

Project data

Client:	Protokoll-No.:	WTG_Number
Operator:	Project name:	client_site_WTG_date
Site:	Order No.:	Client_date
GPS:	Contractor:	windcomp GmbH

Turbine data

Producer WTG:	Power [kW]:	3.000
WTG type:	Rotor Ø [m]:	82
WTG S/N:	Hub height [m]:	84
Producer blade:	Chord (root) [mm]:	3.000
Blade type:	Chord (tip) [mm]:	1.200
Blade S/N:		

Measurement condition

Measuring system:	ROMEG-M 20 G	S/N Laser sensors:	Root : 2014_R_20_4 Tip : 2014_T_20_4
Weather:	cloudy	Type of measurement:	ground front
Wind [m/s]:	6	Executive:	C. Lucks
Temperature [°C]:	3	Date of measurement:	Mar 30, 2015
Remarks:			

Results

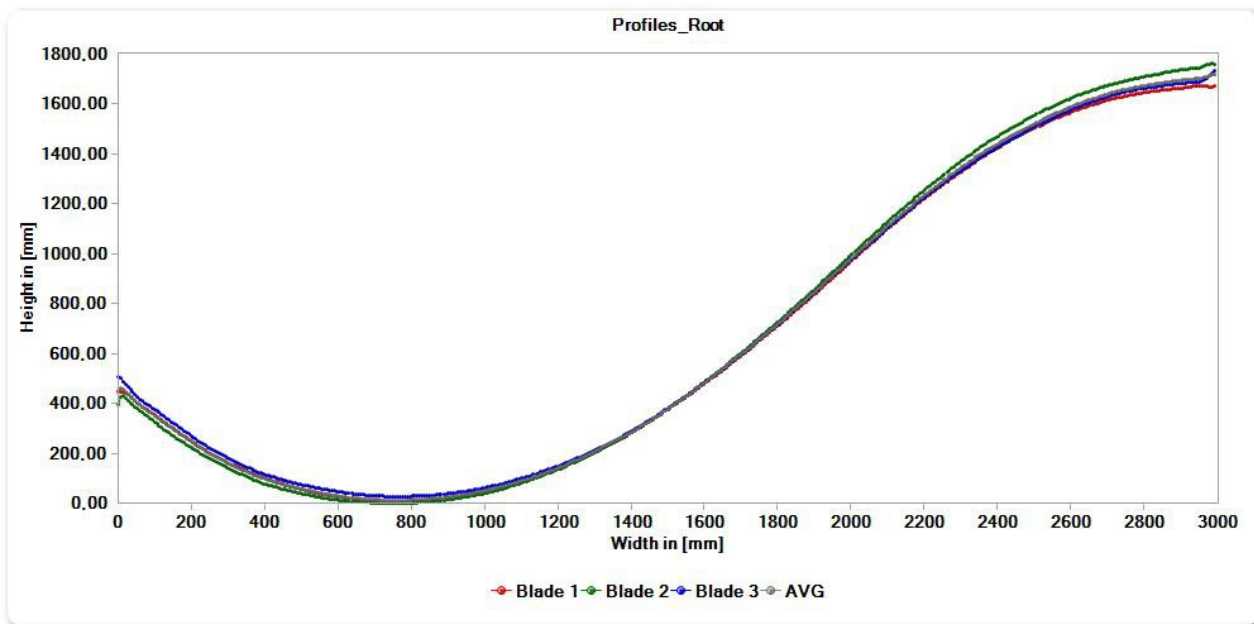
Initial	blade 1	blade 2	blade 3	difference
Root(°)	-0,63	0,89	-0,27	1,52
Tip(°)	-1,09	1,08	0	2,17
Twist(°)	-0,46	0,19	0,27	
Teilung(°)	0,01	0,07	-0,08	

Rating:

