

Project:
211018_Siksberget

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Calculated:
2023-02-22 13:08/3.6.361

Bilaga 1. Skuggutbredning vindpark Siksberget

SHADOW - Main Result

Calculation: 230222_Siksberget_Shadow_Layout230125_20WTGs_HH165_RD210_TotalHeight_270_SEILME_realCase_ZVI_2m
Assumptions for shadow calculations

Maximum distance for influence
Calculate only when more than 20 % of sun is covered by the blade
Please look in WTG table

Minimum sun height over horizon for influence 3 °
Day step for calculation 1 days
Time step for calculation 1 minutes

Sunshine probability S (Average daily sunshine hours) []
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1,53 2,61 5,25 7,49 7,98 8,86 8,35 6,69 5,02 3,43 1,63 1,29

Operational hours are calculated from WTGs in calculation and wind distribution:
EmdEuropeEra5_N60.258865_E015.285248 (3)

Operational time
N NNE ENE E ESE SSE S SSW WSW W WNW NNW Sum
793 791 535 461 445 530 664 988 1 217 805 672 636 8 538
Idle start wind speed: Cut in wind speed from power curve

A ZVI (Zones of Visual Influence) calculation is performed before flicker calculation so non visible WTG do not contribute to calculated flicker values. A WTG will be visible if it is visible from any part of the receiver window. The ZVI calculation is based on the following assumptions:
Height contours used: Height Contours: 211018_Hight_data_siksberget_optim
Receptor grid resolution: 1,0 m

All coordinates are in
Swedish UTM 33-SWREF99 (SE)

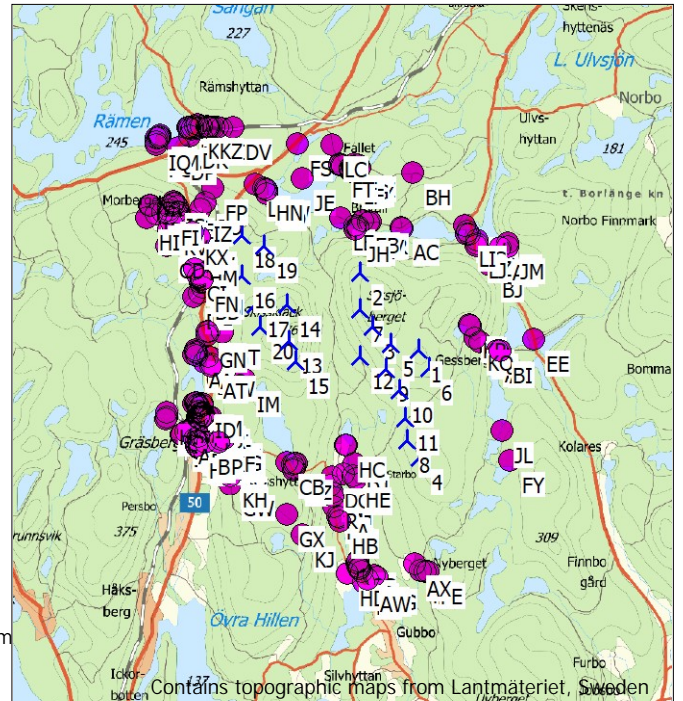
WTGs

Row	Easting	Northing	Z	Row data/Description	WTG type			Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Shadow data	
					Valid	Manufact.	Type-generator				Calculation distance [m]	RPM [RPM]
			[m]									
1	518 499	6 679 179	346,2	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
2	516 959	6 681 219	333,5	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
3	517 274	6 679 786	335,0	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
4	518 555	6 676 331	282,5	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
5	517 781	6 679 325	322,5	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
6	518 779	6 678 699	317,8	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
7	516 935	6 680 237	324,5	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
8	518 219	6 676 779	262,0	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
9	517 643	6 678 682	299,1	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
10	518 019	6 678 099	275,6	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
11	518 146	6 677 376	247,2	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
12	516 934	6 678 984	252,3	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
13	515 059	6 679 379	365,5	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
14	515 019	6 680 379	355,0	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
15	515 259	6 678 859	335,1	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
16	513 819	6 681 119	313,1	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
17	514 159	6 680 359	315,0	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
18	513 799	6 682 179	280,0	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
19	514 389	6 681 913	290,0	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0
20	514 299	6 679 779	321,4	VESTAS 210 (modified) 5600... No	Yes	VESTAS	210 (modified)-5 600	5 600	210,0	165,0	2 041	0,0

