Project:
Kipeto

Description:
Kipeto Wind Farm
Wind rose based on correlated wind data from three 80m met mast located on site.
Sunshine statistics based on average sunshine hours from Nairobi/ Dagor Etti met station from 1969-1993

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Calculated:
23/02/2012 16:40/2.7.486

SHADOW - Main Result

Calculation: Shadow Flicker Predictions

Assumptions for shadow calculations

Maximum distance for influence	1,000	m
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) [NAIROBI / DAGOR ETTI]

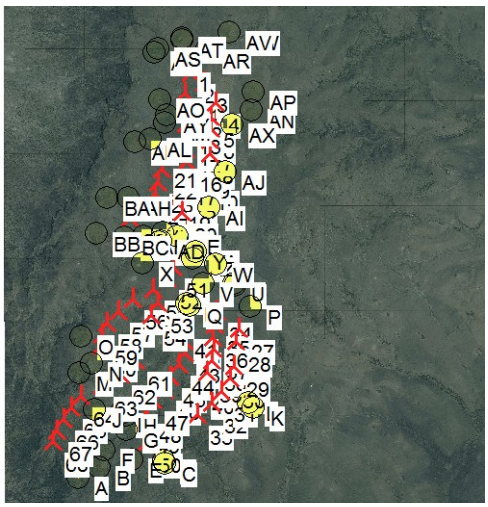
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
9.22	9.20	8.45	7.04	6.12	5.08	4.28	4.16	6.18	7.43	6.87	8.47

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
9	166	2,234	3,960	1,629	517	158	44	26	9	8	0	8,760

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: 30m DEM.wpo (3)
Obstacles used in calculation
Eye height: 1.5 m
Grid resolution: 10 m



Scale 1:200,000
New WTG
Shadow receptor

WTGs

	UTM WGS84 S Zone: 37 East	North	Z [m]	Row data/Description	WTG type Valid	Manufact.	Type-generator	Power, rated [kW]	Rotor diameter [m]	Hub height [m]	RPM [RPM]
1	241,115	9,815,114	1,985.4	T1	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
2	241,243	9,814,802	1,996.4	T2	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
3	241,618	9,814,544	1,997.9	T3	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
4	241,900	9,814,011	2,012.5	T4	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
5	241,776	9,813,634	2,012.6	T5	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
6	241,796	9,813,341	2,009.6	T6	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
7	241,770	9,813,037	2,007.8	T7	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
8	241,762	9,812,686	2,007.1	T8	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
9	241,668	9,812,290	2,010.0	T9	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
10	241,589	9,811,992	2,003.3	T10	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
11	241,085	9,814,286	1,998.8	T11	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
12	241,144	9,813,798	1,993.8	T12	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
13	241,118	9,813,469	1,992.4	T13	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
14	241,121	9,813,152	1,990.4	T14	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
15	241,110	9,812,795	1,983.3	T15	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
16	241,139	9,812,463	1,993.1	T16	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
17	241,009	9,812,116	1,994.6	T17	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
18	241,001	9,811,767	1,990.3	T18	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
19	240,849	9,811,434	1,980.0	T19	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
20	241,016	9,811,132	1,989.9	T20	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
21	240,484	9,812,584	1,965.6	T21	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
22	240,481	9,812,278	1,974.1	T22	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
23	240,377	9,811,923	1,971.3	T23	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
24	240,304	9,811,604	1,968.8	T24	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
25	240,309	9,811,184	1,976.9	T25	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
26	239,650	9,810,976	1,966.0	T26	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
27	242,508	9,808,043	1,989.5	T27	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
28	242,456	9,807,732	1,971.4	T28	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
29	242,386	9,807,063	1,972.7	T29	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
30	242,296	9,806,744	1,980.5	T30	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
31	242,075	9,806,392	1,965.8	T31	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
32	241,819	9,806,087	1,952.0	T32	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
33	241,432	9,805,801	1,928.3	T33	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
34	241,932	9,808,499	1,990.0	T34	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
35	241,894	9,808,151	1,994.4	T35	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
36	241,823	9,807,832	1,987.8	T36	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0

To be continued on next page...