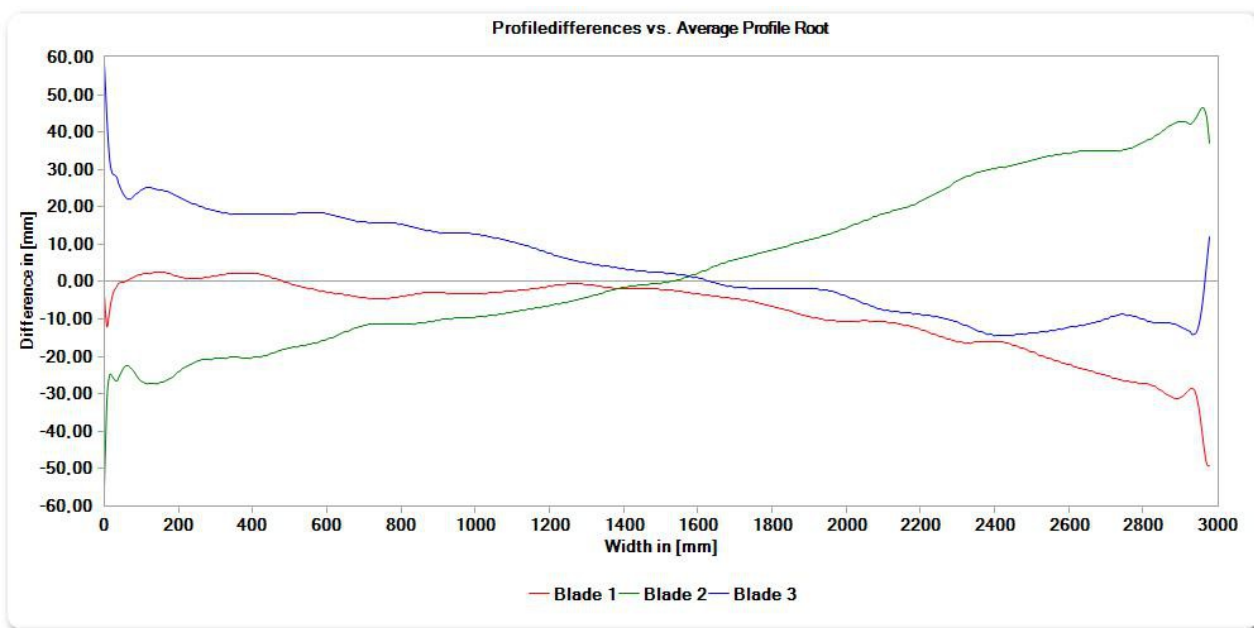
Aerodynamic imbalance – correction advisable

Graphical analysis see next pages:

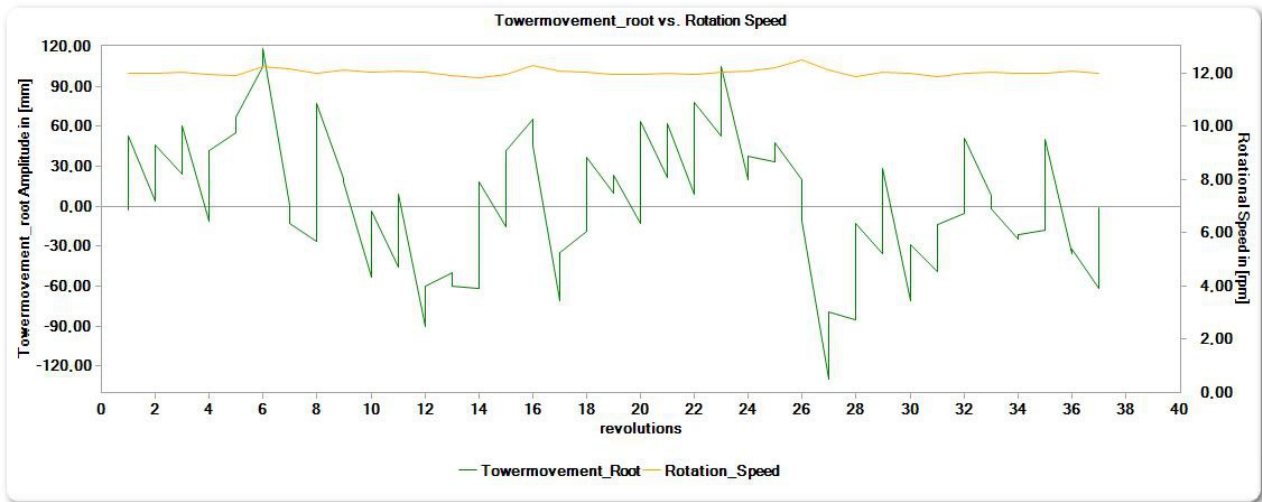
Profiles Root



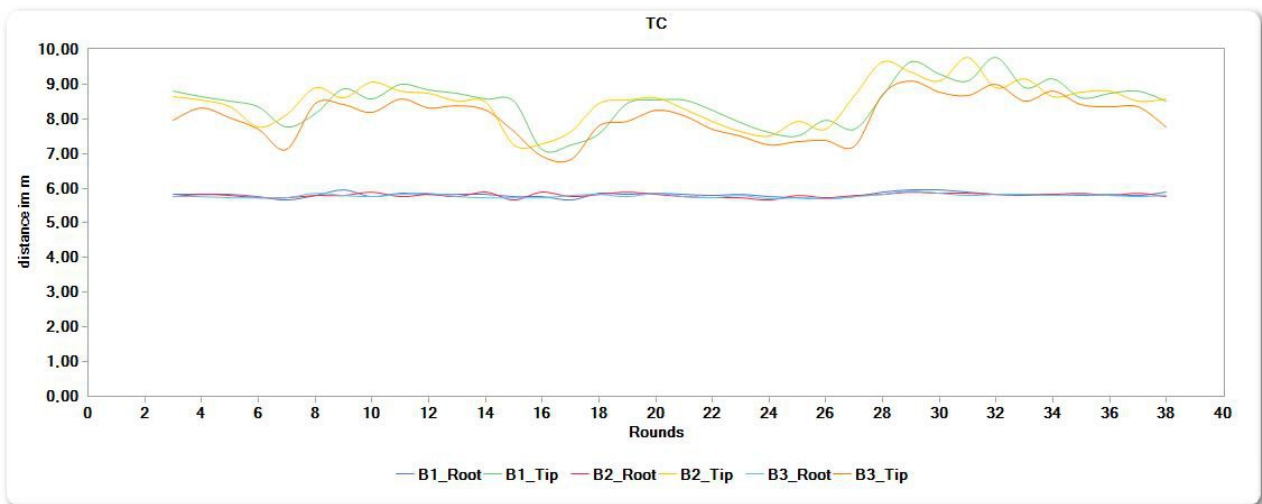
Profile differences Root



Tower movement versus rotational speed



Tower Clearance Root and tip



Tower clearance

No. rotation	blade 1 root (m)	blade 1 tip (m)	blade 2 root (m)	blade 2 tip (m)	blade 3 root (m)	Blade 3 tip (m)	time
3	5,84	8,79	5,78	8,65	5,76	7,95	10:53:46
4	5,82	8,64	5,81	8,55	5,75	8,30	10:53:51
5	5,84	8,52	5,80	8,34	5,74	8,03	10:53:56
6	5,77	8,34	5,71	7,77	5,74	7,70	10:54:01
7	5,66	7,77	5,73	8,11	5,72	7,13	10:54:06
8	5,80	8,14	5,78	8,89	5,86	8,44	10:54:11
9	5,97	8,88	5,78	8,61	5,80	8,42	10:54:16
10	5,77	8,58	5,88	9,06	5,75	8,18	10:54:21
11	5,84	9,01	5,75	8,81	5,84	8,57	10:54:26
12	5,84	8,85	5,82	8,74	5,87	8,32	10:54:31
13	5,82	8,75	5,76	8,52	5,75	8,37	10:54:36
14	5,84	8,59	5,88	8,48	5,74	8,26	10:54:41
15	5,75	8,50	5,67	7,23	5,74	7,65	10:54:46
16	5,76	7,12	5,89	7,27	5,74	6,91	10:54:51
17	5,68	7,25	5,78	7,62	5,78	6,83	10:54:56
18	5,86	7,58	5,81	8,45	5,81	7,80	10:55:01
19	5,84	8,44	5,89	8,54	5,77	7,94	10:55:06
20	5,87	8,53	5,82	8,61	5,85	8,26	10:55:11
21	5,82	8,55	5,76	8,27	5,76	8,08	10:55:16
22	5,79	8,27	5,73	7,92	5,72	7,71	10:55:21
23	5,82	7,88	5,73	7,64	5,79	7,50	10:55:26
24	5,76	7,60	5,66	7,52	5,71	7,23	10:55:31
25	5,73	7,51	5,81	7,91	5,73	7,35	10:55:36
26	5,71	7,96	5,72	7,71	5,70	7,39	10:55:41
27	5,77	7,69	5,78	8,66	5,75	7,21	10:55:46
28	5,89	8,68	5,82	9,66	5,81	8,69	10:55:51
29	5,94	9,65	5,88	9,34	5,91	9,09	10:55:56
30	5,96	9,28	5,86	9,09	5,85	8,78	10:56:01
31	5,89	9,11	5,87	9,77	5,80	8,67	10:56:06
32	5,82	9,77	5,83	8,91	5,81	9,00	10:56:11
33	5,79	8,91	5,83	9,15	5,82	8,50	10:56:16
34	5,84	9,17	5,81	8,63	5,78	8,80	10:56:21
35	5,80	8,62	5,87	8,76	5,81	8,41	10:56:26
36	5,83	8,73	5,78	8,80	5,79	8,36	10:56:31
37	5,78	8,79	5,86	8,50	5,75	8,35	10:56:36
38	5,89	8,50	5,76	8,58	5,80	7,78	10:56:41