Project:
WKG

Licensed user:
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Daan Houf / daanhouf@ventolines.nl
Calculated:
06/12/2017 09:48/3.1.617

PARK - Main Result

Calculation: Alternatief 6

Setup
AEP assuming long term representative time series data with optional corrections

Calculation performed in UTM (north)-WGS84 Zone: 31
At the site centre the difference between grid north and true north is: 2.1°

Wake
Wake Model: N.O. Jensen (EMD) : 2005
Include mirror wakes
Wake decay constant
Wake decay constant: 0.054 HH:100m Very open farmland

Use Downwind change of WDC by number of wake turbines. y = A*ln(x) + B

Model	A	B	Max x
2	-0.3000	1.4000	5

Combination model
Weighted linear and RSS

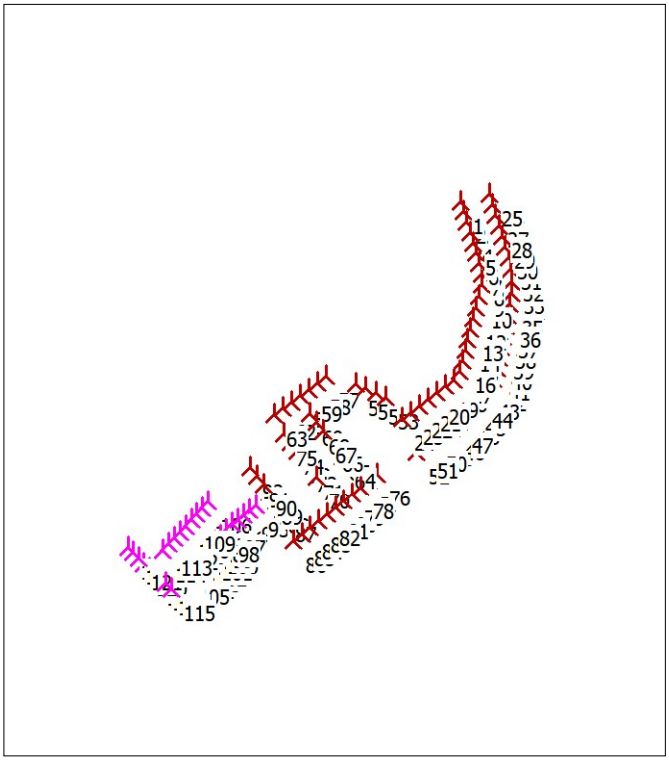
Linear weight	RSS weight
0.35	0.65

Scaler / wind data

Name	EMD Scaler WKG
Used period	31/01/1993 05:00:00 - 31/01/2017 04:00:00
Meteo object(s)	EmdConwx_N52.400_E005.540 (Pijlstaartweg)
	EmdConwx_N52.430_E005.660 (Kokkeltocht)
	EmdConwx_N52.460_E005.660 (Kubbeweg)
	EmdConwx_N52.490_E005.750 (Hoge Vaart)
	EmdConwx_N52.520_E005.780 (Hondtocht)
Horizontal interpolation	Take nearest
Displacement height: Omnidirectional from objects	
WAsP version	WAsP 11 Version 11.04.0006

Power correction
Power curve correction (adjusted IEC method, improved to match turbine control)

		Min	Max	Avg	Corr. [%]	Neg. corr. [%]	Pos. corr. [%]
Air density							
From scaler meteo objects	[°C]	-14.2	32.6	9.8			
From air density settings							
Resulting air density	[kg/m³]	1.134	1.345	1.227			
Relative to 15°C at sea level	[%]	92.6	109.8	100.1	100.0	100.0	100.0



Scale 1:400,000

New WTG

Calculated Annual Energy for Wind Farm

WTG combination	Result PARK [MWh/y]	GROSS (no loss) Free WTGs [MWh/y]	Wake loss [%]	Specific results¤) Capacity factor [%]	Mean WTG result [MWh/y]	Full load hours [Hours/year]	Wind speed free [m/s]	Wind speed wake reduced [m/s]
Wind farm	2,045,380.1	2,268,628.1	9.8	44.4	16,629.1	3,892	7.7	7.3