Project: **Kipeto**

Description: Kipeto Wind Farm
Wind rose based on correlated wind data from three 80m met mast located on site.
Sunshine statistics based on average sunshine hours from Nairobi/ Dagor Etti met station from 1969-1993

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Calculated:
23/02/2012 16:40/2.7.486

SHADOW - Main Result

Calculation: Shadow Flicker Predictions

...continued from previous page

	UTM WGS84 S Zone: 37 East	North	Z	Row data/Description	WTG type Valid	Manufact.	Type-generator	Power, rated	Rotor diameter	Hub height	RPM
	UTM WGS84 S Zone: 37		[m]					[kW]	[m]	[m]	[RPM]
37	241,849	9,807,527	1,979.2	T37	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
38	241,801	9,807,219	1,966.0	T38	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
39	241,680	9,806,908	1,970.8	T39	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
40	241,480	9,806,600	1,948.3	T40	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
41	241,019	9,808,087	1,980.9	T41	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
42	241,086	9,807,712	1,989.8	T42	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
43	241,104	9,807,410	1,987.9	T43	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
44	240,942	9,807,114	1,975.2	T44	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
45	240,727	9,806,771	1,965.9	T45	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
46	240,567	9,806,459	1,965.6	T46	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
47	240,247	9,806,158	1,932.4	T47	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
48	240,093	9,805,851	1,911.9	T48	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
49	240,027	9,805,556	1,902.5	T49	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
50	240,091	9,805,065	1,878.9	T50	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
51	240,799	9,809,679	1,962.3	T51	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
52	240,639	9,809,375	1,981.3	T52	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
53	240,379	9,808,737	1,953.4	T53	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
54	240,214	9,808,419	1,933.0	T54	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
55	240,254	9,809,082	1,958.9	T55	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
56	239,713	9,808,827	1,928.3	T56	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
57	239,356	9,808,504	1,913.7	T57	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
58	239,050	9,808,209	1,903.6	T58	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
59	238,901	9,807,900	1,888.0	T59	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
60	238,894	9,807,590	1,863.9	T60	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
61	239,791	9,807,216	1,903.1	T61	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
62	239,404	9,806,858	1,852.4	T62	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
63	238,908	9,806,542	1,814.4	T63	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
64	238,346	9,806,262	1,794.4	T64	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
65	238,088	9,805,967	1,785.9	T65	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
66	237,902	9,805,663	1,784.8	T66	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
67	237,727	9,805,357	1,783.8	T67	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0
68	237,627	9,805,070	1,772.6	T68	Yes	GE WIND ENERGY	GE 1.6-1,600	1,600	100.0	80.0	0.0

