

SUPPLEMENT

Wind speed time series and statistics for selected stations located in the NE U.S. domain. The BLR approach is used with 13 events in the training dataset using chronological order.

Table S1: RMSE of 10m wind speed for selected METAR stations in the NE U.S. domain. The values in bold font show the lowest RMSE from three simulations (WRF raw, ICLAMS raw and BLR).

Station	Location	Model	RMSE (m/s)			
			Irene	Sandy	11/7/2012	2/8/2013
KMGJ	Inland	WRFraw	3.43	3.21	2.81	3.21
		ICLAMSraw	3.56	2.42	2.31	2.05
		BLR	2.06	2.06	2.01	1.81
KLOM	Inland	WRFraw	2.61	3.00	2.16	1.09
		ICLAMSraw	2.62	4.52	1.99	1.71
		BLR	1.53	2.10	1.28	1.00
KPHL	Inland	WRFraw	2.05	4.19	2.25	2.92
		ICLAMSraw	2.17	1.83	2.15	2.15
		BLR	1.85	2.73	1.93	1.72
KMTP	Coastal	WRFraw	8.31	10.77	8.71	7.08
		ICLAMSraw	4.37	6.74	5.33	4.82
		BLR	1.83	1.56	1.22	1.34
KHPN	Coastal	WRFraw	2.52	2.44	2.90	3.83
		ICLAMSraw	2.17	1.62	1.74	2.44
		BLR	1.95	2.28	1.58	1.85
KJFK	Coastal	WRFraw	2.88	2.56	2.06	2.90
		ICLAMSraw	3.44	2.92	1.82	2.31
		BLR	2.16	2.55	1.98	1.84

