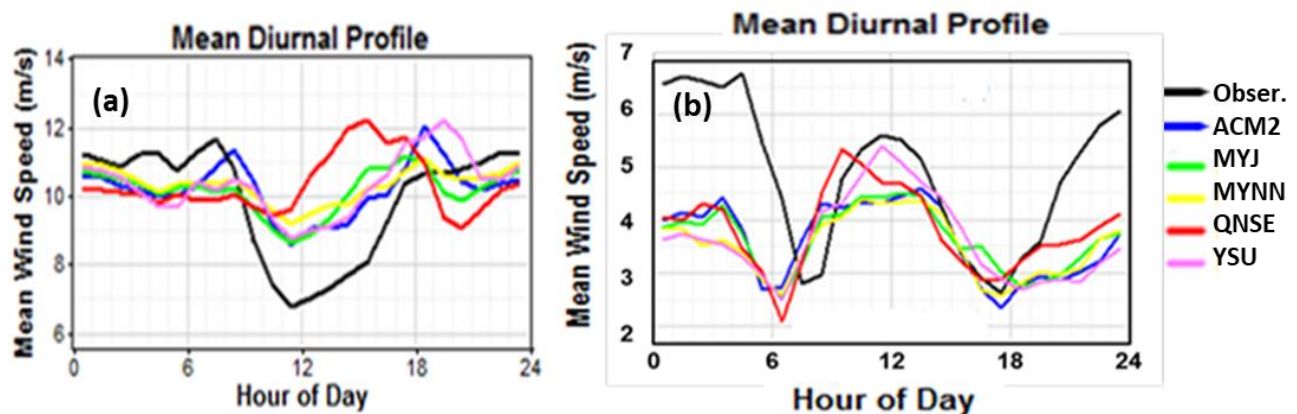


# Supplementary Materials: Optimization and Evaluation of the Weather Research and Forecasting (WRF) Model for Wind Energy Resource Assessment and Mapping in Iran

Abbas Ranjbar Saadatabadi, Nasim Hossein Hamzeh, Dimitris G. Kaskaoutis, Zahra Ghasabi, Mohammadreza Mohammadpour Penchah, Rafaella-Eleni P. Sotiropoulou and Maral Habibi

**Table S1.** Comparison of the wind speeds simulated by the WRF model for different PBL schemes and the measured wind data at a height of 40 m in Istakah Fadashk station for July 2013 and January 2013.

PBL Scheme	RMSE	BIAS	STDE
<b>July 2013</b>			
ACM2	3.45	0.21	3.44
MYJ	3.19	0.33	3.17
MYNN	3.46	0.16	3.45
QNSE	3.60	0.36	3.58
YSU	3.60	0.33	3.59
<b>January 2013</b>			
ACM2	2.96	-1.26	2.68
MYJ	2.98	-1.24	2.71
MYNN	3.05	-1.37	2.73
QNSE	3.18	-1.07	2.99
YSU	3.16	-1.25	2.90



**Figure S1.** Mean diurnal patterns of wind speed from WRF simulations with different PBL schemes and wind measurements at Istakah Fadashk stations for July 2013 (a) and January 2013 (b).