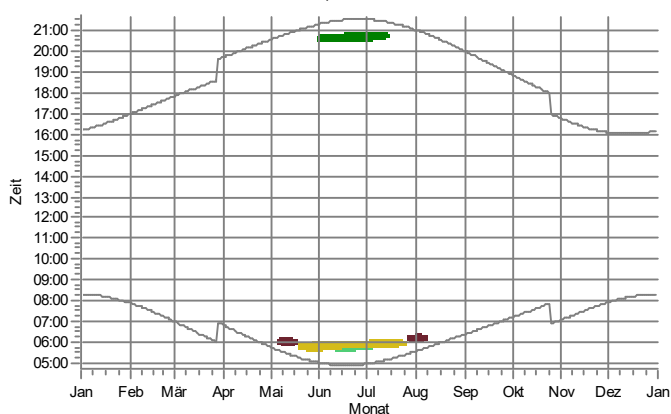
IP03: Siebenhausener Str. 8, 06766 Bitterfeld-Wolfen



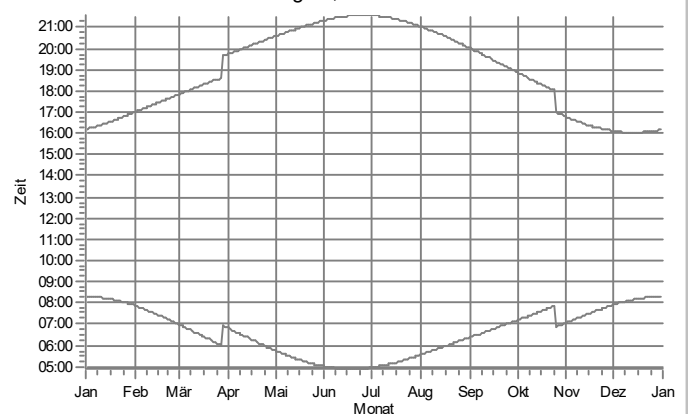
IP04: Siebenhausen 14, 06766 Bitterfeld-Wolfen



IP05: Siebenhausen 15, 06766 Bitterfeld-Wolfen



IP06: Reudener Weg 10, 06766 Bitterfeld-Wolfen



WEA

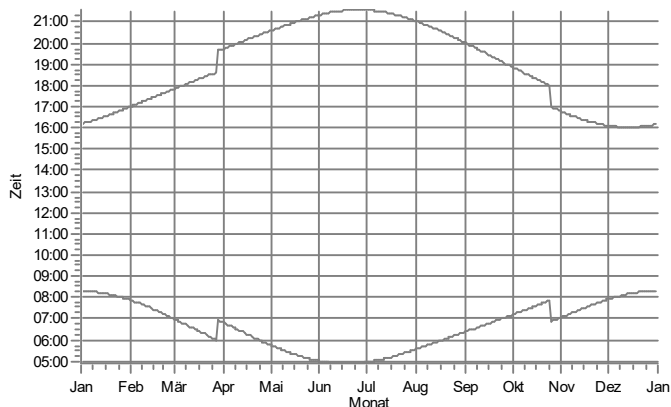
WEA06: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (206)
WEA33: DEWIND D8/80-2MW 2000 80.0 IO! NH: 100,0 m (Ges:140,0 m) (233)

WEA35: DEWIND D8/80-2MW 2000 80.0 IO! NH: 100,0 m (Ges:140,0 m) (235)
WEA37: DEWIND D8/80-2MW 2000 80.0 IO! NH: 100,0 m (Ges:140,0 m) (237)

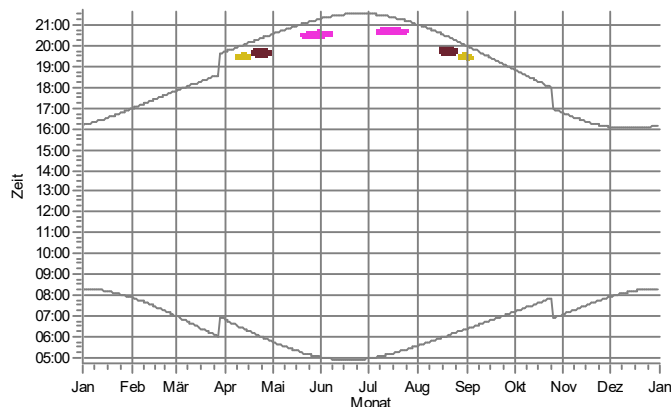
SHADOW - Grafischer Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

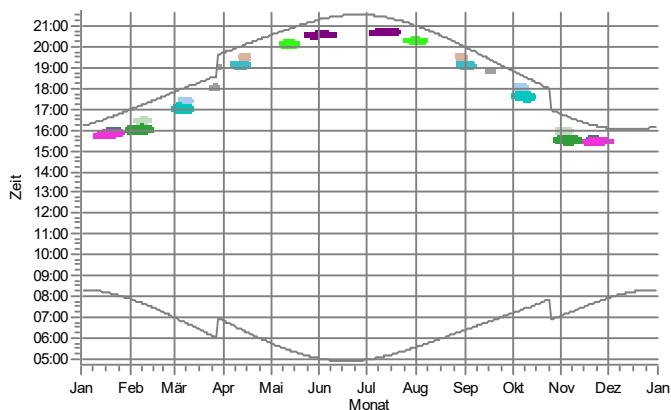
IP07: Siebenhausen 43, 06766 Bitterfeld-Wolfen



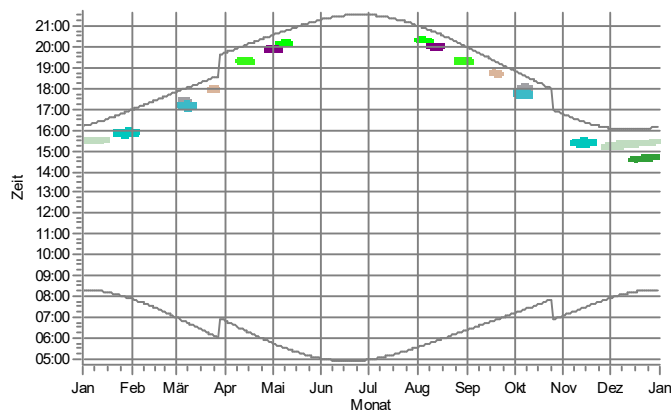
IP08: Feldrain 20, 06766 Bitterfeld-Wolfen (Gemengelage)



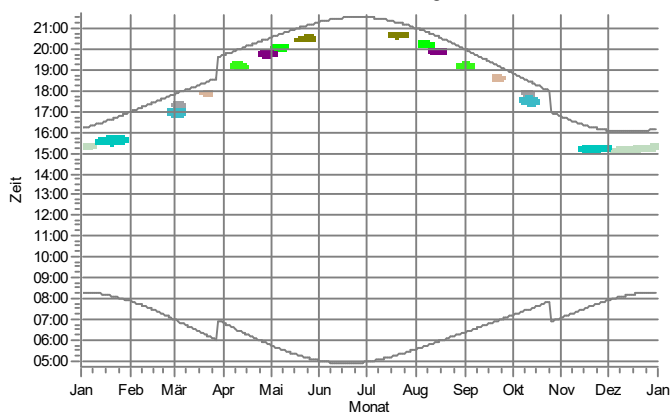
IP09: Thurländer Str. 1, 06779 Raguhn-Jeßnitz



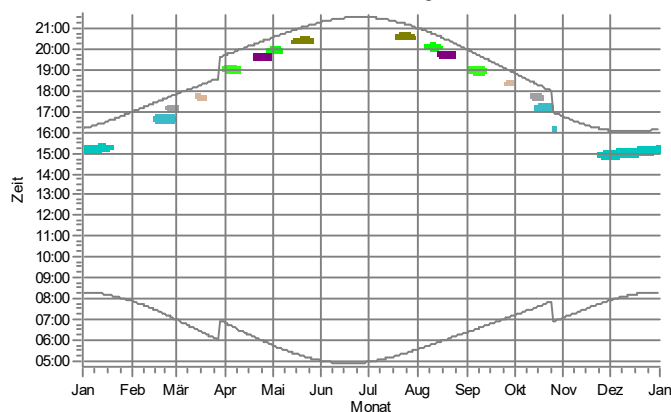
IP10: Thurländer Str. 24, 06779 Raguhn-Jeßnitz



IP11: Thurländer Str. 28, 06779 Raguhn-Jeßnitz



IP12: Zerbster Str. 17, 06779 Raguhn-Jeßnitz



WEA

WEA14: ENERCON E-70 E4 2000 71.0 IO! NH: 98,8 m (Ges:134,3 m) (214)
 WEA15: ENERCON E-70 E4 2000 71.0 IO! NH: 98,2 m (Ges:133,7 m) (215)
 WEA16: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (216)
 WEA19: ENERCON E-66/20.70 2000 70.0 I-I NH: 114,1 m (Ges:149,1 m) (219)
 WEA20: ENERCON E-66/20.70 2000 70.0 I-I NH: 114,1 m (Ges:149,1 m) (220)

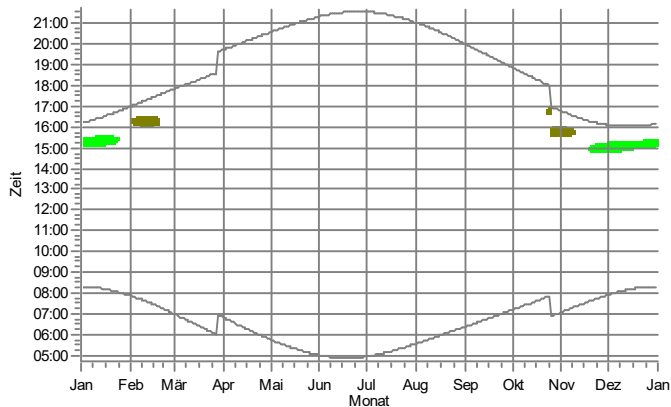
WEA21: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (221)
 WEA22: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (222)
 WEA23: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (223)
 WEA24: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (224)
 WEA25: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (225)

WEA26: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (226)
 WEA34: DEWIND D8/80-2MW 2000 80.0 IO! NH: 100,0 m (Ges:140,0 m) (234)
 WEA35: DEWIND D8/80-2MW 2000 80.0 IO! NH: 100,0 m (Ges:140,0 m) (235)
 WEA36: DEWIND D8/80-2MW 2000 80.0 IO! NH: 100,0 m (Ges:140,0 m) (236)
 WEA37: DEWIND D8/80-2MW 2000 80.0 IO! NH: 100,0 m (Ges:140,0 m) (237)

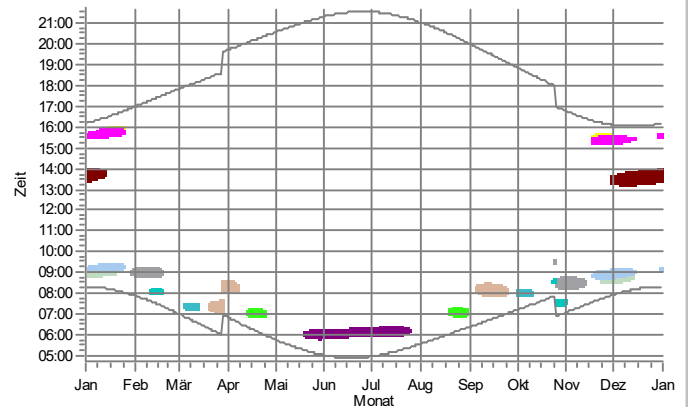
SHADOW - Grafischer Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

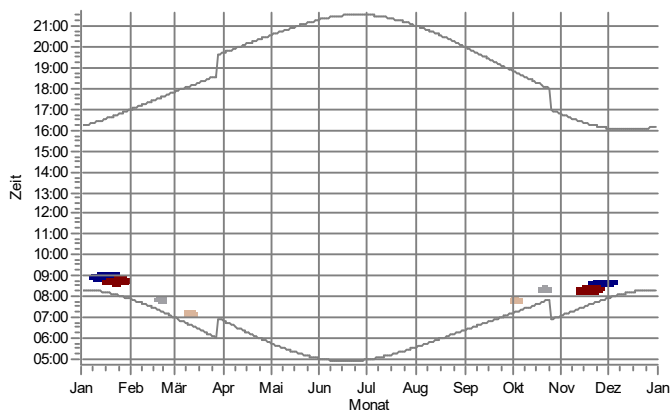
IP13: Dorfstraße 30, 06779 Raguhn-Jeßnitz



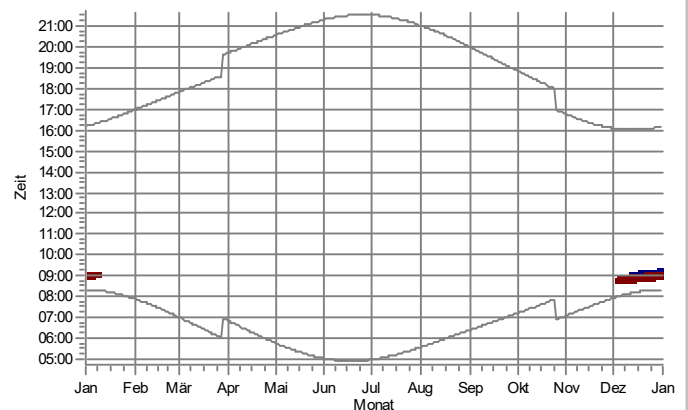
IP14: Holländer Mühle 1, 06779 Raguhn-Jeßnitz



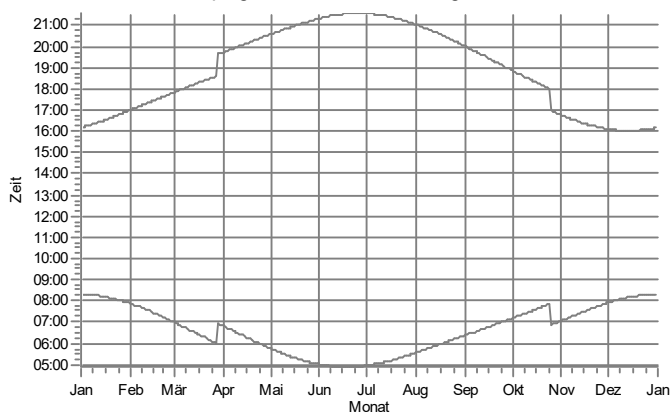
IP15: Thurländer Dorfstraße 23, 06779 Raguhn-Jeßnitz



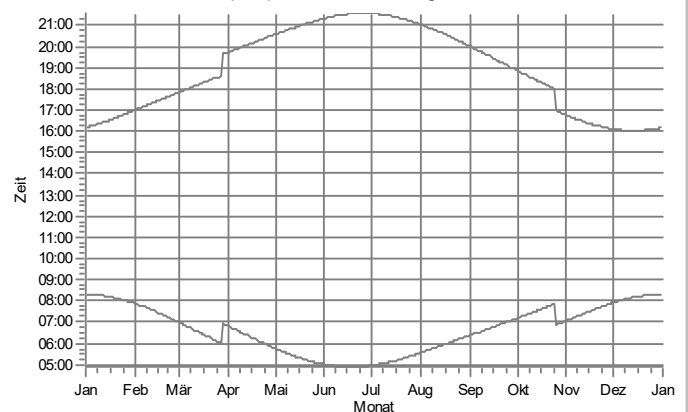
IP16: Thurländer Lindenstrasse 15, 06779 Raguhn-Jeßnitz



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



IP18: Am Sportplatz 8, 06779 Raguhn-Jeßnitz



WEA

WEA07: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (207)
 WEA10: ENERCON E-82 E2 2300 82.0 IO! NH: 85,0 m (Ges:126,0 m) (210)
 WEA12: ENERCON E-70 E4 2000 71.0 IO! NH: 114,1 m (Ges:149,6 m) (212)
 WEA13: ENERCON E-70 E4 2000 71.0 IO! NH: 85,0 m (Ges:120,5 m) (213)
 WEA14: ENERCON E-70 E4 2000 71.0 IO! NH: 98,8 m (Ges:134,3 m) (214)

WEA15: ENERCON E-70 E4 2000 71.0 IO! NH: 98,2 m (Ges:133,7 m) (215)
 WEA16: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (216)
 WEA19: ENERCON E-66/20.70 2000 70.0 I-I NH: 114,1 m (Ges:149,1 m) (219)
 WEA20: ENERCON E-66/20.70 2000 70.0 I-I NH: 114,1 m (Ges:149,1 m) (220)
 WEA21: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (221)

WEA22: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (222)
 WEA23: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (223)
 WEA24: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (224)
 WEA26: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (226)

Projekt:

SW25034 Salzfurtkapelle

Lizenziierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

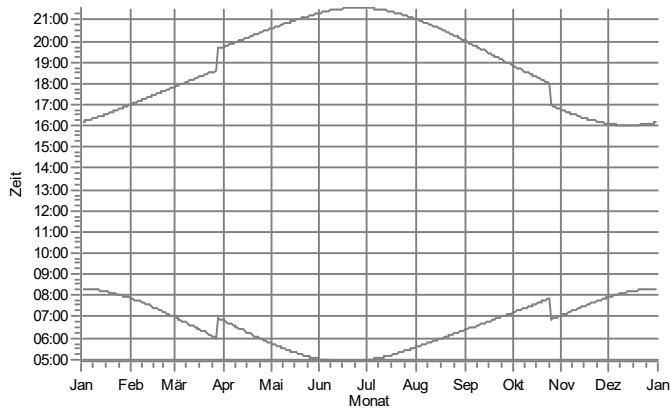
14.10.2025 14:35/4.1.273



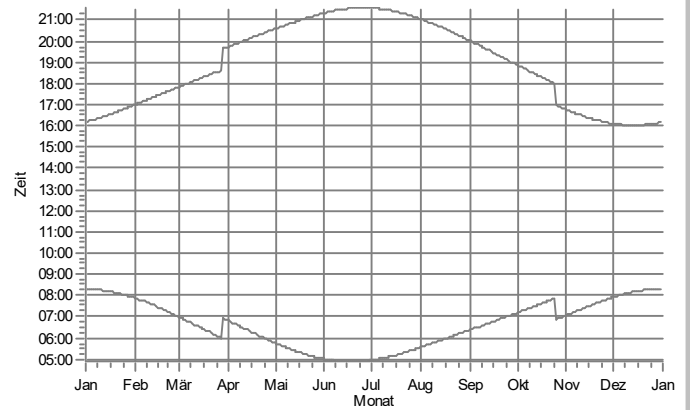
SHADOW - Grafischer Kalender

Berechnung: SW25034 Salzfurtkapelle Vorbelastung

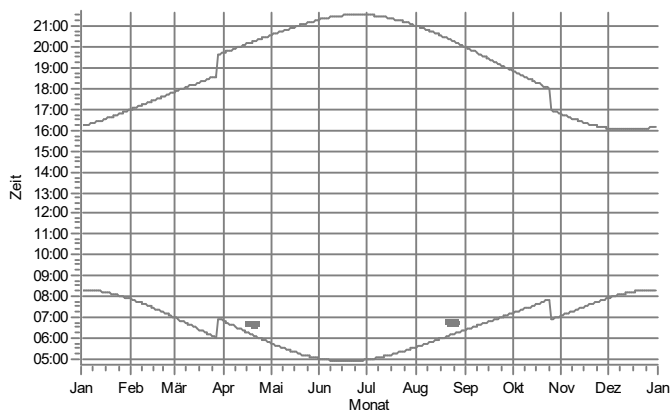
IP19: Vor d. Heide 10, 06779 Raguhn-Jeßnitz



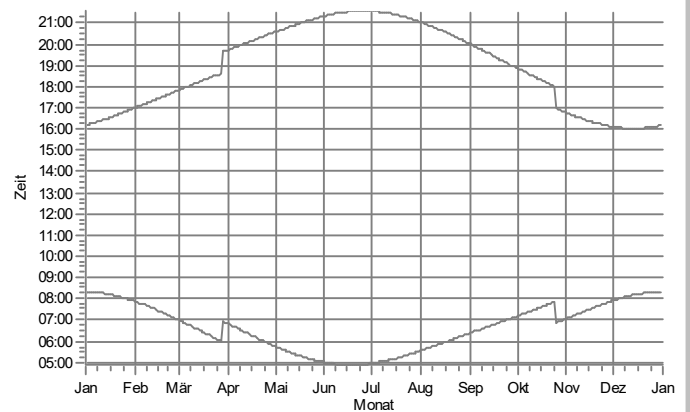
IP20: Am Sandberg 11, 06780 Zörbig



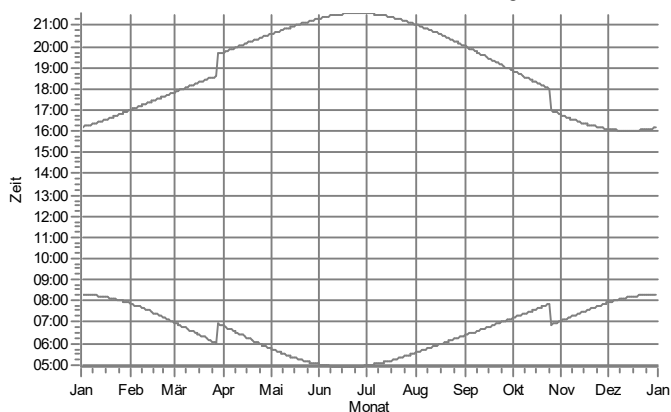
IP21: Am Sandberg 24, 06780 Zörbig



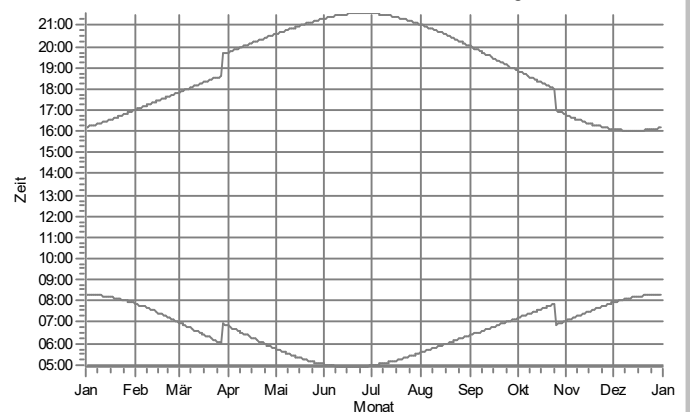
IP22: Hallesche Str. 9, 06779 Raguhn-Jeßnitz



IP23: Hallesche Straße 10, 06780 Zörbig



IP24: Hallesche Straße 13, 06780 Zörbig



WEA

WEA09: ENERCON E-70 E4 2000 71.0 IOf NH: 113,5 m (Ges:149,0 m) (209)

Projekt:

SW25034 Salzfurkapelle

Lizenziertes Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

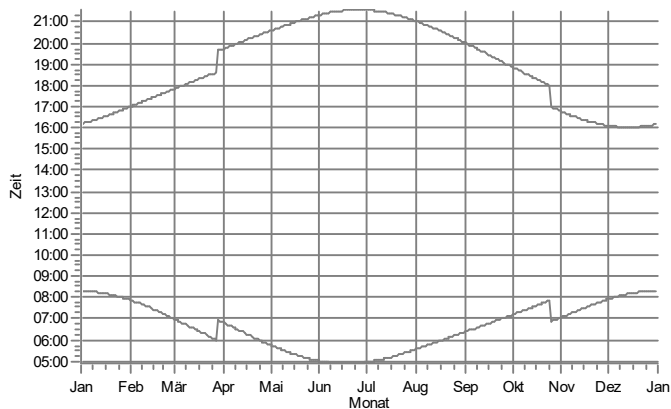
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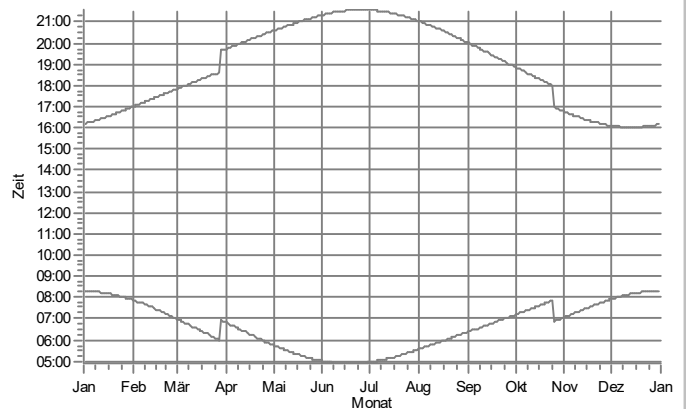
SHADOW - Grafischer Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

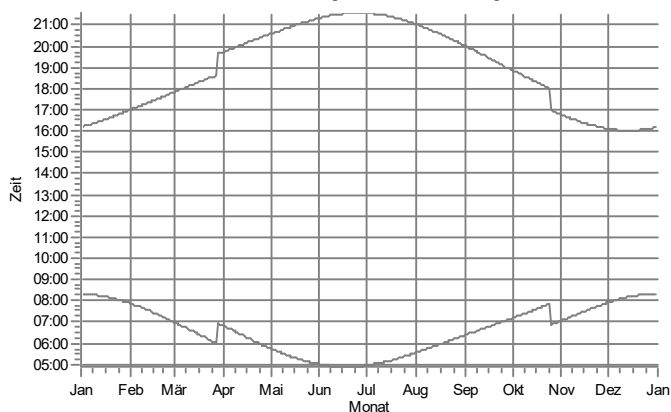
IP25: Hallesche Straße 15, 06780 Zörbig



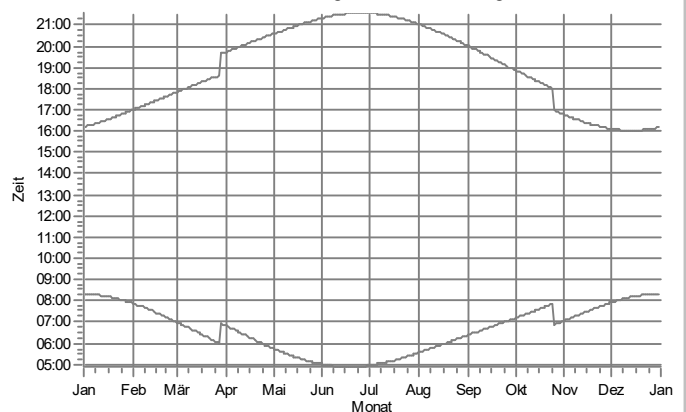
IP26: Hallesche Straße 18, 06780 Zörbig



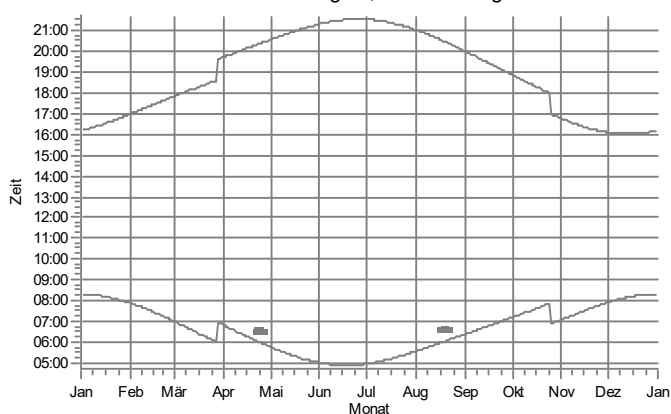
IP27: Am Sandberg 14, 06780 Zörbig



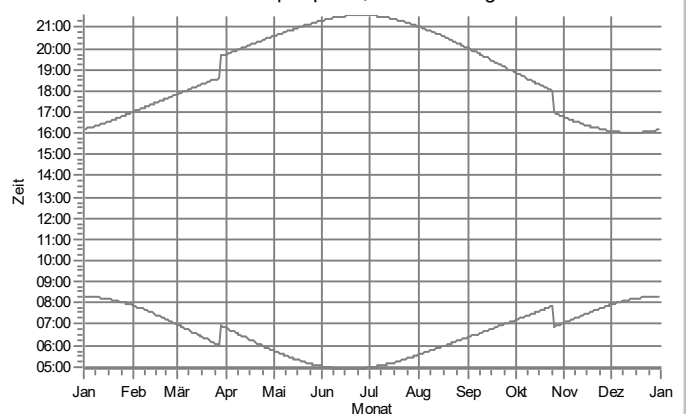
IP28: Am Sandberg 18, 06780 Zörbig



IP29: Am Sandberg 20, 06780 Zörbig



IP30: Am Sportpl. 15, 06780 Zörbig



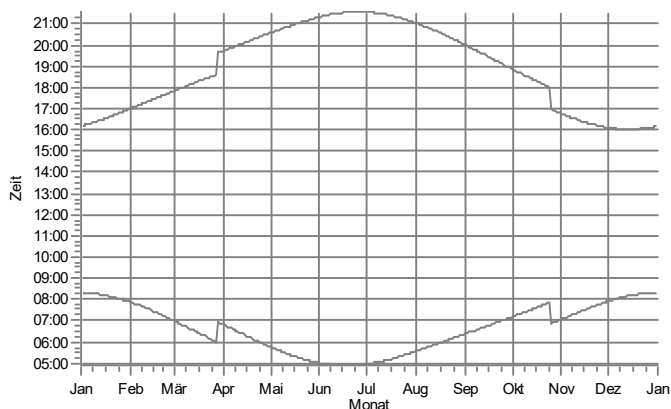
WEA

WEA09: ENERCON E-70 E4 2000 71.0 !OI! NH: 113,5 m (Ges:149,0 m) (209)

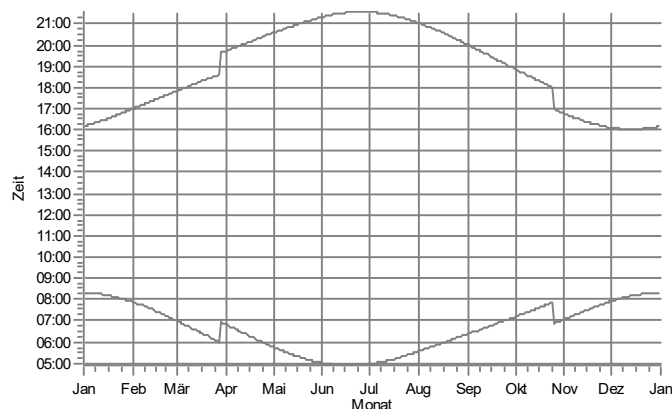
SHADOW - Grafischer Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