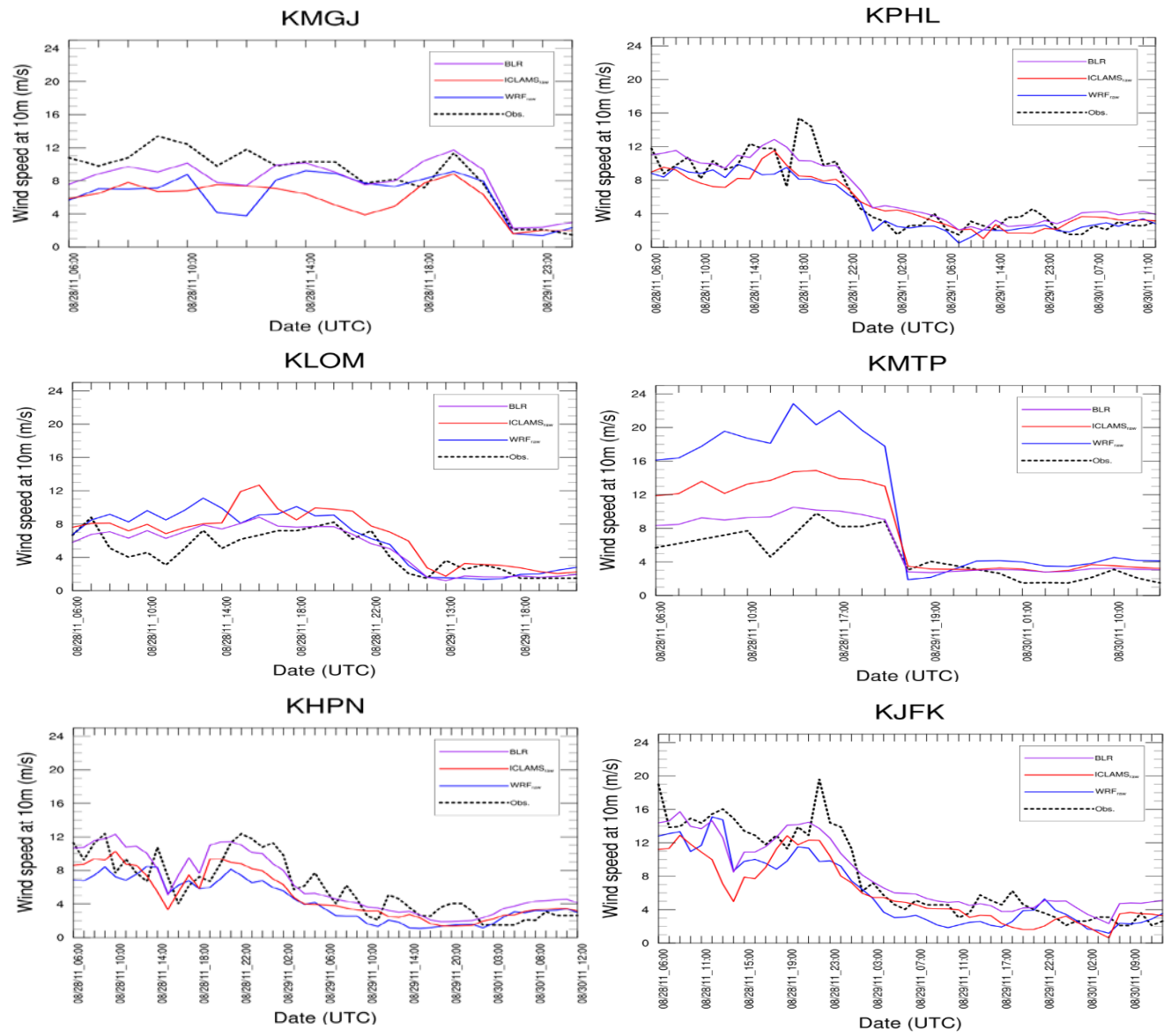


Figure S1: Time series of wind speed at 10m (m/s) for selected stations in the NE U.S. domain for Hurricane Irene.