Shadow receptor-Input

No.	Name	UTM WGS84 S Zone: 37 East	North	Z	Width	Height	Height a.g.l.	Degrees from south cw	Slope of window	Direction mode
				[m]	[m]	[m]	[m]	[°]	[°]	
A	H1	238,289	9,804,115	1,776.8	2.0	2.0	0.5	0.0	90.0	"Green house mode"
B	H2	238,843	9,804,402	1,783.7	2.0	2.0	0.5	0.0	90.0	"Green house mode"
C	H3 - Landowner	240,567	9,804,494	1,824.6	2.0	2.0	0.5	0.0	90.0	"Green house mode"
D	H4 - Landowner	240,527	9,804,574	1,830.8	2.0	2.0	0.5	0.0	90.0	"Green house mode"
E	H5	239,692	9,804,593	1,851.6	2.0	2.0	0.5	0.0	90.0	"Green house mode"
F	H6	238,962	9,804,841	1,794.7	2.0	2.0	0.5	0.0	90.0	"Green house mode"
G	H7 - Landowner	239,552	9,805,389	1,837.2	2.0	2.0	0.5	0.0	90.0	"Green house mode"
H	H8 - Landowner	239,552	9,805,763	1,818.2	2.0	2.0	0.5	0.0	90.0	"Green house mode"
I	H9 - Landowner	239,370	9,805,797	1,814.8	2.0	2.0	0.5	0.0	90.0	"Green house mode"
J	H10 - Landowner	238,699	9,805,906	1,797.9	2.0	2.0	0.5	0.0	90.0	"Green house mode"
K	H11 - Landowner	242,903	9,805,979	1,896.6	2.0	2.0	0.5	0.0	90.0	"Green house mode"
L	H12 - Landowner	242,773	9,806,097	1,907.4	2.0	2.0	0.5	0.0	90.0	"Green house mode"
M	H13	238,311	9,806,877	1,798.0	2.0	2.0	0.5	0.0	90.0	"Green house mode"
N	H14 - Landowner	238,635	9,807,129	1,823.8	2.0	2.0	0.5	0.0	90.0	"Green house mode"
O	H15 - Landowner	238,354	9,807,857	1,854.4	2.0	2.0	0.5	0.0	90.0	"Green house mode"
P	H17 - Landowner	242,829	9,808,634	2,002.4	2.0	2.0	0.5	0.0	90.0	"Green house mode"
Q	H20 - Landowner	241,230	9,808,650	1,982.3	2.0	2.0	0.5	0.0	90.0	"Green house mode"
R	H21 - Landowner	241,154	9,808,714	1,976.2	2.0	2.0	0.5	0.0	90.0	"Green house mode"
S	H22	242,411	9,809,196	1,989.1	2.0	2.0	0.5	0.0	90.0	"Green house mode"
T	H23	242,409	9,809,203	1,989.1	2.0	2.0	0.5	0.0	90.0	"Green house mode"

To be continued on next page...

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SHADOW - Main Result

Calculation: Shadow Flicker Predictions

...continued from previous page

No.	Name	UTM WGS84 S Zone: 37 East	North	Z [m]	Width [m]	Height [m]	Height a.g.l. [m]	Degrees from south cw [°]	Slope of window [°]	Direction mode
U	H24	242,397	9,809,234	1,989.1	2.0	2.0	0.5	0.0	90.0	"Green house mode"
V	H25 - Landowner	241,585	9,809,237	1,969.6	2.0	2.0	0.5	0.0	90.0	"Green house mode"
W	H26	241,904	9,809,758	1,968.6	2.0	2.0	0.5	0.0	90.0	"Green house mode"
X	H27 - Landowner	239,984	9,809,790	1,949.1	2.0	2.0	0.5	0.0	90.0	"Green house mode"
Y	H28	241,380	9,810,075	1,959.4	2.0	2.0	0.5	0.0	90.0	"Green house mode"
Z	H29	241,380	9,810,075	1,959.4	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AA	H30	241,380	9,810,075	1,959.4	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AB	H31	241,380	9,810,075	1,959.4	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AC	H32	240,420	9,810,327	1,970.2	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AD	H33	240,451	9,810,359	1,973.6	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AE	H34 - Landowner	240,895	9,810,492	1,981.2	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AF	H35	240,016	9,810,502	1,961.8	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AG	H36 - Landowner	240,511	9,810,602	1,984.5	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AH	H37 - Landowner	239,608	9,811,508	1,985.9	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AI	H38	241,721	9,811,251	1,989.5	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AJ	H40 - Landowner	242,168	9,812,198	2,007.6	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AK	H41	239,780	9,812,980	1,957.1	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AL	H42 - Landowner	240,194	9,813,053	1,966.4	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AM	H43 - Landowner	240,552	9,813,480	1,976.9	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AN	H44 - Landowner	242,863	9,813,827	2,028.4	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AO	H45	240,424	9,814,088	1,986.7	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AP	H46	242,890	9,814,302	2,022.1	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AQ	H47	240,277	9,815,331	2,000.4	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AR	H48 - Landowner	241,665	9,815,401	1,963.4	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AS	H49	240,390	9,815,444	2,009.4	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AT	H50	241,013	9,815,670	1,970.8	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AU	H51	241,013	9,815,728	1,969.8	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AV	H52	242,260	9,815,884	1,944.4	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AW	H53	242,260	9,815,884	1,944.4	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AX	H54 - Landowner	242,354	9,813,437	2,022.2	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AY	H55 - Landowner	240,619	9,813,691	1,974.6	2.0	2.0	0.5	0.0	90.0	"Green house mode"
AZ	H56	241,294	9,809,897	1,954.0	2.0	2.0	0.5	0.0	90.0	"Green house mode"
BA	H57	239,044	9,811,509	2,018.9	2.0	2.0	0.5	0.0	90.0	"Green house mode"
BB	H58	238,761	9,810,570	2,006.2	2.0	2.0	0.5	0.0	90.0	"Green house mode"
BC	H59	239,503	9,810,467	1,943.6	2.0	2.0	0.5	0.0	90.0	"Green house mode"