¤) Based on wake reduced results, but no other losses included

Calculated Annual Energy for each of 123 new WTGs with total 525.6 MW rated power

	WTG type Valid	Manufact.	Type-generator	Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Power curve Creator	Name	Annual Energy Result [MWh/y]	Wake loss [%]	Wind speed free [m/s]	reduced [m/s]
1	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	20,464.8	3.8	8.05	7.86
2	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	20,009.2	5.5	8.02	7.75
3	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,793.4	6.1	7.99	7.70
4	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,643.1	6.6	7.97	7.66
5	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,470.4	6.9	7.94	7.61
6	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,407.4	7.2	7.94	7.60
7	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,304.7	7.5	7.93	7.58
8	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,130.5	8.1	7.92	7.54
9	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,082.1	8.2	7.92	7.53
10	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,046.9	8.1	7.91	7.52
11	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,046.4	8.1	7.91	7.53
12	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,007.3	8.2	7.91	7.52
13	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,978.5	8.4	7.92	7.51
14	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,963.8	8.5	7.92	7.51
15	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,864.5	8.8	7.91	7.49
16	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,789.8	9.3	7.92	7.47
17	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,443.4	11.0	7.92	7.40
18	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,082.7	12.5	7.91	7.33
19	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,062.5	12.7	7.92	7.34
20	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,058.0	12.6	7.91	7.34
21	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,112.2	12.4	7.91	7.35
22	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,243.7	11.9	7.92	7.38

To be continued on next page...

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Calculated:
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PARK - Main Result

Calculation: Alternatief 6

...continued from previous page

	WTG type						Power curve		Annual Energy		Wind speed	
	Valid	Manufact.	Type-generator	Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Creator	Name	Result [MWh/y]	Wake loss [%]	free [m/s]	reduced [m/s]
23	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,482.8	10.7	7.92	7.43
24	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,100.0	7.4	7.89	7.56
25	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	20,257.9	5.3	8.09	7.82
26	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,705.9	7.1	8.04	7.69
27	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,386.7	7.9	7.99	7.61
28	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,236.0	8.3	7.97	7.57
29	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,160.0	8.6	7.96	7.55
30	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,087.5	8.8	7.96	7.54
31	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,044.1	9.0	7.96	7.53
32	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,075.8	8.9	7.96	7.54
33	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,057.0	8.9	7.96	7.54
34	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,970.9	9.2	7.96	7.52
35	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,839.4	9.6	7.95	7.49
36	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,834.6	9.7	7.96	7.50
37	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,784.0	9.7	7.94	7.48
38	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,834.3	9.5	7.95	7.49
39	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,835.8	9.5	7.95	7.49
40	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,827.3	9.5	7.95	7.49
41	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,719.1	9.8	7.93	7.46
42	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,422.9	11.3	7.94	7.40
43	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,322.9	11.7	7.93	7.38
44	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,349.7	11.5	7.93	7.39
45	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,408.0	11.2	7.93	7.40
46	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,463.6	11.1	7.94	7.42
47	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,269.0	12.0	7.94	7.39
48	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,271.0	12.1	7.95	7.40
49	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,311.6	11.9	7.95	7.41
50	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,448.9	11.3	7.96	7.45
51	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,688.9	10.2	7.96	7.50
52	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,446.3	6.6	7.98	7.68
53	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,066.6	8.0	7.93	7.56
54	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,948.2	8.6	7.94	7.53
55	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,981.1	8.5	7.94	7.54
56	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,278.6	7.0	7.94	7.60
57	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,643.7	10.1	7.93	7.46
58	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,345.9	11.3	7.92	7.39
59	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,358.0	11.4	7.93	7.40
60	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,475.3	10.9	7.93	7.43
61	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,619.8	10.2	7.93	7.45
62	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,867.5	8.9	7.92	7.50
63	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,608.1	5.5	7.93	7.67
64	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,863.8	9.0	7.94	7.52
65	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,705.4	9.9	7.95	7.48
66	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,685.8	10.1	7.95	7.47
67	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,685.9	9.9	7.94	7.47
68	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,743.0	9.8	7.94	7.48
69	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,941.5	8.7	7.94	7.52
70	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,006.5	8.5	7.95	7.54
71	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,784.8	9.4	7.93	7.49
72	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,826.0	9.5	7.95	7.50
73	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,853.7	9.2	7.95	7.50
74	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,946.0	8.6	7.93	7.52
75	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,302.7	6.9	7.93	7.60
76	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,628.4	10.5	7.98	7.49
77	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,392.7	11.7	7.98	7.44
78	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,380.6	11.8	7.98	7.44
79	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,377.3	11.7	7.97	7.43
80	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,444.8	11.6	7.99	7.45
81	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,488.5	11.4	7.99	7.46
82	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,578.2	11.0	7.98	7.48
83	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,734.2	10.2	7.98	7.51
84	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,875.8	9.4	7.97	7.53
85	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,148.6	8.1	7.97	7.59
86	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,805.0	4.9	7.96	7.74
87	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,177.8	7.8	7.96	7.59
88	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,938.0	9.0	7.96	7.53
89	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,942.7	8.8	7.94	7.51
90	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	18,999.2	8.3	7.93	7.52
91	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,144.3	7.5	7.92	7.55
92	Yes	NORDEX	N149/4.0-4.5-4,500	4,500	149.0	166.0	EMD	Mode 00 - 4500kW - 1.225 kg/m³ - R01	19,557.1	5.3	7.90	7.64
93	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,476.3	17.4	7.01	6.42
94	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,399.5	18.1	7.01	6.39
95	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,480.3	17.9	7.04	6.42

