SOLA, 2019, Vol. 15, 113-118, doi:10.2151/sola.2019-021

Supplement

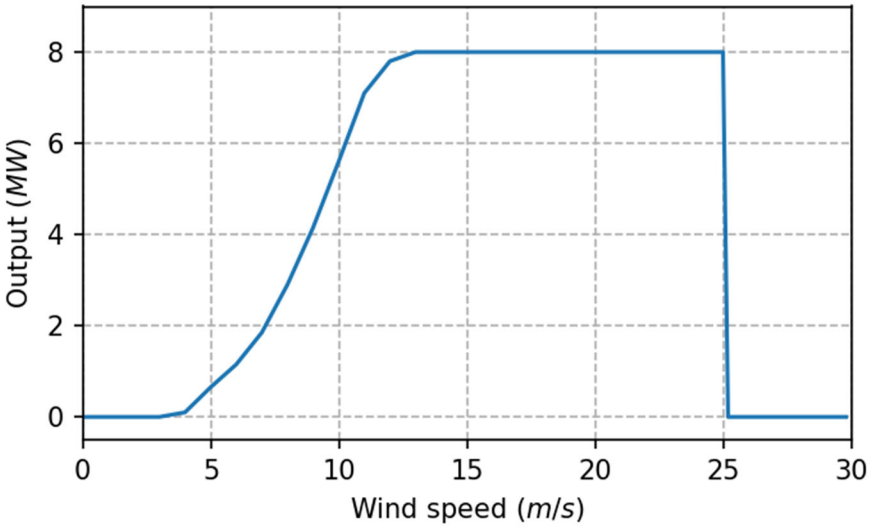

Fig. S1. Power curve for wind turbine Vestas V164-8.0.