Calculation Results

Shadow receptor

No.	Name	Shadow, worst case: Shadow hours per year [h/year]	Shadow days per year [days/year]	Max shadow hours per day [h/day]	Shadow, expected values: Shadow hours per year [h/year]
A	H1	0:00	0	0:00	0:00
B	H2	0:00	0	0:00	0:00
C	H3 - Landowner	0:00	0	0:00	0:00
D	H4 - Landowner	0:00	0	0:00	0:00
E	H5	0:00	0	0:00	0:00
F	H6	0:00	0	0:00	0:00
G	H7 - Landowner	64:37	120	0:46	24:13
H	H8 - Landowner	81:12	136	0:45	38:51
I	H9 - Landowner	85:36	210	0:34	39:34
J	H10 - Landowner	36:24	100	0:31	18:23
K	H11 - Landowner	6:16	28	0:17	1:45
L	H12 - Landowner	47:38	110	0:32	16:03
M	H13	0:00	0	0:00	0:00
N	H14 - Landowner	27:11	71	0:30	13:30
O	H15 - Landowner	60:43	135	0:41	28:44
P	H17 - Landowner	8:24	35	0:17	4:57

To be continued on next page...

Project:
Kipeto

Description:
Kipeto Wind Farm
Wind rose based on correlated wind data from three 80m met mast located on site.
Sunshine statistics based on average sunshine hours from Nairobi/ Dagor Etti met station from 1969-1993

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23/02/2012 17:20 / 4

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IE-CO. Cavan
+353 86 8222803
Cormac

Calculated:
23/02/2012 16:40/2.7.486

SHADOW - Main Result

Calculation: Shadow Flicker Predictions

...continued from previous page

No.	Name	Shadow, worst case: Shadow hours per year [h/year]	Shadow days per year [days/year]	Max shadow hours per day [h/day]	Shadow, expected values: Shadow hours per year [h/year]
Q	H20 - Landowner	27:33	84	0:32	14:14
R	H21 - Landowner	49:12	168	0:37	21:37
S	H22	0:00	0	0:00	0:00
T	H23	0:00	0	0:00	0:00
U	H24	0:00	0	0:00	0:00
V	H25 - Landowner	10:07	34	0:21	4:11
W	H26	0:00	0	0:00	0:00
X	H27 - Landowner	14:08	38	0:28	7:44
Y	H28	0:00	0	0:00	0:00
Z	H29	0:00	0	0:00	0:00
AA	H30	0:00	0	0:00	0:00
AB	H31	0:00	0	0:00	0:00
AC	H32	0:00	0	0:00	0:00
AD	H33	0:00	0	0:00	0:00
AE	H34 - Landowner	0:00	0	0:00	0:00
AF	H35	0:00	0	0:00	0:00
AG	H36 - Landowner	14:38	62	0:16	4:14
AH	H37 - Landowner	33:00	92	0:25	15:51
AI	H38	28:19	84	0:30	14:23
AJ	H40 - Landowner	89:34	164	0:46	44:58
AK	H41	0:00	0	0:00	0:00
AL	H42 - Landowner	24:01	72	0:25	12:00
AM	H43 - Landowner	29:35	66	0:40	15:15
AN	H44 - Landowner	6:43	34	0:15	2:30
AO	H45	62:14	136	0:35	28:20
AP	H46	0:00	0	0:00	0:00
AQ	H47	11:19	43	0:19	5:50
AR	H48 - Landowner	7:49	26	0:22	4:42
AS	H49	14:04	52	0:19	6:52
AT	H50	0:00	0	0:00	0:00
AU	H51	0:00	0	0:00	0:00
AV	H52	0:00	0	0:00	0:00
AW	H53	0:00	0	0:00	0:00
AX	H54 - Landowner	71:36	156	0:35	29:41
AY	H55 - Landowner	81:53	136	0:45	38:07
AZ	H56	48:32	74	0:45	29:18
BA	H57	0:00	0	0:00	0:00
BB	H58	6:05	48	0:09	2:09
BC	H59	0:00	0	0:00	0:00