Shadow receptor-Input

No.	Easting	Northing	Z	Width	Height	Elevation	Slope of	Direction mode	Eye height
			[m]	[m]	[m]	a.g.l. [m]	window [°]		(ZVI) a.g.l. [m]
A	512 341	6 676 980	228,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
B	512 589	6 679 110	228,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
C	512 680	6 677 541	226,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
D	512 692	6 676 720	220,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
E	512 718	6 677 484	222,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
F	512 758	6 677 448	222,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0

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Scale 1:200 000
New WTG (red triangle)
Shadow receptor (yellow circle)

SHADOW - Main Result

Calculation: 230222_Siksberget_Shadow_Layout230125_20WTGs_HH165_RD210_TotalHeight_270_SEILME_realCase_ZVI_2m

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No.	Easting	Northing	Z	Width	Height	Elevation	Slope of	Direction mode	Eye height
			[m]	[m]	[m]	a.g.l.	window		(ZVI) a.g.l.
						[m]	[°]		[m]
G	512 766	6 676 815	219,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
H	512 777	6 677 658	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
I	512 792	6 677 381	222,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
J	512 808	6 677 405	223,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
K	512 938	6 676 727	222,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
L	513 002	6 677 182	230,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
M	513 006	6 677 357	230,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
N	513 034	6 676 567	222,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
O	513 074	6 677 095	232,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
P	513 210	6 676 725	231,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
Q	515 276	6 676 156	249,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
R	516 251	6 675 266	152,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
S	516 975	6 673 364	159,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
T	511 387	6 682 977	321,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
U	511 526	6 682 742	331,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
V	511 872	6 682 325	316,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
W	512 054	6 682 796	308,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
X	512 142	6 682 774	306,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
Y	512 450	6 684 981	247,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
Z	512 666	6 682 119	294,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AA	512 673	6 681 135	290,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AB	512 692	6 681 008	283,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AC	518 018	6 682 403	201,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AD	520 469	6 679 179	216,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AE	520 603	6 679 164	216,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AF	520 671	6 681 900	193,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AG	512 347	6 676 988	227,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AH	512 346	6 676 982	228,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AI	512 609	6 679 016	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AJ	512 610	6 676 741	217,6	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AK	512 619	6 676 600	217,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AL	512 709	6 677 364	219,6	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AM	512 762	6 677 718	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AN	512 762	6 677 504	222,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AO	512 845	6 677 380	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AP	512 869	6 677 386	225,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AQ	512 926	6 678 969	229,6	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AR	512 932	6 677 396	227,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AS	513 007	6 677 182	230,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AT	513 004	6 678 728	232,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AU	513 343	6 677 006	243,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AV	516 929	6 673 401	157,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AW	517 183	6 673 079	160,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AX	518 426	6 673 488	199,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AY	512 381	6 685 031	247,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
AZ	512 597	6 681 960	297,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BA	512 639	6 681 844	297,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BB	512 657	6 682 068	296,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BC	512 675	6 681 918	295,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BD	512 770	6 680 815	271,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BE	512 965	6 685 028	251,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BF	516 441	6 684 053	217,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BG	516 679	6 683 980	217,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BH	518 320	6 683 856	240,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BI	520 667	6 679 169	220,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BJ	520 391	6 681 423	207,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BK	512 434	6 676 998	221,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BL	512 569	6 676 777	215,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BM	512 579	6 679 140	230,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BN	512 676	6 677 671	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BO	512 782	6 677 695	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BP	512 808	6 677 446	224,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BQ	512 868	6 676 717	220,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BR	512 868	6 676 724	220,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0

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SHADOW - Main Result

Calculation: 230222_Siksberget_Shadow_Layout230125_20WTGs_HH165_RD210_TotalHeight_270_SEILME_realCase_ZVI_2m