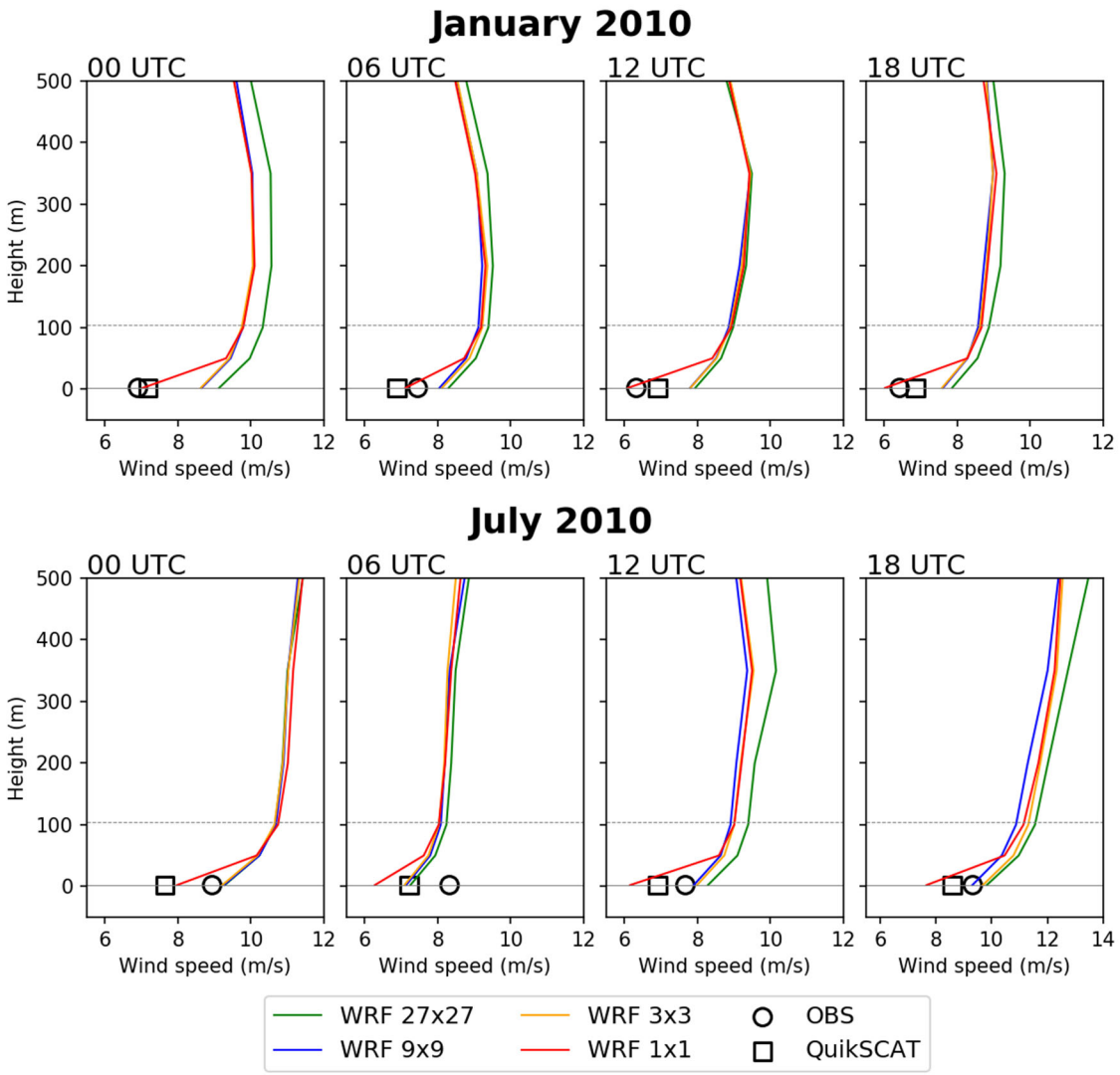

Fig. S2. Monthly mean wind profiles from the WRF's test simulation targeted at Bach Long Vi island using 4 nesting domains. The solid lines represent wind profiles extracted from 4 domains; WRF 27 x 27, 9 x 9, 3 x 3, and 1 x 1 indicate domain resolutions in km. The station wind data (OBS), the QuikSCAT data are plotted to compare with the simulations.

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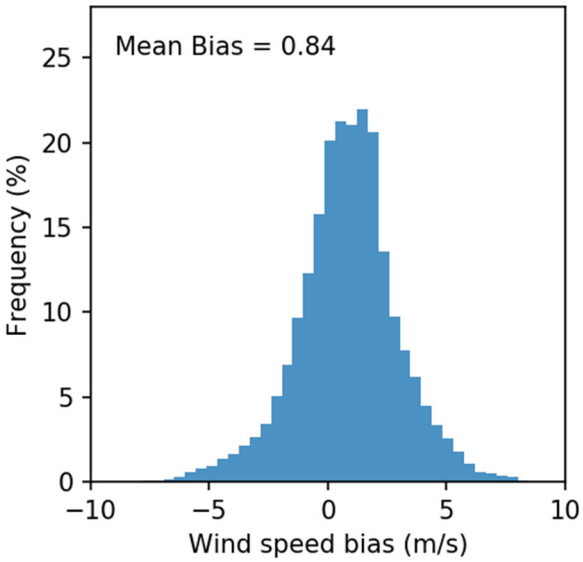

15 Fig. S3. Probability distribution of the model bias. Bias is defined as the WRF minus the
16 QuikSCAT data for monthly mean values in 5 years 2006 – 2010 for all grid cells in the simulation
17 domain 02; the WRF data was re-gridded to have the same resolution with the QuikSCAT data.