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Calculated:
06/12/2017 09:48/3.1.617

PARK - Main Result

Calculation: Alternatief 6

...continued from previous page

	WTG type						Power curve		Annual Energy		Wind speed	
	Valid	Manufact.	Type-generator	Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Creator	Name	Result [MWh/y]	Wake loss [%]	free [m/s]	reduced [m/s]
96	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,398.9	17.7	7.00	6.40
97	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,599.3	16.6	7.03	6.47
98	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,588.6	16.3	7.01	6.46
99	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,666.4	16.1	7.03	6.49
100	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,660.9	15.9	7.02	6.48
101	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,737.1	15.6	7.04	6.51
102	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,739.6	15.2	7.02	6.51
103	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,843.4	14.6	7.03	6.54
104	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,922.5	13.5	7.02	6.57
105	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	10,433.0	9.0	7.01	6.71
106	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,712.8	14.7	6.99	6.52
107	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,644.0	15.8	7.01	6.49
108	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,602.7	15.9	7.00	6.48
109	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,618.0	15.9	7.01	6.48
110	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,619.1	15.9	7.01	6.48
111	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,636.8	15.8	7.01	6.49
112	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,688.8	15.4	7.01	6.51
113	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	9,718.3	14.7	7.00	6.52
114	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	10,193.3	10.7	7.00	6.65
115	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	10,766.4	5.7	7.00	6.77
116	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	10,503.0	7.9	7.00	6.70
117	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	10,429.5	8.5	7.00	6.68
118	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	10,380.9	8.6	6.99	6.66
119	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	10,413.5	8.5	6.99	6.67
120	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	10,398.5	8.3	6.98	6.67
121	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	10,393.3	8.2	6.98	6.67
122	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	10,351.5	7.8	6.95	6.67
123	Yes	VESTAS	V117-3.6-3,600	3,600	117.0	97.5	EMD	Level 0 - Calculated - Modes PO1 & PO1-0S - 01-2016	10,565.6	5.0	6.92	6.75

Annual Energy results do not include any losses apart from wake losses. Additional losses and uncertainty must be considered for an investment decision.