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No.	Easting	Northing	Z	Width	Height	Elevation	Slope of	Direction mode	Eye height
			[m]	[m]	[m]	a.g.l.	window		(ZVI) a.g.l.
						[m]	[°]		[m]
BS	512 932	6 678 972	230,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BT	512 937	6 678 972	230,6	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BU	513 006	6 677 363	231,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BV	513 011	6 678 966	236,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BW	513 017	6 678 786	233,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BX	513 158	6 676 705	230,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BY	513 320	6 676 693	238,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
BZ	513 322	6 676 700	238,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CA	513 488	6 675 883	250,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CB	515 005	6 676 179	249,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CC	516 925	6 673 553	162,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CD	511 814	6 681 920	335,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CE	512 090	6 682 961	305,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CF	512 136	6 682 805	306,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CG	512 426	6 682 576	295,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CH	512 493	6 685 020	247,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CI	512 568	6 681 296	300,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CJ	512 657	6 681 110	290,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CK	512 707	6 680 946	278,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CL	512 766	6 680 977	280,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CM	512 782	6 680 933	277,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CN	513 057	6 685 053	248,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CO	514 479	6 683 282	210,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CP	516 673	6 683 933	218,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CQ	516 727	6 683 992	219,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CR	517 200	6 682 555	205,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CS	518 056	6 682 390	200,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CT	512 443	6 676 882	221,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CU	512 528	6 677 719	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CV	512 601	6 676 707	217,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CW	512 613	6 676 600	217,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CX	512 638	6 676 784	218,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CY	512 733	6 677 325	222,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
CZ	512 787	6 677 659	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DA	512 804	6 677 405	222,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DB	512 813	6 677 402	223,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DC	512 811	6 678 818	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DD	513 032	6 676 571	222,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DE	513 079	6 677 090	232,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DF	515 226	6 676 157	247,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DG	516 240	6 675 793	150,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DH	516 258	6 675 374	150,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DI	516 534	6 675 876	161,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DJ	516 798	6 676 161	170,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DK	511 290	6 682 659	335,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DL	511 530	6 684 640	250,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DM	511 586	6 684 753	247,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DN	511 892	6 681 940	337,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DO	511 892	6 682 650	318,6	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DP	512 109	6 684 500	247,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DQ	512 113	6 682 711	306,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DR	512 421	6 684 807	247,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DS	512 541	6 681 961	298,6	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DT	512 548	6 680 559	267,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DU	512 643	6 685 011	247,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DV	513 545	6 685 020	260,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DW	514 439	6 683 422	210,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DX	516 783	6 684 069	220,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DY	516 820	6 683 945	222,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
DZ	516 873	6 684 055	226,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EA	516 878	6 682 427	202,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EB	517 020	6 682 569	205,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EC	519 834	6 682 251	208,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
ED	520 160	6 679 387	256,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0

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SHADOW - Main Result

Calculation: 230222_Siksberget_Shadow_Layout230125_20WTGs_HH165_RD210_TotalHeight_270_SEILME_realCase_ZVI_2m