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

No.	Name	Worst case [h/year]	Expected [h/year]
1	T1	33:11	17:25
2	T2	0:00	0:00
3	T3	0:00	0:00
4	T4	6:43	2:30
5	T5	43:44	13:45
6	T6	27:52	16:30
7	T7	0:00	0:00
8	T8	0:00	0:00
9	T9	39:29	15:23
10	T10	50:05	29:55
11	T11	28:05	10:48
12	T12	72:12	32:44
13	T13	73:25	36:44
14	T14	10:42	5:11
15	T15	13:19	6:45
16	T16	0:00	0:00

To be continued on next page...

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SHADOW - Main Result

Calculation: Shadow Flicker Predictions

...continued from previous page

No.	Name	Worst case [h/year]	Expected [h/year]
17	T17	0:00	0:00
18	T18	0:00	0:00
19	T19	10:06	3:41
20	T20	18:13	10:49
21	T21	0:00	0:00
22	T22	0:00	0:00
23	T23	0:00	0:00
24	T24	15:38	7:05
25	T25	17:22	8:28
26	T26	20:43	6:24
27	T27	0:00	0:00
28	T28	0:00	0:00
29	T29	0:00	0:00
30	T30	0:00	0:00
31	T31	37:40	11:03
32	T32	9:58	5:10
33	T33	0:00	0:00
34	T34	38:21	20:47
35	T35	0:00	0:00
36	T36	0:00	0:00
37	T37	0:00	0:00
38	T38	0:00	0:00
39	T39	0:00	0:00
40	T40	0:00	0:00
41	T41	0:00	0:00
42	T42	0:00	0:00
43	T43	0:00	0:00
44	T44	0:00	0:00
45	T45	0:00	0:00
46	T46	0:00	0:00
47	T47	28:22	10:20
48	T48	41:20	19:14
49	T49	136:49	59:43
50	T50	0:00	0:00
51	T51	62:40	37:02
52	T52	10:07	4:11
53	T53	14:28	7:02
54	T54	4:00	2:07
55	T55	16:20	4:50
56	T56	0:00	0:00
57	T57	0:00	0:00
58	T58	11:05	3:56
59	T59	29:36	14:44
60	T60	20:02	9:36
61	T61	0:00	0:00
62	T62	27:11	13:30
63	T63	0:00	0:00
64	T64	0:00	0:00
65	T65	22:04	10:06
66	T66	14:20	8:20
67	T67	0:00	0:00
68	T68	0:00	0:00