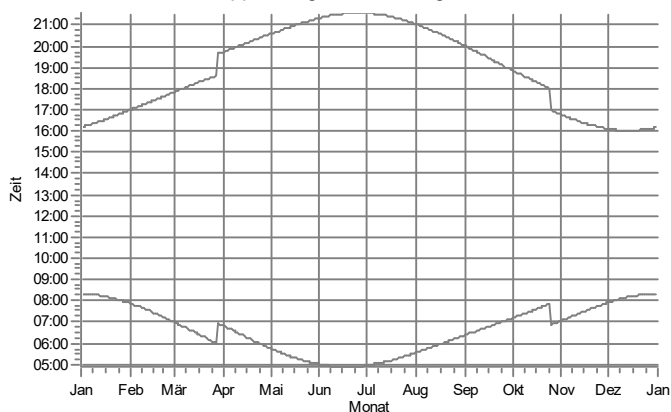
IP31: Vor d. Heide 6, 06779 Raguhn-Jeßnitz



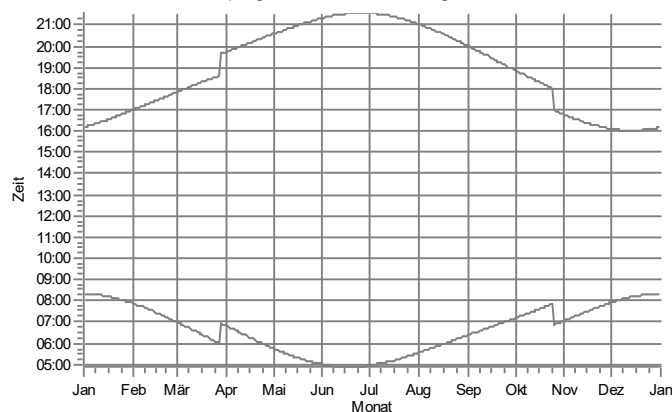
IP32: Vor d. Heide 4, 06779 Raguhn-Jeßnitz



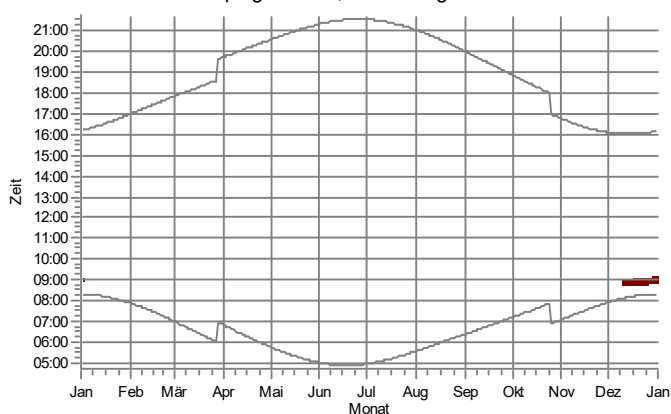
IP33: Am Trappenberg 2, 06779 Raguhn-Jeßnitz



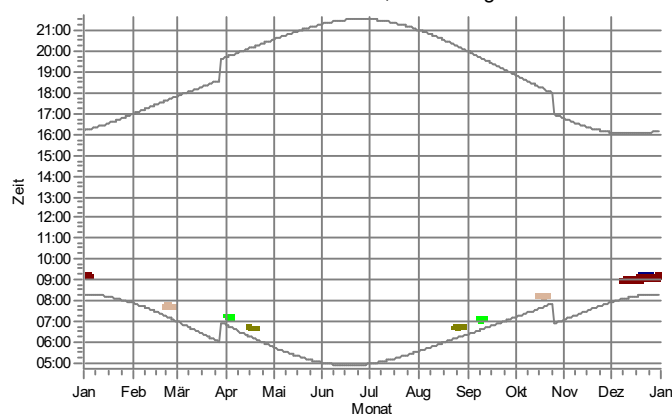
IP34: Kleinleipziger Str. 7, 06779 Raguhn-Jeßnitz



IP35: Kleinleipziger Str. 3, 06779 Raguhn-Jeßnitz



IP36: Thurländer Lindenstrasse 10, 06779 Raguhn-Jeßnitz



WEA

WEA12: ENERCON E-70 E4 2000 71.0 IO! NH: 114,1 m (Ges:149,6 m) (212)
WEA13: ENERCON E-70 E4 2000 71.0 IO! NH: 85,0 m (Ges:120,5 m) (213)

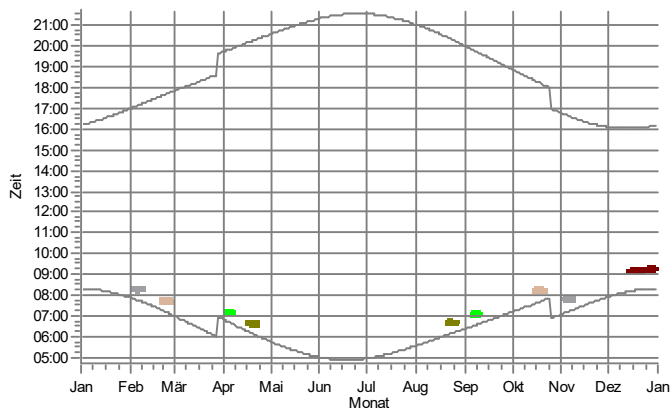
WEA14: ENERCON E-70 E4 2000 71.0 IO! NH: 98,8 m (Ges:134,3 m) (214)
WEA15: ENERCON E-70 E4 2000 71.0 IO! NH: 98,2 m (Ges:133,7 m) (215)

WEA22: ENERCON E-70 E4 2000 71.0 IO! NH: 113,5 m (Ges:149,0 m) (222)

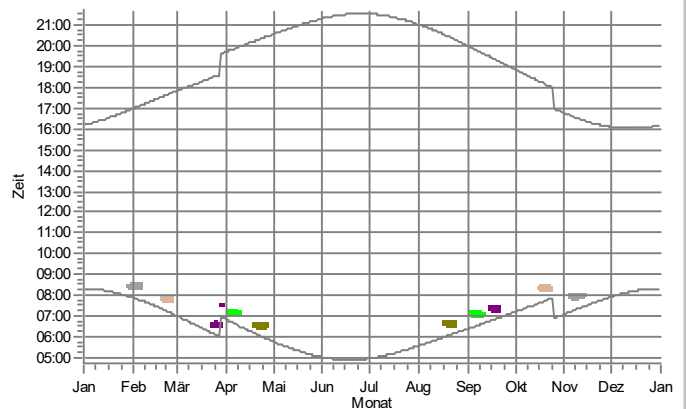
SHADOW - Grafischer Kalender

Berechnung: SW25034 Salzfurkapelle Vorbelastung

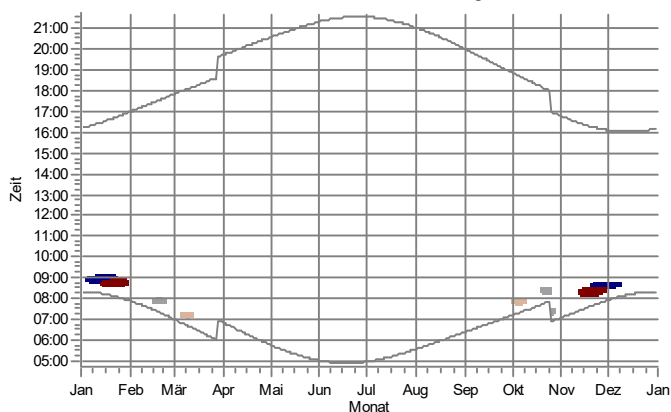
IP37: Thurländer Lindenstrasse 8a, 06779 Raguhn-Jeßnitz



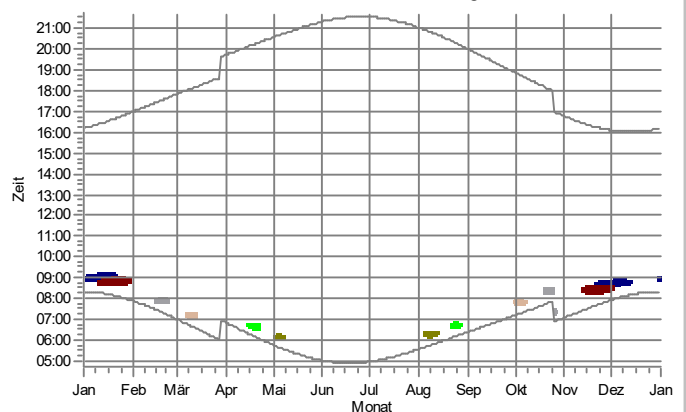
IP38: Thurländer Lindenstrasse 3, 06779 Raguhn-Jeßnitz



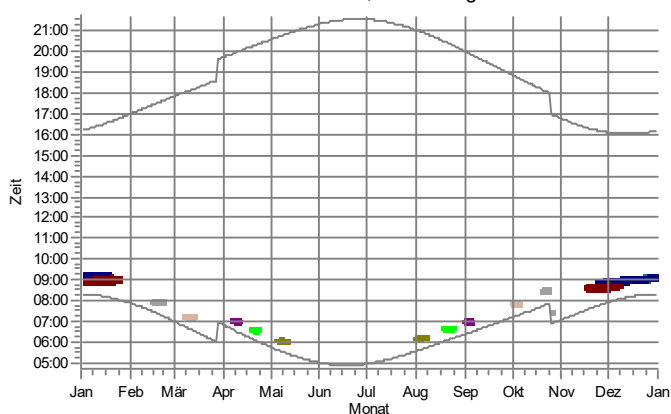
IP39: Thurländer Dorfstraße 24A, 06779 Raguhn-Jeßnitz



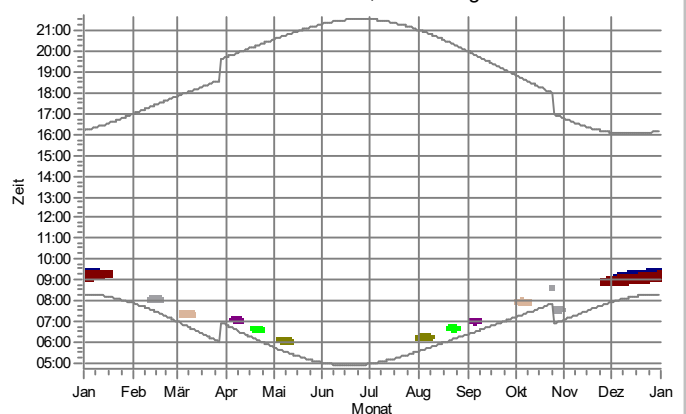
IP40: Thurländer Dorfstraße 21, 06779 Raguhn-Jeßnitz



IP41: Thurländer Dorfstraße 19, 06779 Raguhn-Jeßnitz



IP42: Thurländer Dorfstraße 17, 06779 Raguhn-Jeßnitz



WEA

WEA11: ENERCON E-66/20.70 2000 70.0 I-! NH: 114,1 m (Ges:149,1 m) (211)
 WEA12: ENERCON E-70 E4 2000 71.0 I-! NH: 114,1 m (Ges:149,6 m) (212)
 WEA13: ENERCON E-70 E4 2000 71.0 I-! NH: 85,0 m (Ges:120,5 m) (213)

WEA14: ENERCON E-70 E4 2000 71.0 I-! NH: 98,8 m (Ges:134,3 m) (214)
 WEA15: ENERCON E-70 E4 2000 71.0 I-! NH: 98,2 m (Ges:133,7 m) (215)
 WEA16: ENERCON E-70 E4 2000 71.0 I-! NH: 113,5 m (Ges:149,0 m) (216)

WEA21: ENERCON E-70 E4 2000 71.0 I-! NH: 113,5 m (Ges:149,0 m) (221)
 WEA22: ENERCON E-70 E4 2000 71.0 I-! NH: 113,5 m (Ges:149,0 m) (222)

Projekt:

SW25034 Salzfurtkapelle

Lizenziertes Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

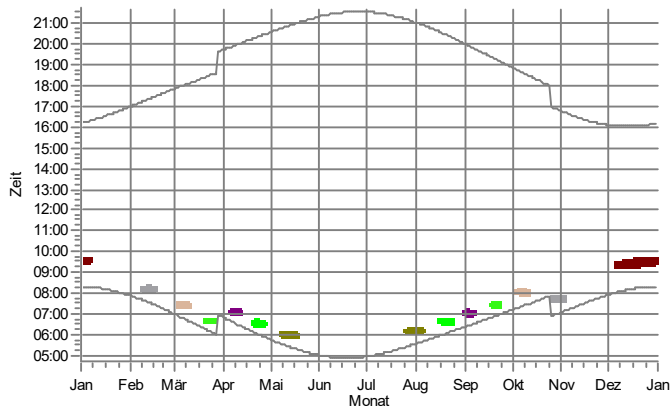
14.10.2025 14:35/4.1.273



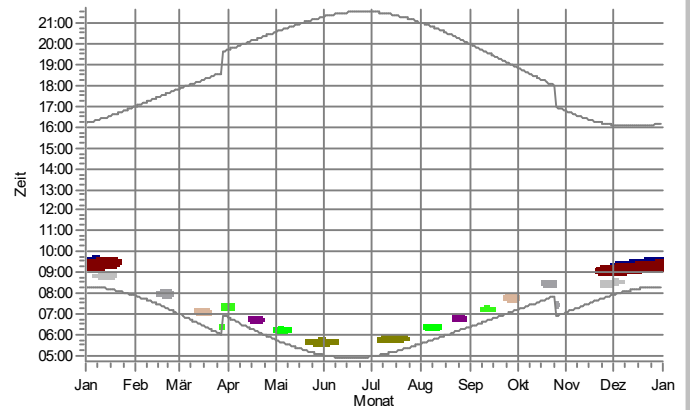
SHADOW - Grafischer Kalender

Berechnung: SW25034 Salzfurtkapelle Vorbelastung

IP43: Thurländer Dorfstraße 12, 06779 Raguhn-Jeßnitz



IP44: Am Dorfe 1, 06779 Raguhn-Jeßnitz



WEA

WEA11: ENERCON E-66/20.70 2000 70.0 I-! NH: 114,1 m (Ges:149,1 m) (211)
WEA12: ENERCON E-70 E4 2000 71.0 I-! NH: 114,1 m (Ges:149,6 m) (212)
WEA13: ENERCON E-70 E4 2000 71.0 I-! NH: 85,0 m (Ges:120,5 m) (213)
WEA14: ENERCON E-70 E4 2000 71.0 I-! NH: 98,8 m (Ges:134,3 m) (214)

WEA15: ENERCON E-70 E4 2000 71.0 I-! NH: 98,2 m (Ges:133,7 m) (215)
WEA16: ENERCON E-70 E4 2000 71.0 I-! NH: 113,5 m (Ges:149,0 m) (216)
WEA17: ENERCON E-70 E4 2000 71.0 I-! NH: 100,0 m (Ges:135,5 m) (217)
WEA21: ENERCON E-70 E4 2000 71.0 I-! NH: 113,5 m (Ges:149,0 m) (221)

WEA22: ENERCON E-70 E4 2000 71.0 I-! NH: 113,5 m (Ges:149,0 m) (222)
WEA23: ENERCON E-70 E4 2000 71.0 I-! NH: 113,5 m (Ges:149,0 m) (223)

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung WEA: WEA06 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (206)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	June	July	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	07:51 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:21	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	06:26 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 17:56	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	05:00 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 21:26	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 20:46	04:55 21:26	05:03 21:30	05:44 20:50	06:34 19:45	07:22 18:36	07:17 16:34	08:04 16:02
9	08:16 16:21	07:39 17:14	06:42 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	05:04 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 20:01	05:27 20:50	04:54 21:29	05:06 21:28	05:49 20:44	06:38 19:38	07:28 18:29	07:22 16:29	08:07 16:02
12	08:15 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	06:33 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 20:57	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 16:02
16	08:11 16:31	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	07:31 16:21	08:12 16:02
17	08:11 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 21:00	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	08:14 16:02
19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	05:15 21:03	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	08:07 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34	05:17 21:18	06:05 20:24	06:54 19:15	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	08:17 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:22	05:08 21:10	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 16:47	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 16:59	07:46 16:11	08:17 16:05
26	08:01 16:48	07:06 17:45	06:03 18:34	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 16:57	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 16:55	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 16:53	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	07:08 18:56	06:59 16:51	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	07:01 16:50	07:53 16:07	08:18 16:09
31	07:54 16:57		06:51 19:42		05:01 21:18		05:32 21:04	06:21 20:03		07:02 16:48		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	0	0	113	670	371	0	0	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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA07 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (207)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:19 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	07:51 17:52	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:21	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	06:26 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 17:56	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	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	08:00 16:04
6	08:18 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 21:26	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 19:56	05:32 20:46	04:55 21:26	05:03 21:30	05:44 20:50	06:34 19:45	07:22 18:36	07:17 16:34	08:04 16:02
9	08:16 16:21	07:39 17:14	06:42 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 20:01	05:27 20:50	04:54 21:29	05:05 21:28	05:49 20:44	06:38 19:38	07:28 18:29	07:22 16:29	08:07 16:02
12	08:15 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	06:33 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 20:57	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 16:02
16	08:11 16:31	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 20:35	06:46 19:26	07:36 18:18	07:31 16:21	08:12 16:02
17	08:11 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 21:00	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	08:14 16:02
19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	05:15 21:03	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	08:07 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34	05:17 21:18	06:05 20:24	06:54 19:15	07:45 18:07	07:39 16:15	08:16 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 21:17	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	08:17 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:22	05:08 21:10	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 21:13	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	07:06 17:45	06:03 18:34	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 16:57	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 16:55	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 16:53	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	07:08 18:56	06:59 16:51	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	07:01 16:50	07:53 16:07	08:18 16:09
31	07:54 16:57		06:51 19:42		05:01 21:18		05:32 21:04	06:21 20:03		07:02 16:48		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten	119	0	0	0	0	0	0	0	0	0	120	0

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

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA08 - ENERCON E-66/20.70 2000 70.0 I-! NH: 93,8 m (Ges:128,8 m) (208)

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

378 352 573 577 403 485 1.015 1.027 1.396 804 662 639 8.311

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	07:51 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:21	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	06:26 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	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	08:00 16:03
6	08:18 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 21:26	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 20:46	04:55 21:26	05:02 21:30	05:44 20:50	06:34 19:45	07:22 18:36	07:17 16:34	08:04 16:02
9	08:16 16:21	07:39 17:14	06:42 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 20:01	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	08:15 16:25	07:33 17:19	06:35 18:10	06:24 20:02	05:25 20:52	04:53 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	06:33 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 16:01
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 16:02
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 16:02
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	07:31 16:21	08:12 16:02
17	08:11 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 21:00	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	08:14 16:02
19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	05:15 21:03	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	08:07 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34	05:17 21:18	06:05 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	08:17 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:22	05:08 21:10	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 16:59	07:46 16:11	08:17 16:05
26	08:01 16:48	07:06 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 16:57	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 16:55	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 16:53	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	07:08 18:56	06:59 16:51	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	07:01 16:49	07:53 16:07	08:18 16:09
31	07:54 16:57		06:51 19:42		05:01 21:18		05:32 21:04	06:21 20:03		07:02 16:48		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	0	0	0	0	0	0	0	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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA09 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (209)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:19 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	07:51 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:21	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	06:26 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 17:56	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	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	08:00 16:04
6	08:18 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 21:26	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 19:56	05:32 20:46	04:55 21:26	05:03 21:30	05:44 20:50	06:34 19:45	07:22 18:36	07:17 16:34	08:04 16:02
9	08:16 16:21	07:39 17:14	06:42 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	05:29 20:49	04:54 21:28	05:04 21:29	05:47 20:46	06:37 19:40	07:26 18:26	07:20 16:30	08:06 16:02
11	08:15 16:24	07:35 17:17	06:37 18:08	06:26 20:01	05:27 20:50	04:54 21:29	05:06 21:28	05:49 20:44	06:38 19:38	07:28 18:29	07:22 16:29	08:07 16:02
12	08:15 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	06:33 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 20:57	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 16:02
16	08:11 16:31	07:26 17:27	06:26 18:16	06:16 06:39-06:43/4	05:19 20:58	04:53 21:32	05:11 21:23	05:57 20:34	06:46 19:26	07:36 18:18	07:31 16:21	08:12 16:02
17	08:11 16:33	07:24 17:28	06:23 18:18	06:13 06:36-06:44/8	05:17 21:00	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 06:35-06:44/9	05:16 21:01	04:53 21:33	05:14 21:21	06:00 20:30	06:31-06:41/10	06:50 19:21	07:39 18:14	08:14 16:02
19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 06:34-06:44/10	05:15 21:03	04:53 21:33	05:15 21:20	06:01 20:28	06:30-06:41/11	06:51 19:19	07:41 18:12	08:14 16:02
20	08:08 16:38	07:18 17:34	06:17 18:23	06:07 06:34-06:44/10	05:13 21:04	04:53 21:33	05:16 21:19	06:03 20:26	06:31-06:41/10	06:53 19:17	07:43 18:09	08:15 16:03
21	08:07 16:40	07:16 17:36	06:14 18:25	06:05 06:28-06:43/15	05:12 21:05	04:53 21:34	05:17 21:18	06:05 20:24	06:32-06:40/8	06:55 19:15	07:45 18:07	08:16 16:03
22	08:05 16:41	07:14 17:38	06:12 18:27	06:03 06:26-06:42/16	05:11 21:07	04:53 21:34	05:19 21:17	06:06 20:22	06:33-06:38/5	06:56 19:12	07:46 18:05	08:16 16:04
23	08:04 16:43	07:12 17:39	06:10 18:28	06:01 06:25-06:35/10	05:09 21:08	04:53 21:34	05:20 21:15	06:08 20:20	06:39-06:49/10	06:58 19:10	07:48 18:03	08:17 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 06:25-06:35/10	05:08 21:10	04:54 21:34	05:21 21:14	06:09 20:18	06:38-06:48/10	06:59 19:08	07:50 18:01	08:17 16:05
25	08:02 16:47	07:08 17:43	06:05 18:32	05:57 06:25-06:35/10	05:07 21:11	04:54 21:34	05:23 21:13	06:11 20:16	06:38-06:48/10	07:01 19:05	06:52 16:11	08:17 16:05
26	08:01 16:48	07:06 17:45	06:03 18:34	05:55 06:25-06:34/9	05:06 21:12	04:54 21:34	05:24 21:11	06:13 20:14	06:39-06:46/7	07:03 19:03	06:59 16:10	08:18 16:06
27	07:59 16:50	07:03 17:47	06:00 18:35	05:53 06:26-06:32/6	05:05 21:13	04:55 21:34	05:26 21:10	06:14 20:11	06:41-06:44/3	07:04 19:01	06:55 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 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		07:08 18:56	06:59 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	07:01 16:07	08:18 16:09
31	07:54 16:57		06:51 19:42		05:01 21:18		05:32 21:04	06:21 20:03		07:02 16:48		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	0	117	0	0	0	118	0	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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung WEA: WEA10 - ENERCON E-82 E2 2300 82.0 !O! NH: 85,0 m (Ges:126,0 m) (210)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:19 15:33-15:37/4 16:12	07:52 16:59 17:50	06:59 17:50 19:44	06:49 19:44 20:34	05:45 20:34 21:19	05:00 21:19 21:33	04:57 21:33 21:02	05:33 21:02 20:00	06:22 20:00 18:51	07:11 18:51 16:46	07:04 16:46 16:06	07:55 15:15-15:33/18 16:06
2	08:18 15:32-15:38/6 16:13	07:51 17:52 17:01	06:57 17:52 19:45	06:47 19:45 20:36	05:43 20:36 21:21	04:58 21:21 21:33	04:58 21:33 21:00	05:35 21:00 19:58	06:24 19:58 18:49	07:12 18:49 16:44	07:06 16:44 16:05	07:56 15:15-15:32/17 16:05
3	08:18 15:32-15:39/7 16:14	07:49 17:53 17:03	06:55 17:54 19:47	06:44 19:47 20:37	05:41 20:37 21:22	04:58 21:22 21:33	04:58 21:33 20:59	05:36 20:59 19:56	06:26 19:56 18:47	07:14 18:47 16:42	07:08 16:42 16:05	07:57 15:16-15:31/15 16:05
4	08:18 15:32-15:41/9 16:15	07:47 17:56 17:04	06:53 17:56 19:49	06:42 19:49 20:39	05:39 20:39 21:23	04:58 21:23 21:32	04:58 21:32 20:57	05:38 20:57 19:54	06:27 19:54 18:45	07:16 18:45 16:40	07:09 16:40 16:04	07:59 15:17-15:30/13 16:04
5	08:18 15:32-15:41/9 16:16	07:46 17:57 17:06	06:50 17:57 19:50	06:40 19:50 20:41	05:37 20:41 21:24	04:57 21:24 21:32	04:57 21:32 20:55	05:39 20:55 19:51	06:29 19:51 18:42	07:17 18:42 16:39	07:11 16:39 16:03	08:00 15:17-15:29/12 16:03
6	08:18 15:32-15:43/11 16:17	07:44 17:59 17:08	06:48 17:59 19:52	06:38 19:52 20:42	05:35 20:42 21:25	04:56 21:25 21:31	04:56 21:31 20:53	05:41 20:53 19:49	06:30 19:49 18:40	07:19 18:40 16:37	07:13 16:37 16:03	08:01 15:18-15:29/11 16:03
7	08:17 15:32-15:44/12 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 21:26 21:31	04:56 21:31 20:52	05:42 20:52 19:47	06:32 19:47 18:38	07:21 18:38 16:35	07:15 16:35 16:03	08:03 15:19-15:29/10 16:03
8	08:17 15:32-15:46/14 16:20	07:41 17:12 18:03	06:44 18:03 19:55	06:33 19:55 20:46	05:32 20:46 21:26	04:55 21:26 21:30	04:55 21:30 20:50	05:44 20:50 19:45	06:34 19:45 18:36	07:22 18:36 16:34	07:17 16:34 16:02	08:04 15:19-15:28/9 16:02
9	08:16 15:32-15:47/15 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 21:27 21:29	04:55 21:29 20:48	05:45 20:48 19:42	06:35 19:42 18:33	07:24 18:33 16:32	07:18 16:32 16:02	08:05 15:21-15:28/7 16:02
10	08:16 15:32-15:48/16 16:23	07:37 17:16 18:06	06:39 18:06 19:59	06:29 19:59 20:49	05:28 20:49 21:28	04:54 21:28 21:29	04:54 21:29 20:46	05:47 20:46 19:40	06:37 19:40 18:31	07:26 18:31 16:30	07:20 16:30 16:02	08:06 15:22-15:28/6 16:02
11	08:15 15:33-15:51/18 16:24	07:35 17:17 18:08	06:37 18:08 20:01	06:26 20:01 20:50	05:27 20:50 21:29	04:54 21:29 21:28	04:54 21:28 20:44	05:49 20:44 19:38	06:38 19:38 18:29	07:28 18:29 16:29	07:22 16:29 16:02	08:07 15:23-15:27/4 16:02
12	08:15 15:33-15:51/18 16:25	07:33 17:19 18:10	06:35 18:10 20:02	06:24 20:02 20:52	05:25 20:52 21:29	04:53 21:29 21:27	04:53 21:27 20:42	05:50 20:42 19:35	06:40 19:35 18:27	07:29 18:27 16:27	07:24 16:27 16:02	08:08 15:24-15:27/3 16:02
13	08:14 15:33-15:51/18 16:27	07:32 17:21 18:11	06:33 18:11 20:04	06:22 20:04 20:53	05:24 20:53 21:30	04:53 21:30 21:26	04:53 21:26 20:40	05:52 20:40 19:33	06:42 19:33 18:24	07:31 18:24 16:26	07:25 16:26 16:01	08:09 15:25-15:27/2 16:01
14	08:13 15:33-15:52/19 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	04:53 21:31 21:25	04:53 21:25 20:38	05:53 20:38 19:31	06:43 19:31 18:22	07:33 18:22 16:24	07:27 16:24 16:02	08:10 15:26-15:27/1 16:02
15	08:12 15:34-15:52/18 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	04:53 21:31 21:24	04:53 21:24 20:36	05:55 20:36 19:28	06:45 19:28 18:20	07:34 18:20 16:23	07:29 16:23 16:02	08:11 15:27-15:27/1 16:02
16	08:11 15:34-15:52/18 16:31	07:26 17:27 18:16	06:26 18:16 20:09	06:15 20:09 20:58	05:19 20:58 21:32	04:53 21:32 21:23	04:53 21:23 20:34	05:57 20:34 19:26	06:46 19:26 18:18	07:36 18:18 16:21	07:31 16:21 16:02	08:12 15:28-15:27/1 16:02
17	08:11 15:35-15:53/18 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	04:53 21:32 21:22	04:53 21:22 20:32	05:58 20:32 19:24	06:48 19:24 18:16	07:38 18:16 16:20	07:32 16:20 16:02	08:13 15:29-15:27/1 16:02
18	08:10 15:35-15:53/18 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	04:53 21:33 21:21	04:53 21:21 20:30	06:00 20:30 19:21	06:50 19:21 18:14	07:39 18:14 16:19	07:34 16:19 16:02	08:14 15:30-15:27/1 16:02
19	08:09 15:36-15:53/17 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	04:53 21:33 21:20	04:53 21:20 20:28	06:01 20:28 19:19	06:51 19:19 18:12	07:41 18:12 16:18	07:36 16:18 16:02	08:15 15:31-15:27/1 16:02
20	08:08 15:37-15:53/16 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	04:53 21:33 21:19	04:53 21:19 20:26	06:03 20:26 19:17	06:53 19:17 18:09	07:43 18:09 16:16	07:37 16:16 16:03	08:16 15:32-15:27/1 16:03
21	08:07 15:37-15:52/15 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	04:53 21:34 21:18	04:53 21:18 20:24	06:05 20:24 19:15	06:54 19:15 18:07	07:45 18:07 16:15	07:39 16:15 16:03	08:17 15:33-15:27/1 16:03
22	08:05 15:39-15:52/13 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	04:53 21:34 21:17	04:53 21:17 20:22	06:06 20:22 19:12	06:56 19:12 18:05	07:46 18:05 16:14	07:41 16:14 16:04	08:18 15:34-15:27/1 16:04
23	08:04 15:41-15:51/10 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	04:53 21:34 21:15	04:53 21:15 20:20	06:08 20:20 19:10	06:58 19:10 18:03	07:48 18:03 16:13	07:42 16:13 16:04	08:19 15:35-15:27/1 16:04
24	08:03 15:42-15:49/7 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	04:54 21:34 21:14	04:54 21:14 20:18	06:09 20:18 19:08	06:59 19:08 18:01	07:50 18:01 16:12	07:44 16:12 16:05	08:20 15:36-15:27/1 16:05
25	08:02 16:46 17:43	07:08 18:32 19:24	06:05 19:24 20:11	05:57 20:11 21:04	05:07 21:04 21:34	04:54 21:34 21:13	04:54 21:13 20:16	06:11 20:16 19:05	07:01 19:05 18:00	06:52 18:00 16:11	07:46 16:11 16:05	08:21 15:37-15:27/1 16:05
26	08:01 16:48 17:45	07:06 18:34 19:26	06:03 19:26 20:12	05:55 20:12 21:04	05:06 21:04 21:34	04:54 21:34 21:11	04:54 21:11 20:14	06:13 20:14 19:03	07:03 19:03 18:00	06:53 18:00 16:12	07:47 16:12 16:06	08:22 15:38-15:27/1 16:06
27	07:59 16:50 17:47	07:03 18:35 19:27	06:00 19:27 20:13	05:53 20:13 21:05	05:05 21:05 21:34	04:55 21:34 21:10	04:55 21:10 20:11	06:14 20:11 19:01	07:04 19:01 18:00	06:55 18:00 16:13	07:49 16:13 16:07	08:23 15:39-15:27/1 16:07
28	07:58 16:52 17:48	07:01 18:37 19:29	05:58 19:29 20:15	05:51 20:15 21:07	05:04 21:07 21:34	04:55 21:34 21:08	04:55 21:08 20:09	06:16 20:09 18:58	07:06 18:58 18:00	06:57 18:00 16:14	07:50 16:14 16:08	08:24 15:40-15:27/1 16:08
29	07:56 16:54 17:49	06:56 18:39 19:31	05:49 19:31 20:17	05:03 20:17 21:09	05:03 21:09 21:34	04:56 21:34 21:07	04:56 21:07 20:07	06:17 20:07 18:56	07:08 18:56 18:00	06:59 18:00 16:15	07:52 16:15 16:09	08:25 15:41-15:27/1 16:09
30	07:55 16:55 17:50	06:54 18:40 19:32	05:47 19:32 20:18	05:02 20:18 21:10	05:02 21:10 21:34	04:56 21:34 21:05	04:56 21:05 20:05	06:19 20:05 18:54	07:09 18:54 18:00	07:01 18:00 16:16	07:53 16:16 16:10	08:26 15:42-15:27/1 16:10
31	07:54 16:57	06:51 19:42	05:41 20:18	05:01 21:18	05:01 21:18	05:32 21:04	05:32 21:03	06:21 20:03	07:02 16:48	07:02 16:48	07:02 16:48	08:27 15:43-15:27/1 16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten	326	0	0	0	0	0	0	0	0	0	207	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-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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung WEA: WEA11 - ENERCON E-66/20.70 2000 70.0 !-! NH: 114,1 m (Ges:149,1 m) (211)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

		Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:18 16:12	09:02-09:13/11	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	09:01-09:13/12	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:21	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	09:02-09:14/12	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 16:04
4	08:18 16:15	09:03-09:14/11	07:47 17:04	06:53 17:55	06:42 19:49	05:39 20:39	04:57 21:23	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:44	07:09 16:40	07:59 16:04
5	08:18 16:16	09:04-09:14/10	07:46 17:06	06:50 17:57	06:40 19:50	05:37 20:41	04:57 21:24	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	08:00 16:03
6	08:17 16:17	09:05-09:14/9	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 16:18	09:05-09:14/9	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	09:07-09:14/7	07:41 17:12	06:44 18:03	06:33 19:55	05:32 20:46	04:55 21:26	05:02 21:30	05:44 20:50	06:34 19:45	07:22 18:35	07:17 16:33	08:04 16:02
9	08:16 16:21	09:08-09:13/5	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 16:22	09:08-09:13/5	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	05:49 20:44	06:38 19:38	07:27 18:29	07:22 16:29	08:07 16:02
12	08:14 16:25	09:08-09:13/5	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 18:27	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	05:23 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 16:01
14	08:13 16:28	09:08-09:13/5	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 20:56	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	09:08-09:13/5	07:26 17:27	06:26 18:16	06:15 20:09	05:19 20:58	04:53 21:32	05:11 21:23	05:56 20:34	06:46 19:26	07:36 18:18	07:31 16:21	08:12 16:02
17	08:11 16:33		07:24 17:28	06:23 18:18	06:13 20:11	05:17 21:00	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	09:08-09:13/5	07:22 17:30	06:21 18:20	06:11 20:12	05:16 21:01	04:53 21:33	05:13 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 18:11	07:36 16:17	08:14 16:02
20	08:08 16:38	09:08-09:13/5	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	08:07 16:40		07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34	05:17 21:18	06:05 20:24	06:54 19:14	07:45 18:07	07:39 16:15	08:16 16:03
22	08:05 16:41	09:08-09:13/5	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	09:08-09:13/5	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 16:59	07:46 16:11	08:17 16:05
26	08:01 16:48	09:08-09:13/5	07:05 17:45	06:03 18:33	05:54 20:26	05:06 21:12	04:54 21:34	05:24 21:11	06:13 20:14	07:03 19:03	06:53 16:57	07:47 16:10	08:18 16:06
27	07:59 16:50		07:03 17:47	06:00 18:35	05:52 20:27	05:05 21:13	04:55 21:34	05:26 21:10	06:14 20:11	07:04 19:01	06:55 16:55	07:49 16:09	08:19 16:07
28	07:58 16:52	09:08-09:13/5	07:01 17:48	05:58 18:37	05:50 20:29	05:04 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 16:08
29	07:56 16:54		07:00 17:49	06:02 18:38	05:52 20:31	05:03 21:16	04:56 21:34	05:29 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	09:08-09:13/5	07:00 17:49	06:02 18:38	05:52 20:31	05:03 21:16	04:56 21:34	05:29 21:07	06:17 20:07	07:07 18:56	06:59 16:51	07:52 16:07	08:18 16:08
31	07:54 16:57		07:00 17:49	06:02 18:38	05:52 20:31	05:03 21:16	04:56 21:34	05:29 21:07	06:17 20:07	07:07 18:56	06:59 16:51	07:52 16:07	08:18 16:08
Sonnenscheinstunden		260	278	367	416	484	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten		86	0	0	0	0	0	0	0	0	0	0	536

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

SW25034 Salzfurtkapelle

windtest grevenbroich gmbh

Berechnet:

14.10.2025 14:35/4.1.273



Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA13 - ENERCON E-70 E4 2000 71.0 !O! NH: 85,0 m (Ges:120,5 m) (213)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:18 08:55-09:41/46 16:12 13:26-13:56/30	07:52 16:59	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:19
2	08:18 08:55-09:41/46 16:13 13:26-13:55/29	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:21
3	08:18 08:56-09:41/45 13:27-13:55/28 16:14 08:50-08:55/5	07:49 17:03	06:55 17:54	06:44 19:47	05:41 20:37	04:58 21:22
4	08:18 08:50-09:41/51 16:15 13:28-13:56/28	07:47 17:04	06:53 17:55	06:42 19:49	05:39 20:39	04:57 21:23
5	08:18 08:49-09:40/51 16:16 13:29-13:55/26	07:46 17:06	06:50 17:57	06:40 19:50	05:37 20:41	04:57 21:24
6	08:17 08:49-09:40/51 16:17 13:30-13:55/25	07:44 17:08	06:48 17:59	06:38 19:52	05:35 20:42	04:56 21:25
7	08:17 08:48-09:38/50 16:18 13:31-13:55/24	07:42 17:10	06:46 18:01	06:35 19:54	05:34 20:44	04:56 21:26
8	08:17 08:48-09:36/48 16:20 13:33-13:55/22	07:41 17:12	06:44 18:03	06:33 19:55	05:32 20:46	04:55 21:26
9	08:16 08:48-09:36/48 16:21 13:34-13:54/20	07:39 17:14	06:42 18:04	06:31 19:57	05:30 20:47	04:55 21:27
10	08:16 09:05-09:36/31 13:35-13:53/18 16:22 08:48-09:03/15	07:37 17:15	06:39 18:06	06:29 19:59	05:28 20:49	04:54 21:28
11	08:15 09:07-09:37/30 13:37-13:53/16 16:24 08:45-09:05/20	07:35 17:17	06:37 18:08	06:26 20:01	05:27 20:50	04:54 21:29
12	08:15 09:07-09:37/30 13:39-13:52/13 16:25 08:44-09:05/21	07:33 17:19	06:35 18:10	06:24 20:02	05:25 20:52	04:53 21:29
13	08:14 09:08-09:37/29 13:42-13:49/7 16:27 08:43-09:06/23	07:32 17:21	06:32 18:11	06:22 20:04	05:23 20:53	04:53 21:30
14	08:13 09:09-09:37/28 16:28 08:42-09:06/24	07:30 17:23	06:30 18:13	06:20 20:06	05:22 20:55	04:53 21:31
15	08:12 09:10-09:37/27 16:30 08:41-09:07/26	07:28 17:25	06:28 18:15	06:18 20:07	05:20 20:57	04:53 21:31
16	08:11 09:11-09:37/26 16:31 08:40-09:07/27	07:26 17:27	06:26 18:16	06:15 20:09	05:19 20:58	04:53 21:32
17	08:11 09:13-09:37/24 16:33 08:39-09:08/29	07:24 17:28	06:23 18:18	06:13 20:11	05:17 21:00	04:53 21:32
18	08:10 09:18-09:37/19 16:35 08:38-09:08/30	07:22 17:30	06:21 18:20	06:11 20:12	05:16 21:01	04:53 21:33
19	08:09 09:19-09:36/17 16:36 08:37-09:08/31	07:20 17:32	06:19 18:22	06:09 20:14	05:15 21:02	04:53 21:33
20	08:08 09:21-09:36/15 16:38 08:36-09:09/33	07:18 17:34	06:17 18:23	06:07 20:16	05:13 21:04	04:53 21:33
21	08:07 09:22-09:34/12 16:40 08:35-09:08/33	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34
22	08:05 09:25-09:32/7 16:41 08:35-09:08/33	07:14 17:38	06:12 18:27	06:03 20:19	05:11 21:07	04:53 21:34
23	08:04 08:35-09:08/33 16:43	07:12 17:39	06:10 18:28	06:01 20:21	05:09 21:08	04:53 21:34
24	08:03 08:35-09:07/32 16:45	07:10 17:41	06:07 18:30	05:59 20:22	05:08 21:10	04:54 21:34
25	08:02 08:36-09:06/30 16:46	07:08 17:43	06:05 18:32	05:57 20:24	05:07 21:11	04:54 21:34
26	08:01 08:36-09:04/28 16:48	07:06 17:45	06:03 18:33	05:54 20:26	05:06 21:12	04:54 21:34
27	07:59 08:36-08:57/21 16:50	07:03 17:47	06:00 18:35	05:52 20:27	05:05 21:13	04:55 21:34
28	07:58 08:38-08:57/19 16:52	07:01 17:48	05:58 18:37	05:50 20:29	05:04 21:15	04:55 21:34
29	07:56 08:38-08:54/16 16:54		06:56 19:39	05:49 20:31	05:03 21:16	04:56 21:34
30	07:55 08:39-08:50/11 16:55		06:54 19:40	05:47 20:32	05:02 21:17	04:56 21:34
31	07:54 08:41-08:49/8 16:57		06:51 19:42		05:01 21:18	
Sonnenscheinstunden	260	278	367	416	484	498
Anzahl Minuten mit Schatten	1565	0	0	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 Vorbelastung **WEA:** WEA13 - ENERCON E-70 E4 2000 71.0 !O! NH: 85,0 m (Ges:120,5 m) (213)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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 08:49-09:19/30 13:19-13:35/16 16:06 08:27-08:47/20
2	04:58 21:33	05:35 21:00	06:24 19:58	07:12 18:49	07:06 16:44	07:56 08:48-09:19/31 13:18-13:36/18 16:05 08:31-08:46/15
3	04:58 21:33	05:36 20:59	06:25 19:56	07:14 18:47	07:08 16:42	07:57 08:32-09:20/48 16:04 13:18-13:38/20
4	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:45	07:09 16:40	07:59 08:32-09:20/48 16:04 13:17-13:39/22
5	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	08:00 08:33-09:23/50 16:03 13:16-13:40/24
6	05:01 21:31	05:41 20:53	06:30 19:49	07:19 18:40	07:13 16:37	08:01 08:35-09:26/51 16:03 13:16-13:42/26
7	05:02 21:31	05:42 20:52	06:32 19:47	07:21 18:38	07:15 16:35	08:03 08:36-09:27/51 16:03 13:16-13:42/26
8	05:02 21:30	05:44 20:50	06:34 19:45	07:22 18:35	07:17 16:33	08:04 08:37-09:28/51 16:02 13:16-13:43/27
9	05:03 21:29	05:45 20:48	06:35 19:42	07:24 18:33	07:18 16:32	08:05 08:45-09:30/45 13:16-13:44/28 16:02 08:39-08:44/5
10	05:04 21:29	05:47 20:46	06:37 19:40	07:26 18:31	07:20 16:30	08:06 08:45-09:31/46 16:02 13:16-13:45/29
11	05:05 21:28	05:49 20:44	06:38 19:38	07:27 18:29	07:22 08:12-08:20/8 16:29	08:07 08:45-09:31/46 16:02 13:16-13:46/30
12	05:06 21:27	05:50 20:42	06:40 19:35	07:29 18:27	07:24 08:11-08:22/11 16:27	08:08 08:45-09:32/47 16:01 13:16-13:46/30
13	05:08 21:26	05:52 20:40	06:42 19:33	07:31 18:24	07:25 08:10-08:26/16 16:26	08:09 08:46-09:33/47 16:01 13:16-13:47/31
14	05:09 21:25	05:53 20:38	06:43 19:31	07:33 18:22	07:27 08:10-08:29/19 16:24	08:10 08:46-09:34/48 16:01 13:17-13:48/31
15	05:10 21:24	05:55 20:36	06:45 19:28	07:34 18:20	07:29 08:09-08:30/21 16:23	08:11 08:47-09:34/47 16:02 13:17-13:48/31
16	05:11 21:23	05:57 20:34	06:46 19:26	07:36 18:18	07:31 08:09-08:38/29 16:21	08:12 08:47-09:35/48 16:02 13:18-13:49/31
17	05:12 21:22	05:58 20:32	06:48 19:24	07:38 18:16	07:32 08:09-08:39/30 16:20	08:13 08:47-09:35/48 16:02 13:17-13:49/32
18	05:13 21:21	06:00 20:30	06:50 19:21	07:39 18:14	07:34 08:09-08:41/32 16:19	08:14 08:48-09:36/48 16:02 13:18-13:50/32
19	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:11	07:36 08:09-08:42/33 16:17	08:14 08:48-09:37/49 16:02 13:19-13:51/32
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	07:37 09:00-09:07/7 16:16	08:15 08:48-09:37/49 16:03 13:18-13:50/32
21	05:17 21:18	06:05 20:24	06:54 19:14	07:45 18:07	07:39 08:58-09:10/12 16:15	08:15 08:49-09:38/49 16:03 13:19-13:51/32
22	05:19 21:16	06:06 20:22	06:56 19:12	07:46 18:05	07:41 08:57-09:12/15 16:14	08:16 08:49-09:38/49 16:04 13:19-13:51/32
23	05:20 21:15	06:08 20:20	06:58 19:10	07:48 18:03	07:42 08:56-09:12/16 16:13	08:17 08:50-09:39/49 16:04 13:20-13:52/32
24	05:21 21:14	06:09 20:18	06:59 19:08	07:50 18:01	07:44 08:55-09:14/19 16:12	08:17 08:50-09:39/49 16:05 13:20-13:53/33
25	05:23 21:12	06:11 20:16	07:01 19:05	06:52 16:59	07:46 08:51-09:15/24 16:11	08:17 08:50-09:39/49 16:05 13:21-13:53/32
26	05:24 21:11	06:13 20:14	07:03 19:03	06:53 16:57	07:47 08:50-09:16/26 16:10	08:18 08:52-09:40/48 16:06 13:22-13:54/32
27	05:26 21:10	06:14 20:11	07:04 19:01	06:55 16:55	07:49 08:49-09:16/27 16:09	08:18 08:52-09:40/48 16:07 13:22-13:54/32
28	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	07:50 08:49-09:17/28 16:08	08:18 08:52-09:40/48 16:08 13:23-13:54/31
29	05:29 21:07	06:17 20:07	07:07 18:56	06:59 16:51	07:52 08:48-09:17/29 13:22-13:29/7 16:07	08:18 08:53-09:41/48 16:08 13:24-13:54/30
30	05:30 21:05	06:19 20:05	07:09 18:54	07:01 16:49	07:53 08:48-09:18/30 13:20-13:33/13 16:06	08:18 08:53-09:41/48 16:09 13:24-13:55/31
31	05:32 21:04	06:21 20:03		07:02 16:48		08:18 08:54-09:41/47 16:10 13:25-13:55/30
Sonnenscheinstunden	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	0	0	762	2395

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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA14 - ENERCON E-70 E4 2000 71.0 !O! NH: 98,8 m (Ges:134,3 m) (214)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar		Februar		März	April		Mai		Juni	
1	08:18	15:07-15:23/16	07:52	16:59	06:59	06:49	07:11-07:16/5	05:45	06:09-06:17/8	05:00	
	16:11		16:59	17:50	17:50	19:44		20:34	19:54-20:06/12	21:19	
2	08:18	15:07-15:23/16	07:50	06:57	06:57	06:47	07:09-07:17/8	05:43	06:07-06:17/10	04:59	
	16:12		17:01	17:52	17:52	19:45		20:36	19:54-20:07/13	21:21	
3	08:18	15:07-15:24/17	07:49	06:55	06:55	06:44	07:07-07:16/9	05:41	06:05-06:17/12	04:58	
	16:14		17:03	17:54	17:54	19:47		20:37	19:54-20:09/15	21:22	
4	08:18	15:08-15:25/17	07:47	06:53	06:53	06:42	07:05-07:16/11	05:39	06:06-06:18/12	04:57	
	16:15		17:04	17:55	17:55	19:49		20:39	19:54-20:10/16	21:23	
5	08:18	15:07-15:25/18	07:46	06:50	06:50	06:40	07:03-07:14/11	05:37	06:05-06:18/13	04:57	
	16:16		17:06	17:57	17:57	19:50		20:41	19:55-20:12/17	21:24	
6	08:17	15:08-15:27/19	07:44	06:48	06:48	06:38	07:02-07:14/12	05:35	06:05-06:17/12	04:56	
	16:17		17:08	17:59	17:59	19:52		20:42	19:56-20:13/17	21:25	
7	08:17	15:08-15:27/19	07:42	06:46	06:46	06:35	07:03-07:13/10	05:34	06:06-06:16/10	04:55	
	16:18		17:10	18:01	18:01	19:54		20:44	20:01-20:14/13	21:26	
8	08:17	15:09-15:28/19	07:41	06:44	06:44	06:33	07:03-07:12/9	05:32	06:07-06:16/9	04:55	
	16:20		17:12	18:02	18:02	19:55		20:46	20:02-20:17/15	21:26	
9	08:16	15:09-15:28/19	07:39	06:41	06:41	06:31	07:05-07:11/6	05:30	06:08-06:14/6	04:54	
	16:21		17:14	18:04	18:04	19:57		20:47	20:02-20:16/14	21:27	
10	08:16	15:09-15:28/19	07:37	06:39	06:39	06:29		05:28	20:04-20:16/12	04:54	
	16:22		17:15	18:06	18:06	19:59		20:49		21:28	
11	08:15	15:10-15:29/19	07:35	06:37	06:37	06:26		05:27	20:07-20:15/8	04:54	
	16:24		17:17	18:08	18:08	20:00		20:50		21:29	
12	08:14	15:10-15:30/20	07:33	06:35	06:35	06:24		05:25	20:07-20:13/6	04:53	
	16:25		17:19	18:09	18:09	20:02		20:52		21:29	
13	08:14	15:10-15:30/20	07:32	06:32	06:32	06:22		05:23		04:53	
	16:27		17:21	18:11	18:11	20:04		20:53		21:30	
14	08:13	15:11-15:30/19	07:30	06:30	06:30	06:20		05:22		04:53	
	16:28		17:23	18:13	18:13	20:06		20:55		21:31	
15	08:12	15:11-15:30/19	07:28	06:28	06:28	06:18	06:41-06:42/1	05:20		04:53	
	16:30		17:25	18:15	18:15	20:07		20:57		21:31	
16	08:11	15:12-15:30/18	07:26	06:26	06:26	06:15	06:38-06:42/4	05:19		04:53	
	16:31		17:26	18:16	18:16	20:09		20:58		21:32	
17	08:11	15:13-15:30/17	07:24	06:23	06:23	06:13	06:36-06:42/6	05:17		04:52	
	16:33		17:28	18:18	18:18	20:11		21:00		21:32	
18	08:10	15:14-15:30/16	07:22	06:21	06:21	06:11	06:34-06:43/9	05:16		04:52	
	16:35		17:30	18:20	18:20	20:12		21:01		21:33	
19	08:09	15:15-15:30/15	07:20	06:19	06:19	06:09	06:32-06:42/10	05:14		04:52	
	16:36		17:32	18:22	18:22	20:14		21:02		21:33	
20	08:08	15:15-15:29/14	07:18	06:16	06:16	06:07	06:30-06:42/12	05:13		04:53	
	16:38		17:34	18:23	18:23	20:16		21:04		21:33	
21	08:07	15:17-15:28/11	07:16	06:14	06:14	06:05	06:28-06:42/14	05:12		04:53	
	16:39		17:36	18:25	18:25	20:17		21:05		21:34	
22	08:05	15:19-15:27/8	07:14	06:12	06:12	06:03	06:27-06:41/14	05:10		04:53	
	16:41		17:37	18:27	18:27	20:19		21:07		21:34	
23	08:04	15:23-15:25/2	07:12	06:10	06:10	06:01	06:27-06:40/13	05:09		04:53	
	16:43		17:39	18:28	18:28	20:21		21:08		21:34	
24	08:03		07:10	06:07	06:07	05:58	06:27-06:39/12	05:08		04:53	
	16:45		17:41	18:30	18:30	20:22		21:10		21:34	
25	08:02		07:08	06:05	06:05	05:56	06:28-06:38/10	05:07		04:54	
	16:46		17:43	18:32	18:32	20:24		21:11		21:34	
26	08:01		07:05	06:03	06:03	05:54	06:28-06:37/9	05:06		04:54	
	16:48		17:45	18:33	18:33	20:26		21:12		21:34	
27	07:59		07:03	06:00	06:00	05:52	06:30-06:34/4	05:05		04:55	
	16:50		17:46	18:35	18:35	20:27		21:13		21:34	
28	07:58		07:01	05:58	05:58	05:50	19:57-20:01/4	05:03		04:55	
	16:52		17:48	18:37	18:37	20:29		21:15		21:34	
29	07:56			06:56	06:56	05:48	19:55-20:02/7	05:02		04:56	
	16:53			19:39	19:39	20:31		21:16		21:34	
30	07:55			06:53	06:53	05:47	06:11-06:16/5	05:02		04:56	
	16:55			19:40	19:40	20:32	19:55-20:05/10	21:17		21:34	
31	07:54			06:51	07:14-07:16/2			05:01			
	16:57			19:42	19:42			21:18			
Sonnenscheinstunden	260		278		367	416		484		498	
Anzahl Minuten mit Schatten	377		0		2	225		250		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 Vorbelastung **WEA:** WEA14 - ENERCON E-70 E4 2000 71.0 !O! NH: 98,8 m (Ges:134,3 m) (214)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli	August	September	Oktober	November	Dezember
1	04:57 21:33	05:33 20:17-20:24/7 21:02	06:22 20:00	07:11 18:51	07:04 16:46	07:55 14:52-15:12/20 16:06
2	04:57 21:33	05:34 20:17-20:26/9 21:00	06:24 19:58	07:12 18:49	07:06 16:44	07:56 14:52-15:11/19 16:05
3	04:58 21:33	05:36 20:13-20:26/13 20:59	06:25 07:02-07:08/6 19:56	07:14 18:47	07:08 16:42	07:57 14:53-15:12/19 16:04
4	04:59 21:32	05:38 06:18-06:25/7 20:57 20:12-20:27/15	06:27 07:00-07:09/9 19:54	07:16 18:44	07:09 16:40	07:59 14:53-15:12/19 16:04
5	05:00 21:32	05:39 06:16-06:25/9 20:55 20:11-20:25/14	06:29 06:59-07:09/10 19:51	07:17 18:42	07:11 16:38	08:00 14:53-15:12/19 16:03
6	05:01 21:31	05:41 06:16-06:27/11 20:53 20:07-20:24/17	06:30 06:58-07:10/12 19:49	07:19 18:40	07:13 16:37	08:01 14:54-15:13/19 16:03
7	05:01 21:31	05:42 06:15-06:27/12 20:52 20:05-20:22/17	06:32 06:59-07:10/11 19:47	07:21 18:38	07:15 16:35	08:03 14:54-15:13/19 16:03
8	05:02 21:30	05:44 06:15-06:27/12 20:50 20:04-20:21/17	06:33 06:59-07:10/11 19:44	07:22 18:35	07:17 16:33	08:04 14:55-15:12/17 16:02
9	05:03 21:29	05:45 06:14-06:27/13 20:48 20:03-20:19/16	06:35 07:01-07:11/10 19:42	07:24 18:33	07:18 16:32	08:05 14:56-15:13/17 16:02
10	05:04 21:29	05:47 06:15-06:27/12 20:46 20:03-20:18/15	06:37 07:02-07:10/8 19:40	07:26 18:31	07:20 16:30	08:06 14:57-15:13/16 16:02
11	05:05 21:28	05:48 06:16-06:26/10 20:44 20:02-20:15/13	06:38 07:04-07:09/5 19:38	07:27 18:29	07:22 16:29	08:07 14:57-15:14/17 16:02
12	05:06 21:27	05:50 06:18-06:25/7 20:42 20:03-20:14/11	06:40 07:05-07:08/3 19:35	07:29 18:27	07:24 16:27	08:08 14:58-15:14/16 16:01
13	05:07 21:26	05:52 06:19-06:23/4 20:40 20:03-20:12/9	06:41 19:33	07:31 18:24	07:25 16:26	08:09 14:59-15:14/15 16:01
14	05:09 21:25	05:53 20:04-20:10/6 20:38	06:43 19:31	07:33 18:22	07:27 16:24	08:10 14:59-15:14/15 16:01
15	05:10 21:24	05:55 20:05-20:08/3 20:36	06:45 19:28	07:34 18:20	07:29 16:23	08:11 15:00-15:14/14 16:01
16	05:11 21:23	05:56 06:37-06:43/6 20:34	06:46 19:26	07:36 18:18	07:31 16:21	08:12 15:01-15:15/14 16:02
17	05:12 21:22	05:58 06:35-06:44/9 20:32	06:48 19:24	07:38 18:16	07:32 16:20	08:13 15:01-15:14/13 16:02
18	05:13 21:21	06:00 06:34-06:45/11 20:30	06:50 19:21	07:39 18:14	07:34 16:19	08:14 15:02-15:15/13 16:02
19	05:15 21:20	06:01 06:33-06:45/12 20:28	06:51 19:19	07:41 18:11	07:36 14:57-14:59/2 16:17	08:14 15:03-15:16/13 16:02
20	05:16 21:19	06:03 06:33-06:46/13 20:26	06:53 19:17	07:43 18:09	07:37 14:54-15:02/8 16:16	08:15 15:03-15:15/12 16:03
21	05:17 21:18	06:04 06:32-06:46/14 20:24	06:54 19:14	07:45 18:07	07:39 14:53-15:04/11 16:15	08:15 15:04-15:16/12 16:03
22	05:19 21:16	06:06 06:33-06:46/13 20:22	06:56 19:12	07:46 18:05	07:41 14:52-15:06/14 16:14	08:16 15:04-15:16/12 16:03
23	05:20 21:15	06:08 06:34-06:46/12 20:20	06:58 19:10	07:48 18:03	07:42 14:51-15:06/15 16:13	08:17 15:05-15:17/12 16:04
24	05:21 21:14	06:09 06:36-06:46/10 20:18	06:59 19:07	07:50 18:01	07:44 14:51-15:07/16 16:12	08:17 15:05-15:18/13 16:05
25	05:23 21:12	06:11 06:37-06:46/9 20:16	07:01 19:05	06:52 16:59	07:46 14:51-15:08/17 16:11	08:17 15:05-15:18/13 16:05
26	05:24 21:11	06:13 06:39-06:45/6 20:14	07:03 19:03	06:53 16:57	07:47 14:50-15:08/18 16:10	08:18 15:06-15:19/13 16:06
27	05:26 21:10	06:14 06:41-06:45/4 20:11	07:04 19:01	06:55 16:55	07:49 14:50-15:09/19 16:09	08:18 15:06-15:20/14 16:07
28	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	07:50 14:51-15:10/19 16:08	08:18 15:06-15:20/14 16:07
29	05:28 21:07	06:17 20:07	07:07 18:56	06:59 16:51	07:52 14:50-15:10/20 16:07	08:18 15:06-15:21/15 16:08
30	05:30 21:05	06:19 20:05	07:09 18:54	07:00 16:49	07:53 14:51-15:11/20 16:06	08:18 15:07-15:22/15 16:09
31	05:31 20:20-20:23/3 21:04	06:21 20:03		07:02 16:47		08:18 15:07-15:22/15 16:10
Sonnenscheinstunden	501	453	381	332	267	245
Anzahl Minuten mit Schatten	3	398	85	0	179	474

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 Vorbelastung **WEA:** WEA15 - ENERCON E-70 E4 2000 71.0 !O! NH: 98,2 m (Ges:133,7 m) (215)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:18 16:11	07:52 16:59	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:19
2	08:18 16:12	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:21
3	08:18 16:14	07:49 17:03	16:14-16:18/4 17:54	06:55 19:47	05:41 20:37	04:58 21:22
4	08:18 16:15	07:47 17:04	16:10-16:21/11 17:55	06:53 19:49	05:39 20:39	04:57 21:23
5	08:18 16:16	07:46 17:06	16:08-16:23/15 17:57	06:50 19:50	05:37 20:41	04:57 21:24
6	08:18 16:17	07:44 17:08	16:07-16:24/17 17:59	06:48 19:52	05:35 20:42	04:56 21:25
7	08:17 16:18	07:42 17:10	16:07-16:26/19 18:01	06:46 19:54	05:34 20:44	04:55 21:26
8	08:17 16:20	07:41 17:12	16:06-16:26/20 18:02	06:44 19:55	05:32 20:46	04:55 21:26
9	08:16 16:21	07:39 17:14	16:06-16:27/21 18:04	06:41 19:57	05:30 20:47	04:54 21:27
10	08:16 16:22	07:37 17:15	16:05-16:27/22 18:06	06:39 19:59	05:28 20:49	04:54 21:28
11	08:15 16:24	07:35 17:17	16:05-16:27/22 18:08	06:37 20:00	05:27 20:50	04:54 21:29
12	08:15 16:25	07:33 17:19	16:05-16:27/22 18:09	06:35 20:02	05:25 20:52	04:53 21:29
13	08:14 16:27	07:32 17:21	16:06-16:27/21 18:11	06:32 20:04	05:23 20:53	04:53 21:30
14	08:13 16:28	07:30 17:23	16:06-16:26/20 18:13	06:30 20:06	05:22 20:55	04:53 21:31
15	08:12 16:30	07:28 17:25	16:07-16:26/19 18:15	06:28 20:07	05:20 20:57	04:53 21:31
16	08:11 16:31	07:26 17:26	16:08-16:25/17 18:16	06:26 20:09	05:19 20:58	04:53 21:32
17	08:11 16:33	07:24 17:28	16:09-16:24/15 18:18	06:23 20:11	05:17 21:00	04:52 21:32
18	08:10 16:34	07:22 17:30	16:11-16:22/11 18:20	06:21 20:12	05:16 21:01	04:52 21:33
19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	05:14 21:03	04:52 21:33
20	08:08 16:38	07:18 17:34	06:16 18:23	06:07 20:16	05:13 21:04	04:53 21:33
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
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
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
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
25	08:02 16:46	07:08 17:43	06:05 18:32	06:28-06:37/9 20:24	05:07 21:11	04:54 21:34
26	08:01 16:48	07:05 17:45	06:03 18:33	06:30-06:35/5 20:26	05:06 21:12	04:54 21:34
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
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
29	07:56 16:53		06:56 19:39	05:48 20:31	05:02 21:16	04:56 21:34
30	07:55 16:55		06:53 19:40	05:47 20:32	05:01 21:17	04:56 21:34
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	276	0	118	427	62