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No.	Easting	Northing	Z	Width	Height	Elevation	Slope of	Direction mode	Eye height
			[m]	[m]	[m]	a.g.l.	window		(ZVI) a.g.l.
			[m]	[m]	[m]	[m]	[°]		[m]
EE	521 561	6 679 480	197,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EF	512 496	6 677 069	217,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EG	512 602	6 677 733	227,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EH	512 602	6 676 711	217,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EI	512 614	6 676 612	217,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EJ	512 653	6 676 579	218,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EK	512 665	6 677 365	219,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EL	512 673	6 676 777	219,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EM	512 676	6 676 864	220,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EN	512 684	6 676 724	220,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EO	512 710	6 677 422	221,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EP	512 768	6 676 809	219,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EQ	512 787	6 677 381	222,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
ER	512 812	6 677 472	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
ES	512 845	6 677 376	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
ET	513 019	6 678 789	234,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EU	513 092	6 676 703	227,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EV	513 253	6 676 773	235,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EW	513 254	6 676 741	234,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EX	513 308	6 676 763	238,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EY	513 330	6 676 831	241,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
EZ	513 356	6 676 824	242,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FA	516 275	6 674 980	157,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FB	516 858	6 675 754	170,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FC	516 913	6 673 496	160,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FD	516 940	6 673 357	154,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FE	518 788	6 673 289	214,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FF	519 837	6 679 860	297,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FG	511 523	6 684 581	250,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FH	511 626	6 684 825	247,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FI	511 882	6 682 759	320,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FJ	512 659	6 681 923	296,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FK	512 677	6 681 089	289,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FL	512 701	6 680 664	269,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FM	512 714	6 685 065	248,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FN	512 753	6 681 003	283,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FO	512 835	6 683 062	275,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FP	513 021	6 683 428	250,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FQ	513 259	6 684 998	253,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FR	514 473	6 683 380	210,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FS	515 257	6 684 610	213,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FT	516 411	6 684 060	216,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FU	516 888	6 682 359	194,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FV	517 150	6 682 520	201,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FW	519 725	6 682 452	197,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FX	519 797	6 682 306	200,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FY	520 948	6 676 256	242,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
FZ	520 033	6 681 994	197,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GA	511 786	6 677 327	266,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GB	511 828	6 677 359	265,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GC	512 430	6 677 000	221,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GD	512 475	6 676 819	218,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GE	512 525	6 679 038	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GF	512 668	6 677 363	219,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GG	512 702	6 677 619	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GH	512 714	6 677 364	219,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GI	512 737	6 676 521	220,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GJ	512 750	6 676 537	220,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GK	512 771	6 676 819	220,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GL	512 790	6 677 662	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GM	512 803	6 677 448	224,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GN	512 886	6 679 519	245,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GO	512 964	6 676 684	222,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GP	513 036	6 676 563	222,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0

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SHADOW - Main Result

Calculation: 230222_Siksberget_Shadow_Layout230125_20WTGs_HH165_RD210_TotalHeight_270_SEILME_realCase_ZVI_2m

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No.	Easting	Northing	Z	Width	Height	Elevation	Slope of	Direction mode	Eye height
			[m]	[m]	[m]	a.g.l.	window		(ZVI) a.g.l.
						[m]	[°]		[m]
GQ	513 138	6 676 566	225,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GR	513 159	6 676 697	229,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GS	513 212	6 676 721	231,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GT	513 312	6 679 611	266,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GU	513 380	6 676 729	242,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GV	513 456	6 676 114	245,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GW	513 519	6 675 602	252,6	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GX	515 023	6 674 792	276,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GY	515 202	6 675 988	237,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
GZ	515 217	6 676 043	242,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HA	516 424	6 674 695	150,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HB	516 429	6 674 601	150,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HC	516 607	6 676 647	167,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HD	516 639	6 673 242	150,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HE	516 787	6 675 847	170,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HF	517 030	6 673 269	158,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HG	517 444	6 673 152	168,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HH	518 726	6 673 281	208,6	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HI	511 285	6 682 639	336,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HJ	511 850	6 682 838	320,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HK	511 875	6 682 946	315,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HL	511 916	6 682 664	318,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HM	512 622	6 681 712	291,6	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HN	514 373	6 683 431	214,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HO	516 383	6 684 069	216,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HP	516 740	6 683 991	219,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HQ	520 048	6 682 088	196,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HR	520 636	6 681 846	193,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HS	511 832	6 677 496	265,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HT	512 529	6 677 728	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HU	512 591	6 679 145	230,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HV	512 609	6 676 611	217,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HW	512 613	6 679 068	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HX	512 643	6 676 579	218,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HY	512 660	6 677 366	219,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
HZ	512 681	6 676 736	220,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IA	512 692	6 676 549	220,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IB	512 718	6 677 364	219,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IC	512 739	6 677 464	222,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
ID	512 786	6 677 665	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IE	512 807	6 676 521	220,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IF	512 892	6 679 633	250,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IG	512 961	6 676 681	221,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IH	513 093	6 677 054	232,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
II	513 096	6 676 704	227,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IJ	513 245	6 676 736	233,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IK	513 375	6 676 730	242,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IL	513 510	6 675 573	251,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IM	513 887	6 678 377	266,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IN	516 168	6 675 564	157,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IO	517 370	6 673 179	167,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IP	511 369	6 682 979	321,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IQ	511 532	6 684 751	247,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IR	511 986	6 683 015	307,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IS	511 994	6 683 066	307,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IT	512 046	6 683 032	306,6	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IU	512 060	6 682 613	307,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IV	512 419	6 685 003	247,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IW	512 588	6 682 054	298,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IX	512 616	6 685 095	248,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IY	512 692	6 681 054	286,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
IZ	512 701	6 682 888	287,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JA	512 734	6 681 028	285,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JB	512 893	6 685 032	250,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0

To be continued on next page...