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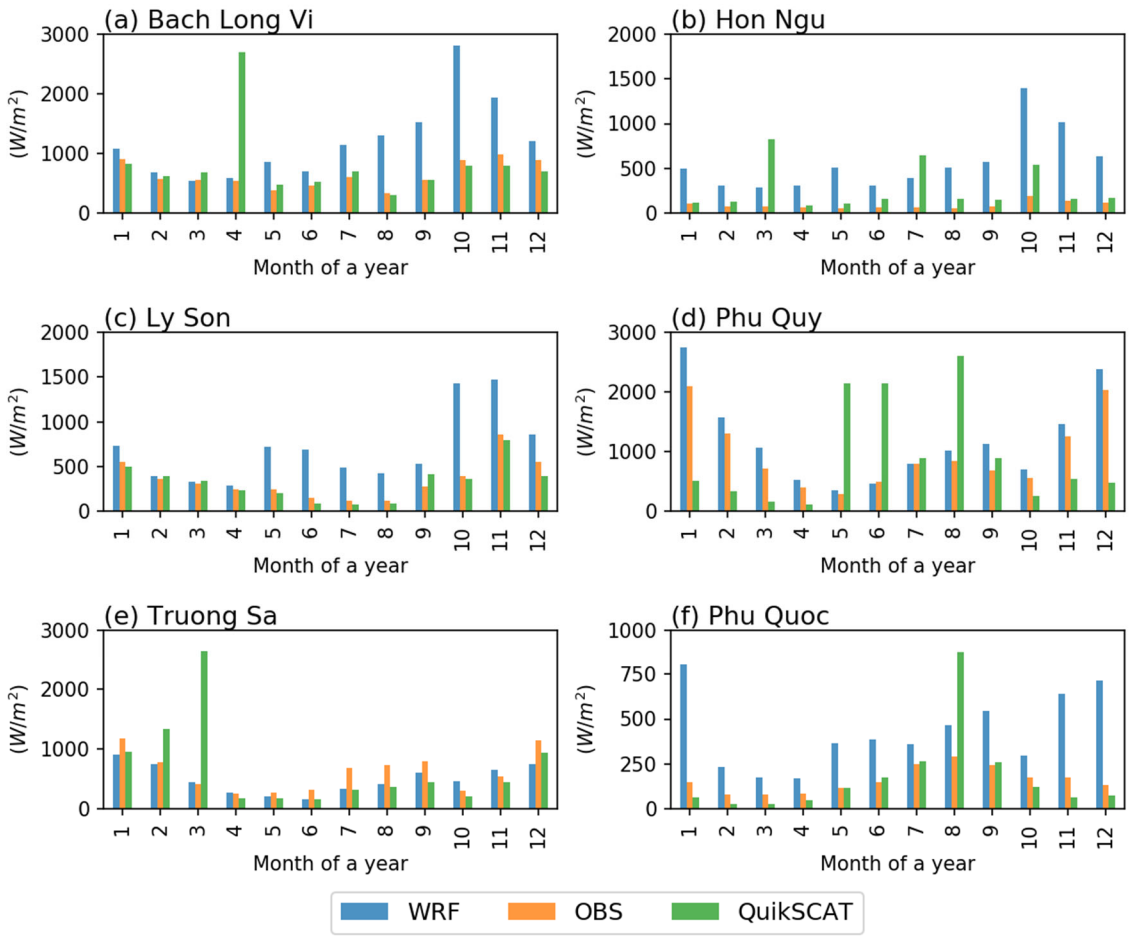

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21 Fig. S4. Seasonal variation of the modelled WPD at the turbine height (105 m) over 6 islands in
22 the East Vietnam sea in comparison with the station observation (OBS) and the QuikSCAT data
23 for 5 years 2006 – 2010.