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

Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA15 - ENERCON E-70 E4 2000 71.0 !O! NH: 98,2 m (Ges:133,7 m) (215)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli		August		September		Oktober		November		Dezember	
1	04:57	21:33	05:33	06:03-06:17/14	06:22	07:11	07:04	15:35-15:57/22	07:55			
2	04:57	21:33	05:34	06:03-06:18/15	06:24	07:12	07:06	15:36-15:56/20	07:56			
3	04:58	21:33	05:36	06:04-06:18/14	06:25	07:14	07:08	15:36-15:56/20	07:57			
4	04:59	21:32	05:37	06:06-06:19/13	06:27	07:16	07:09	15:36-15:54/18	07:59			
5	05:00	05:44-05:48/4	05:39	06:07-06:18/11	06:29	07:17	07:11	15:37-15:54/17	08:00			
6	05:01	05:43-05:49/6	05:41	06:09-06:20/11	06:30	07:19	07:13	15:38-15:52/14	08:01			
7	05:01	05:43-05:50/7	05:42	06:10-06:21/11	06:32	07:21	07:15	15:40-15:51/11	08:03			
8	05:02	05:42-05:51/9	05:44	06:12-06:22/10	06:33	07:22	07:17	15:44-15:47/3	08:04			
9	05:03	05:42-05:52/10	05:45	06:13-06:21/8	06:35	07:24	07:18		08:05			
10	05:04	05:42-05:52/10	05:47	06:15-06:21/6	06:37	07:26	07:20		08:06			
11	05:05	05:42-05:53/11	05:48	06:16-06:20/4	06:38	07:27	07:22		08:07			
12	05:06	05:42-05:53/11	05:50	06:18-06:20/2	06:40	07:29	07:24		08:08			
13	05:07	05:42-05:53/11	05:52		06:41	07:31	07:25		08:09			
14	05:09	05:42-05:54/12	05:53		06:43	07:33	07:27		08:10			
15	05:10	05:41-05:54/13	05:55		06:45	07:34	07:29		08:11			
16	05:11	05:41-05:54/13	05:56		06:46	07:36	07:31		08:12			
17	05:12	05:42-05:54/12	05:58	06:36-06:42/6	06:48	07:38	07:32		08:13			
18	05:13	05:43-05:53/10	06:00	06:35-06:44/9	06:50	07:39	07:34		08:14			
19	05:15	05:44-05:53/9	06:01	06:33-06:44/11	06:51	07:41	07:36		08:14			
20	05:16	05:46-05:54/8	06:03	06:33-06:45/12	06:53	07:43	07:37		08:15			
21	05:17	05:47-05:53/6	06:04	06:32-06:44/12	06:54	07:45	07:39		08:15			
22	05:19	05:48-05:52/4	06:06	06:33-06:46/13	06:56	07:46	07:41		08:16			
23	05:20	05:49-05:50/1	06:08	06:34-06:45/11	06:58	07:48	16:44-16:50/6	07:42	08:17			
24	05:21	20:31-20:44/13	06:09	06:36-06:47/11	06:59	07:50	16:40-16:52/12	07:44	08:17			
25	05:23	06:07-06:10/3	06:11	06:37-06:48/11	07:01	06:52	15:38-15:53/15	07:46	08:17			
26	05:24	06:05-06:12/7	06:13	06:39-06:48/9	07:03	06:53	15:37-15:55/18	07:47	08:18			
27	05:26	06:04-06:13/9	06:14	06:41-06:48/7	07:04	06:55	15:36-15:56/20	07:49	08:18			
28	05:27	06:03-06:14/11	06:16	06:42-06:47/5	07:06	06:57	15:35-15:56/21	07:50	08:18			
29	05:28	06:02-06:14/12	06:17	06:44-06:46/2	07:07	06:59	15:35-15:56/21	07:52	08:18			
30	05:30	06:03-06:15/12	06:19		07:09	07:00	15:35-15:57/22	07:53	08:18			
31	05:31	06:02-06:15/13	06:21			07:02	15:35-15:57/22		08:18			
Sonnenscheinstunden		501	453		381	332	267	245				
Anzahl Minuten mit Schatten		377	238	0	157	125	0					

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



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA16 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (216)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:18 16:11	07:52 16:59	06:59 17:50	06:49 19:44	05:45 19:42-20:00/18	05:00 05:51-06:10/19
2	08:18 16:12	07:50 17:01	06:57 17:52	06:47 19:45	05:43 19:42-19:59/17	04:59 05:51-06:10/19
3	08:18 16:14	07:49 17:03	06:55 17:54	06:44 19:47	05:41 19:44-19:58/14	04:58 05:51-06:11/20
4	08:18 16:15	07:47 17:04	06:53 17:55	06:42 19:49	05:39 19:47-19:57/10	04:57 05:51-06:11/20
5	08:18 16:16	07:46 17:06	06:50 17:57	06:40 19:50	05:37 19:49-19:57/8	04:57 05:52-06:11/19
6	08:17 16:17	07:44 17:08	06:48 17:59	06:38 19:52	05:35 19:50-19:54/4	04:56 05:52-06:11/19
7	08:17 16:18	07:42 17:10	06:46 18:01	06:35 19:54	05:34 20:44	04:55 05:53-06:12/19
8	08:17 16:20	07:41 17:12	06:44 18:02	06:33 19:55	05:32 20:46	04:55 05:52-06:11/19
9	08:16 16:21	07:39 17:14	06:41 18:04	06:31 19:57	05:30 20:47	04:54 05:53-06:11/18
10	08:16 16:22	07:37 17:15	06:39 18:06	06:29 19:59	05:28 20:49	04:54 05:54-06:12/18
11	08:15 16:24	07:35 17:17	06:37 18:08	06:26 20:00	05:27 20:50	04:54 05:53-06:11/18
12	08:14 16:25	07:33 17:19	06:35 18:09	06:24 20:02	05:25 20:52	04:53 05:54-06:11/17
13	08:14 16:27	07:32 17:21	06:32 18:11	06:22 20:04	05:23 20:53	04:53 05:54-06:12/18
14	08:13 16:28	07:30 17:23	06:30 18:13	06:20 20:06	05:22 20:55	04:53 05:55-06:12/17
15	08:12 16:30	07:28 17:25	06:28 18:15	06:18 20:07	05:20 20:57	04:53 05:55-06:12/17
16	08:11 16:31	07:26 17:26	06:26 18:16	06:15 20:09	05:19 20:58	04:53 05:56-06:12/16
17	08:11 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 21:00	04:52 05:56-06:12/16
18	08:10 16:35	07:22 17:30	06:21 18:20	06:11 20:12	05:16 21:01	04:52 05:56-06:13/17
19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	05:14 19:39-19:41/2	04:52 05:56-06:13/17
20	08:08 16:38	07:18 17:34	06:16 18:23	06:07 20:16	05:13 19:35-19:44/9	04:53 05:56-06:13/17
21	08:07 16:39	07:16 17:36	06:14 18:25	06:05 20:17	05:12 19:34-19:45/11	04:53 05:56-06:13/17
22	08:05 16:41	07:14 17:37	06:12 18:27	06:03 20:19	05:10 19:33-19:46/13	04:53 05:56-06:13/17
23	08:04 16:43	07:12 17:39	06:10 18:28	06:01 20:21	05:09 20:32-20:37/5	04:53 05:57-06:14/17
24	08:03 16:45	07:10 17:41	06:07 18:30	05:58 20:22	05:08 20:31-20:38/7	04:53 05:57-06:14/17
25	08:02 16:46	07:08 17:43	06:05 18:32	05:56 20:24	05:07 20:31-20:39/8	04:54 05:57-06:13/16
26	08:01 16:48	07:05 17:45	06:03 18:33	05:54 20:26	05:06 20:31-20:40/9	04:54 05:58-06:14/16
27	07:59 16:50	07:03 17:46	06:00 18:35	05:52 20:27	05:05 20:30-20:41/11	04:55 05:57-06:14/17
28	07:58 16:52	07:01 17:48	05:58 18:37	05:50 20:29	05:03 20:30-20:41/11	04:55 05:58-06:15/17
29	07:56 16:53		06:56 19:39	05:48 20:31	05:02 20:30-20:41/11	04:56 05:58-06:15/17
30	07:55 16:55		06:53 19:40	05:47 20:32	05:02 20:31-20:42/11	04:56 05:58-06:16/18
31	07:54 16:57		06:51 19:42		05:01 20:31-20:42/11	
Sonnenscheinstunden	260	278	367	416	484	498
Anzahl Minuten mit Schatten	0	0	54	367	344	608

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



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA16 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (216)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli		August		September		Oktober		November		Dezember	
1	04:57	05:58-06:15/17	21:33	05:33	06:22	06:55-07:07/12	07:11	07:04	07:55			
				21:02	20:00		18:51	16:46	16:06			
2	04:57	05:58-06:16/18	21:33	05:34	06:24	06:54-07:08/14	07:12	07:06	07:56			
				21:00	19:58		18:49	16:44	16:05			
3	04:58	05:58-06:17/19	21:33	05:36	06:25	06:53-07:07/14	07:14	07:08	07:57			
		20:41-20:45/4		20:59	19:56		18:47	16:42	16:04			
4	04:59	05:58-06:16/18	21:32	05:38	06:27	06:53-07:07/14	07:16	07:09	07:59			
		20:40-20:45/5		20:57	19:54		18:44	16:40	16:04			
5	05:00	05:58-06:17/19	21:32	05:39	06:29	06:54-07:06/12	07:17	07:11	08:00			
		20:40-20:47/7		20:55	19:51		18:42	16:38	16:03			
6	05:01	05:58-06:17/19	21:31	05:41	06:30	06:56-07:06/10	07:19	07:13	08:01			
		20:40-20:47/7		20:53	19:49		18:40	16:37	16:03			
7	05:01	05:58-06:18/20	21:31	05:42	06:32	06:58-07:05/7	07:21	07:15	08:03			
		20:40-20:48/8		20:52	19:47		18:38	16:35	16:03			
8	05:02	05:59-06:18/19	21:30	05:44	06:33	06:59-07:02/3	07:22	07:17	08:04			
		20:39-20:49/10		20:50	19:44		18:35	16:33	16:02			
9	05:03	05:59-06:18/19	21:29	05:45	06:35		07:24	07:18	08:05			
		20:39-20:49/10		20:48	19:42		18:33	16:32	16:02			
10	05:04	05:59-06:19/20	21:29	05:47	06:37		07:26	07:20	08:06			
		20:38-20:49/11		20:46	19:40		18:31	16:30	16:02			
11	05:05	05:59-06:19/20	21:28	05:48	06:38		07:27	07:22	08:07			
		20:38-20:49/11		20:44	19:38		18:29	16:29	16:02			
12	05:06	05:59-06:19/20	21:27	05:50	06:40		07:29	07:24	08:08			
		20:38-20:50/12		20:42	19:35		18:27	16:27	16:01			
13	05:07	06:00-06:19/19	21:26	05:52	06:41		07:31	07:25	08:09			
		20:39-20:51/12		20:40	19:33		18:24	16:26	16:01			
14	05:09	06:00-06:19/19	21:25	05:53	06:43		07:33	07:27	08:10			
		20:39-20:51/12		20:38	19:31		18:22	16:24	16:01			
15	05:10	06:00-06:19/19	21:24	05:55	06:45	07:20-07:27/7	07:34	07:29	08:11			
		20:40-20:51/11		20:36	19:28		18:20	16:23	16:01			
16	05:11	06:00-06:19/19	21:23	05:56	06:46	07:19-07:28/9	07:36	07:31	08:12			
		20:40-20:51/11		20:34	19:26		18:18	16:21	16:02			
17	05:12	06:00-06:18/18	21:22	05:58	06:48	07:17-07:28/11	07:38	07:32	08:13			
		20:40-20:50/10		20:32	19:24		18:16	16:20	16:02			
18	05:13	06:01-06:18/17	21:21	06:00	06:50	07:17-07:28/11	07:39	07:34	08:14			
		20:40-20:49/9		20:30	19:21		18:14	16:19	16:02			
19	05:15	06:01-06:17/16	21:20	06:01	06:51	07:17-07:26/9	07:41	07:36	08:14			
		20:41-20:48/7		20:28	19:19		18:11	16:17	16:02			
20	05:16	06:03-06:18/15	21:19	06:03	06:53	07:18-07:25/7	07:43	07:37	08:15			
		20:41-20:47/6		20:26	19:17		18:09	16:16	16:03			
21	05:17	06:03-06:17/14	21:18	06:04	06:54		07:45	07:39	08:15			
		20:44-20:47/3		20:24	19:14		18:07	16:15	16:03			
22	05:19	06:04-06:15/11	21:16	06:06	06:56		07:46	07:41	08:16			
				20:22	19:12		18:05	16:14	16:03			
23	05:20	06:05-06:14/9	21:15	06:08	06:58		07:48	07:42	08:17			
				20:20	19:10		18:03	16:13	16:04			
24	05:21	06:09-06:12/3	21:14	06:09	06:59		07:50	07:44	08:17			
				20:18	19:07		18:01	16:12	16:05			
25	05:23		21:12	06:11	07:01		06:52	07:46	08:17			
				20:16	19:05		16:59	16:11	16:05			
26	05:24		21:11	06:13	07:03		06:53	07:47	08:18			
				20:14	19:03		16:57	16:10	16:06			
27	05:26		21:10	06:14	07:04		06:55	07:49	08:18			
				20:11	19:01		16:55	16:09	16:07			
28	05:27		21:08	06:16	07:06		06:57	07:50	08:18			
				20:09	18:58		16:53	16:08	16:07			
29	05:28		21:07	06:17	07:07		06:59	07:52	08:18			
				20:07	18:56		16:51	16:07	16:08			
30	05:30		21:05	06:19	07:09		07:00	07:53	08:18			
				20:05	18:54		16:49	16:06	16:09			
31	05:31		21:03	06:21			07:02		08:18			
				20:03			16:47		16:10			
Sonnenscheinstunden	501		453		381		332		267		245	
Anzahl Minuten mit Schatten	573		354		140		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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA17 - ENERCON E-70 E4 2000 71.0 !O! NH: 100,0 m (Ges:135,5 m) (217)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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 19:44	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 16:04
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	05:38 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	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	08:00 16:03
6	08:17 08:48-08:49/1 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 08:47-08:50/3 16:18	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 08:47-08:51/4 16:20	07:41 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 08:46-08:52/6 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 08:45-08:52/7 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 08:45-08:53/8 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 08:44-08:54/10 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 18:27	07:24 16:27	08:08 16:01
13	08:14 08:43-08:54/11 16:27	07:32 17:21	06:32 18:11	06:22 20:04	05:23 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 16:01
14	08:13 08:43-08:54/11 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 08:44-08:54/10 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 08:45-08:54/9 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	05:56 20:34	06:46 19:26	07:36 18:18	07:31 16:21	08:12 16:02
17	08:11 08:45-08:54/9 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 08:47-08:54/7 16:35	07:22 17:30	06:21 18:20	06:11 20:12	05:16 21:01	04:53 21:33	05:13 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 08:48-08:53/5 16:36	07:20 17:32	06:19 18:22	06:09 20:14	05:14 21:02	04:53 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	04:53 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 21:34	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 16:04
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	04:53 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	07:45 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	06:13 20:14	07:03 19:03	06:53 16:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:03 17:47	06:00 18:35	05:52 20:27	05:05 21:13	04:55 21:34	05:26 21:10	06:14 20:11	07:04 19:01	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	05:04 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 16:08
29	07:56 16:53		06:56 19:39	05:48 20:31	05:03 21:16	04:56 21:34	05:29 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		06:54 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 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 20:03		07:02 16:48		08:18 16:10
Sonnenscheinstunden	260		278	367	416	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten	101		0	0	0	0	0	0	0	0	71	30

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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA18 - ENERCON E-70 E4 2000 71.0 !O! NH: 98,0 m (Ges:133,5 m) (218)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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 16:04
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	05:38 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	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	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	05:01 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	05:02 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 18:02	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	08:16 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	05:49 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 18:09	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 18:27	07:24 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	05:08 21:26	05:52 20:40	06:42 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 20:56	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	05:56 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	05:13 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 18:11	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	04:53 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 21:34	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 17:37	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 16:04
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	05:56 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	07:45 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	06:13 20:14	07:03 19:03	06:53 16:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:03 17:47	06:00 18:35	05:52 20:27	05:05 21:13	04:55 21:34	05:26 21:10	06:14 20:11	07:04 19:01	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	05:04 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 16:08
29	07:56 16:53		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 16:51	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 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 20:03		07:02 16:48		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	0	0	0	0	0	0	0	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

Lizenziierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA19 - ENERCON E-66/20.70 2000 70.0 !-! NH: 114,1 m (Ges:149,1 m) (219)

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
378 352 573 577 403 485 1.015 1.027 1.396 804 662 639 8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:18 08:52-08:55/3	07:52	06:59	06:49	05:45	05:00
	16:11 15:12-15:33/21	16:59	17:50	19:44	20:34	21:19
2	08:18 08:50-08:56/6	07:50	06:57	06:47	05:43	04:59
	16:13 15:13-15:34/21	17:01	17:52	19:45	20:36	21:20
3	08:18 08:50-08:57/7	07:49	06:55	06:44	05:41	04:58
	16:14 15:14-15:35/21	17:03	17:54	19:47	20:37	21:22
4	08:18 08:51-08:59/8	07:47 16:26-16:30/4	06:53	06:42	05:39	04:57
	16:15 15:15-15:36/21	17:04	17:55	19:49	20:39	21:23
5	08:18 08:50-08:59/9	07:46 16:24-16:32/8	06:50	06:40	05:37	04:57
	16:16 15:15-15:36/21	17:06	17:57	19:50	20:41	21:24
6	08:17 08:51-09:00/9	07:44 16:22-16:33/11	06:48	06:38	05:35	04:56
	16:17 15:17-15:37/20	17:08	17:59	19:52	20:42	21:24
7	08:17 08:50-09:01/11	07:42 16:22-16:34/12	06:46	06:35	05:34	04:56
	16:18 15:17-15:37/20	17:10	18:01	19:54	20:44	21:25
8	08:17 08:51-09:02/11 15:26-15:38/12	07:41 16:22-16:35/13	06:44	06:33	05:32	04:55
	16:20 15:19-15:25/6	17:12	18:02	19:55	20:45	21:26
9	08:16 08:51-09:02/11 15:26-15:38/12	07:39 16:22-16:35/13	06:41	06:31	05:30	04:55
	16:21 15:20-15:23/3	17:14	18:04	19:57	20:47	21:27
10	08:16 08:51-09:02/11	07:37 16:22-16:35/13	06:39	06:29	05:28	04:54
	16:22 15:26-15:38/12	17:15	18:06	19:59	20:49	21:28
11	08:15 08:52-09:04/12	07:35 16:23-16:35/12	06:37	06:26	05:27	04:54
	16:24 15:26-15:38/12	17:17	18:08	20:00	20:50	21:29
12	08:14 08:52-09:04/12	07:33 16:24-16:34/10	06:35	06:24	05:25	04:53
	16:25 15:28-15:39/11	17:19	18:09	20:02	20:52	21:29
13	08:14 08:52-09:04/12	07:31 16:25-16:32/7	06:32	06:22	05:23	04:53
	16:27 15:28-15:39/11	17:21	18:11	20:04	20:53	21:30
14	08:13 08:53-09:04/11	07:30	06:30	06:20	05:22	04:53
	16:28 15:29-15:38/9	17:23	18:13	20:05	20:55	21:31
15	08:12 08:54-09:04/10	07:28	06:28	06:18	05:20	04:53
	16:30 15:30-15:38/8	17:25	18:15	20:07	20:56	21:31
16	08:11 08:54-09:04/10	07:26	06:26	06:15	05:19	04:53
	16:31 15:32-15:37/5	17:27	18:16	20:09	20:58	21:32
17	08:10 08:56-09:03/7	07:24	06:23	06:13	05:17	04:53
	16:33	17:28	18:18	20:11	20:59	21:32
18	08:10 08:57-09:03/6	07:22	06:21	06:11	05:16	04:53
	16:35	17:30	18:20	20:12	21:01	21:33
19	08:09	07:20	06:19	06:09	05:14	04:53
	16:36	17:32	18:21	20:14	21:02	21:33
20	08:08	07:18	06:16	06:07	05:13	04:53
	16:38	17:34	18:23	20:16	21:04	21:33
21	08:06	07:16	06:14	06:05	05:12	04:53
	16:39	17:36	18:25	20:17	21:05	21:33
22	08:05	07:14	06:12	06:03	05:10	04:53
	16:41	17:37	18:27	20:19	21:07	21:34
23	08:04	07:12	06:10	06:01	05:09	04:53
	16:43	17:39	18:28	20:21	21:08	21:34
24	08:03	07:10	06:07	05:58	05:08	04:53
	16:45	17:41	18:30	20:22	21:09	21:34
25	08:02	07:08	06:05	05:56	05:07	04:54
	16:46	17:43	18:32	20:24	21:11	21:34
26	08:00	07:05	06:03	05:54	05:06	04:54
	16:48	17:45	18:33	20:26	21:12	21:34
27	07:59	07:03	06:00	05:52	05:05	04:55
	16:50	17:46	18:35	20:27	21:13	21:34
28	07:58	07:01	05:58	05:50	05:04	04:55
	16:52	17:48	18:37	20:29	21:15	21:34
29	07:56		06:56	05:48	05:03	04:56
	16:53		19:38	20:31	21:16	21:34
30	07:55		06:53	05:47	05:02	04:56
	16:55		19:40	20:32	21:17	21:34
31	07:53		06:51		05:01	
	16:57		19:42		21:18	
Sonnenscheinstunden	260	278	367	416	484	498
Anzahl Minuten mit Schatten	412	103	0	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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA19 - ENERCON E-66/20.70 2000 70.0 !-! NH: 114,1 m (Ges:149,1 m) (219)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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	15:52-16:05/13	07:55	08:34-08:46/12
2	04:58	21:33	05:34	21:00	06:24	19:58	07:12	18:49	07:06	15:52-16:05/13	07:56	08:34-08:45/11
3	04:58	21:33	05:36	20:59	06:25	19:56	07:14	18:47	07:08	15:51-16:04/13	07:57	08:35-08:46/11
4	04:59	21:32	05:38	20:57	06:27	19:54	07:16	18:44	07:09	15:51-16:04/13	07:59	08:35-08:46/11
5	05:00	21:32	05:39	20:55	06:29	19:51	07:17	18:42	07:11	15:52-16:03/11	08:00	08:35-08:46/11
6	05:01	21:31	05:41	20:53	06:30	19:49	07:19	18:40	07:13	15:54-16:02/8	08:01	08:37-08:46/9
7	05:01	21:31	05:42	20:52	06:32	19:47	07:21	18:38	07:15	15:56-16:00/4	08:03	08:37-08:46/9
8	05:02	21:30	05:44	20:50	06:33	19:44	07:22	18:35	07:16		08:04	08:38-08:46/8
9	05:03	21:29	05:45	20:48	06:35	19:42	07:24	18:33	07:18		08:05	08:40-08:47/7
10	05:04	21:29	05:47	20:46	06:37	19:40	07:26	18:31	07:20		08:06	08:40-08:46/6
11	05:05	21:28	05:48	20:44	06:38	19:38	07:27	18:29	07:22		08:07	08:42-08:46/4
12	05:06	21:27	05:50	20:42	06:40	19:35	07:29	18:27	07:24		08:08	08:43-08:45/2
13	05:08	21:26	05:52	20:40	06:41	19:33	07:31	18:24	07:25		08:09	15:04-15:24/20
14	05:09	21:25	05:53	20:38	06:43	19:31	07:32	18:22	07:27		08:10	15:04-15:25/21
15	05:10	21:24	05:55	20:36	06:45	19:28	07:34	18:20	07:29		08:11	15:05-15:25/20
16	05:11	21:23	05:56	20:34	06:46	19:26	07:36	18:18	07:30		08:12	15:04-15:24/20
17	05:12	21:22	05:58	20:32	06:48	19:24	07:38	18:16	07:32		08:13	15:05-15:25/20
18	05:13	21:21	06:00	20:30	06:50	19:21	07:39	18:14	07:34		08:13	15:06-15:25/19
19	05:15	21:20	06:01	20:28	06:51	19:19	07:41	18:11	07:36		08:14	15:07-15:26/19
20	05:16	21:19	06:03	20:26	06:53	19:17	07:43	18:09	07:37		08:15	15:06-15:26/20
21	05:17	21:18	06:04	20:24	06:54	19:14	07:45	18:07	07:39		08:15	15:07-15:27/20
22	05:19	21:16	06:06	20:22	06:56	19:12	07:46	18:05	07:41		08:16	15:07-15:26/19
23	05:20	21:15	06:08	20:20	06:58	19:10	07:48	18:03	07:42		08:16	15:08-15:28/20
24	05:21	21:14	06:09	20:18	06:59	19:07	07:50	18:01	07:44	08:34-08:40/6	08:17	15:09-15:28/19
25	05:23	21:12	06:11	20:16	07:01	19:05	06:52	16:59	07:45	08:34-08:41/7	08:17	15:09-15:28/19
26	05:24	21:11	06:13	20:13	07:02	19:03	06:53	16:57	07:47	08:33-08:42/9	08:18	15:09-15:29/20
27	05:26	21:10	06:14	20:11	07:04	19:00	06:55	16:55	07:49	08:33-08:43/10	08:18	15:10-15:30/20
28	05:27	21:08	06:16	20:09	07:06	18:58	06:57	16:53	07:50	08:33-08:44/11	08:18	15:11-15:31/20
29	05:28	21:07	06:17	20:07	07:07	18:56	06:59	16:51	07:52	08:33-08:44/11	08:18	15:11-15:31/20
30	05:30	21:05	06:19	20:05	07:09	18:54	07:00	16:49	07:53	08:33-08:45/12	08:18	15:12-15:32/20
31	05:31	21:03	06:21	20:03			07:02	16:48	07:52	15:52-16:04/12	08:18	15:12-15:33/21
Sonnenscheinstunden		501	453		381	332		267			245	
Anzahl Minuten mit Schatten		0	0	0	31	184	699					

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

SW25034 Salzfurtkapelle

windtest grevenbroich gmbh

Berechnet:
14.10.2025 14:35/4.1.273



Projekt:

SW25034 Salzfurkapelle

Lizenzierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

14.10.2025 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA21 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (221)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:18 16:11	07:52 08:21-08:31/10 16:59 08:51-09:07/16	06:59 17:07-17:13/6 17:50 17:17-17:24/7	06:49 19:44	05:45 20:34	05:00 21:19
2	08:18 16:13	07:50 08:16-08:31/15 17:01 08:50-09:08/18	06:57 17:16-17:26/10 17:52	06:47 19:45	05:43 20:36	04:59 21:21
3	08:18 16:14	07:49 08:15-08:32/17 17:03 08:49-09:10/21	06:55 17:16-17:26/10 17:54	06:44 19:47	05:41 20:37	04:58 21:22
4	08:18 16:15	07:47 08:14-08:32/18 17:04 08:48-09:11/23	06:53 17:16-17:30/14 17:55	06:42 19:49	05:39 20:39	04:57 21:23
5	08:18 16:16	07:46 08:13-08:31/18 17:06 08:48-09:11/23	06:50 17:16-17:31/15 17:57	06:40 19:50	05:37 20:41	04:57 21:24
6	08:17 16:17	07:44 08:13-08:30/17 17:08 08:47-09:11/24	06:48 17:17-17:32/15 17:59	06:38 19:52	05:35 20:42	04:56 21:25
7	08:17 16:18	07:42 08:14-08:24/10 17:10 08:48-09:13/25	06:46 17:22-17:32/10 18:01	06:35 19:54	05:34 20:44	04:56 21:25
8	08:17 16:20	07:41 08:10-08:23/13 17:12 08:47-09:13/26	06:44 17:23-17:32/9 18:02	06:33 19:55	05:32 20:45	04:55 21:26
9	08:16 16:21	07:39 08:08-08:21/13 17:14 08:47-09:13/26	06:41 17:23-17:29/6 18:04	06:31 19:57	05:30 20:47	04:55 21:27
10	08:16 16:22	07:37 08:07-08:18/11 17:15 08:47-09:13/26	06:39 18:06	06:29 19:59	05:28 20:49	04:54 21:28
11	08:15 16:24	07:35 08:02-08:18/16 17:17 08:47-09:12/25	06:37 18:08	06:26 20:00	05:27 20:50	04:54 21:29
12	08:14 16:25	07:33 08:00-08:19/19 17:19 08:48-09:12/24	06:35 18:09	06:24 20:02	05:25 20:52	04:53 21:29
13	08:14 16:27	07:32 07:59-08:19/20 17:21 08:48-09:11/23	06:32 18:11	06:22 20:04	05:23 20:53	04:53 21:30
14	08:13 16:28	07:30 07:58-08:18/20 17:23 08:49-09:11/22	06:30 18:13	06:20 20:06	05:22 20:55	04:53 21:31
15	08:12 16:30	07:28 07:58-08:17/19 08:50-09:09/19 17:25 07:53-07:56/3	06:28 18:15	06:18 20:07	05:20 20:56	04:53 21:31
16	08:11 16:31	07:26 07:50-08:16/26 17:27 08:51-09:08/17	06:26 18:16	06:15 20:09	05:19 20:58	04:53 21:32
17	08:11 16:33	07:24 07:48-08:09/21 17:28 08:53-09:06/13	06:23 18:18	06:13 20:11	05:17 21:00	04:53 21:32
18	08:10 16:35	07:22 07:46-08:08/22 17:30 08:57-09:02/5	06:21 18:20	06:11 20:12	05:16 21:01	04:53 21:33
19	08:09 16:36	07:20 07:44-08:05/21 17:32	06:19 18:22	06:09 20:14	05:14 21:02	04:53 21:33
20	08:08 16:38	07:18 07:44-08:04/20 17:34	06:16 18:23	06:07 20:16	05:13 21:04	04:53 21:33
21	08:07 16:40	07:16 07:44-08:04/20 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34
22	08:05 16:41	07:14 07:44-08:04/20 17:37	06:12 18:27	06:03 20:19	05:10 21:07	04:53 21:34
23	08:04 16:43	07:12 07:45-08:03/18 17:39 17:09-17:12/3	06:10 18:28	06:01 20:21	05:09 21:08	04:53 21:34
24	08:03 16:45	07:10 07:53-08:01/8 17:41 17:07-17:14/7	06:07 18:01-18:05/4 18:30	05:59 20:22	05:08 21:09	04:53 21:34
25	08:02 16:46	07:08 17:06-17:16/10 17:43	06:05 17:59-18:06/7 18:32	05:56 20:24	05:07 21:11	04:54 21:34
26	08:01 16:48	07:05 17:06-17:16/10 17:45	06:03 17:58-18:08/10 18:33	05:54 20:26	05:06 21:12	04:54 21:34
27	07:59 16:50	07:03 17:06-17:16/10 17:47	06:00 17:58-18:08/10 18:35	05:52 20:27	05:05 21:13	04:55 21:34
28	07:58 16:52	07:01 17:05-17:15/10 17:48 17:19-17:22/3	05:58 17:58-18:07/9 18:37	05:50 20:29	05:04 21:15	04:55 21:34
29	07:56 08:25-08:27/2 16:53		06:56 18:59-19:05/6 19:39	05:48 20:31	05:03 21:16	04:56 21:34
30	07:55 08:22-08:29/7 16:55 08:56-09:01/5		06:54 19:40	05:47 20:32	05:02 21:17	04:56 21:34
31	07:54 08:22-08:31/9 16:57 08:53-09:05/12		06:51 19:42		05:01 21:18	
Sonnenscheinstunden	260	278	367	416	484	498
Anzahl Minuten mit Schatten	35	844	148	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 Vorbelastung **WEA:** WEA21 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (221)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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 07:37-07:47/10 16:46 08:17-08:42/25	07:55 16:06
2	04:58 21:33	05:34 21:00	06:24 19:58	07:12 18:49	07:06 07:38-07:51/13 16:44 08:17-08:43/26	07:56 16:05
3	04:58 21:33	05:36 20:59	06:25 19:56	07:14 18:47	07:08 07:40-07:44/4 08:17-08:43/26 16:42 07:45-07:53/8	07:57 16:04
4	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:02-18:06/4 18:44	07:09 07:56-07:58/2 08:17-08:42/25 16:40 07:44-07:54/10	07:59 16:04
5	05:00 21:32	05:39 20:55	06:29 19:51	07:17 17:59-18:07/8 18:42	07:11 07:44-08:01/17 16:39 08:17-08:41/24	08:00 16:03
6	05:01 21:31	05:41 20:53	06:30 19:49	07:19 17:58-18:08/10 18:40	07:13 07:43-08:01/18 16:37 08:18-08:41/23	08:01 16:03
7	05:01 21:31	05:42 20:52	06:32 19:47	07:21 17:58-18:08/10 18:38	07:15 07:43-08:02/19 16:35 08:18-08:40/22	08:03 16:03
8	05:02 21:30	05:44 20:50	06:33 19:44	07:22 17:52-18:08/16 18:35	07:16 07:45-08:02/17 16:33 08:19-08:40/21	08:04 16:02
9	05:03 21:29	05:45 20:48	06:35 19:42	07:24 17:50-18:05/15 18:33	07:18 07:47-08:02/15 16:32 08:21-08:39/18	08:05 16:02
10	05:04 21:29	05:47 20:46	06:37 19:40	07:26 17:50-18:03/13 18:31	07:20 07:52-08:02/10 16:30 08:22-08:37/15	08:06 16:02
11	05:05 21:28	05:49 20:44	06:38 19:38	07:27 17:50-18:00/10 18:29	07:22 07:53-08:02/9 16:29 08:24-08:36/12	08:07 16:02
12	05:06 21:27	05:50 20:42	06:40 19:35	07:29 17:43-17:46/3 18:27 17:50-17:59/9	07:24 07:54-08:01/7 16:27 08:28-08:32/4	08:08 16:01
13	05:08 21:26	05:52 20:40	06:42 19:33	07:31 17:39-17:47/8 18:24 17:51-17:56/5	07:25 07:57-07:58/1 16:26	08:09 16:01
14	05:09 21:25	05:53 20:38	06:43 19:31	07:33 17:38-17:48/10 18:22	07:27 16:24	08:10 16:01
15	05:10 21:24	05:55 20:36	06:45 19:28	07:34 17:38-17:48/10 18:20	07:29 16:23	08:11 16:01
16	05:11 21:23	05:56 20:34	06:46 19:26	07:36 17:38-17:48/10 18:18	07:31 16:21	08:12 16:02
17	05:12 21:22	05:58 20:32	06:48 19:24	07:38 08:27-08:31/4 18:16 17:37-17:47/10	07:32 16:20	08:13 16:02
18	05:13 21:21	06:00 20:30	06:50 19:21	07:39 08:23-08:33/10 17:39-17:45/6 18:14 08:17-08:21/4	07:34 16:19	08:13 16:02
19	05:15 21:20	06:01 20:28	06:51 19:19	07:41 08:15-08:34/19 18:11	07:36 16:17	08:14 16:02
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 08:14-08:34/20 18:09	07:37 16:16	08:15 16:03
21	05:17 21:18	06:04 20:24	06:54 19:14	07:45 08:14-08:35/21 18:07	07:39 16:15	08:15 16:03
22	05:19 21:16	06:06 20:22	06:56 19:12	07:46 08:14-08:35/21 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 08:15-08:37/22 18:03	07:42 16:13	08:16 16:04
24	05:21 21:14	06:09 20:18	06:59 19:07	07:50 08:17-08:39/22 18:01 09:26-09:34/8	07:44 16:12	08:17 16:05
25	05:23 21:12	06:11 20:16	07:01 19:05	06:52 07:18-07:39/21 08:22-08:36/14 16:59 07:41-07:42/1	07:46 16:11	08:17 16:05
26	05:24 21:11	06:13 20:14	07:03 19:03	06:53 07:20-07:46/26 16:57 08:20-08:38/18	07:47 16:10	08:18 16:06
27	05:26 21:10	06:14 20:11	07:04 19:01	06:55 07:28-07:47/19 16:55 08:19-08:39/20	07:49 16:09	08:18 16:07
28	05:27 21:08	06:16 20:09	07:06 18:58	06:57 07:28-07:48/20 16:53 08:18-08:40/22	07:50 16:08	08:18 16:08
29	05:28 21:07	06:17 20:07	07:07 18:56	06:59 07:29-07:48/19 16:51 08:18-08:41/23	07:52 16:07	08:18 16:08
30	05:30 21:05	06:19 20:05	07:09 18:54	07:00 07:30-07:48/18 16:49 08:17-08:42/25	07:53 16:06	08:18 16:09
31	05:31 21:03	06:21 20:03		07:02 07:36-07:48/12 08:17-08:42/25 16:48 07:33-07:34/1		08:18 16:10
Sonnenscheinstunden	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	45	592	401	0

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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA22 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (222)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:18 16:11	07:52 16:59	06:59 17:50	06:49 19:44	08:03-08:32/29 20:34	05:00 21:19
2	08:18 16:13	07:50 17:01	06:57 17:52	06:47 19:45	08:03-08:31/28 20:36	04:59 21:21
3	08:18 16:14	07:49 17:03	06:55 17:54	06:44 19:47	08:04-08:30/26 20:37	04:58 21:22
4	08:18 16:15	07:47 17:04	06:53 17:55	06:42 19:49	08:05-08:29/24 20:39	04:57 21:23
5	08:18 16:16	07:46 17:06	06:50 17:57	06:40 19:50	08:05-08:26/21 20:41	04:57 21:24
6	08:17 16:17	07:44 17:08	06:48 17:59	06:38 19:52	08:07-08:24/17 20:42	04:56 21:25
7	08:17 16:18	07:42 17:10	06:46 18:01	06:35 19:54	08:10-08:21/11 20:44	04:56 21:25
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
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
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
11	08:15 16:24	07:35 17:17	06:37 18:08	06:26 20:00	19:31-19:34/3 20:50	04:54 21:29
12	08:14 16:25	07:33 17:19	06:35 18:09	06:24 20:02	19:30-19:36/6 20:52	04:53 21:29
13	08:14 16:27	07:32 17:21	06:32 18:11	06:22 20:04	19:29-19:38/9 20:53	04:53 21:30
14	08:13 16:28	07:30 17:23	06:30 18:13	06:20 20:06	19:28-19:38/10 20:55	04:53 21:31
15	08:12 16:30	07:28 17:25	06:28 18:15	06:18 20:07	19:28-19:38/10 20:57	04:53 21:31
16	08:11 16:31	07:26 17:27	06:26 18:16	06:15 20:09	19:29-19:36/7 20:58	04:53 21:32
17	08:11 16:33	07:24 17:28	06:23 18:18	06:13 20:11	19:31-19:34/3 21:00	04:53 21:32
18	08:10 16:35	07:22 17:30	06:21 18:20	06:11 20:12	06:58-07:11/13 21:01	04:52 21:33
19	08:09 16:36	07:20 17:32	06:19 18:22	06:09 20:14	06:58-07:08/10 21:02	04:53 21:33
20	08:08 16:38	07:18 17:34	06:16 18:23	06:07 20:16	07:00-07:06/6 21:04	04:53 21:33
21	08:07 16:39	07:16 17:36	06:14 18:25	06:05 20:17	07:12-07:31/19 21:05	04:53 21:34
22	08:05 16:41	07:14 17:37	06:12 18:27	06:03 20:19	07:10-07:32/22 21:07	04:53 21:34
23	08:04 16:43	07:12 17:39	06:10 18:28	06:01 20:21	07:08-07:33/25 21:08	04:53 21:34
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:22	07:07-07:34/27 21:09	04:53 21:34
25	08:02 16:46	07:08 17:43	06:05 18:32	05:56 20:24	07:05-07:34/29 21:11	04:54 21:34
26	08:01 16:48	07:05 17:45	06:03 18:33	05:54 20:26	07:05-07:34/29 21:12	04:54 21:34
27	07:59 16:50	07:03 17:47	06:00 18:35	05:52 20:27	07:04-07:35/31 21:13	04:55 21:34
28	07:58 16:52	07:01 17:48	05:58 18:37	05:50 20:29	07:04-07:35/31 21:15	04:55 21:34
29	07:56 16:53		06:56 19:39	05:48 20:31	08:03-08:34/31 21:16	04:56 21:34
30	07:55 16:55		06:54 19:40	05:47 20:32	08:03-08:34/31 21:17	04:56 21:34
31	07:54 16:57		06:51 19:42		08:03-08:33/30 21:18	
Sonnenscheinstunden	260	278	367	416	484	498
Anzahl Minuten mit Schatten	0	122	707	204	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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA22 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (222)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli		August		September		Oktober		November		Dezember
1	04:57	21:33	05:33	21:02	06:22	19:30-19:33/3	07:11	07:41-07:55/14	07:04	16:06	07:55
2	04:57	21:33	05:34	21:00	06:24	19:58	07:12	07:42-07:59/17	07:06	16:05	07:56
3	04:58	21:33	05:36	20:59	06:25	19:56	07:14	07:41-08:05/24	07:08	16:04	07:57
4	04:59	21:32	05:38	20:57	06:27	19:54	07:16	07:41-08:07/26	07:09	16:04	07:59
5	05:00	21:32	05:39	20:55	06:29	08:06-08:17/11	07:17	07:43-08:08/25	07:11	16:03	08:00
6	05:01	21:31	05:41	20:53	06:30	08:03-08:20/17	07:19	07:44-08:08/24	07:13	16:03	08:01
7	05:01	21:31	05:42	20:52	06:32	08:00-08:21/21	07:21	07:46-08:08/22	07:15	16:03	08:03
8	05:02	21:30	05:44	20:50	06:33	07:59-08:23/24	07:22	07:48-08:08/20	07:17	16:02	08:04
9	05:03	21:29	05:45	20:48	06:35	07:58-08:24/26	07:24	07:51-08:07/16	07:18	16:02	08:05
10	05:04	21:29	05:47	20:46	06:37	07:56-08:24/28	07:26	07:55-08:06/11	07:20	16:02	08:06
11	05:05	21:28	05:48	20:44	06:38	07:56-08:25/29	07:27	07:57-08:04/7	07:22	16:02	08:07
12	05:06	21:27	05:50	20:42	06:40	07:55-08:25/30	07:29		07:24	16:01	08:08
13	05:08	21:26	05:52	20:40	06:42	07:54-08:25/31	07:31		07:25	16:01	08:09
14	05:09	21:25	05:53	20:38	06:43	07:53-08:24/31	07:33		07:27	16:01	08:10
15	05:10	21:24	05:55	20:36	06:45	07:53-08:24/31	07:34	08:10-08:18/8	07:29	16:01	08:11
16	05:11	21:23	05:56	20:34	06:46	07:54-08:24/30	07:36	08:09-08:23/14	07:31	16:02	08:12
17	05:12	21:22	05:58	20:32	06:48	07:53-08:23/30	07:38	08:08-08:25/17	07:32	16:02	08:13
18	05:13	21:21	06:00	20:30	06:50	07:54-08:22/28	07:39	08:07-08:25/18	07:34	16:02	08:14
19	05:15	21:20	06:01	20:28	06:51	07:53-08:21/28	07:41	08:07-08:26/19	07:36	16:02	08:14
20	05:16	21:19	06:03	20:26	06:53	07:54-08:20/26	07:43	08:09-08:26/17	07:37	16:03	08:15
21	05:17	21:18	06:04	20:24	06:54	07:55-08:18/23	07:45	08:11-08:26/15	07:39	16:03	08:15
22	05:19	21:16	06:06	20:22	06:56	07:56-08:16/20	07:46	08:15-08:25/10	07:41	16:04	08:16
23	05:20	21:15	06:08	20:20	06:58	07:45-07:50/5	07:48	08:17-08:23/6	07:42	16:04	08:17
24	05:21	21:14	06:09	20:18	06:59	07:42-07:52/10	07:50		07:44	16:05	08:17
25	05:23	21:12	06:11	20:16	07:01	07:41-07:53/12	06:52		07:46	16:05	08:17
26	05:24	21:11	06:13	20:14	07:03	07:40-07:54/14	06:53		07:47	16:06	08:18
27	05:26	21:10	06:14	20:11	07:04	07:39-07:53/14	06:55		07:49	16:07	08:18
28	05:27	21:08	06:16	20:09	07:06	07:39-07:53/14	06:57		07:50	16:08	08:18
29	05:28	21:07	06:17	20:07	07:07	07:38-07:51/13	06:59		07:52	16:08	08:18
30	05:30	21:05	06:19	20:05	07:09	07:39-07:54/15	07:00		07:53	16:09	08:18
31	05:31	21:03	06:21	20:03			16:49		16:06	16:09	
Sonnenscheinstunden		501	453		381		332		267	245	
Anzahl Minuten mit Schatten		0	44		684		330		0	0	

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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA23 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (223)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:18 16:11	07:52 16:59	06:59 17:50	06:49 19:44	05:45 20:34	05:00 21:19
2	08:18 16:12	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:21
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
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
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
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
7	08:17 16:18	07:42 17:10	06:46 18:01	06:35 19:54	05:34 20:44	04:55 21:25
8	08:17 16:20	07:41 17:12	06:44 18:02	06:33 19:55	05:32 20:45	04:55 21:26
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
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
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
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
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
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
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
16	08:11 16:31	07:26 17:26	06:26 18:16	06:15 20:09	05:19 20:58	04:53 21:32
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
18	08:10 16:35	07:22 17:30	06:21 18:20	06:11 20:12	05:16 21:01	04:52 21:33
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
20	08:08 16:38	07:18 17:34	06:16 18:23	06:07 20:16	05:13 21:04	04:53 21:33
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
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
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
24	08:03 16:45	07:10 17:41	06:08 18:30	05:58 20:22	05:08 21:09	04:53 21:34
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
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
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
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
29	07:56 16:53		05:56 19:38	05:48 20:31	05:02 21:16	04:56 21:34
30	07:55 16:55		05:53 19:40	05:47 20:32	05:02 21:17	04:56 21:34
31	07:54 16:57		05:51 19:42		05:01 21:18	
Sonnenscheinstunden	260	278	367	416	484	498
Anzahl Minuten mit Schatten	0	0	93	517	125	0

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

SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA23 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (223)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober	November	Dezember
1	04:57 21:33	05:33 20:12-20:25/13 21:02	06:22 19:05-19:27/22 20:00	07:11 18:51	07:04 16:46	07:55 16:06
2	04:57 21:33	05:34 20:13-20:26/13 21:00	06:24 19:05-19:26/21 19:58	07:12 18:49	07:06 16:44	07:56 16:05
3	04:58 21:33	05:36 20:13-20:25/12 20:59	06:25 18:56-19:03/7 19:56 19:05-19:22/17	07:14 18:47	07:08 16:42	07:57 16:04
4	04:59 21:32	05:38 20:14-20:25/11 20:57	06:27 18:54-19:19/25 19:54	07:16 18:44	07:09 16:40	07:59 16:04
5	05:00 21:32	05:39 20:14-20:23/9 20:55	06:29 18:52-19:17/25 19:51	07:17 18:42	07:11 16:38	08:00 16:03
6	05:01 21:31	05:41 20:17-20:22/5 20:53	06:30 18:51-19:06/15 19:49 19:07-19:15/8	07:19 18:40	07:13 16:37	08:01 16:03
7	05:01 21:31	05:42 20:52	06:32 18:50-19:05/15 19:47	07:21 18:38	07:15 16:35	08:03 16:03
8	05:02 21:30	05:44 20:50	06:33 18:50-19:05/15 19:44	07:22 18:35	07:16 16:33	08:04 16:02
9	05:03 21:29	05:45 20:48	06:35 07:12-07:18/6 19:42 18:49-19:04/15	07:24 18:33	07:18 16:32	08:05 16:02
10	05:04 21:29	05:47 20:46	06:37 07:10-07:18/8 19:40 18:50-19:04/14	07:26 18:31	07:20 16:30	08:06 16:02
11	05:05 21:28	05:48 20:44	06:38 07:09-07:19/10 19:38 18:51-19:03/12	07:27 18:29	07:22 16:29	08:07 16:02
12	05:06 21:27	05:50 20:42	06:40 07:08-07:19/11 19:35 18:52-19:00/8	07:29 18:27	07:24 16:27	08:08 16:01
13	05:07 21:26	05:52 20:40	06:41 07:08-07:18/10 19:33	07:31 18:24	07:25 16:26	08:09 16:01
14	05:09 21:25	05:53 20:38	06:43 07:08-07:17/9 19:31	07:33 18:22	07:27 16:24	08:10 16:01
15	05:10 21:24	05:55 20:36	06:45 07:10-07:15/5 19:28	07:34 18:20	07:29 16:23	08:11 16:01
16	05:11 21:23	05:56 20:34	06:46 19:26	07:36 18:18	07:31 16:21	08:12 16:02
17	05:12 21:22	05:58 20:32	06:48 07:25-07:29/4 19:24	07:38 18:16	07:32 16:20	08:13 16:02
18	05:13 21:21	06:00 20:30	06:50 07:23-07:31/8 19:21	07:39 18:14	07:34 16:19	08:13 16:02
19	05:15 21:20	06:01 07:01-07:10/9 20:28	06:51 07:21-07:31/10 19:19	07:41 18:11	07:36 16:17	08:14 16:02
20	05:16 21:19	06:03 06:59-07:12/13 20:26	06:53 07:21-07:31/10 19:17	07:43 18:09	07:37 16:16	08:15 16:03
21	05:17 21:18	06:04 06:57-07:12/15 20:24	06:54 07:20-07:30/10 19:14	07:45 18:07	07:39 16:15	08:15 16:03
22	05:19 21:16	06:06 06:57-07:13/16 20:22	06:56 07:21-07:30/9 19:12	07:46 18:05	07:41 16:14	08:16 16:04
23	05:20 21:15	06:08 06:56-07:13/17 20:20	06:58 07:23-07:28/5 19:10	07:48 18:03	07:42 16:13	08:16 16:04
24	05:21 21:14	06:09 06:56-07:13/17 20:18	06:59 19:07	07:50 18:01	07:44 16:12	08:17 16:05
25	05:23 20:19-20:20/1 21:12	06:11 06:55-07:13/18 20:16 19:19-19:27/8	07:01 19:05	06:52 16:59	07:46 16:11	08:17 16:05
26	05:24 20:16-20:23/7 21:11	06:13 06:55-07:13/18 20:14 19:18-19:28/10	07:03 19:03	06:53 16:57	07:47 16:10	08:18 16:06
27	05:26 20:15-20:24/9 21:10	06:14 06:56-07:12/16 20:11 19:16-19:29/13	07:04 19:01	06:55 16:55	07:49 16:09	08:18 16:07
28	05:27 20:14-20:25/11 21:08	06:16 06:56-07:11/15 20:09 19:13-19:29/16	07:06 18:58	06:57 16:53	07:50 16:08	08:18 16:07
29	05:28 20:13-20:25/12 21:07	06:17 06:57-07:10/13 20:07 19:09-19:29/20	07:07 18:56	06:59 16:51	07:52 16:07	08:18 16:08
30	05:30 20:13-20:26/13 21:05	06:19 06:58-07:07/9 20:05 19:07-19:29/22	07:09 18:54	07:00 16:49	07:53 16:06	08:18 16:09
31	05:31 20:13-20:26/13 21:03	06:21 19:07-19:28/21 20:03		07:02 16:47		08:18 16:10
Sonnenscheinstunden	501	453	381	332	267	245
Anzahl Minuten mit Schatten	66	349	334	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 Vorbelastung **WEA:** WEA24 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (224)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:18 16:11	07:52 16:59	06:59 16:49-17:07/18 17:50	06:49 19:44	05:45 20:34	05:00 21:19
2	08:18 16:12	07:50 17:01	06:57 16:49-17:07/18 17:52 17:09-17:13/4	06:47 19:45	05:43 20:36	04:59 21:20
3	08:18 16:14	07:49 17:03	06:55 16:50-17:16/26 17:54	06:44 19:47	05:41 20:37	04:58 21:22
4	08:18 16:15	07:47 17:04	06:53 16:50-17:18/28 17:55	06:42 19:49	05:39 20:39	04:57 21:23
5	08:18 16:16	07:46 17:06	06:50 07:19-07:26/7 17:57 16:50-17:18/28	06:40 19:50	05:37 20:41	04:57 21:24
6	08:17 16:17	07:44 17:08	06:48 07:17-07:27/10 17:59 16:51-17:18/27	06:38 19:12-19:15/3 19:52 19:07-19:11/4	05:35 20:42	04:56 21:25
7	08:17 16:18	07:42 17:10	06:46 07:16-07:29/13 18:01 16:54-17:19/25	06:35 19:15-19:18/3 19:54 19:05-19:14/9	05:34 20:44	04:56 21:25
8	08:17 16:20	07:41 17:12	06:44 07:16-07:29/13 18:02 17:02-17:19/17	06:33 19:14-19:19/5 19:04-19:06/2 19:55 19:07-19:13/6	05:32 20:45	04:55 21:26
9	08:16 16:21	07:39 17:14	06:41 07:15-07:28/13 18:04 17:01-17:17/16	06:31 19:12-19:18/6 19:57 19:02-19:10/8	05:30 20:47	04:54 21:27
10	08:16 16:22	07:37 17:15	06:39 07:15-07:28/13 18:06 17:02-17:17/15	06:29 19:10-19:18/8 19:59 19:02-19:09/7	05:28 20:49	04:54 21:28
11	08:15 16:24	07:35 17:17	06:37 07:16-07:27/11 18:08 17:03-17:16/13	06:26 19:09-19:18/9 19:02-19:04/2 20:00 19:05-19:07/2	05:27 20:50	04:54 21:29
12	08:14 16:25	07:33 17:19	06:35 07:16-07:25/9 18:09 17:04-17:13/9	06:24 19:08-19:18/10 20:02 19:02-19:06/4	05:25 20:52	04:53 21:29
13	08:14 16:27	07:31 17:21	06:32 07:19-07:22/3 18:11	06:22 19:07-19:17/10 20:04 19:02-19:05/3	05:23 20:53	04:53 21:30
14	08:13 16:28	07:30 17:23	06:30 18:13	06:20 19:04-19:15/11 20:06 19:02-19:03/1	05:22 20:55	04:53 21:31
15	08:12 16:30	07:28 17:25	06:28 18:15	06:18 19:03-19:14/11 20:07	05:20 20:56	04:53 21:31
16	08:11 16:31	07:26 16:36-16:45/9 17:26	06:26 18:16	06:15 19:05-19:11/6 20:09	05:19 20:58	04:53 21:32
17	08:10 16:33	07:24 16:34-16:47/13 17:28	06:23 18:18	06:13 20:11	05:17 20:59	04:52 21:32
18	08:10 16:35	07:22 16:33-16:48/15 17:30	06:21 18:20	06:11 20:12	05:16 21:01	04:52 21:33
19	08:09 16:36	07:20 16:32-16:49/17 17:32	06:19 18:21	06:09 20:14	05:14 21:02	04:52 21:33
20	08:08 16:38	07:18 16:31-16:49/18 17:34	06:16 18:23	06:07 20:16	05:13 21:04	04:53 21:33
21	08:06 16:39	07:16 16:31-16:49/18 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34
22	08:05 16:41	07:14 16:31-16:49/18 17:37	06:12 18:27	06:03 20:19	05:10 21:07	04:53 21:34
23	08:04 16:43	07:12 16:31-16:48/17 17:39	06:10 18:28	06:01 20:21	05:09 21:08	04:53 21:34
24	08:03 16:45	07:10 16:31-16:48/17 17:41	06:07 18:30	05:58 20:22	05:08 21:09	04:53 21:34
25	08:02 16:46	07:08 16:32-16:47/15 17:43 16:54-17:03/9	06:05 18:32	05:56 20:24	05:07 21:11	04:54 21:34
26	08:00 16:48	07:05 16:34-16:46/12 17:45 16:52-17:05/13	06:03 18:33	05:54 20:26	05:06 21:12	04:54 21:34
27	07:59 16:50	07:03 16:36-16:43/7 17:46 16:51-17:07/16	06:00 18:35	05:52 20:27	05:05 21:13	04:55 21:34
28	07:58 16:52	07:01 16:50-17:06/16 17:48	05:58 18:37	05:50 20:29	05:03 21:15	04:55 21:34
29	07:56 16:53		06:56 19:38	05:48 20:31	05:02 21:16	04:56 21:34
30	07:55 16:55		06:53 19:40	05:46 20:32	05:02 21:17	04:56 21:34
31	07:53 16:57		06:51 19:42		05:01 21:18	
Sonnenscheinstunden	260	278	367	416	484	498
Anzahl Minuten mit Schatten	0	230	336	130	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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA24 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (224)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	July	August	September	Oktober	November	Dezember
1	04:57 21:33	05:33 21:02	06:22 19:08-19:17/9 20:00 19:04-19:06/2	07:11 07:57-08:04/7 18:51 17:45-17:52/7	07:04 16:46	07:55 16:06
2	04:57 21:33	05:34 21:00	06:24 19:09-19:17/8 19:58 19:01-19:08/7	07:12 07:54-08:05/11 18:49 17:41-17:53/12	07:06 16:44	07:56 16:05
3	04:58 21:33	05:36 20:59	06:25 19:10-19:16/6 19:56 19:00-19:08/8	07:14 07:53-08:06/13 18:47 17:40-17:54/14	07:08 16:42	07:57 16:04
4	04:59 21:32	05:38 20:57	06:27 19:11-19:16/5 19:54 19:04-19:10/6	07:16 07:53-08:06/13 18:44 17:39-17:55/16	07:09 16:40	07:59 16:04
5	05:00 21:32	05:39 20:55	06:29 19:11-19:14/3 19:51 19:01-19:10/9	07:17 07:53-08:06/13 18:42 17:38-17:54/16	07:11 16:38	08:00 16:03
6	05:01 21:31	05:41 20:53	06:30 19:08-19:11/3 19:49 19:03-19:07/4	07:19 07:52-08:05/13 18:40 17:32-17:35/3	07:13 16:37	08:01 16:03
7	05:01 21:31	05:42 20:52	06:32 19:06-19:07/1 19:47	07:21 07:53-08:04/11 18:38 17:28-17:54/26	07:15 16:35	08:03 16:03
8	05:02 21:30	05:44 20:50	06:33 19:44	07:22 07:54-08:03/9 18:35 17:27-17:54/27	07:16 16:33	08:04 16:02
9	05:03 21:29	05:45 20:48	06:35 19:42	07:24 07:56-07:59/3 18:33 17:25-17:52/27	07:18 16:32	08:05 16:02
10	05:04 21:29	05:47 20:46	06:37 19:40	07:26 17:24-17:51/27 18:31	07:20 16:30	08:06 16:02
11	05:05 21:28	05:48 20:44	06:38 19:38	07:27 17:23-17:49/26 18:29	07:22 16:29	08:07 16:02
12	05:06 21:27	05:50 20:42	06:40 19:35	07:29 17:23-17:41/18 18:27	07:24 16:27	08:08 16:01
13	05:07 21:26	05:52 20:40	06:41 19:33	07:31 17:23-17:40/17 18:24	07:25 16:26	08:09 16:01
14	05:09 21:25	05:53 20:38	06:43 19:31	07:32 17:23-17:39/16 18:22	07:27 16:24	08:10 16:01
15	05:10 21:24	05:55 20:36	06:45 19:28	07:34 17:07-17:17/10 18:20 17:24-17:38/14	07:29 16:23	08:11 16:01
16	05:11 21:23	05:56 20:34	06:46 19:26	07:36 17:05-17:18/13 18:18 17:25-17:37/12	07:30 16:21	08:12 16:02
17	05:12 21:22	05:58 20:32	06:48 19:24	07:38 17:03-17:19/16 18:16 17:26-17:34/8	07:32 16:20	08:13 16:02
18	05:13 21:21	06:00 20:30	06:50 19:21	07:39 17:02-17:19/17 18:14	07:34 16:19	08:13 16:02
19	05:15 21:20	06:01 20:28	06:51 19:19	07:41 17:02-17:20/18 18:11	07:36 16:17	08:14 16:02
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 17:02-17:20/18 18:09	07:37 16:16	08:15 16:03
21	05:17 21:18	06:04 20:24	06:54 19:14	07:45 17:02-17:20/18 18:07	07:39 16:15	08:15 16:03
22	05:19 21:16	06:06 20:22	06:56 19:12	07:46 17:02-17:19/17 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 17:03-17:19/16 18:03	07:42 16:13	08:16 16:04
24	05:21 21:14	06:09 20:18	06:59 19:07	07:50 17:02-17:17/15 18:01	07:44 16:12	08:17 16:05
25	05:23 21:12	06:11 20:16	07:01 19:05	06:52 16:04-16:16/12 16:59	07:45 16:11	08:17 16:05
26	05:24 21:11	06:13 20:13	07:02 19:03	06:53 16:06-16:13/7 16:57	07:47 16:10	08:18 16:06
27	05:26 21:10	06:14 19:07-19:14/7 20:11	07:04 19:00	06:55 16:55	07:49 16:09	08:18 16:07
28	05:27 21:08	06:16 19:05-19:16/11 20:09	07:06 18:58	06:57 16:53	07:50 16:08	08:18 16:07
29	05:28 21:07	06:17 19:05-19:16/11 20:07	07:07 18:56	06:59 16:51	07:52 16:07	08:18 16:08
30	05:30 21:05	06:19 19:07-19:17/10 20:05	07:09 18:54	07:00 16:49	07:53 16:06	08:18 16:09
31	05:31 21:03	06:21 19:08-19:18/10 20:03	19:02-19:03/1 19:04-19:06/2	07:02 16:47		08:18 16:10
Sonnenscheinstunden	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	55	75	574	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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung WEA: WEA25 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (225)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember	
1	08:18 16:11	07:52 15:54-16:09/15 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 15:23-15:42/19 16:46	07:55 16:06	
2	08:18 16:12	07:50 15:53-16:10/17 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 15:23-15:42/19 16:44	07:56 16:05	
3	08:18 16:14	07:49 15:53-16:11/18 17:03	06:55 17:54	06:44 19:47	05:41 20:37	04:58 21:22	04:58 21:33	05:36 20:58	06:25 19:56	07:14 18:47	07:08 15:21-15:42/21 16:42	07:57 16:04	
4	08:18 16:15	07:47 15:52-16:12/20 17:04	06:52 17:55	06:42 19:49	05:39 20:39	04:57 21:23	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:44	07:09 15:21-15:42/21 16:40	07:59 16:04	
5	08:18 16:16	07:46 15:52-16:12/20 17:06	06:50 17:57	06:40 19:50	05:37 20:41	04:57 21:24	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 15:21-15:42/21 16:38	08:00 16:03	
6	08:17 16:17	07:44 15:52-16:12/20 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 18:37	07:13 15:22-15:42/20 16:37	08:01 16:03	
7	08:17 16:18	07:42 15:52-16:12/20 17:10	06:46 18:04	06:35 19:54	05:34 20:44	04:56 21:25	05:01 21:31	05:42 20:52	06:32 19:48	07:21 18:38	07:15 15:22-15:42/20 16:35	08:03 16:04	
8	08:17 16:20	07:40 15:53-16:13/20 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 15:23-15:41/18 16:33	08:04 16:02	
9	08:16 16:21	07:39 15:53-16:12/19 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 15:24-15:41/17 16:32	08:05 16:02	
10	08:16 16:22	07:37 15:54-16:12/18 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 15:25-15:40/15 16:30	08:06 16:02	
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12	08:14 16:25	07:33 15:56-16:10/14 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 15:28-15:37/9 16:27	08:08 16:01	
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14	08:13 16:28	07:30 16:01-16:04/3 17:23	06:30 18:13	06:20 20:05	05:22 20:55	04:53 21:31	05:09 21:25	05:53 20:38	06:43 19:31	07:32 18:22	08:10 14:34-14:40/6 16:24	14:34-14:40/6 16:01	
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	18:20 16:23	07:29 14:34-14:41/7 16:29	14:34-14:41/7 16:01	
16	08:11 16:31	07:26 17:26	06:26 18:16	06:15 20:09	05:19 20:58	04:53 21:32	05:11 21:23	05:56 20:34	06:46 19:26	07:36 18:18	08:12 14:33-14:41/8 16:21	14:33-14:41/8 16:02	
17	08:10 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 20:59	04:52 21:32	05:12 21:22	05:58 20:32	06:48 19:24	07:38 18:16	08:13 14:34-14:42/8 16:20	14:34-14:42/8 16:02	
18	08:10 16:35	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 18:14	08:13 14:34-14:43/9 16:19	14:34-14:43/9 16:02	
19	08:09 16:36	07:20 17:32	06:19 18:21	06:09 20:14	05:14 21:02	04:53 21:33	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:11	08:14 14:35-14:44/9 16:17	14:35-14:44/9 16:02	
20	08:08 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	08:15 14:35-14:44/9 16:16	14:35-14:44/9 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	07:45 18:07	08:15 14:36-14:45/9 16:15	14:36-14:45/9 16:03	
22	08:05 16:41	07:14 17:37	06:12 18:27	06:03 20:16	05:10 21:07	04:53 21:31	05:19 21:22	06:06 20:36	06:56 19:12	07:46 18:05	08:16 14:36-14:45/9 16:14	14:36-14:45/9 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	08:16 14:37-14:46/9 16:13	14:37-14:46/9 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	08:17 14:37-14:46/9 16:12	14:37-14:46/9 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	08:17 14:37-14:46/9 16:11	14:37-14:46/9 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	08:18 14:38-14:46/8 16:10	14:38-14:46/8 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 21:10	06:14 20:11	07:04 19:00	06:55 16:55	08:18 14:39-14:47/8 16:09	14:39-14:47/8 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	15:29-15:35/6 16:53	08:18 14:40-14:47/7 16:08	14:40-14:47/7 16:07	
29	07:56 16:53	 17:46	07:56 18:37	05:48 20:29	05:02 21:16	04:56 21:34	05:28 21:07	06:17 20:07	07:07 18:56	15:26-15:38/12 16:51	08:18 14:41-14:47/6 16:07	14:41-14:47/6 16:08	
30	07:55 16:55	15:56-16:05/9 17:46	07:55 18:37	05:46 20:32	05:19 21:17	04:56 21:33	05:19 21:05	07:09 20:05	16:51 18:54	15:25-15:40/15 16:49	08:18 14:42-14:47/5 16:06	14:42-14:47/5 16:09	
31	07:53 16:57	15:55-16:08/13 17:48	07:53 19:42	05:51 21:18	05:01 21:18	05:31 21:18	06:21 21:03	16:47 20:02	16:47 20:02	15:24-15:41/17 16:47	08:18 16:10	14:42-14:47/5 16:10	
	Sonnenscheinstunden Anzahl Minuten mit Schatten	260 22	278 232	367 0	416 0	484 0	498 0	501 0	453 0	381 0	332 50	267 213	245 138