SHADOW - Main Result

Calculation: 230222_Siksberget_Shadow_Layout230125_20WTGs_HH165_RD210_TotalHeight_270_SEILME_realCase_ZVI_2m

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No.	Easting	Northing	Z	Width	Height	Elevation	Slope of	Direction mode	Eye height
			[m]	[m]	[m]	a.g.l.	window		(ZVI) a.g.l.
			[m]	[m]	[m]	[m]	[°]		[m]
JC	512 920	6 685 047	252,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JD	513 150	6 685 039	250,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JE	515 401	6 683 706	217,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JF	516 460	6 684 035	216,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JG	516 778	6 683 997	220,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JH	516 810	6 682 348	196,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JI	516 935	6 683 977	228,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JJ	520 431	6 679 190	216,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JK	520 570	6 679 171	213,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JL	520 737	6 677 063	227,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JM	520 860	6 681 916	202,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JN	512 221	6 676 896	237,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JO	512 226	6 676 898	237,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JP	512 430	6 676 997	221,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JQ	512 471	6 676 817	218,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JR	512 493	6 677 076	217,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JS	512 611	6 677 734	227,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JT	512 637	6 676 789	218,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JU	512 649	6 677 711	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JV	512 676	6 677 541	226,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JW	512 688	6 676 596	219,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JX	512 697	6 676 552	220,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JY	512 760	6 677 500	222,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
JZ	512 757	6 676 685	220,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KA	512 808	6 677 473	225,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KB	512 945	6 679 637	254,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KC	513 080	6 677 096	232,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KD	513 094	6 676 698	227,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KE	513 139	6 676 563	225,4	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KF	513 255	6 676 770	235,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KG	513 363	6 676 817	243,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KH	513 507	6 675 826	250,6	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KI	515 170	6 676 140	243,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KJ	515 448	6 674 248	258,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KK	516 387	6 674 738	155,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KL	516 594	6 676 656	167,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KM	516 601	6 676 634	167,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KN	517 078	6 672 999	147,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KO	518 586	6 673 317	201,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KP	519 881	6 679 818	289,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KQ	519 996	6 679 478	275,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KR	511 595	6 684 778	250,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KS	511 618	6 684 827	247,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KT	511 624	6 684 776	250,3	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KU	511 697	6 682 782	324,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KV	511 958	6 682 511	315,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KW	512 357	6 685 043	247,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KX	512 492	6 682 256	299,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KY	512 565	6 685 060	247,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
KZ	512 864	6 685 063	252,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
LA	513 580	6 685 033	260,9	5,0	5,0	2,0	0,0	"Green house mode"	2,0
LB	514 142	6 683 556	219,2	5,0	5,0	2,0	0,0	"Green house mode"	2,0
LC	516 185	6 684 582	219,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
LD	516 202	6 684 600	218,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
LE	516 424	6 682 648	212,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
LF	516 713	6 683 892	222,1	5,0	5,0	2,0	0,0	"Green house mode"	2,0
LG	516 775	6 683 910	221,7	5,0	5,0	2,0	0,0	"Green house mode"	2,0
LH	516 819	6 682 441	205,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
LI	519 774	6 682 223	207,5	5,0	5,0	2,0	0,0	"Green house mode"	2,0
LJ	520 031	6 681 954	195,0	5,0	5,0	2,0	0,0	"Green house mode"	2,0
LK	520 857	6 682 009	210,8	5,0	5,0	2,0	0,0	"Green house mode"	2,0

SHADOW - Main Result

Calculation: 230222_Siksberget_Shadow_Layout230125_20WTGs_HH165_RD210_TotalHeight_270_SEILME_realCase_ZVI_2m
Calculation Results

Shadow receptor
Shadow, expected values

No. Shadow hours
per year
[h/year]