WTG siting

	Dutch Stereo-RD/NAP 2008				Calculation period	
		X (east)	Y (north)	Z [m]	Row data/Description	Start	End
1	New	180,300.0	509,271.0	-4.1	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6888)	31/01/1993	31/01/2017
2	New	180,464.0	508,725.0	-5.9	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6889)	31/01/1993	31/01/2017
3	New	180,629.0	508,179.0	-4.5	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6890)	31/01/1993	31/01/2017
4	New	180,793.0	507,634.0	-4.4	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6891)	31/01/1993	31/01/2017
5	New	180,957.0	507,088.0	-6.1	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6892)	31/01/1993	31/01/2017
6	New	181,121.0	506,542.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6893)	31/01/1993	31/01/2017
7	New	181,286.0	505,996.0	-4.8	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6894)	31/01/1993	31/01/2017
8	New	181,450.0	505,451.0	-6.1	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6895)	31/01/1993	31/01/2017
9	New	181,432.0	504,866.0	-4.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6896)	31/01/1993	31/01/2017
10	New	181,287.0	504,284.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6897)	31/01/1993	31/01/2017
11	New	181,138.0	503,687.0	-5.8	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6898)	31/01/1993	31/01/2017
12	New	180,992.0	503,105.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6899)	31/01/1993	31/01/2017
13	New	180,850.0	502,538.0	-5.3	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6900)	31/01/1993	31/01/2017
14	New	180,712.0	501,985.0	-5.5	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6901)	31/01/1993	31/01/2017
15	New	180,574.0	501,432.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6902)	31/01/1993	31/01/2017
16	New	180,435.0	500,879.0	-4.9	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6903)	31/01/1993	31/01/2017
17	New	180,297.0	500,326.0	-4.5	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6904)	31/01/1993	31/01/2017
18	New	179,961.0	499,866.0	-6.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6905)	31/01/1993	31/01/2017
19	New	179,509.0	499,519.0	-5.1	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6906)	31/01/1993	31/01/2017
20	New	179,056.0	499,172.0	-5.6	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6907)	31/01/1993	31/01/2017
21	New	178,604.0	498,825.0	-5.3	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6908)	31/01/1993	31/01/2017
22	New	178,152.0	498,479.0	-3.7	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6909)	31/01/1993	31/01/2017
23	New	177,700.0	498,132.0	-5.7	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6910)	31/01/1993	31/01/2017
24	New	177,247.0	497,785.0	-7.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6911)	31/01/1993	31/01/2017
25	New	181,811.0	509,651.0	-4.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6912)	31/01/1993	31/01/2017
26	New	181,985.0	509,106.0	-4.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6913)	31/01/1993	31/01/2017
27	New	182,159.0	508,561.0	-5.6	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6914)	31/01/1993	31/01/2017
28	New	182,333.0	508,016.0	-5.5	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6915)	31/01/1993	31/01/2017
29	New	182,503.0	507,457.0	-3.4	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6916)	31/01/1993	31/01/2017
30	New	182,676.0	506,884.0	-3.6	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6917)	31/01/1993	31/01/2017

To be continued on next page...

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Calculated:
06/12/2017 09:48/3.1.617