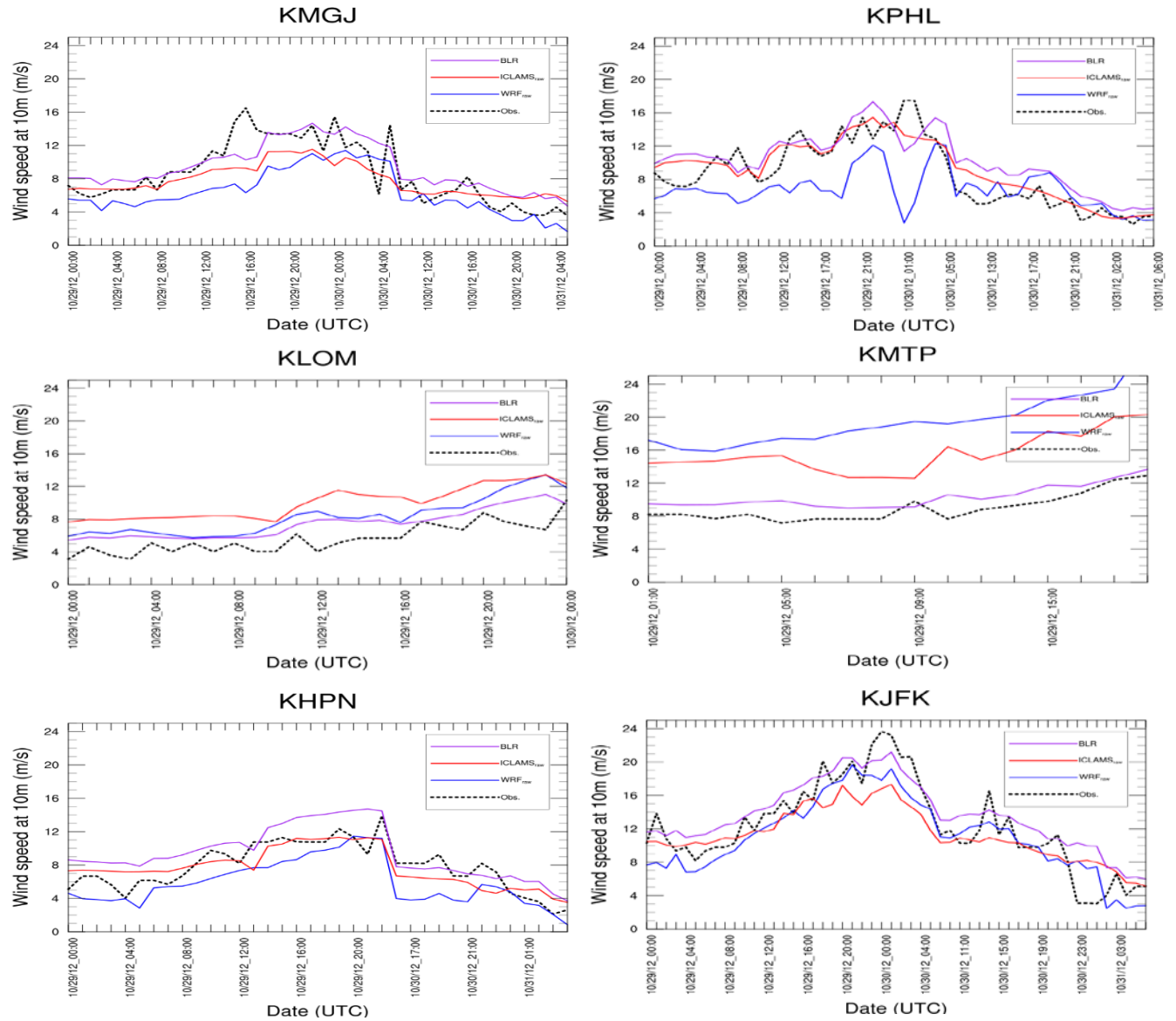


Figure S2: Time series of wind speed at 10m (m/s) for selected stations in the NE U.S. domain for Hurricane Sandy.