A	0:00
B	10:29
C	0:00
D	0:00
E	0:00
F	0:00
G	0:00
H	0:00
I	0:00
J	0:00
K	0:00
L	0:00
M	0:00
N	0:00
O	0:00
P	0:00
Q	0:00
R	0:00
S	0:00
T	0:00
U	0:00
V	1:41
W	1:52
X	2:11
Y	0:00
Z	14:48
AA	21:11
AB	20:46
AC	3:30
AD	6:03
AE	2:44
AF	0:00
AG	0:00
AH	0:00
AI	5:58
AJ	0:00
AK	0:00
AL	0:00
AM	0:00
AN	0:00
AO	0:00
AP	0:00
AQ	10:58
AR	0:00
AS	0:00
AT	3:19
AU	0:00
AV	0:00
AW	0:00
AX	0:00
AY	0:00
AZ	14:23
BA	16:33
BB	15:01
BC	16:56
BD	29:31
BE	0:00
BF	0:00
BG	0:00
BH	0:00
BI	2:33
BJ	0:00

To be continued on next page...

SHADOW - Main Result

Calculation: 230222_Siksberget_Shadow_Layout230125_20WTGs_HH165_RD210_TotalHeight_270_SEILME_realCase_ZVI_2m

...continued from previous page

Shadow, expected values

No. Shadow hours

per year
[h/year]

BK	0:00
BL	0:00
BM	11:05
BN	0:00
BO	0:00
BP	0:00
BQ	0:00
BR	0:00
BS	11:00
BT	10:59
BU	0:00
BV	10:15
BW	4:46
BX	0:00
BY	0:00
BZ	0:00
CA	0:00
CB	0:00
CC	0:00
CD	1:29
CE	1:44
CF	2:07
CG	5:38
CH	0:00
CI	23:07
CJ	20:37
CK	21:25
CL	23:21
CM	25:24
CN	0:00
CO	12:13
CP	0:00
CQ	0:00
CR	4:57
CS	3:24
CT	0:00
CU	0:00
CV	0:00
CW	0:00
CX	0:00
CY	0:00
CZ	0:00
DA	0:00
DB	0:00
DC	9:04
DD	0:00
DE	0:00
DF	0:00
DG	0:00
DH	0:00
DI	8:19
DJ	15:46
DK	0:00
DL	0:00
DM	0:00
DN	1:37
DO	1:27
DP	0:00
DQ	2:08
DR	0:00
DS	13:04
DT	17:54
DU	0:00

To be continued on next page...

SHADOW - Main Result

Calculation: 230222_Siksberget_Shadow_Layout230125_20WTGs_HH165_RD210_TotalHeight_270_SEILME_realCase_ZVI_2m

...continued from previous page
Shadow, expected values

No.	Shadow hours per year [h/year]
DV	0:00
DW	10:52
DX	0:00
DY	0:00
DZ	0:00
EA	5:55
EB	5:07
EC	0:00
ED	7:48
EE	0:00
EF	0:00
EG	0:00
EH	0:00
EI	0:00
EJ	0:00
EK	0:00
EL	0:00
EM	0:00
EN	0:00
EO	0:00
EP	0:00
EQ	0:00
ER	0:00
ES	0:00
ET	4:49
EU	0:00
EV	0:00
EW	0:00
EX	0:00
EY	0:00
EZ	0:00
FA	0:00
FB	10:48
FC	0:00
FD	0:00
FE	0:00
FF	7:54
FG	0:00
FH	0:00
FI	1:20
FJ	16:24
FK	20:03
FL	23:40
FM	0:00
FN	22:09
FO	6:11
FP	4:07
FQ	0:00
FR	11:09
FS	0:00
FT	0:00
FU	6:25
FV	5:12
FW	0:00
FX	0:00
FY	0:00
FZ	0:00
GA	0:00
GB	0:00
GC	0:00
GD	0:00
GE	4:53
GF	0:00

To be continued on next page...

