Correction: Best Practices for Wake Model Optimization Algorithm Selection in Wind Farm Layout Optimization

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Correction Notice

(1/2) Table 3 regarding the 36 turbine case omitted the data from *sub6* in the results. For comparative AEP return amongst the other participants *sub6* was ranked number 10, and the full table as it should have appeared is given here:

Table 3 36 turbine scenario participant results

Rank	Algorithm	sub#	Grad.	AEP	Increase
1	SNOPT+WEC	4	G	863676.2993	17.05 %
2	Multistart Interior-Point	10	G	851631.9310	15.42 %
3	Preconditioned Sequential Quadratic Programming	2	G	849369.7863	15.11 %
4	SNOPT	8	G	846357.8142	14.70 %
5	SNOPT	1	G	844281.1609	14.42 %
6	Full Pseudo-Gradient Approach	3	GF	828745.5992	12.31 %
7	fmincon	5	G	820394.2402	11.18 %
8	Simple Pseudo-Gradient Approach	9	GF	813544.2105	10.25 %
9	Basic Genetic Algorithm	7	GF	777475.7827	5.37 %
10	Simple Particle Swarm Optimization	6	GF	776000.1425	5.17 %
11	(Example Layout)	-	-	737883.0985	-

(2/2) Tables 6-10 mislabeled the wake model and algorithms used by *sub4* and *sub5*. The Bastankhah wake model using the SNOPT+WEC optimization algorithm was used by sub4, the Simplified Bastankhah wake model using the fmincon optimization algorithm was used by *sub5*. The inverse was listed in the tables. Tables 6-10 correctly tied Rank, AEP data, and % Difference to the submission numbers on the same horizontal line, only the wake model and optimization algorithm names were mislabeled. Furthermore all descriptions in the paper's corresponding paragraphs refer correctly to what wake model and optimization algorithm the two submissions used, the only error was in the table "Wake Model" and "Algorithm" columns. The corrected tables as they should have appeared are given here:

Table 6 Cross-comparison results of *sub1*

Rank	Wake Model	Algorithm	AEP	cc-sub#	Difference
1	Bastankhah	SNOPT+WEC	262350.319	4	0.624 %
2	SimplifiedBastankhah	fmincon	262282.416	5	0.598 %
3	FLORISSE 3D	SNOPT	**260722.295**	**1**	-
4	Bastankhah	Full Pseudo-Gradient Approach	260640.906	3	-0.031 %
5	Park2	PSQP	248215.024	2	-4.797 %

Table 7 Cross-comparison results of *sub2*

Rank	Wake Model	Algorithm	AEP	cc-sub#	Difference
1	Bastankhah	SNOPT+WEC	250464.9732	4	5.975 %
2	Simplified Bastankhah	fmincon	250249.0259	5	5.884 %
3	Bastankhah	Full Pseudo-Gradient Approach	247812.0522	3	4.853 %
4	FLORISSE 3D	SNOPT	240309.5850	1	1.678 %
5	Park2	PSQP	**236342.799**	**2**	-

Table 8 Cross-comparison results of *sub3*

Rank	Wake Model	Algorithm	AEP	cc-sub#	Difference
1	Simplified Bastankhah	fmincon	247109.5234	5	0.590 %
2	Bastankhah	SNOPT+WEC	246942.3767	4	0.522 %
3	Bastankhah	Full Pseudo-Gradient Approach	**245659.4124**	**3**	-
4	Park2	PSQP	242431.5431	2	-1.314 %
5	FLORISSE 3D	SNOPT	237548.6622	1	-3.302 %

Table 9 Cross-comparison results of *sub4*

Rank	Wake Model	Algorithm	AEP	cc-sub#	Difference
1	Bastankhah	SNOPT+WEC	**257790.1924**	**4**	-
2	Simplified Bastankhah	fmincon	257663.4068	5	-0.049 %
3	Bastankhah	Full Pseudo-Gradient Approach	255063.8201	3	-1.058 %
4	FLORISSE 3D	SNOPT	251776.7157	1	-2.333 %
5	Park2	PSQP	239612.8223	2	-7.051 %

Table 10 Cross-comparison results of *sub5*

Rank	Wake Model	Algorithm	AEP	cc-sub#	Difference
1	Simplified Bastankhah	fmincon	**251771.9067**	**5**	-
2	Bastankhah	SNOPT+WEC	251697.7126	4	-0.029 %
3	Bastankhah	Full Pseudo-Gradient Approach	249829.2199	3	-0.772 %
4	FLORISSE 3D	SNOPT	246503.8323	1	-2.092 %
5	Park2	PSQP	239482.6767	2	-4.881 %