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*Supplement of*

## **The importance of round-robin validation when assessing machine-learning-based vertical extrapolation of wind speeds**

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**Table S1:** Percentage reduction in wind-speed extrapolation MAE from the random forest approach over the power law when wind shear is calculated using data at 4 m and 65 m AGL versus at 65 m and 91 m AGL. In the latter case, wind speed at 91 m AGL is included as input feature for the random forest model.

Error reduction relative to POWER LAW	Training - testing site				Average
	C1	E37	E39	E41	
Shear from 4 m and 65 m AGL	-25%	-36%	-27%	-24%	-28%
Shear from 65 m and 91 m AGL	-15%	-22%	-16%	-15%	-17%