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 Vorbelastung **WEA:** WEA26 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (226)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:18 15:01-15:18/17 16:11	07:52 15:46-16:01/15 16:59	06:59 16:58-17:10/12 17:50	06:49 19:44 20:34	05:45 20:34 21:19	05:00 21:19
2	08:18 15:02-15:18/16 16:12	07:50 15:47-16:00/13 17:01	06:57 16:56-17:11/15 17:52	06:47 19:45 20:36	05:43 20:36 21:20	04:59 21:20
3	08:18 15:03-15:19/16 16:14	07:49 15:49-16:00/11 17:03	06:55 16:55-17:12/17 17:54	06:44 19:47 20:37	05:41 20:37 21:22	04:58 21:22
4	08:18 15:03-15:20/17 16:15	07:47 15:51-15:58/7 17:04	06:52 16:55-17:13/18 17:55	06:42 19:49 20:39	05:39 20:39 21:23	04:57 21:23
5	08:18 15:03-15:20/17 16:16	07:46 17:06 17:06	06:50 16:54-17:12/18 17:57	06:40 19:50 20:41	05:37 20:41 21:24	04:57 21:24
6	08:17 15:04-15:21/17 16:17	07:44 17:08 17:08	06:48 16:54-17:12/18 17:59	06:38 19:52 20:42	05:35 20:42 21:25	04:56 21:25
7	08:17 15:04-15:21/17 16:18	07:42 17:10 17:10	06:46 16:54-17:12/18 18:01	06:35 19:54 20:44	05:34 20:44 21:25	04:56 21:25
8	08:17 15:05-15:22/17 16:20	07:41 17:12 17:12	06:44 16:55-17:12/17 18:02	06:33 19:55 20:45	05:32 20:45 21:26	04:55 21:26
9	08:16 15:05-15:22/17 16:21	07:39 17:14 17:14	06:41 16:55-17:10/15 18:04	06:31 19:57 20:47	05:30 20:47 21:27	04:54 21:27
10	08:16 15:05-15:22/17 16:22	07:37 17:15 17:15	06:39 16:56-17:08/12 18:06	06:29 19:59 20:49	05:28 20:49 21:28	04:54 21:28
11	08:15 15:06-15:22/16 16:24	07:35 08:01-08:06/5 17:17	06:37 16:59-17:06/7 18:08	06:26 20:00 20:50	05:27 20:50 21:29	04:54 21:29
12	08:14 15:07-15:23/16 16:25	07:33 07:59-08:08/9 17:19	06:35 18:09 18:09	06:24 20:02 20:52	05:25 20:52 21:29	04:53 21:29
13	08:14 15:08-15:23/15 16:27	07:31 07:59-08:09/10 17:21	06:32 18:11 18:11	06:22 20:04 20:53	05:23 20:53 21:30	04:53 21:30
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15	08:12 15:09-15:22/13 16:30	07:28 07:58-08:09/11 17:25	06:28 18:15 18:15	06:18 20:07 20:56	05:20 20:56 21:31	04:53 21:31
16	08:11 15:10-15:22/12 16:31	07:26 07:58-08:09/11 17:26	06:26 18:16 18:16	06:15 20:09 20:58	05:19 20:58 21:32	04:53 21:32
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18	08:10 15:14-15:20/6 16:35	07:22 08:00-08:07/7 17:30	06:21 18:20 18:20	06:11 20:12 21:01	05:16 21:01 21:33	04:52 21:33
19	08:09 15:29-15:46/17 16:36	07:20 17:32 17:32	06:19 18:21 18:21	06:09 20:14 21:02	05:14 21:02 21:33	04:53 21:33
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21	08:06 15:29-15:46/17 16:39	07:16 17:36 17:36	06:14 18:25 18:25	06:05 20:17 21:05	05:12 21:05 21:33	04:53 21:33
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23	08:04 15:30-15:58/28 16:43	07:12 17:39 17:39	06:10 18:28 18:28	06:01 20:21 21:08	05:09 21:08 21:34	04:53 21:34
24	08:03 15:30-15:59/29 16:45	07:10 17:41 17:41	06:07 18:30 18:30	05:58 20:22 21:09	05:08 21:09 21:34	04:53 21:34
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28	07:58 15:35-15:43/8 16:52	07:01 17:00-17:07/7 17:48	05:58 18:37 18:37	05:50 20:29 21:15	05:03 21:15 21:34	04:55 21:34
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30	07:55 15:45-16:01/16 16:55		06:53 19:40 19:40	05:47 20:32 21:17	05:02 21:17 21:34	04:56 21:34
31	07:53 15:46-16:02/16 16:57		06:51 19:42 19:42		05:01 21:18 21:18	
Sonnenscheinstunden	260	278	367	416	484	498
Anzahl Minuten mit Schatten	669	126	167	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 Vorbelastung **WEA:** WEA26 - ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (226)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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 14:48-15:04/16 16:06 15:13-15:19/6
2	04:57 21:33	05:34 21:00	06:24 19:58	07:12 17:39-17:42/3 18:49	07:06 16:44	07:56 14:48-15:05/17 16:05
3	04:58 21:33	05:36 20:59	06:25 19:56	07:14 17:35-17:45/10 18:47	07:08 16:42	07:57 14:48-15:05/17 16:04
4	04:59 21:32	05:38 20:57	06:27 19:54	07:16 17:33-17:47/14 18:44	07:09 16:40	07:59 14:49-15:06/17 16:04
5	05:00 21:32	05:39 20:55	06:29 19:51	07:17 17:31-17:47/16 18:42	07:11 16:38	08:00 14:49-15:06/17 16:03
6	05:01 21:31	05:41 20:53	06:30 19:49	07:19 17:30-17:48/18 18:40	07:13 16:37	08:01 14:50-15:07/17 16:03
7	05:01 21:31	05:42 20:52	06:32 19:47	07:21 17:30-17:48/18 18:38	07:15 15:21-15:28/7 16:35	08:03 14:50-15:07/17 16:03
8	05:02 21:30	05:44 20:50	06:33 19:44	07:22 17:30-17:48/18 18:35	07:16 15:19-15:30/11 16:33	08:04 14:50-15:07/17 16:02
9	05:03 21:29	05:45 20:48	06:35 19:42	07:24 17:29-17:47/18 18:33	07:18 15:18-15:31/13 16:32	08:05 14:51-15:07/16 16:02
10	05:04 21:29	05:47 20:46	06:37 19:40	07:26 17:29-17:47/18 18:31	07:20 15:17-15:32/15 16:30	08:06 14:52-15:08/16 16:02
11	05:05 21:28	05:48 20:44	06:38 19:38	07:27 17:30-17:46/16 18:29	07:22 15:17-15:33/16 16:29	08:07 14:52-15:09/17 16:02
12	05:06 21:27	05:50 20:42	06:40 19:35	07:29 17:31-17:45/14 18:27	07:24 15:17-15:33/16 16:27	08:08 14:53-15:09/16 16:01
13	05:07 21:26	05:52 20:40	06:41 19:33	07:31 17:32-17:42/10 18:24	07:25 15:10-15:13/3 16:26	08:09 14:53-15:09/16 16:01
14	05:09 21:25	05:53 20:38	06:43 19:31	07:32 17:36-17:38/2 18:22	07:27 15:07-15:16/9 16:24	08:10 14:54-15:10/16 16:01
15	05:10 21:24	05:55 20:36	06:45 19:28	07:34 18:20	07:29 15:06-15:34/28 16:23	08:11 14:55-15:10/15 16:01
16	05:11 21:23	05:56 20:34	06:46 19:26	07:36 18:18	07:30 15:05-15:33/28 16:21	08:12 14:54-15:10/16 16:02
17	05:12 21:22	05:58 20:32	06:48 19:24	07:38 18:16	07:32 15:04-15:33/29 16:20	08:13 14:55-15:10/15 16:02
18	05:13 21:21	06:00 20:30	06:50 19:21	07:39 18:14	07:34 15:04-15:33/29 16:19	08:13 14:56-15:11/15 16:02
19	05:15 21:20	06:01 20:28	06:51 19:19	07:41 18:11	07:36 15:04-15:32/28 16:17	08:14 14:57-15:12/15 16:02
20	05:16 21:19	06:03 20:26	06:53 19:17	07:43 18:09	07:37 15:04-15:32/28 16:16	08:15 14:57-15:11/14 16:03
21	05:17 21:18	06:04 20:24	06:54 19:14	07:45 18:07	07:39 15:05-15:22/17 16:15	08:15 14:58-15:12/14 16:03
22	05:19 21:16	06:06 20:22	06:56 19:12	07:46 18:05	07:41 15:04-15:21/17 16:14	08:16 14:58-15:12/14 16:04
23	05:20 21:15	06:08 20:20	06:58 19:10	07:48 08:33-08:35/2 18:03	07:42 15:05-15:22/17 16:13	08:16 14:59-15:13/14 16:04
24	05:21 21:14	06:09 20:18	06:59 19:07	07:50 08:30-08:38/8 18:01	07:44 14:51-14:57/6 16:12	08:17 14:59-15:13/14 16:05
25	05:23 21:12	06:11 20:16	07:01 19:05	06:52 07:28-07:38/10 16:59	07:45 14:50-14:59/9 16:11	08:17 14:59-15:14/15 16:05
26	05:24 21:11	06:13 20:13	07:02 19:03	06:53 07:28-07:39/11 16:57	07:47 14:48-15:00/12 16:10	08:18 15:00-15:15/15 16:06
27	05:26 21:10	06:14 20:11	07:04 19:00	06:55 07:27-07:39/12 16:55	07:49 14:48-15:01/13 16:09	08:18 15:00-15:15/15 16:07
28	05:27 21:08	06:16 20:09	07:06 18:58	06:57 07:28-07:39/11 16:53	07:50 14:48-15:03/15 16:08	08:18 15:01-15:16/15 16:07
29	05:28 21:07	06:17 20:07	07:07 18:56	06:59 07:28-07:38/10 16:51	07:52 14:48-15:03/15 16:07	08:18 15:01-15:16/15 16:08
30	05:30 21:05	06:19 20:05	07:09 18:54	07:00 07:29-07:37/8 16:49	07:53 14:48-15:04/16 16:06	08:18 15:01-15:17/16 16:09
31	05:31 21:03	06:21 20:03		07:02 07:32-07:35/3 16:47		08:18 15:02-15:18/16 16:10
Sonnenscheinstunden	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	0	250	530	491

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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA27 - GE WIND ENERGY GE 1.5sl 1500 77.0 !O! NH: 96,0 m (Ges:134,5 m) (227)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	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	05:01 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	05:02 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	05:02 21:30	05:44 20:50	06:34 19:45	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	08:16 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 18:09	06:24 20:02	05:25 20:52	04:53 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 16:01
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 20:56	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	07:31 16:21	08:12 16:02
17	08:11 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	05:13 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 18:11	07:36 16:17	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	08:07 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34	05:17 21:18	06:05 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 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	06:13 20:14	07:03 19:03	06:53 16:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:03 17:47	06:00 18:35	05:52 20:27	05:05 21:13	04:55 21:34	05:26 21:10	06:14 20:11	07:04 19:01	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	05:51 20:29	05:04 21:15	04:55 21:34	05:27 21:08	06:16 20:09	07:06 18:58	06:57 16:53	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 16:51	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 16:49	07:53 16:06	08:18 16:09
31	07:54 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	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	0	0	0	0	0	0	0	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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA28 - GE WIND ENERGY GE 1.5sl 1500 77.0 !O! NH: 96,0 m (Ges:134,5 m) (228)

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

378 352 573 577 403 485 1.015 1.027 1.396 804 662 639 8.311

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 21:21	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	06:26 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 17:56	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	05:00 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 20:46	04:55 21:26	05:03 21:30	05:44 20:50	06:34 19:45	07:22 18:36	07:17 16:34	08:04 16:02
9	08:16 16:21	07:39 17:14	06:42 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 20:01	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	06:33 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 20:57	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 16:02
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	07:31 16:21	08:12 16:02
17	08:11 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 21:00	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	08:14 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	08:07 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34	05:17 21:18	06:05 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	08:17 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:22	05:08 21:10	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 16:59	07:46 16:11	08:17 16:05
26	08:01 16:48	07:06 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 16:57	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 16:55	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 16:53	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	07:08 18:56	06:59 16:51	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	07:01 16:49	07:53 16:07	08:18 16:09
31	07:54 16:57		06:51 19:42		05:01 21:18		05:32 21:04	06:21 20:03		07:02 16:48		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	0	0	0	0	0	0	0	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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA29 - GE WIND ENERGY GE 1.5sl 1500 77.0 !O! NH: 96,0 m (Ges:134,5 m) (229)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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	07:51 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 21:21	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	06:26 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 17:56	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	05:00 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 21:26	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 20:46	04:55 21:26	05:03 21:30	05:44 20:50	06:34 19:45	07:22 18:36	07:17 16:34	08:04 16:02
9	08:16 16:21	07:39 17:14	06:42 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 20:01	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	08:15 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	06:33 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 20:57	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 16:02
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	07:31 16:21	08:12 16:02
17	08:11 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 21:00	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	08:14 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	08:07 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34	05:17 21:18	06:05 20:24	06:54 19:15	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	08:17 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:22	05:08 21:10	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 16:59	07:46 16:11	08:17 16:05
26	08:01 16:48	07:06 17:45	06:03 18:34	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 16:57	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 16:55	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 16:53	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	07:08 18:56	06:59 16:51	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	07:01 16:49	07:53 16:07	08:18 16:09
31	07:54 16:57		06:51 19:42		05:01 21:18		05:32 21:04	06:21 20:03		07:02 16:48		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	0	0	0	0	0	0	0	0	0	0

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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung WEA: WEA30 - GE WIND ENERGY GE 1.5sl 1500 77.0 !O! NH: 96,0 m (Ges:134,5 m) (230)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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 21:21	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	06:26 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	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	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	05:01 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 20:46	04:55 21:26	05:02 21:30	05:44 20:50	06:34 19:45	07:22 18:35	07:17 16:34	08:04 16:02
9	08:16 16:21	07:39 17:14	06:42 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 20:01	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	04:53 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	06:33 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 16:01
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 16:02
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 16:02
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	07:31 16:21	08:12 16:02
17	08:11 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 21:00	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	08:14 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	08:07 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34	05:17 21:18	06:05 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	08:17 16:04
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:22	05:08 21:10	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 16:59	07:46 16:11	08:17 16:05
26	08:01 16:48	07:06 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 16:57	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 16:55	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 16:53	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 16:51	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	07:01 16:49	07:53 16:07	08:18 16:09
31	07:54 16:57		06:51 19:42		05:01 21:18		05:32 21:04	06:21 20:03		07:02 16:48		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	0	0	0	0	0	0	0	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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA31 - GE WIND ENERGY GE 1.5sl 1500 77.0 !O! NH: 96,0 m (Ges:134,5 m) (231)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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 21:21	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	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	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	05:01 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 20:46	04:55 21:26	05:02 21:30	05:44 20:50	06:34 19:45	07:22 18:35	07:17 16:34	08:04 16:02
9	08:16 16:21	07:39 17:14	06:42 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 20:01	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	04:53 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 16:01
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 16:02
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 16:02
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	07:31 16:21	08:12 16:02
17	08:11 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 21:00	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	08:07 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 21:05	04:53 21:34	05:17 21:18	06:05 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 16:59	07:46 16:11	08:17 16:05
26	08:01 16:48	07:06 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 16:57	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 16:55	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 16:53	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 16:51	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 16:49	07:53 16:07	08:18 16:09
31	07:54 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	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	0	0	0	0	0	0	0	0	0	0

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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung WEA: WEA32 - ENERCON E-70 E4 2,3 MW 2300 71.0 !O! NH: 114,0 m (Ges:149,5 m) (232)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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 16:04
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	05:38 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	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	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	05:01 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	05:02 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 18:02	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	08:16 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	05:49 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 18:09	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 18:27	07:24 16:27	08:08 16:02
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	05:08 21:26	05:52 20:40	06:42 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 20:56	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	05:56 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	05:13 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 18:11	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	04:53 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 17:37	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	05:56 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	07:45 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	06:13 20:14	07:03 19:03	06:53 16:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:03 17:47	06:00 18:35	05:52 20:27	05:05 21:13	04:55 21:34	05:26 21:10	06:14 20:11	07:04 19:01	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	05:04 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 16:08
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 16:51	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 16:49	07:53 16:06	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	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	0	0	0	0	0	0	0	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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung WEA: WEA33 - DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (233)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	June	July	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	05:47-06:12/25 21:33	04:57 21:02	05:43-06:19/36 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	05:48-06:13/25 21:33	04:58 21:00	05:44-06:20/36 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	05:48-06:13/25 21:33	04:58 20:59	05:45-06:20/35 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	05:47-06:13/26 21:32	04:59 20:57	05:46-06:20/34 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	05:48-06:14/26 21:32	05:00 20:55	05:47-06:20/33 19:51	07:17 18:42	07:11 16:39	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	05:44-05:46/2 21:31	05:01 20:53	05:49-06:20/31 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	05:42-06:14/32 21:31	05:02 20:52	05:54-06:20/26 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 18:02	06:33 19:55	05:32 20:45	04:55 21:26	05:41-06:14/33 21:30	05:02 20:50	05:54-06:20/26 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	05:40-06:15/35 21:29	05:03 20:48	05:55-06:21/26 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	05:40-06:15/35 21:29	05:04 20:46	05:55-06:21/26 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	05:39-06:15/36 21:28	05:05 20:44	05:56-06:20/24 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 18:09	06:24 20:02	05:25 20:52	04:53 21:29	05:39-06:15/36 21:27	05:06 20:42	05:56-06:20/24 19:35	07:29 18:27	07:24 16:27	08:08 16:02
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	05:39-06:16/37 21:26	05:08 20:59	05:57-06:20/23 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	05:39-06:16/37 21:25	05:09 20:38	05:57-06:20/23 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 20:56	04:53 21:31	05:39-06:16/37 21:24	05:10 20:36	05:58-06:19/21 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	05:39-06:17/38 21:23	05:11 20:34	05:58-06:19/21 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	05:39-06:17/38 21:22	05:12 20:32	05:59-06:18/19 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	05:39-06:17/38 21:21	05:13 20:30	06:00-06:17/17 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	05:39-06:17/38 21:20	05:15 20:28	06:01-06:16/15 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	04:53 21:33	05:39-06:17/38 21:19	05:16 20:26	06:03-06:15/12 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	05:39-06:17/38 21:18	05:17 20:24	06:05-06:13/8 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	05:11 21:07	04:53 21:34	05:39-06:17/38 21:16	05:19 20:22	06:06-06:17/17 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	05:40-06:18/38 21:15	05:20 20:20	06:08-06:18/18 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	05:40-06:18/38 21:14	05:21 20:18	06:09-06:18/18 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	05:40-06:18/38 21:12	05:23 20:16	06:11-06:17/16 19:05	07:52 18:59	07:45 16:11	08:17 16:05
26	08:00 16:48	07:05 17:45	06:03 18:33	05:54 20:26	05:06 21:12	04:54 21:34	05:41-06:19/38 21:11	05:24 20:13	06:13-06:19/18 19:03	07:53 18:57	07:47 16:10	08:18 16:06
27	07:59 16:50	07:03 17:47	06:00 18:35	05:52 20:27	05:05 21:13	04:55 21:34	05:41-06:19/38 21:10	05:26 20:11	06:14-06:19/19 19:01	07:54 19:01	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	05:04 21:15	04:55 21:34	05:42-06:19/37 21:08	05:27 20:09	06:16-06:19/19 18:58	07:56 19:01	07:50 16:08	08:18 16:08
29	07:56 16:54	07:03 17:48	06:05 18:38	05:49 20:31	05:03 21:16	04:56 21:34	05:42-06:19/37 21:07	05:29 20:07	06:17-06:19/19 18:56	07:57 19:01	07:52 16:08	08:18 16:08
30	07:55 16:55	07:03 17:49	06:04 18:40	05:47 20:32	05:02 21:17	04:56 21:34	05:43-06:20/37 21:05	05:30 20:05	06:19-06:19/19 18:54	07:59 19:01	07:53 16:06	08:18 16:09
31	07:53 16:57	07:03 17:49	06:04 18:41	05:47 20:32	05:02 21:18	04:56 21:34	05:43-06:20/37 21:03	05:32 20:03	06:21-06:21/17 18:54	07:59 19:01	07:53 16:06	08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	497	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	0	0	174	1041	516	0	0	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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung WEA: WEA34 - DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (234)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

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 19:44	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 17:52	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 17:54	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	06:53 17:55	06:42 19:49	05:39 20:39	04:57 21:23	04:59 21:32	05:38 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	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:39	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	05:02 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 18:02	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	08:16 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	05:49 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 18:09	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 18:27	07:24 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	05:08 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 20:05	05:22 20:55	04:53 21:31	05:09 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	06:18 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	05:56 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	05:13 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 18:21	06:09 20:14	05:14 21:02	04:53 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	04:53 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	06:04 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 16:04
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	04:53 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	07:45 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	06:13 20:13	07:03 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	05:05 21:13	04:55 21:34	05:26 21:10	06:14 20:11	07:04 19:01	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	05:04 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 16:08
29	07:56 16:53		06:56 19:38	05:48 20:31	05:03 21:16	04:56 21:34	05:29 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	05:47 20:32	05:02 21:17	04:56 21:34	05:30 21:05	06:19 20:05	07:09 18:54	07:00 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 20:03		07:02 16:48		08:18 16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten	99	0	0	0	0	0	0	0	0	0	100	0