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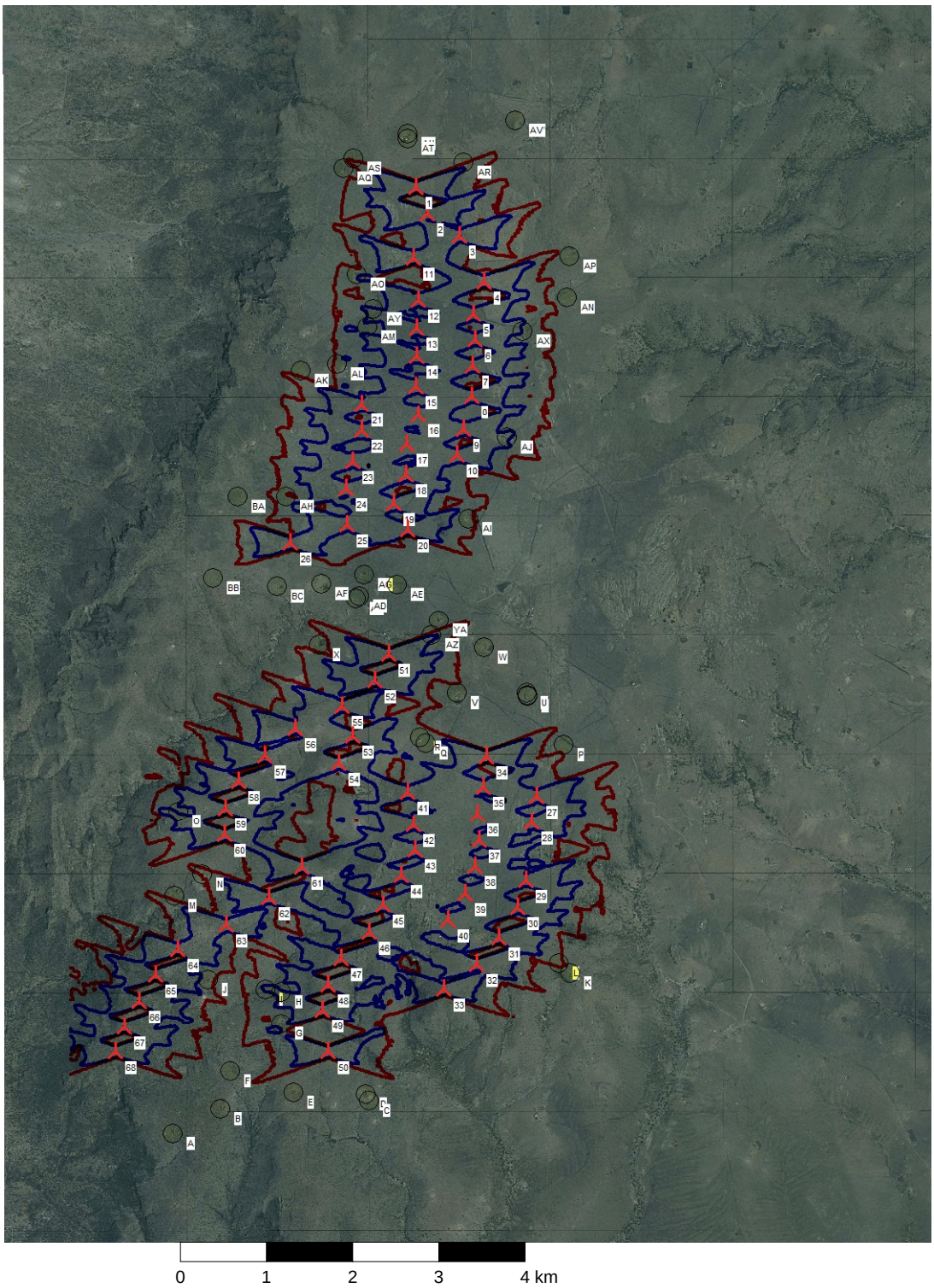
SHADOW - Map

Calculation: Shadow Flicker Predictions



0 1 2 3 4 km

Map: , Print scale 1:75,000, Map center UTM WGS 84 South Zone: 37 East: 240,380 North: 9,810,037

New WTG Shadow receptor

Isolines showing shadow in Hours per year, real case

10 30