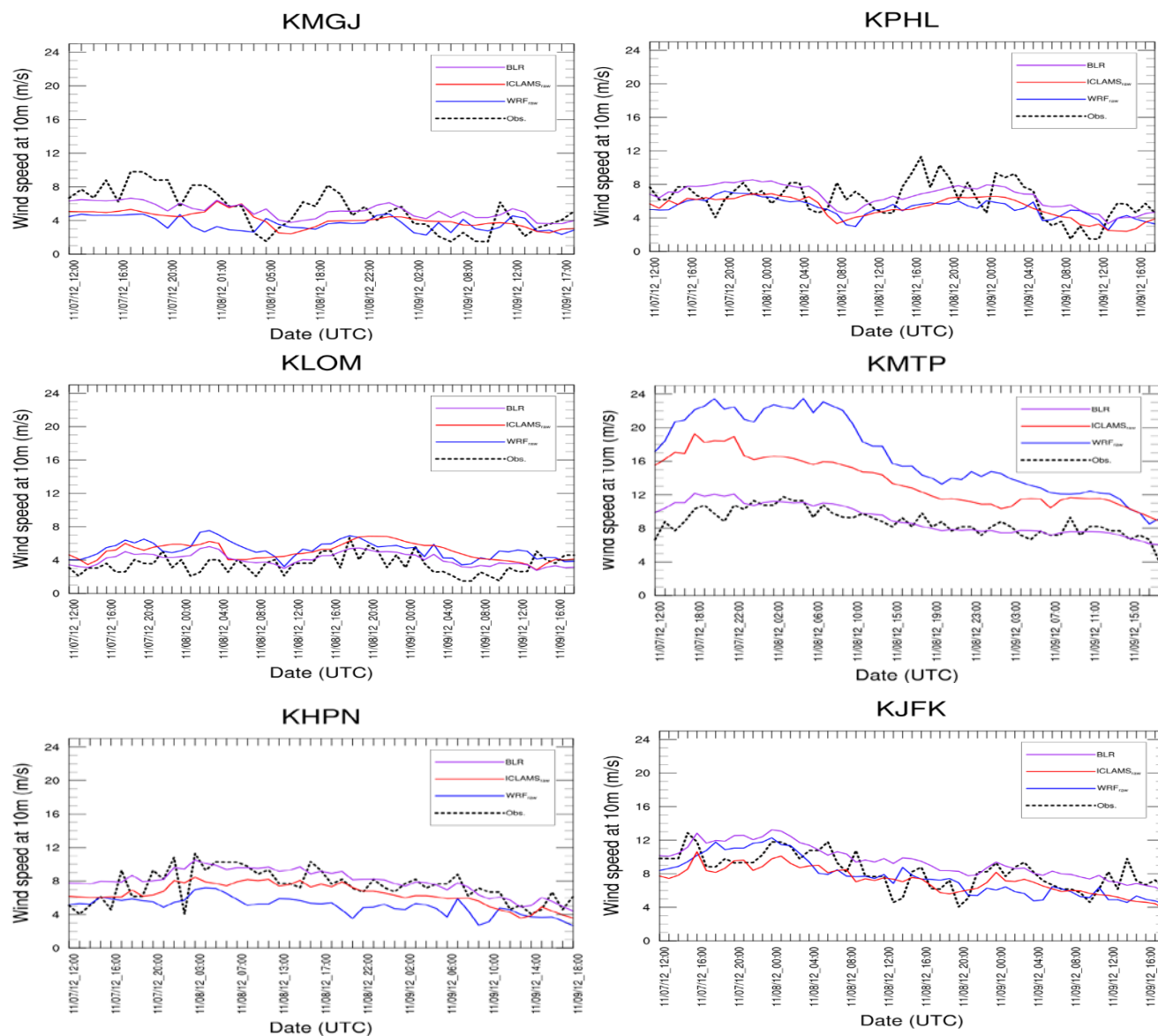


Figure S3: Time series of wind speed at 10m (m/s) for selected stations in the NE U.S. domain for the Nov 2012 storm.