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 Vorbelastung **WEA:** WEA35 - DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (235)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:18 16:12	07:52 16:59	06:59 17:50	06:49 19:44	05:45 20:34	05:00 05:39-06:02/23 21:19 20:29-20:40/11
2	08:18 16:13	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 05:40-06:02/22 21:20 20:29-20:39/10
3	08:18 16:14	07:49 17:03	06:55 17:54	06:44 19:47	05:41 20:37	04:58 05:40-05:57/17 20:31-20:39/8 21:21 05:58-05:59/1
4	08:18 16:15	07:47 17:04	06:53 17:55	06:42 19:49	05:39 20:39	04:57 05:40-05:56/16 21:23 20:31-20:38/7
5	08:18 16:16	07:46 17:06	06:50 17:57	06:40 19:50	05:37 20:41	04:57 05:41-05:57/16 21:24 20:33-20:38/5
6	08:17 16:17	07:44 17:08	06:48 17:59	06:38 19:52	05:35 20:42	04:56 05:41-05:56/15 21:24 20:34-20:36/2
7	08:17 16:18	07:42 17:10	06:46 18:01	06:35 19:54	05:34 20:44	04:56 05:42-05:57/15 21:25
8	08:17 16:20	07:40 17:12	06:44 18:02	06:33 19:55	05:32 20:45	04:55 05:41-05:56/15 21:26
9	08:16 16:21	07:39 17:14	06:41 18:04	06:31 19:27-19:31/4 19:57	05:30 20:47	04:55 05:42-05:57/15 21:27
10	08:16 16:22	07:37 17:15	06:39 18:06	06:29 19:26-19:32/6 19:59	05:28 20:49	04:54 05:43-05:57/14 21:28
11	08:15 16:24	07:35 17:17	06:37 18:08	06:26 19:25-19:34/9 20:00	05:27 20:50	04:54 05:43-05:56/13 21:29
12	08:14 16:25	07:33 17:19	06:35 18:09	06:24 19:25-19:36/11 20:02	05:25 20:52	04:53 05:43-05:56/13 21:29
13	08:14 16:27	07:31 17:21	06:32 18:11	06:22 19:25-19:36/11 20:04	05:23 05:53-06:00/7 20:53	04:53 05:44-05:56/12 21:30
14	08:13 16:28	07:30 17:23	06:30 18:13	06:20 19:25-19:34/9 20:05	05:22 05:52-06:02/10 20:55	04:53 05:45-05:57/12 21:31
15	08:12 16:30	07:28 17:25	06:28 18:15	06:18 19:27-19:32/5 20:07	05:20 05:50-06:03/13 20:56	04:53 05:45-05:57/12 21:31
16	08:11 16:31	07:26 17:27	06:26 18:16	06:15 20:09	05:19 05:49-06:04/15 20:58	04:53 05:46-05:57/11 21:32
17	08:10 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 05:49-06:05/16 20:59	04:53 05:46-05:57/11 21:32
18	08:10 16:35	07:22 17:30	06:21 18:20	06:11 20:12	05:16 05:48-06:05/17 21:01	04:53 05:46-05:57/11 21:33
19	08:09 16:36	07:20 17:32	06:19 18:21	06:09 20:14	05:14 05:48-06:05/17 21:02 20:30-20:32/2	04:53 05:47-05:57/10 21:33
20	08:08 16:38	07:18 17:34	06:16 18:23	06:07 20:16	05:13 05:43-06:06/23 21:04 20:29-20:33/4	04:53 05:47-05:57/10 21:33
21	08:06 16:40	07:16 17:36	06:14 18:25	06:05 20:17	05:12 05:42-06:06/24 21:05 20:28-20:35/7	04:53 05:47-05:57/10 21:33
22	08:05 16:41	07:14 17:37	06:12 18:27	06:03 20:19	05:10 05:41-06:06/25 21:07 20:27-20:35/8	04:53 05:47-05:57/10 21:34
23	08:04 16:43	07:12 17:39	06:10 18:28	06:01 20:21	05:09 05:40-06:05/25 21:08 20:27-20:37/10	04:53 05:48-05:58/10 21:34
24	08:03 16:45	07:10 17:41	06:07 18:30	05:59 20:22	05:08 05:39-06:05/26 21:09 20:27-20:38/11	04:54 05:47-05:58/11 21:34
25	08:02 16:46	07:08 17:43	06:05 18:32	05:56 20:24	05:07 05:39-06:05/26 21:11 20:27-20:39/12	04:54 05:47-05:58/11 21:34
26	08:00 16:48	07:05 17:45	06:03 18:33	05:54 20:26	05:06 05:39-06:05/26 21:12 20:27-20:40/13	04:54 05:48-05:59/11 21:34
27	07:59 16:50	07:03 17:46	06:00 18:35	05:52 20:27	05:05 05:39-06:05/26 21:13 20:27-20:40/13	04:55 05:47-05:59/12 21:34
28	07:58 16:52	07:01 17:48	05:58 18:37	05:50 20:29	05:04 05:39-06:04/25 21:15 20:27-20:40/13	04:55 05:48-06:00/12 21:34
29	07:56 16:53		05:56 19:38	05:48 20:31	05:03 05:39-06:05/26 21:16 20:27-20:40/13	04:56 05:47-05:59/12 21:34
30	07:55 16:55		05:53 19:40	05:47 20:32	05:02 05:39-06:04/25 21:17 20:28-20:41/13	04:56 05:48-06:00/12 21:33
31	07:53 16:57		05:51 19:42		05:01 05:39-06:03/24 21:18 20:29-20:40/11	
Sonnenscheinstunden	260	278	367	416	484	498
Anzahl Minuten mit Schatten	0	0	0	55	526	438

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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA35 - DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (235)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Juli		August		September		Oktober		November		Dezember
1	04:57	05:47-06:00/13	21:33	05:33	06:22	19:24-19:33/9	07:11	07:04	07:55		
				21:02	20:00		18:51	16:46	16:06		
2	04:58	05:47-06:01/14	21:33	05:35	06:24	19:25-19:31/6	07:12	07:06	07:56		
				21:00	19:58		18:49	16:44	16:05		
3	04:58	05:48-06:02/14	21:33	05:36	06:25	19:25-19:29/4	07:14	07:08	07:57		
				20:58	19:56		18:47	16:42	16:04		
4	04:59	05:48-06:02/14	21:32	05:38	06:27		07:16	07:09	07:59		
				20:57	19:54		18:44	16:40	16:04		
5	05:00	05:47-06:02/15	21:32	05:39	06:29		07:17	07:11	08:00		
				20:55	19:51		18:42	16:39	16:03		
6	05:01	05:47-06:03/16	21:31	05:41	06:30		07:19	07:13	08:01		
				20:53	19:49		18:40	16:37	16:03		
7	05:02	05:47-06:03/16	21:31	05:42	06:32		07:21	07:15	08:03		
				20:52	19:47		18:38	16:35	16:03		
8	05:02	05:47-06:04/17	21:30	05:44	06:33		07:22	07:16	08:04		
				20:50	19:44		18:35	16:33	16:02		
9	05:03	05:48-06:04/16	21:29	05:45	06:35		07:24	07:18	08:05		
				20:48	19:42		18:33	16:32	16:02		
10	05:04	05:48-06:08/20	21:29	05:47	06:37		07:26	07:20	08:06		
				20:46	19:40		18:31	16:30	16:02		
11	05:05	05:48-06:10/22	21:28	05:49	06:38		07:27	07:22	08:07		
				20:44	19:38		18:29	16:29	16:02		
12	05:06	05:48-06:11/23	21:27	05:50	06:40		07:29	07:23	08:08		
				20:42	19:35		18:27	16:27	16:01		
13	05:08	05:48-06:12/24	21:26	05:52	06:41		07:31	07:25	08:09		
				20:40	19:33		18:24	16:26	16:01		
14	05:09	05:48-06:13/25	21:25	05:53	06:43		07:32	07:27	08:10		
				20:38	19:31		18:22	16:24	16:01		
15	05:10	05:48-06:13/25	21:24	05:55	06:45		07:34	07:29	08:11		
				20:36	19:28		18:20	16:23	16:02		
16	05:11	05:48-06:14/26	21:23	05:56	06:46		07:36	07:30	08:12		
				20:34	19:26		18:18	16:21	16:02		
17	05:12	05:48-06:14/26	21:22	05:58	06:48		07:38	07:32	08:13		
				20:32	19:24		18:16	16:20	16:02		
18	05:13	05:48-06:14/26	21:21	06:00	06:50		07:39	07:34	08:13		
				20:30	19:21		18:14	16:19	16:02		
19	05:15	05:49-06:15/26	21:20	06:01	06:51		07:41	07:36	08:14		
				20:28	19:19		18:11	16:17	16:02		
20	05:16	05:50-06:16/26	21:19	06:03	06:53		07:43	07:37	08:15		
				20:26	19:17		18:09	16:16	16:03		
21	05:17	05:51-06:16/25	21:18	06:04	06:54		07:45	07:39	08:15		
				20:24	19:14		18:07	16:15	16:03		
22	05:19	05:51-06:16/25	21:16	06:06	06:56		07:46	07:41	08:16		
				20:22	19:12		18:05	16:14	16:04		
23	05:20	05:52-06:15/23	21:15	06:08	06:58		07:48	07:42	08:16		
				20:20	19:10		18:03	16:13	16:04		
24	05:21	05:55-06:16/21	21:14	06:09	06:59		07:50	07:44	08:17		
				20:18	19:07		18:01	16:12	16:05		
25	05:23	05:59-06:15/16	21:12	06:11	07:01		06:52	07:45	08:17		
				20:16	19:05		16:59	16:11	16:05		
26	05:24	05:59-06:15/16	21:11	06:13	07:03		06:53	07:47	08:18		
				20:13	19:03		16:57	16:10	16:06		
27	05:26	06:00-06:15/15	21:10	06:14	07:04		06:55	07:49	08:18		
				20:11	19:01		16:55	16:09	16:07		
28	05:27	06:00-06:14/14	21:08	06:16	07:06		06:57	07:50	08:18		
				20:09	18:58		16:53	16:08	16:08		
29	05:29	06:01-06:13/12	21:07	06:17	07:07		06:59	07:52	08:18		
				20:07	18:56		16:51	16:07	16:08		
30	05:30	06:03-06:12/9	21:05	06:19	07:09		07:00	07:53	08:18		
				20:05	18:54		16:49	16:06	16:09		
31	05:31	06:05-06:09/4	21:03	06:21	07:02		07:02		08:18		
				20:03			16:48		16:10		
Sonnenscheinstunden	501		453		381		332	267	245		
Anzahl Minuten mit Schatten	760		38		19		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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA36 - DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (236)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

	Januar	Februar	März	April	Mai	Juni
1	08:18 16:11	07:52 16:59	06:59 17:50	06:49 19:44	05:45 20:34	05:00 20:30-20:41/11 21:19
2	08:18 16:13	07:50 17:01	06:57 17:52	06:47 19:45	05:43 20:36	04:59 20:31-20:40/9 21:20
3	08:18 16:14	07:49 17:03	06:55 17:54	06:44 19:47	05:41 20:37	04:58 20:32-20:41/9 21:22
4	08:18 16:15	07:47 17:04	06:52 17:55	06:42 19:49	05:39 20:39	04:57 20:33-20:40/7 21:23
5	08:18 16:16	07:46 17:06	06:50 17:57	06:40 19:50	05:37 20:41	04:57 20:34-20:40/6 21:24
6	08:17 16:17	07:44 17:08	06:48 17:59	06:38 19:52	05:35 20:42	04:56 20:35-20:38/3 21:24
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
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
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
10	08:16 15:44-15:48/4 16:22	07:37 17:15	06:39 18:06	06:29 19:59	05:28 20:49	04:54 21:28
11	08:15 15:43-15:50/7 16:24	07:35 17:17	06:37 18:08	06:26 20:00	05:27 20:50	04:54 21:29
12	08:14 15:44-15:52/8 16:25	07:33 17:19	06:35 18:09	06:24 20:02	05:25 20:52	04:53 21:29
13	08:14 15:43-15:54/11 16:27	07:31 17:21	06:32 18:11	06:22 20:04	05:23 20:53	04:53 21:30
14	08:13 15:43-15:55/12 16:28	07:30 17:23	06:30 18:13	06:20 20:05	05:22 20:55	04:53 21:31
15	08:12 15:43-15:57/14 16:30	07:28 17:25	06:28 18:15	06:18 20:07	05:20 20:56	04:53 21:31
16	08:11 15:43-15:57/14 16:31	07:26 17:26	06:26 18:16	06:15 20:09	05:19 20:58	04:53 21:32
17	08:10 15:43-15:58/15 16:33	07:24 17:28	06:23 18:18	06:13 20:11	05:17 20:59	04:53 21:32
18	08:10 15:43-15:59/16 16:35	07:22 17:30	06:21 18:20	06:11 20:12	05:16 21:01	04:53 21:33
19	08:09 15:43-15:59/16 16:36	07:20 17:32	06:19 18:21	06:09 20:14	05:14 21:02	04:53 21:33
20	08:08 15:43-15:59/16 16:38	07:18 17:34	06:16 18:23	06:07 20:16	05:13 20:31-20:33/2 21:04	04:53 21:33
21	08:06 15:44-15:59/15 16:39	07:16 17:36	06:14 18:25	06:05 20:17	05:12 20:30-20:35/5 21:05	04:53 21:33
22	08:05 15:45-16:00/15 16:41	07:14 17:37	06:12 18:27	06:03 20:19	05:10 20:29-20:35/6 21:07	04:53 21:34
23	08:04 15:46-16:00/14 16:43	07:12 17:39	06:10 18:28	06:01 20:21	05:09 20:28-20:37/9 21:08	04:53 21:34
24	08:03 15:46-15:59/13 16:45	07:10 17:41	06:07 18:30	05:58 20:22	05:08 20:28-20:38/10 21:09	04:53 21:34
25	08:02 15:47-15:59/12 16:46	07:08 17:43	06:05 18:32	05:56 20:24	05:07 20:28-20:39/11 21:11	04:54 21:34
26	08:00 15:48-15:57/9 16:48	07:05 17:45	06:03 18:33	05:54 20:26	05:06 20:28-20:40/12 21:12	04:54 21:34
27	07:59 15:51-15:55/4 16:50	07:03 17:46	06:00 18:35	05:52 20:27	05:05 20:28-20:41/13 21:13	04:55 21:34
28	07:58 16:52	07:01 17:48	05:58 18:37	05:50 20:29	05:04 20:29-20:41/12 21:15	04:55 21:34
29	07:56 16:53		06:56 19:38	05:48 20:31	05:03 20:29-20:41/12 21:16	04:56 21:34
30	07:55 16:55		06:53 19:40	05:47 20:32	05:02 20:30-20:42/12 21:17	04:56 21:33
31	07:53 16:57		06:51 19:42		05:01 20:30-20:41/11 21:18	
Sonnenscheinstunden	260	278	367	416	484	498
Anzahl Minuten mit Schatten	215	0	0	0	115	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-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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung **WEA:** WEA36 - DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (236)

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
378 352 573 577 403 485 1.015 1.027 1.396 804 662 639 8.311

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	07:55 15:25-15:32/7 16:06
2	04:58 21:33	05:34 21:00	06:24 19:58	07:12 18:49	07:06 16:44	07:56 15:27-15:32/5 16:05
3	04:58 21:33	05:36 20:58	06:25 19:56	07:14 18:47	07:08 16:42	07:57 15:29-15:30/1 16:04
4	04:59 21:32	05:38 20:57	06:27 19:54	07:16 18:44	07:09 16:40	07:59 16:04
5	05:00 21:32	05:39 20:55	06:29 19:51	07:17 18:42	07:11 16:38	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	08:01 16:03
7	05:01 20:41-20:45/4 21:31	05:42 20:52	06:32 19:47	07:21 18:38	07:15 16:35	08:03 16:03
8	05:02 20:40-20:47/7 21:30	05:44 20:50	06:33 19:44	07:22 18:35	07:16 16:33	08:04 16:02
9	05:03 20:40-20:48/8 21:29	05:45 20:48	06:35 19:42	07:24 18:33	07:18 16:32	08:05 16:02
10	05:04 20:39-20:49/10 21:29	05:47 20:46	06:37 19:40	07:26 18:31	07:20 16:30	08:06 16:02
11	05:05 20:38-20:48/10 21:28	05:48 20:44	06:38 19:38	07:27 18:29	07:22 16:29	08:07 16:02
12	05:06 20:39-20:50/11 21:27	05:50 20:42	06:40 19:35	07:29 18:27	07:23 16:27	08:08 16:01
13	05:08 20:38-20:50/12 21:26	05:52 20:40	06:41 19:33	07:31 18:24	07:25 16:26	08:09 16:01
14	05:09 20:38-20:51/13 21:25	05:53 20:38	06:43 19:31	07:32 18:22	07:27 16:24	08:10 16:01
15	05:10 20:38-20:51/13 21:24	05:55 20:36	06:45 19:28	07:34 18:20	07:29 15:24-15:29/5 16:23	08:11 16:01
16	05:11 20:38-20:51/13 21:23	05:56 20:34	06:46 19:26	07:36 18:18	07:30 15:21-15:30/9 16:21	08:12 16:02
17	05:12 20:38-20:50/12 21:22	05:58 20:32	06:48 19:24	07:38 18:16	07:32 15:20-15:32/12 16:20	08:13 16:02
18	05:13 20:38-20:49/11 21:21	06:00 20:30	06:50 19:21	07:39 18:14	07:34 15:20-15:33/13 16:19	08:13 16:02
19	05:15 20:38-20:48/10 21:20	06:01 20:28	06:51 19:19	07:41 18:11	07:36 15:20-15:34/14 16:17	08:14 16:02
20	05:16 20:39-20:48/9 21:19	06:03 20:26	06:53 19:17	07:43 18:09	07:37 15:20-15:35/15 16:16	08:15 16:03
21	05:17 20:39-20:47/8 21:18	06:04 20:24	06:54 19:14	07:45 18:07	07:39 15:20-15:35/15 16:15	08:15 16:03
22	05:19 20:39-20:45/6 21:16	06:06 20:22	06:56 19:12	07:46 18:05	07:41 15:19-15:35/16 16:14	08:16 16:04
23	05:20 20:40-20:44/4 21:15	06:08 20:20	06:58 19:10	07:48 18:03	07:42 15:20-15:35/15 16:13	08:16 16:04
24	05:21 20:42-20:43/1 21:14	06:09 20:18	06:59 19:07	07:50 18:01	07:44 15:20-15:36/16 16:12	08:17 16:05
25	05:23 21:12	06:11 20:16	07:01 19:05	06:52 16:59	07:45 15:21-15:36/15 16:11	08:17 16:05
26	05:24 21:11	06:13 20:13	07:02 19:03	06:53 16:57	07:47 15:21-15:36/15 16:10	08:18 16:06
27	05:26 21:10	06:14 20:11	07:04 19:00	06:55 16:55	07:49 15:22-15:36/14 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 15:23-15:35/12 16:08	08:18 16:07
29	05:28 21:07	06:17 20:07	07:07 18:56	06:59 16:51	07:52 15:23-15:34/11 16:07	08:18 16:08
30	05:30 21:05	06:19 20:05	07:09 18:54	07:00 16:49	07:53 15:25-15:33/8 16:06	08:18 16:09
31	05:31 21:03	06:21 20:03	07:02 16:47	07:02 16:47	07:02 16:47	08:18 16:10
Sonnenscheinstunden	501	453	381	332	267	245
Anzahl Minuten mit Schatten	162	0	0	0	205	13

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 14:35/4.1.273



SHADOW - Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung WEA: WEA37 - DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (237)

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
378	352	573	577	403	485	1.015	1.027	1.396	804	662	639	8.311

Startwindgeschwindigkeit: Startwindgeschw. aus Leistungskennlinie

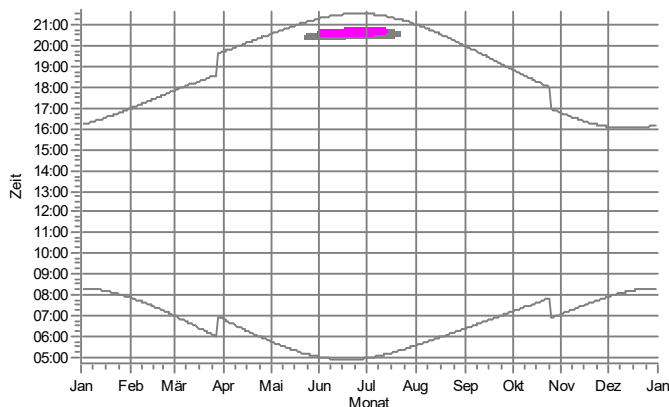
	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
1	08:18 16:11	07:52 16:59	06:59 17:50	06:49 19:44	05:45 20:34	06:09-06:11/2 21:19	04:57 21:33	05:33 21:02	06:05-06:21/16 20:00	06:22 18:51	07:11 16:46	07:04 16:06
2	08:18 16:13	07:50 17:52	06:57 17:55	06:47 19:45	05:43 20:36	06:07-06:13/6 21:20	04:58 21:33	05:34 21:00	06:05-06:22/17 19:58	06:24 18:49	07:12 16:44	07:06 16:05
3	08:18 16:14	07:49 17:54	06:55 17:54	06:44 19:47	05:41 20:37	06:05-06:14/9 21:21	04:58 21:33	05:36 20:58	06:05-06:24/19 19:56	06:25 18:47	07:14 16:42	07:08 16:04
4	08:18 16:15	07:47 17:55	06:52 17:55	06:42 19:49	05:39 20:39	06:04-06:15/11 21:23	04:57 21:32	05:38 20:57	06:06-06:24/18 19:54	06:27 18:44	07:16 16:40	07:09 16:04
5	08:18 16:16	07:46 17:57	06:50 17:57	06:40 19:50	05:37 20:41	06:02-06:15/13 21:23	04:57 21:32	05:39 20:55	06:07-06:24/17 19:51	06:29 18:42	07:17 16:38	07:11 16:03
6	08:17 16:17	07:44 17:59	06:48 17:59	06:38 19:52	05:35 20:42	06:00-06:15/15 21:24	04:56 21:31	05:41 20:53	06:09-06:25/16 19:49	06:30 18:40	07:19 16:37	07:13 16:03
7	08:17 16:18	07:42 17:59	06:46 18:01	06:35 19:54	05:34 20:44	05:59-06:15/16 21:25	04:56 21:31	05:42 20:51	06:10-06:24/14 19:47	06:32 18:38	07:21 16:35	07:15 16:03
8	08:17 16:20	07:40 18:02	06:44 18:02	06:33 19:55	05:32 20:45	05:57-06:15/18 21:26	04:55 21:30	05:44 20:50	06:12-06:25/13 19:44	06:33 18:35	07:22 16:33	07:16 16:02
9	08:16 16:21	07:39 18:04	06:41 18:04	06:31 19:57	05:30 20:47	05:55-06:14/19 21:27	04:55 21:29	05:45 20:48	06:13-06:24/11 19:42	06:35 18:33	07:24 16:32	07:18 16:02
10	08:16 16:22	07:37 18:06	06:39 18:06	06:29 19:59	05:28 20:49	05:55-06:13/18 21:28	04:54 21:29	05:47 20:46	06:15-06:23/8 19:40	06:37 18:31	07:26 16:30	07:20 16:02
11	08:15 16:24	07:35 18:08	06:37 18:08	06:26 20:00	05:27 20:50	05:54-06:11/17 21:29	04:54 21:28	05:48 20:44	06:16-06:21/5 19:38	06:38 18:29	07:27 16:29	07:22 16:02
12	08:14 16:25	07:33 18:09	06:35 18:09	06:24 20:02	05:25 20:52	05:55-06:07/12 21:29	04:53 21:27	05:50 20:42	06:40-06:21/5 19:35	06:40 18:27	07:29 16:27	07:23 16:01
13	08:14 16:27	07:31 18:11	06:32 18:11	06:22 20:04	05:23 20:53	05:55-06:07/12 21:30	04:53 21:26	05:52 20:40	06:41-06:21/5 19:33	06:41 18:24	07:31 16:26	07:25 16:01
14	08:13 16:28	07:30 18:13	06:30 18:13	06:20 20:05	05:22 20:55	05:55-06:06/11 21:31	04:53 21:25	05:53 20:38	06:43-06:21/5 19:31	06:43 18:22	07:32 16:24	07:27 16:01
15	08:12 16:30	07:28 18:15	06:28 18:15	06:18 20:07	05:20 20:56	05:56-06:05/9 21:31	04:53 21:24	05:55 20:36	19:44-19:52/8 19:28	06:45 18:20	07:34 16:23	07:29 16:01
16	08:11 16:31	07:26 18:16	06:26 18:16	06:15 20:09	05:19 20:58	05:57-06:04/7 21:32	04:53 21:23	05:56 20:34	19:43-19:54/11 19:26	06:46 18:18	07:36 16:21	07:30 16:02
17	08:10 16:33	07:24 18:18	06:23 18:18	06:13 20:11	05:17 20:59	06:00-06:02/2 21:32	04:53 21:22	05:58 20:32	19:41-19:54/13 19:24	06:48 18:16	07:38 16:20	07:32 16:02
18	08:10 16:35	07:22 18:20	06:21 18:20	06:11 20:12	05:16 21:01	05:53-06:05/6 21:33	04:53 21:21	06:00 20:30	19:41-19:55/14 19:21	06:50 18:14	07:39 16:19	07:34 16:02
19	08:09 16:36	07:20 18:21	06:19 18:21	06:09 20:14	05:14 21:02	05:53-06:04/7 21:33	04:53 21:20	06:01 20:28	19:40-19:55/15 19:19	06:51 18:11	07:41 16:17	07:36 16:02
20	08:07 16:38	07:18 18:23	06:16 18:23	06:07 20:16	05:13 21:04	05:53-06:05/6 21:33	04:53 21:19	06:03 20:26	19:40-19:55/15 19:17	06:53 18:09	07:43 16:16	07:37 16:03
21	08:06 16:40	07:16 18:25	06:14 18:25	06:05 20:17	05:12 21:05	05:53-06:05/6 21:33	04:53 21:18	06:04 20:24	19:39-19:54/15 19:14	06:54 18:07	07:45 16:15	07:39 16:03
22	08:05 16:41	07:14 18:27	06:12 18:27	06:03 20:19	05:10 21:07	05:53-06:05/6 21:34	04:53 21:16	06:06 20:22	19:40-19:54/14 19:12	06:56 18:05	07:46 16:14	07:41 16:04
23	08:04 16:43	07:12 18:28	06:10 18:28	06:01 20:21	05:09 21:08	05:53-06:05/6 21:34	04:53 21:15	06:08 20:20	19:40-19:52/12 19:10	06:58 18:03	07:48 16:13	07:42 16:04
24	08:03 16:45	07:10 18:30	06:07 18:30	05:58 20:22	05:08 21:09	05:53-06:05/6 21:34	04:53 21:14	06:09 20:18	19:41-19:50/9 19:07	06:59 18:01	07:50 16:12	07:44 16:05
25	08:02 16:46	07:08 18:32	06:05 18:32	05:56 20:24	05:07 21:11	05:53-06:05/6 21:34	04:53 21:12	06:11 20:16	19:42-19:48/6 19:05	07:01 16:59	06:52 16:11	07:45 16:05
26	08:00 16:48	07:05 18:33	06:03 18:33	05:54 20:26	05:06 21:12	05:53-06:05/6 21:34	04:53 21:11	06:13 20:13	07:02-06:53/8 19:03	07:02 16:57	06:53 16:10	07:47 16:06
27	07:59 16:50	07:03 18:35	06:00 18:35	05:52 20:27	05:05 21:13	05:53-06:05/6 21:34	04:55 21:09	06:14 20:11	07:04-06:55/9 19:00	07:04 16:55	06:55 16:09	07:49 16:07
28	07:58 16:52	07:01 18:37	05:58 18:37	05:50 20:29	05:04 21:15	05:53-06:05/6 21:34	04:55 21:08	06:16 20:09	06:07-06:15/8 18:58	07:06 16:53	06:57 16:08	07:50 16:08
29	07:56 16:53	07:00 18:38	05:56 18:38	05:48 20:31	05:03 21:16	05:53-06:05/6 21:34	04:56 21:07	06:17 20:07	06:06-06:16/10 18:56	07:07 16:51	06:59 16:07	07:52 16:08
30	07:55 16:55	07:00 18:40	05:53 18:40	05:47 20:32	05:02 21:17	05:53-06:05/6 21:33	04:56 21:05	06:19 20:05	06:06-06:17/11 18:54	07:09 16:49	07:00 16:06	07:53 16:09
31	07:53 16:57	07:00 19:42	05:51 19:42	05:42 20:32	05:01 21:18	05:53-06:05/6 21:33	04:56 21:03	06:21 20:02	06:05-06:17/12 18:54	07:12 16:48	07:02 16:10	07:54 16:10
Sonnenscheinstunden	260	278	367	416	484	498	501	453	381	332	267	245
Anzahl Minuten mit Schatten	0	0	0	132	197	0	46	286	0	0	0	0

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

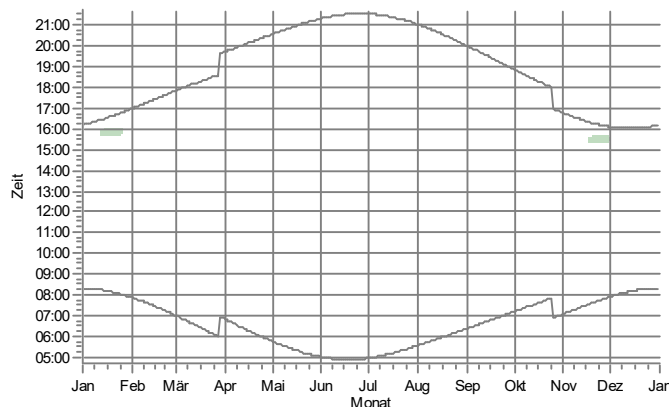
Tag im Monat	Sonnenaufgang (SS:MM)	Zeitpunkt (SS:MM)	Schattenanfang-Zeitpunkt (SS:MM)	Schattenende/Minuten mit Schatten
	Sonnenuntergang (SS:MM)	Zeitpunkt (SS:MM)	Schattenanfang-Zeitpunkt (SS:MM)	Schattenende/Minuten mit Schatten

SHADOW - Grafischer Kalender pro WEA**Berechnung:** SW25034 Salzfurkapelle Vorbelastung

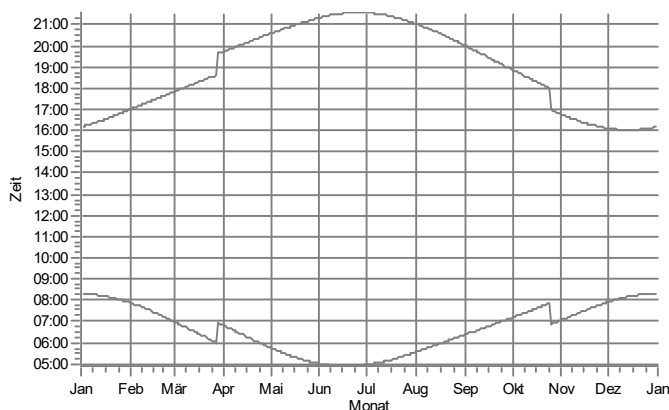
WEA06: ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (20)



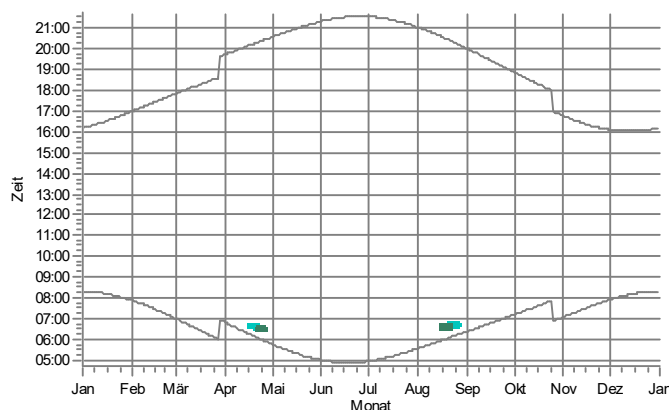
WEA07: ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (207)



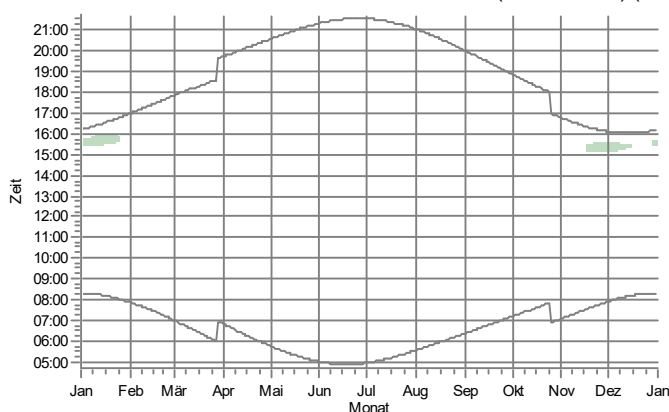
WEA08: ENERCON E-66/20.70 2000 70.0 !-! NH: 93,8 m (Ges:128,8 m) (2)