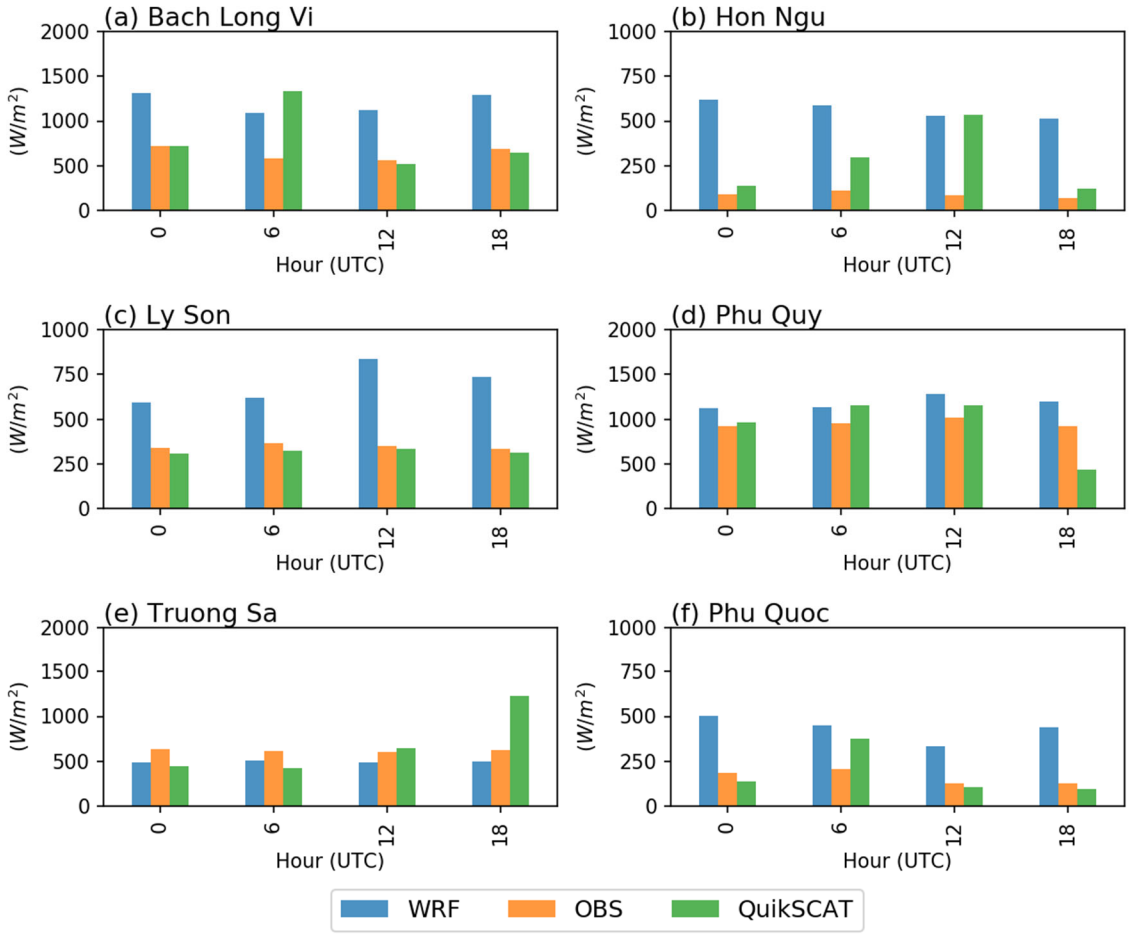

Fig. S5. Diurnal variation of the modelled WPD at the turbine height (105 m) over 6 islands in the East Vietnam sea in comparison with the station observation (OBS) and the QuikSCAT data for 5 years 2006 – 2010.