SHADOW - Main Result

Calculation: 230222_Siksberget_Shadow_Layout230125_20WTGs_HH165_RD210_TotalHeight_270_SEILME_realCase_ZVI_2m

...continued from previous page
Shadow, expected values

No. Shadow hours
per year
[h/year]

GG	0:00
GH	0:00
GI	0:00
GJ	0:00
GK	0:00
GL	0:00
GM	0:00
GN	16:47
GO	0:00
GP	0:00
GQ	0:00
GR	0:00
GS	0:00
GT	23:33
GU	0:00
GV	0:00
GW	0:00
GX	0:00
GY	0:00
GZ	0:00
HA	0:00
HB	0:00
HC	14:57
HD	0:00
HE	13:25
HF	0:00
HG	0:00
HH	0:00
HI	0:00
HJ	0:00
HK	0:00
HL	1:30
HM	18:11
HN	11:06
HO	0:00
HP	0:00
HQ	0:00
HR	0:00
HS	0:00
HT	0:00
HU	10:59
HV	0:00
HW	9:31
HX	0:00
HY	0:00
HZ	0:00
IA	0:00
IB	0:00
IC	0:00
ID	0:00
IE	0:00
IF	19:23
IG	0:00
IH	0:00
II	0:00
IJ	0:00
IK	0:00
IL	0:00
IM	8:15
IN	0:00
IO	0:00
IP	0:00
IQ	0:00

To be continued on next page...

SHADOW - Main Result

Calculation: 230222_Siksberget_Shadow_Layout230125_20WTGs_HH165_RD210_TotalHeight_270_SEILME_realCase_ZVI_2m

...continued from previous page
Shadow, expected values

No.	Shadow hours per year [h/year]
IR	1:26
IS	1:21
IT	1:30
IU	2:05
IV	0:00
IW	13:21
IX	0:00
IY	19:30
IZ	5:03
JA	21:27
JB	0:00
JC	0:00
JD	0:00
JE	0:00
JF	0:00
JG	0:00
JH	6:25
JI	0:00
JJ	6:17
JK	2:48
JL	0:00
JM	0:00
JN	0:00
JO	0:00
JP	0:00
JQ	0:00
JR	0:00
JS	0:00
JT	0:00
JU	0:00
JV	0:00
JW	0:00
JX	0:00
JY	0:00
JZ	0:00
KA	0:00
KB	19:52
KC	0:00
KD	0:00
KE	0:00
KF	0:00
KG	0:00
KH	0:00
KI	0:00
KJ	0:00
KK	0:00
KL	14:21
KM	14:59
KN	0:00
KO	0:00
KP	7:54
KQ	8:43
KR	0:00
KS	0:00
KT	0:00
KU	0:00
KV	1:48
KW	0:00
KX	9:42
KY	0:00
KZ	0:00
LA	0:00
LB	11:32

To be continued on next page...

SHADOW - Main Result

Calculation: 230222_Siksberget_Shadow_Layout230125_20WTGs_HH165_RD210_TotalHeight_270_SEILME_realCase_ZVI_2m