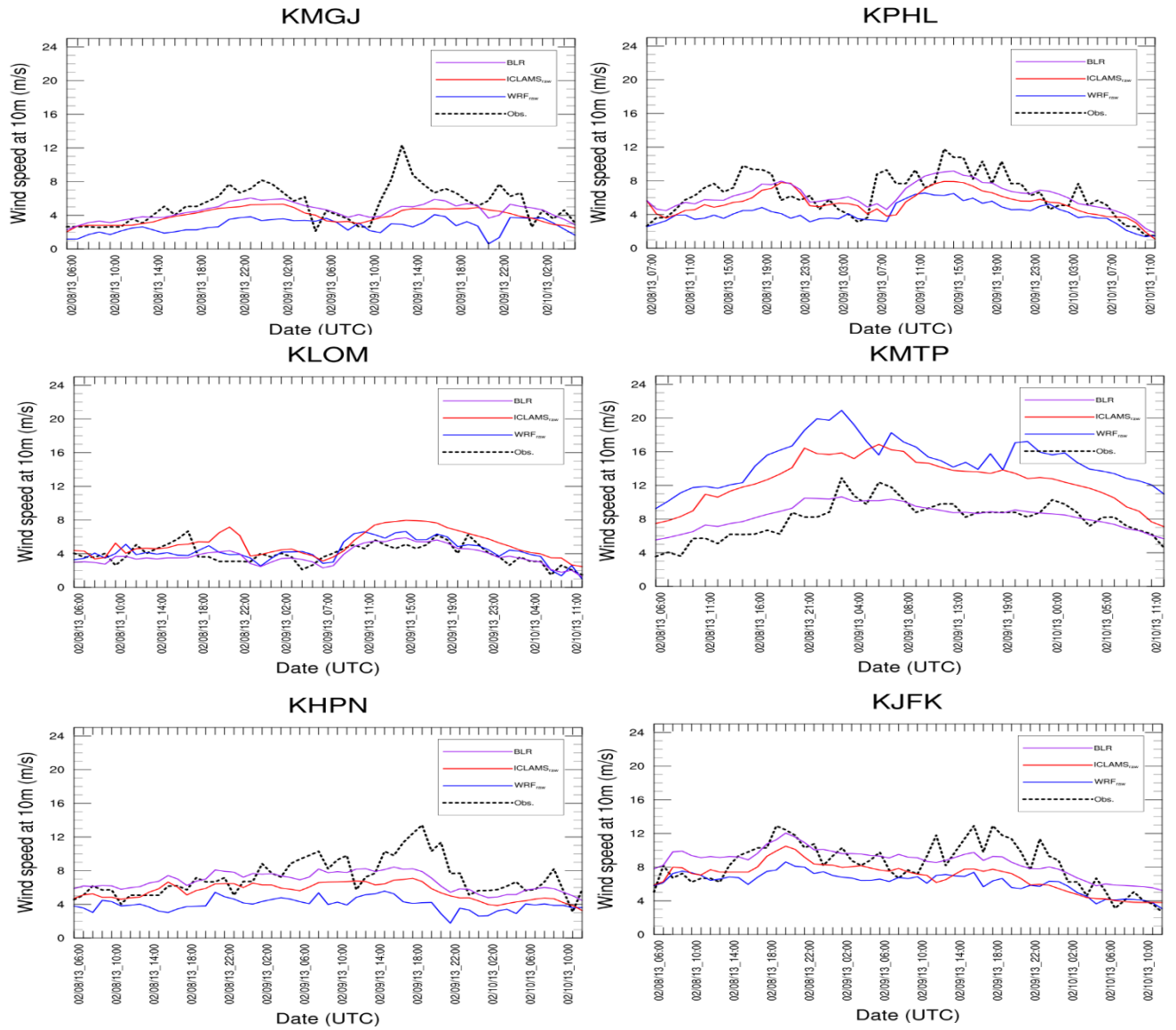


Figure S4: Time series of wind speed at 10m (m/s) for selected stations in the NE U.S. domain for the Feb 2013 storm.

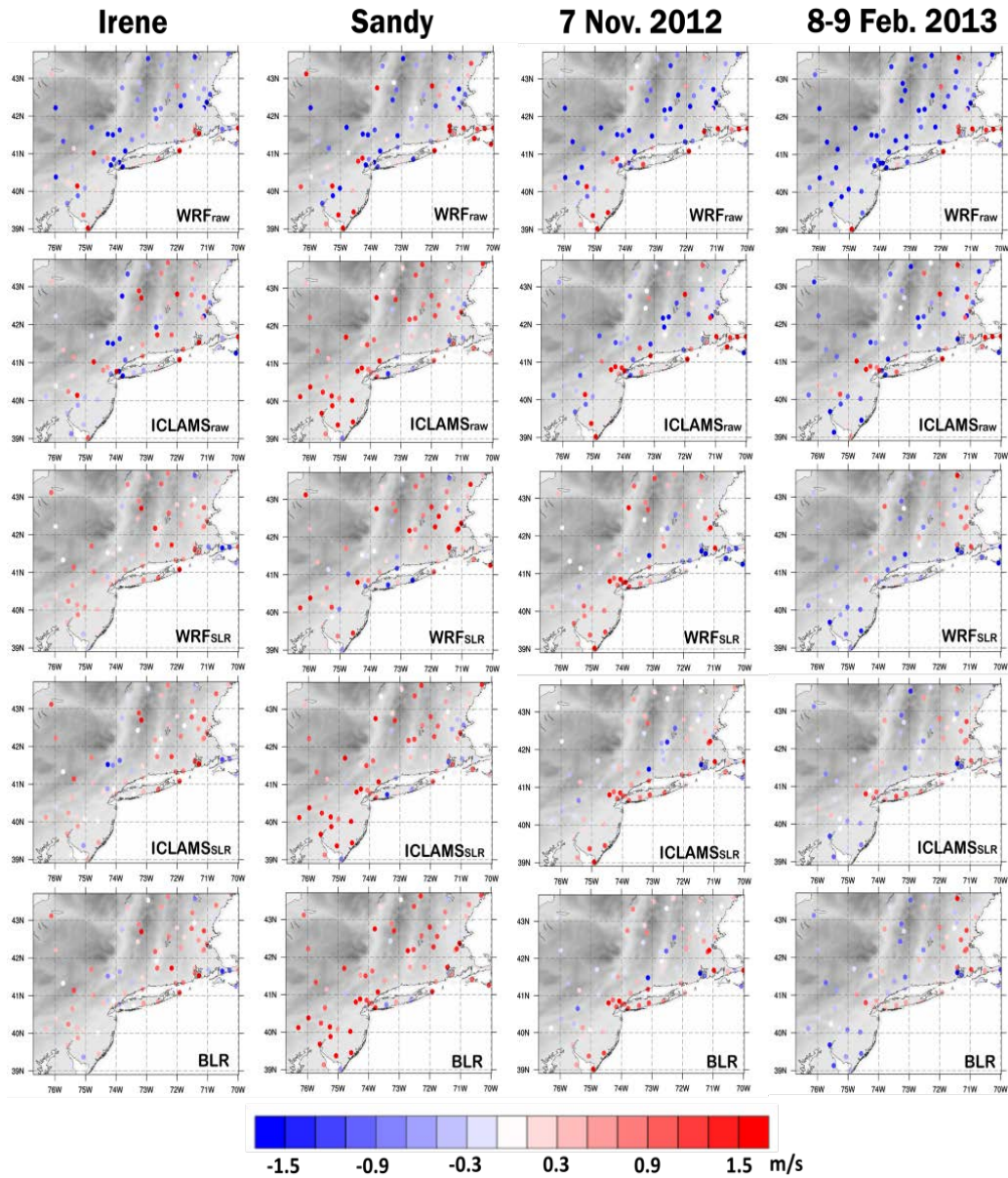


Figure S5: Spatial BIAS distribution for all models.