PARK - Main Result

Calculation: Alternatief 6

...continued from previous page

		Dutch Stereo-RD/NAP 2008				Calculation period	
		X (east)	Y (north)	Z [m]	Row data/Description	Start	End
31	New	182,854.0	506,300.0	-6.1	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6918)	31/01/1993	31/01/2017
32	New	182,973.0	505,687.0	-5.1	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6919)	31/01/1993	31/01/2017
33	New	183,026.0	505,066.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6920)	31/01/1993	31/01/2017
34	New	183,013.0	504,455.0	-4.3	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6921)	31/01/1993	31/01/2017
35	New	182,944.0	503,861.0	-6.1	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6922)	31/01/1993	31/01/2017
36	New	182,830.0	503,287.0	-4.6	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6923)	31/01/1993	31/01/2017
37	New	182,716.0	502,714.0	-5.8	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6924)	31/01/1993	31/01/2017
38	New	182,602.0	502,140.0	-3.8	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6925)	31/01/1993	31/01/2017
39	New	182,488.0	501,566.0	-4.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6926)	31/01/1993	31/01/2017
40	New	182,379.0	501,007.0	-4.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6927)	31/01/1993	31/01/2017
41	New	182,270.0	500,447.0	-5.1	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6928)	31/01/1993	31/01/2017
42	New	182,102.0	499,903.0	-4.1	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6929)	31/01/1993	31/01/2017
43	New	181,747.0	499,456.0	-4.6	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6930)	31/01/1993	31/01/2017
44	New	181,393.0	499,010.0	-4.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6931)	31/01/1993	31/01/2017
45	New	181,038.0	498,564.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6932)	31/01/1993	31/01/2017
46	New	180,683.0	498,118.0	-4.3	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6933)	31/01/1993	31/01/2017
47	New	180,329.0	497,672.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6934)	31/01/1993	31/01/2017
48	New	179,873.0	497,329.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6935)	31/01/1993	31/01/2017
49	New	179,408.0	497,001.0	-6.2	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6936)	31/01/1993	31/01/2017
50	New	178,942.0	496,672.0	-5.8	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6937)	31/01/1993	31/01/2017
51	New	178,476.0	496,343.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6938)	31/01/1993	31/01/2017
52	New	178,011.0	496,015.0	-6.3	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6939)	31/01/1993	31/01/2017
53	New	176,352.0	498,930.0	-5.3	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6963)	31/01/1993	31/01/2017
54	New	175,828.0	499,166.0	-5.5	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6964)	31/01/1993	31/01/2017
55	New	175,304.0	499,403.0	-6.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6965)	31/01/1993	31/01/2017
56	New	174,780.0	499,640.0	-5.1	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6966)	31/01/1993	31/01/2017
57	New	173,154.0	500,006.0	-4.2	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6967)	31/01/1993	31/01/2017
58	New	172,696.0	499,667.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6968)	31/01/1993	31/01/2017
59	New	172,237.0	499,328.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6969)	31/01/1993	31/01/2017
60	New	171,779.0	498,989.0	-4.2	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6970)	31/01/1993	31/01/2017
61	New	171,321.0	498,651.0	-5.3	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6971)	31/01/1993	31/01/2017
62	New	170,863.0	498,312.0	-5.3	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6972)	31/01/1993	31/01/2017
63	New	170,404.0	497,973.0	-4.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6973)	31/01/1993	31/01/2017
64	New	174,087.0	495,769.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6979)	31/01/1993	31/01/2017
65	New	173,738.0	496,219.0	-5.3	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6980)	31/01/1993	31/01/2017
66	New	173,389.0	496,670.0	-6.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6981)	31/01/1993	31/01/2017
67	New	173,040.0	497,120.0	-6.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6982)	31/01/1993	31/01/2017
68	New	172,690.0	497,571.0	-4.6	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6983)	31/01/1993	31/01/2017
69	New	172,341.0	498,021.0	-5.8	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6984)	31/01/1993	31/01/2017
70	New	172,705.0	494,704.0	-5.4	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6985)	31/01/1993	31/01/2017
71	New	172,355.0	495,154.0	-6.4	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6986)	31/01/1993	31/01/2017
72	New	172,005.0	495,604.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6987)	31/01/1993	31/01/2017
73	New	171,655.0	496,054.0	-5.2	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6988)	31/01/1993	31/01/2017
74	New	171,305.0	496,503.0	-6.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6989)	31/01/1993	31/01/2017
75	New	170,955.0	496,953.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6990)	31/01/1993	31/01/2017
76	New	175,914.0	494,845.0	-4.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6991)	31/01/1993	31/01/2017
77	New	175,470.0	494,488.0	-5.2	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6992)	31/01/1993	31/01/2017
78	New	175,025.0	494,132.0	-4.6	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6993)	31/01/1993	31/01/2017
79	New	174,581.0	493,775.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6994)	31/01/1993	31/01/2017
80	New	174,137.0	493,418.0	-4.8	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6995)	31/01/1993	31/01/2017
81	New	173,692.0	493,061.0	-4.6	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6996)	31/01/1993	31/01/2017
82	New	173,247.0	492,705.0	-4.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6997)	31/01/1993	31/01/2017
83	New	172,803.0	492,348.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6998)	31/01/1993	31/01/2017
84	New	172,358.0	491,991.0	-4.8	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (6999)	31/01/1993	31/01/2017
85	New	171,914.0	491,635.0	-5.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (7000)	31/01/1993	31/01/2017
86	New	171,469.0	491,278.0	-4.3	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (7001)	31/01/1993	31/01/2017
87	New	170,891.0	492,924.0	-6.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (7009)	31/01/1993	31/01/2017
88	New	170,544.0	493,376.0	-5.6	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (7010)	31/01/1993	31/01/2017
89	New	170,197.0	493,828.0	-5.5	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (7011)	31/01/1993	31/01/2017
90	New	169,850.0	494,280.0	-6.1	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (7012)	31/01/1993	31/01/2017
91	New	169,503.0	494,732.0	-5.1	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (7013)	31/01/1993	31/01/2017
92	New	169,156.0	495,185.0	-6.0	NORDEX N149/4.0-4.5 4500 149.0 !O! hub: 166,0 m (TOT: 240,5 m) (7014)	31/01/1993	31/01/2017
93	New	169,445.0	493,142.0	-5.8	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7015)	31/01/1993	31/01/2017
94	New	169,125.0	492,895.0	-5.0	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7016)	31/01/1993	31/01/2017