...continued from previous page

Shadow, expected values

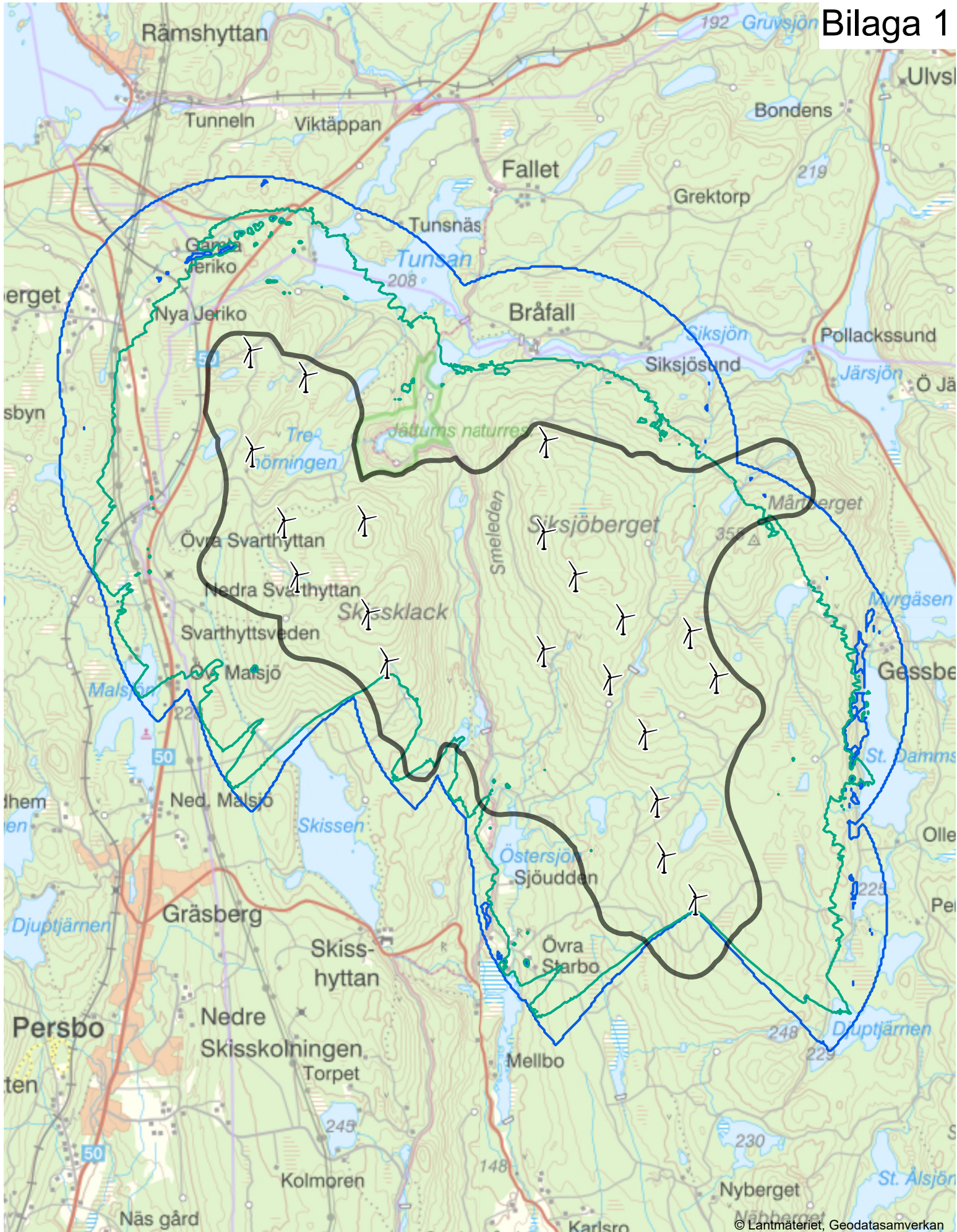
No.	Shadow hours per year [h/year]
LC	0:00
LD	0:00
LE	3:42
LF	0:00
LG	0:00
LH	5:43
LI	0:00
LJ	0:00
LK	0:00

Total amount of flickering on the shadow receptors caused by each WTG

No.	Name	Expected [h/year]
1	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (87)	15:23
2	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (88)	27:01
3	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (89)	0:00
4	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (90)	14:13
5	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (91)	0:00
6	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (92)	17:18
7	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (93)	0:00
8	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (94)	32:11
9	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (95)	0:00
10	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (96)	0:00
11	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (97)	10:26
12	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (98)	0:00
13	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (99)	3:09
14	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (100)	5:36
15	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (101)	8:15
16	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (102)	67:06
17	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (103)	38:27
18	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (104)	87:52
19	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (105)	49:56
20	VESTAS 210 (modified) 5600 210.0 !O! hub: 165,0 m (TOT: 270,0 m) (106)	52:52

Total times in Receptor wise and WTG wise tables can differ, as a WTG can lead to flicker at 2 or more receptors simultaneously and/or receptors may receive flicker from 2 or more WTGs simultaneously.

The calculation of the total expected values for a given receptor assumes a weighted average directional reduction for all WTGs contributing to shadow flicker within the same day. In the case where shadow flicker from different WTGs is not concurrent within the day, the total expected time at a given receptor may deviate marginally from the individual flicker time caused by each turbine separately.



TECKENFÖRKLARING

- Projektområde Siksberget
- Layout
- Skuggning
- 0 h/år
- 8 h/år

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SKALA (A4): 1:50 000