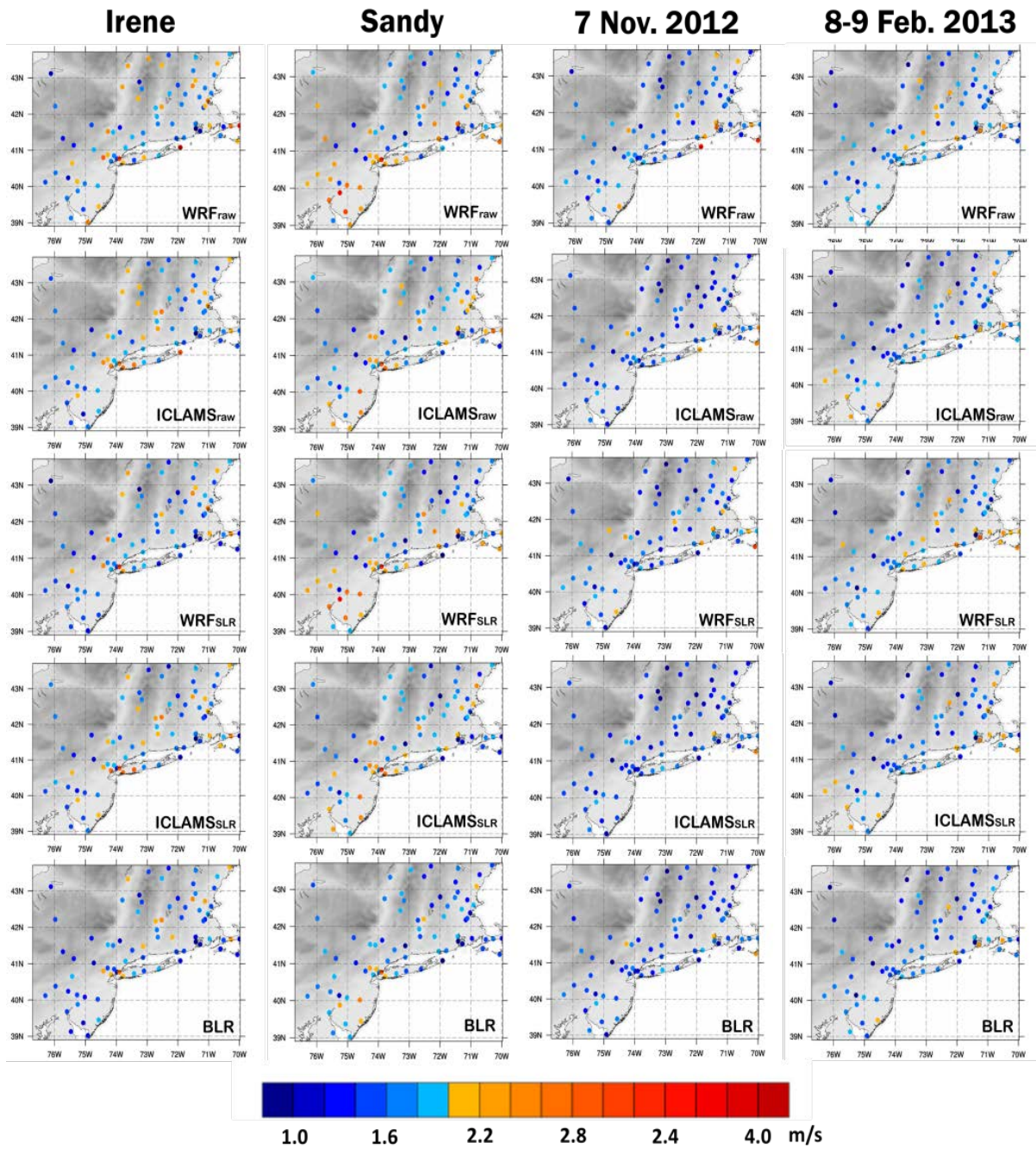


Figure S6: Spatial CRMSE distribution for all models.