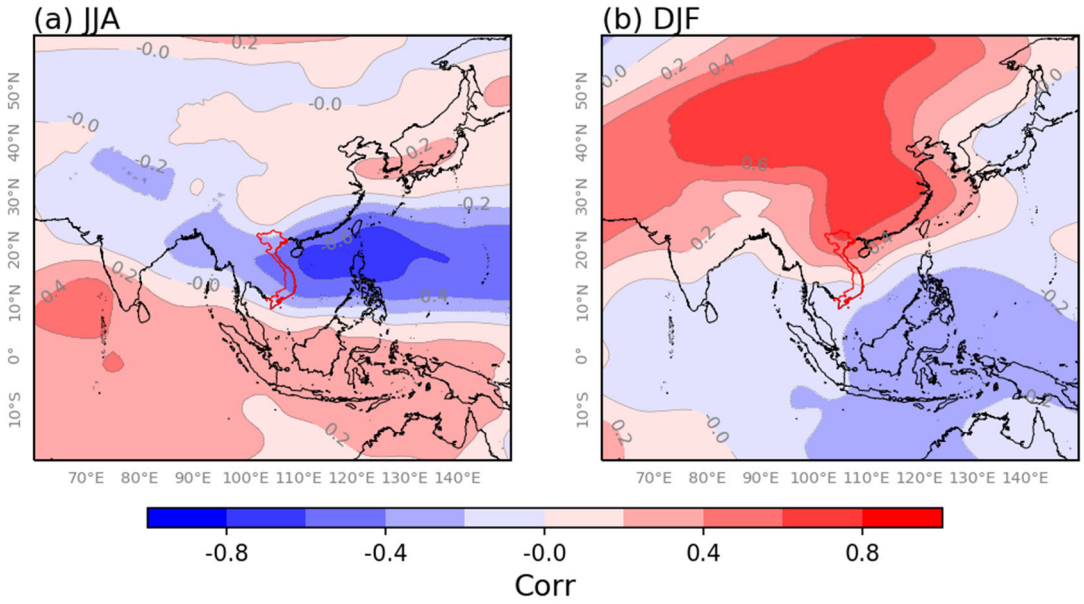

Fig. S6. Correlation coefficient (Corr) of monthly mean 850-hPa geopotential height (NCEP/FNL) with the simulated monthly mean wind power density at Bach Long Vi (20.13N, 107.72E) for JJA and DJF for 10 years 2006 – 2015.

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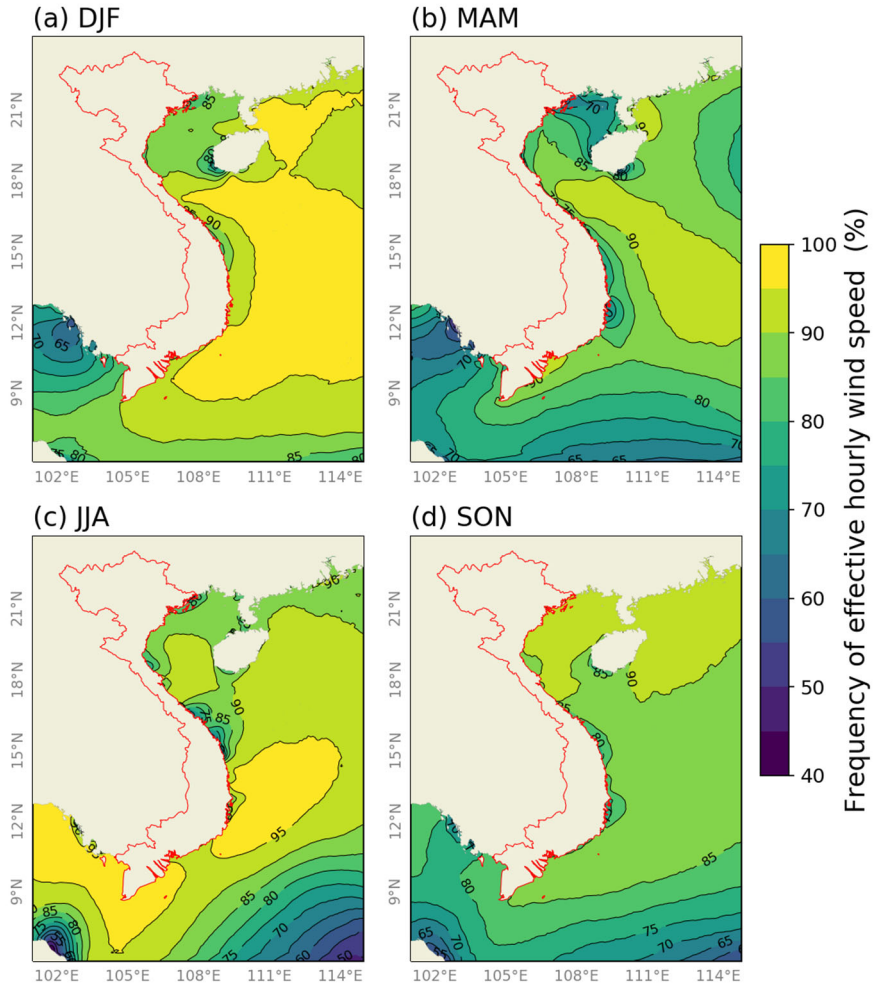

40

41 Fig. S7. Spatial distribution of seasonal frequency of "effective" wind speed (between the cut-in

42 4 m/s and the cut-out 25 m/s) at the turbine height (105 m).

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