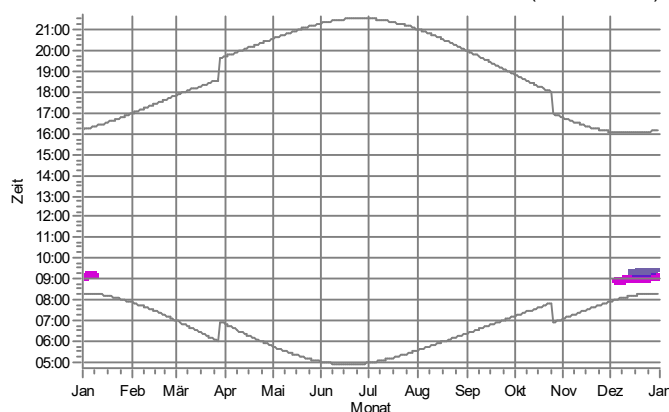
WEA09: ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (209)



WEA10: ENERCON E-82 E2 2300 82.0 !O! NH: 85,0 m (Ges:126,0 m) (210)



WEA11: ENERCON E-66/20.70 2000 70.0 !-! NH: 114,1 m (Ges:149,1 m) (211)



Schattenrezeptoren

IP04: Siebenhausen 14, 06766 Bitterfeld-Wolfen
IP05: Siebenhausen 15, 06766 Bitterfeld-Wolfen

IP14: Holländer Mühle 1, 06779 Raguhn-Jeßnitz
IP21: Am Sandberg 24, 06780 Zörbig

IP29: Am Sandberg 20, 06780 Zörbig
IP41: Thurländer Dorfstraße 19, 06779 Raguhn-Jeßnitz

IP42: Thurländer Dorfstraße 17, 06779 Raguhn-Jeßnitz
IP44: Am Dorfe 1, 06779 Raguhn-Jeßnitz

Projekt:

SW25034 Salzfurkapelle

Lizenziierter Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

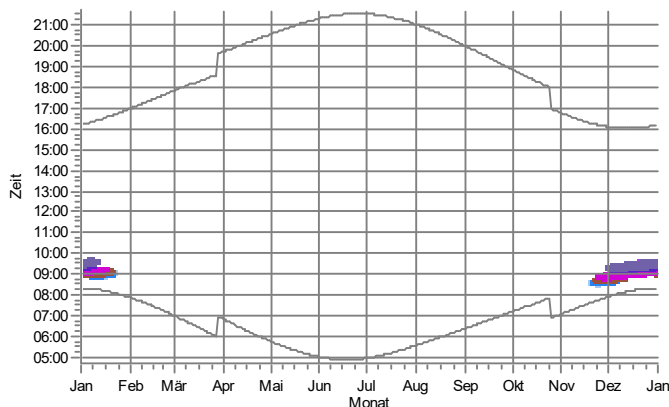
14.10.2025 14:35/4.1.273



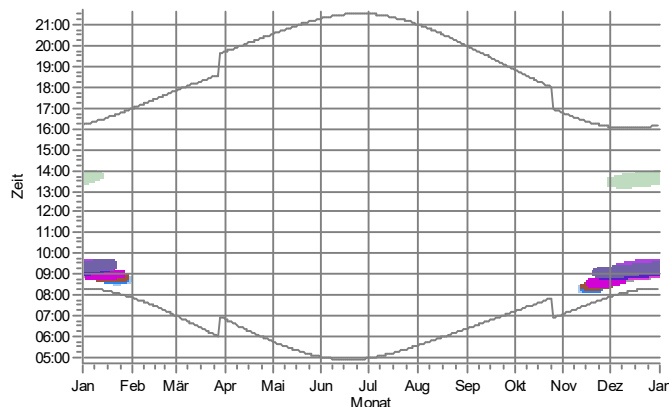
SHADOW - Grafischer Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung

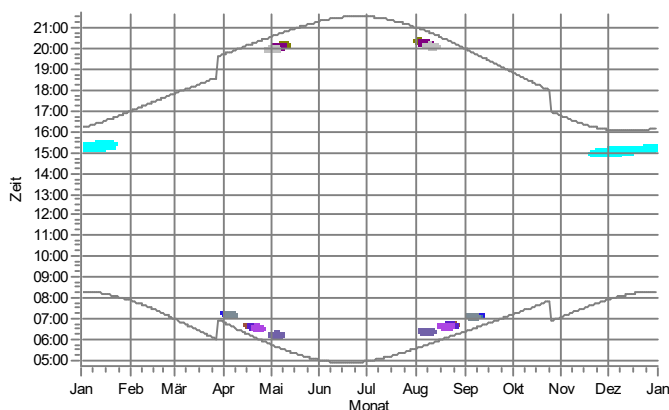
WEA 12: ENERCON E-70 E4 2000 71.0 !O! NH: 114,1 m (Ges:149,6 m) (21)



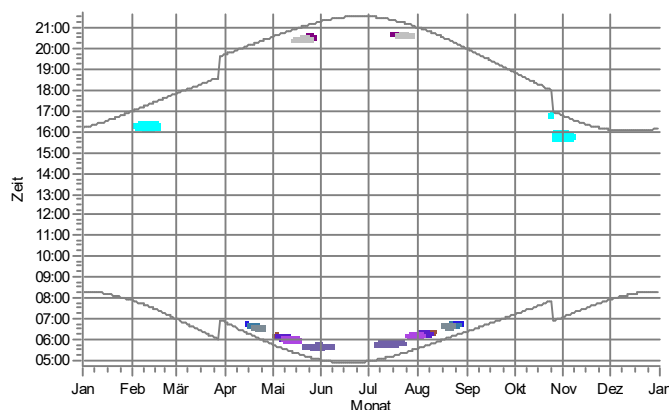
WEA 13: ENERCON E-70 E4 2000 71.0 !O! NH: 85,0 m (Ges:120,5 m) (213)



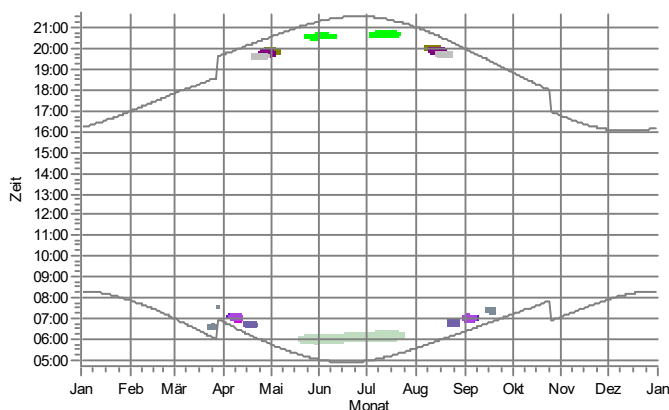
WEA 14: ENERCON E-70 E4 2000 71.0 !O! NH: 98,8 m (Ges:134,3 m) (214)



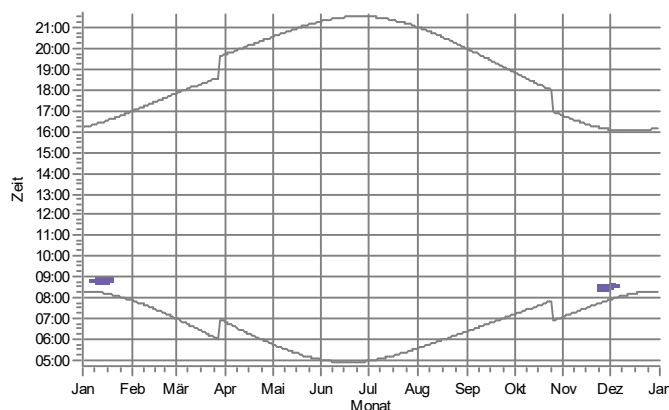
WEA 15: ENERCON E-70 E4 2000 71.0 !O! NH: 98,2 m (Ges:133,7 m) (215)



WEA 16: ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (21)



WEA 17: ENERCON E-70 E4 2000 71.0 !O! NH: 100,0 m (Ges:135,5 m) (217)



Schattenrezeptoren

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
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
IP35: Kleinleipziger Str. 3, 06779 Raguhn-Jeßnitz
IP36: Thurländer Lindenstrasse 10, 06779 Raguhn-Jeßnitz

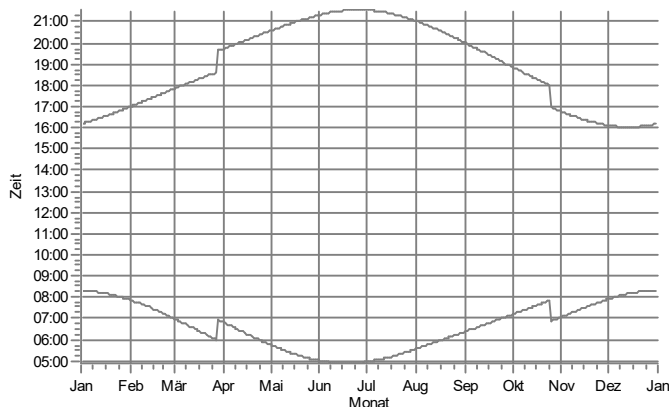
IP37: Thurländer Lindenstrasse 8a, 06779 Raguhn-Jeßnitz
IP38: Thurländer Lindenstrasse 3, 06779 Raguhn-Jeßnitz
IP39: Thurländer Dorfstraße 24a, 06779 Raguhn-Jeßnitz
IP40: Thurländer Dorfstraße 21, 06779 Raguhn-Jeßnitz
IP41: Thurländer Dorfstraße 19, 06779 Raguhn-Jeßnitz

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

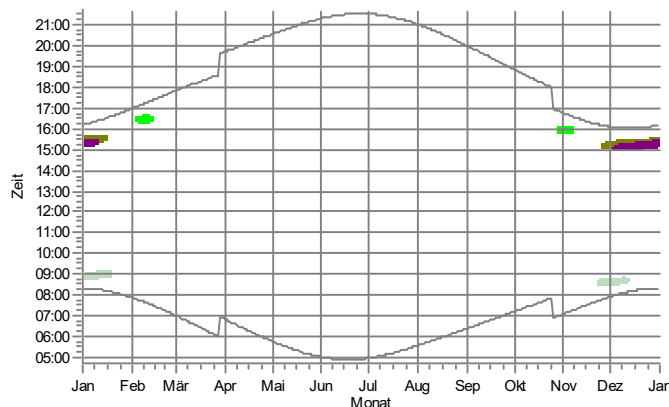
SHADOW - Grafischer Kalender pro WEA

Berechnung: SW25034 Salzfurtkapelle Vorbelastung

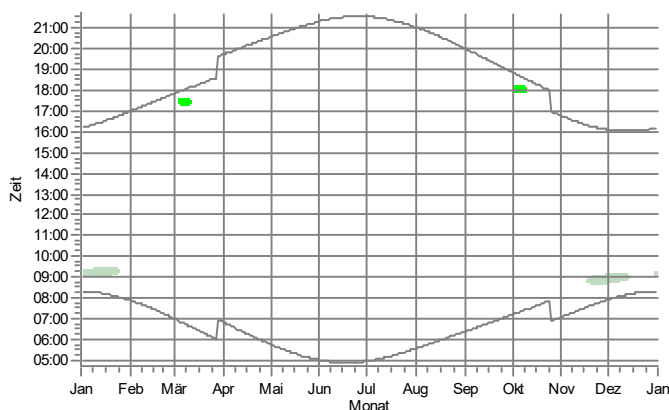
WEA 18: ENERCON E-70 E4 2000 71.0 !O! NH: 98,0 m (Ges:133,5 m) (218)



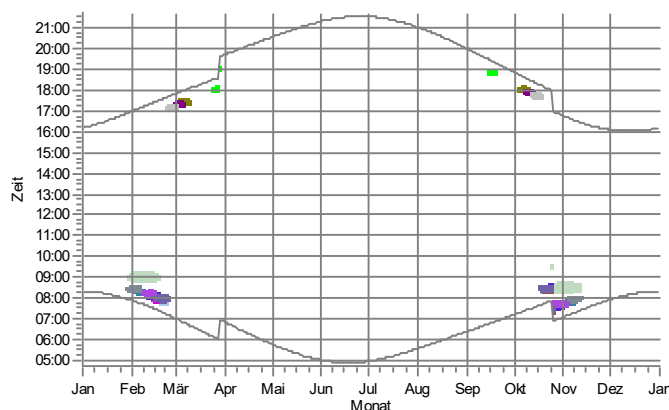
WEA 19: ENERCON E-66/20.70 2000 70.0 !-! NH: 114,1 m (Ges:149,1 m) (219)



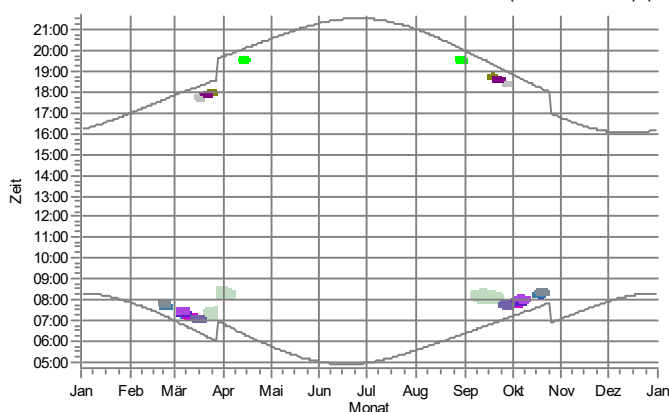
WEA20: ENERCON E-66/20.70 2000 70.0 !-! NH: 114,1 m (Ges:149,1 m) (220)



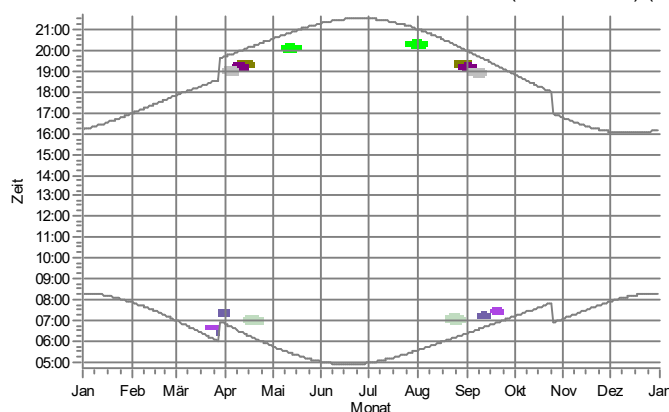
WEA21: ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (221)



WEA 22: ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (222)



WEA23: ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (223)



Schattenrezeptoren

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

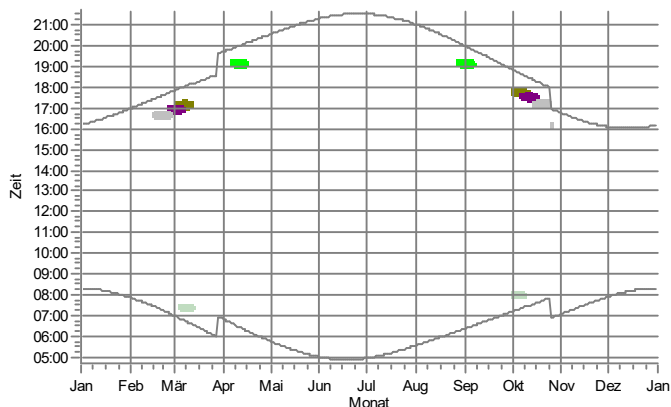
IP14: Holländer Mühle 1, 06779 Raguhn-Jeßnitz
IP15: Thurländer Dorfstraße 23, 06779 Raguhn-Jeßnitz
IP36: Thurländer Lindenstrasse 10, 06779 Raguhn-Jeßnitz
IP37: Thurländer Lindenstrasse 8a, 06779 Raguhn-Jeßnitz

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

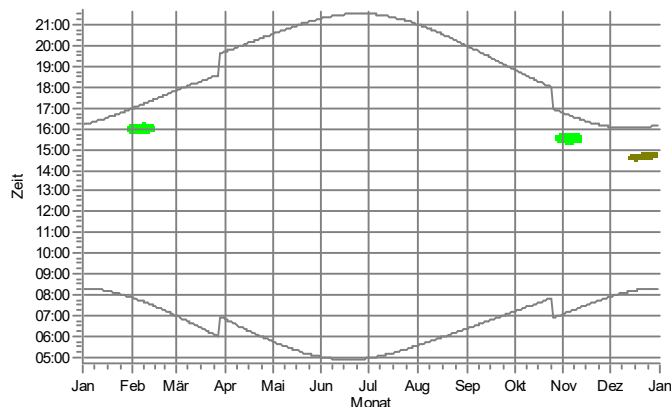
IP42: Thurländer Dorfstraße 17, 06779 Raguhn-Jeßnitz
IP43: Thurländer Dorfstraße 12, 06779 Raguhn-Jeßnitz
IP44: Am Dorfe 1, 06779 Raguhn-Jeßnitz

SHADOW - Grafischer Kalender pro WEA**Berechnung:** SW25034 Salzfurkapelle Vorbelastung

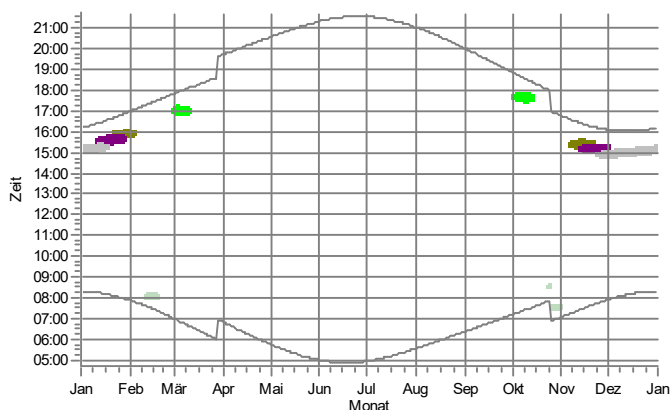
WEA24: ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (22)



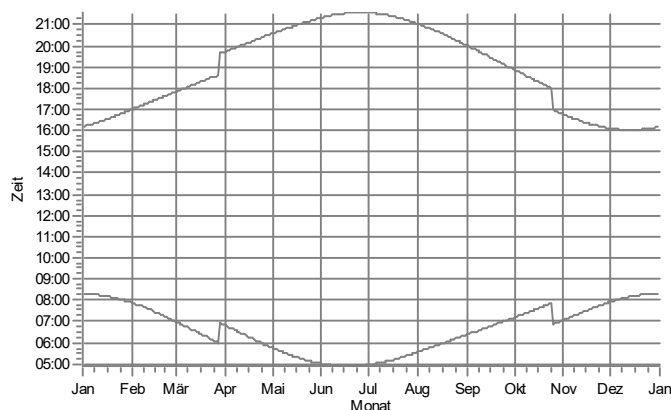
WEA25: ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (225)



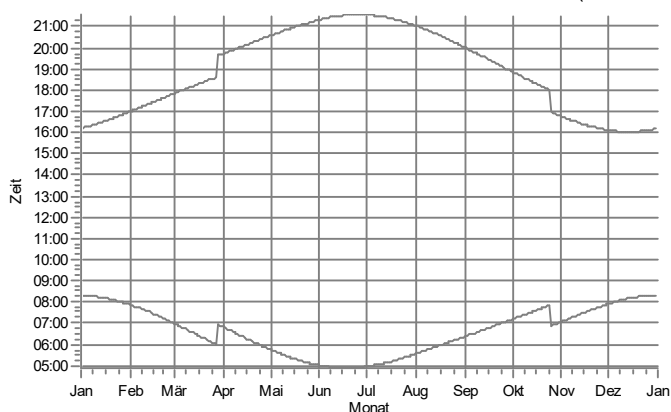
WEA26: ENERCON E-70 E4 2000 71.0 !O! NH: 113,5 m (Ges:149,0 m) (22)



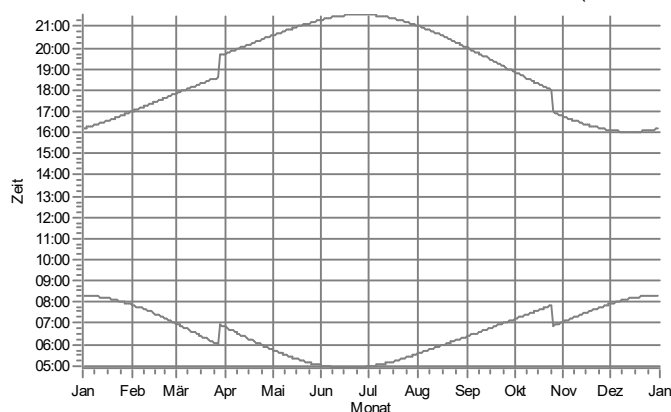
WEA27: GE WIND ENERGY GE 1.5sl 1500 77.0 !O! NH: 96,0 m (Ges:134,5 m) (227)



WEA28: GE WIND ENERGY GE 1.5sl 1500 77.0 !O! NH: 96,0 m (Ges:134,5



WEA29: GE WIND ENERGY GE 1.5sl 1500 77.0 !O! NH: 96,0 m (Ges:134,5 m) (229)



Schattenrezeptoren

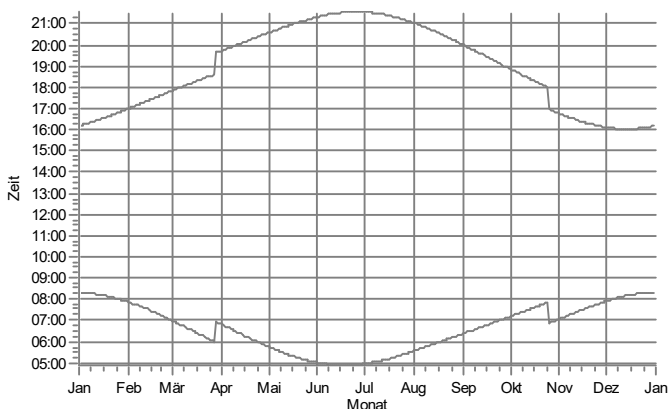
IP09: Thurländer Str. 1, 06779 Raguhn-Jeßnitz
 IP10: Thurländer Str. 24, 06779 Raguhn-Jeßnitz

IP11: Thurländer Str. 28, 06779 Raguhn-Jeßnitz
 IP12: Zerbster Str. 17, 06779 Raguhn-Jeßnitz

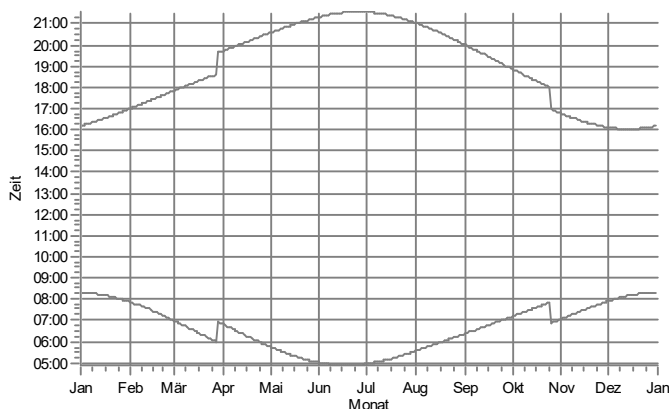
IP14: Holländer Mühle 1, 06779 Raguhn-Jeßnitz

SHADOW - Grafischer Kalender pro WEA**Berechnung:** SW25034 Salzfurkapelle Vorbelastung

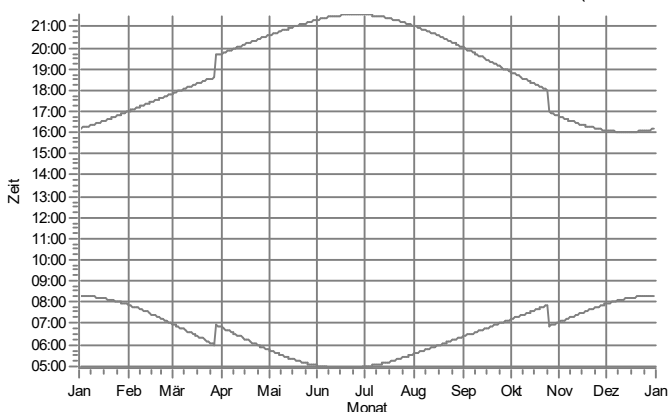
WEA30: GE WIND ENERGY GE 1.5sl 1500 77.0 !O! NH: 96,0 m (Ges:134,5



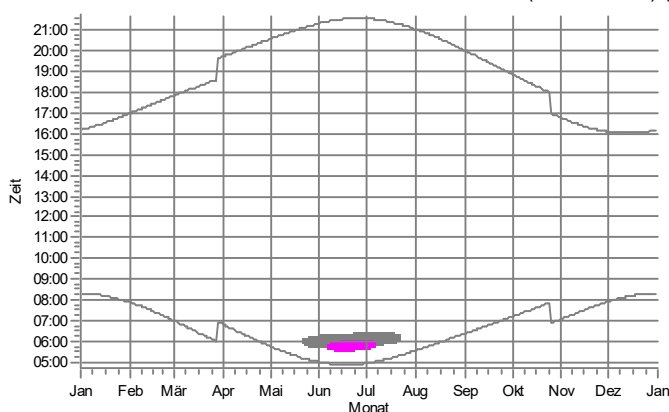
WEA31: GE WIND ENERGY GE 1.5sl 1500 77.0 !O! NH: 96,0 m (Ges:134,5 m) (231



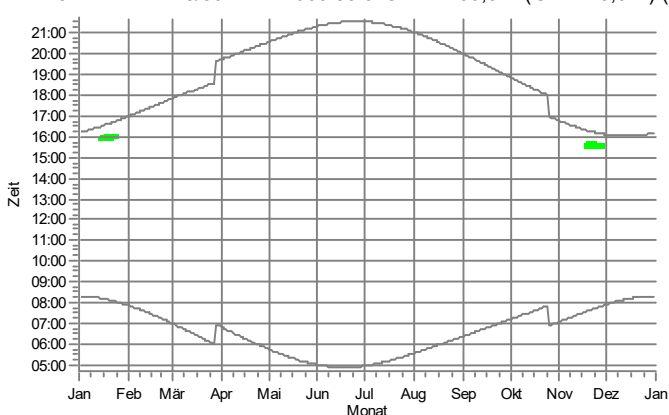
WEA32: ENERCON E-70 E4 2,3 MW 2300 71.0 !O! NH: 114,0 m (Ges:149,5



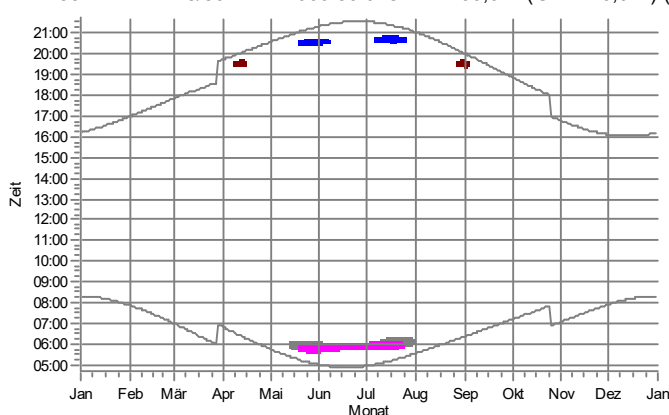
WEA33: DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (233)



WEA34: DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (2



WEA35: DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (235)



Schattenrezeptoren

IP03: Siebenhausen Str. 8, 06766 Bitterfeld-Wolfen
IP04: Siebenhausen 14, 06766 Bitterfeld-Wolfen

IP05: Siebenhausen 15, 06766 Bitterfeld-Wolfen
IP08: Feldrain 20, 06766 Bitterfeld-Wolfen (Gemengelage)

IP09: Thurländer Str. 1, 06779 Raguhn-Jeßnitz

Projekt:

SW25034 Salzfurkapelle

Lizenziertes Anwender:

windtest grevenbroich gmbh

Frimmersdorfer Straße 73a

DE-41517 Grevenbroich

+49 2181 2278 0

Florian Schmidt

Berechnet:

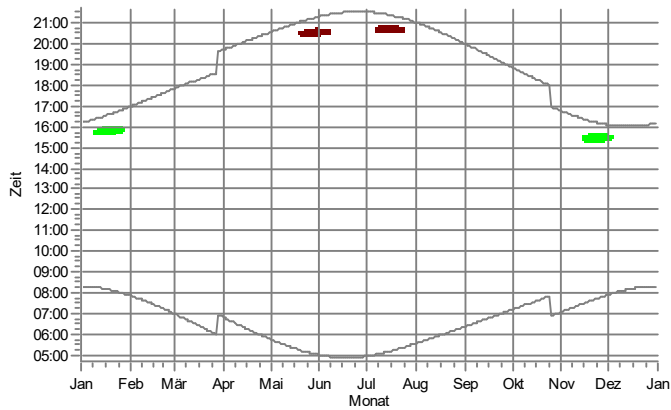
14.10.2025 14:35/4.1.273



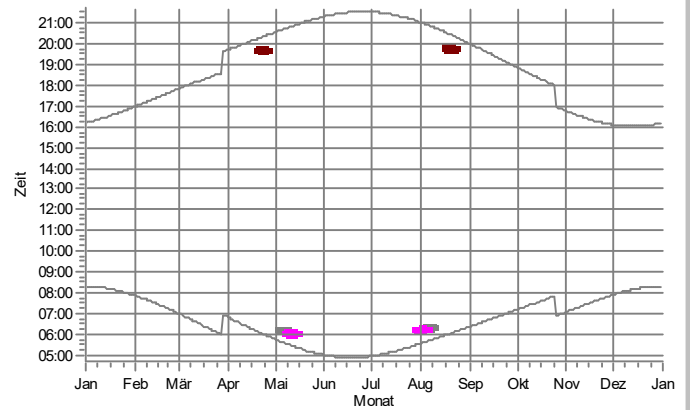
SHADOW - Grafischer Kalender pro WEA

Berechnung: SW25034 Salzfurkapelle Vorbelastung

WEA36: DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (237)



WEA37: DEWIND D8/80-2MW 2000 80.0 !O! NH: 100,0 m (Ges:140,0 m) (237)



Schattenrezeptoren

IP04: Siebenhausen 14, 06766 Bitterfeld-Wolfen

IP05: Siebenhausen 15, 06766 Bitterfeld-Wolfen

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

IP09: Thurländer Str. 1, 06779 Raguhn-Jeßnitz