To be continued on next page...

Licensed user:
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Daan Houf / daanhouf@ventolines.nl
Calculated:
06/12/2017 09:48/3.1.617

PARK - Main Result

Calculation: Alternatief 6

...continued from previous page

		Dutch Stereo-RD/NAP 2008				Calculation period	
		X (east)	Y (north)	Z [m]	Row data/Description	Start	End
95	New	168,804.0	492,648.0	-4.2	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7017)	31/01/1993	31/01/2017
96	New	168,483.0	492,401.0	-6.5	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7018)	31/01/1993	31/01/2017
97	New	168,162.0	492,154.0	-5.0	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7019)	31/01/1993	31/01/2017
98	New	167,858.0	491,833.0	-6.0	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7020)	31/01/1993	31/01/2017
99	New	167,554.0	491,512.0	-5.1	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7021)	31/01/1993	31/01/2017
100	New	167,250.0	491,191.0	-5.0	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7022)	31/01/1993	31/01/2017
101	New	166,946.0	490,870.0	-5.9	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7023)	31/01/1993	31/01/2017
102	New	166,642.0	490,549.0	-6.0	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7024)	31/01/1993	31/01/2017
103	New	166,338.0	490,229.0	-5.3	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7025)	31/01/1993	31/01/2017
104	New	166,034.0	489,908.0	-5.9	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7026)	31/01/1993	31/01/2017
105	New	165,730.0	489,587.0	-5.7	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7027)	31/01/1993	31/01/2017
106	New	166,921.0	493,323.0	-6.3	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7029)	31/01/1993	31/01/2017
107	New	166,616.0	493,003.0	-4.0	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7030)	31/01/1993	31/01/2017
108	New	166,312.0	492,683.0	-5.6	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7031)	31/01/1993	31/01/2017
109	New	166,007.0	492,362.0	-5.8	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7032)	31/01/1993	31/01/2017
110	New	165,703.0	492,042.0	-5.1	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7033)	31/01/1993	31/01/2017
111	New	165,398.0	491,722.0	-6.0	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7034)	31/01/1993	31/01/2017
112	New	165,094.0	491,402.0	-4.3	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7035)	31/01/1993	31/01/2017
113	New	164,789.0	491,082.0	-6.0	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7036)	31/01/1993	31/01/2017
114	New	164,485.0	490,762.0	-5.0	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7037)	31/01/1993	31/01/2017
115	New	164,937.0	488,734.0	-5.0	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7045)	31/01/1993	31/01/2017
116	New	164,643.0	488,998.0	-4.9	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7046)	31/01/1993	31/01/2017
117	New	164,348.0	489,261.0	-4.2	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7047)	31/01/1993	31/01/2017
118	New	164,054.0	489,525.0	-5.0	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7048)	31/01/1993	31/01/2017
119	New	163,760.0	489,788.0	-5.4	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7049)	31/01/1993	31/01/2017
120	New	163,466.0	490,052.0	-5.6	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7050)	31/01/1993	31/01/2017
121	New	163,191.0	490,336.0	-4.1	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7051)	31/01/1993	31/01/2017
122	New	162,917.0	490,620.0	-4.7	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7052)	31/01/1993	31/01/2017
123	New	162,642.0	490,904.0	-4.7	VESTAS V117-3.6 3600 117.0 !O! hub: 97,5 m (TOT: 156,0 m) (7053)	31/01/1993	31/01/2017