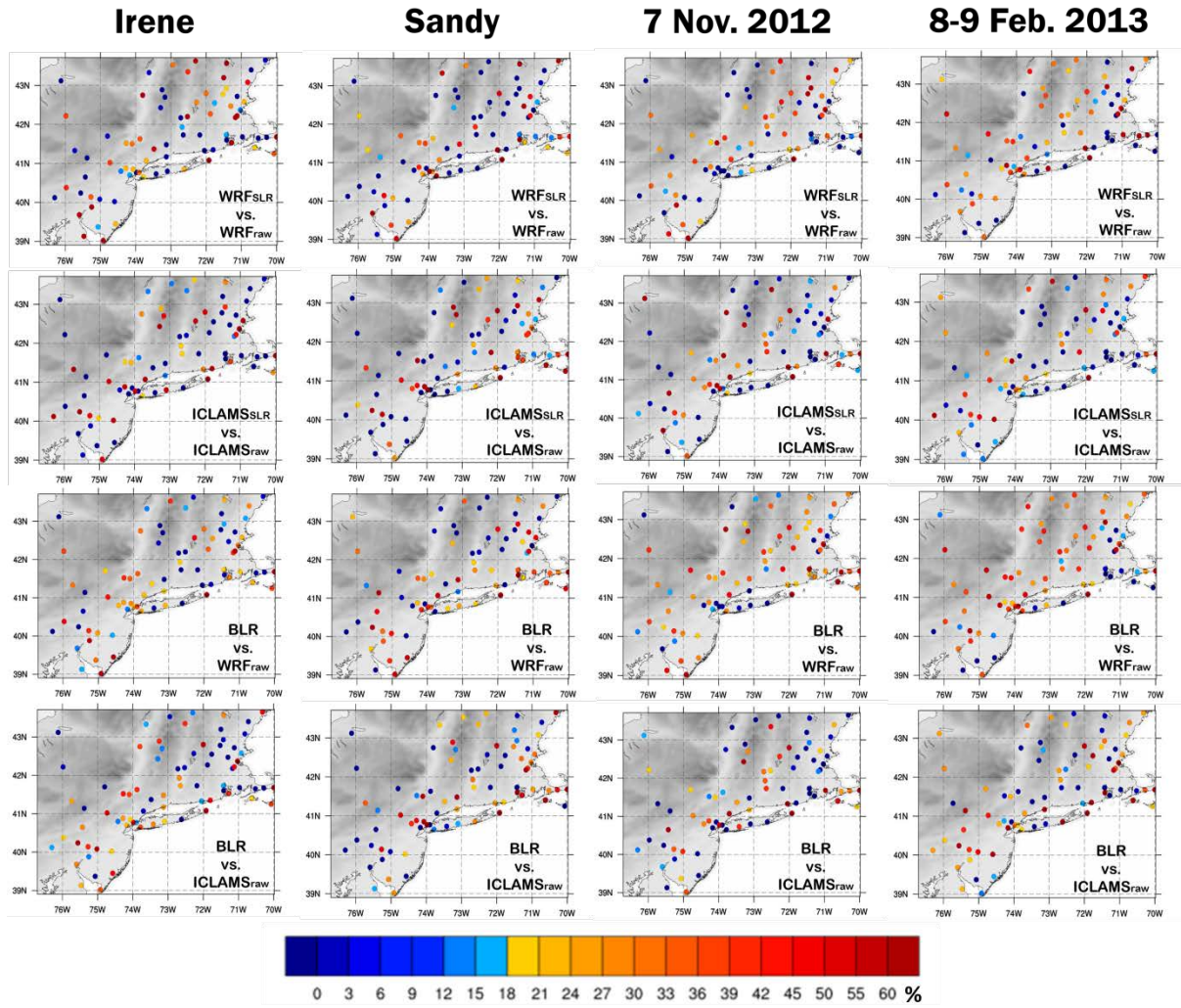


Figure S7: Spatial skill score (SS) distribution for all storms. The relationship indicated by the SS is written as a legend in each plot.