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Supplemental Material

Journal of Hydrometeorology

Evaluation and Intercomparison of Multiple Snow Water Equivalent Products over the Tibetan Plateau

<https://doi.org/10.1175/JHM-D-19-0011.1>

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Supplementary figures and tables for manuscript “Evaluation and Intercomparison of Multiple Snow Water Equivalent Products over the Tibetan Plateau”

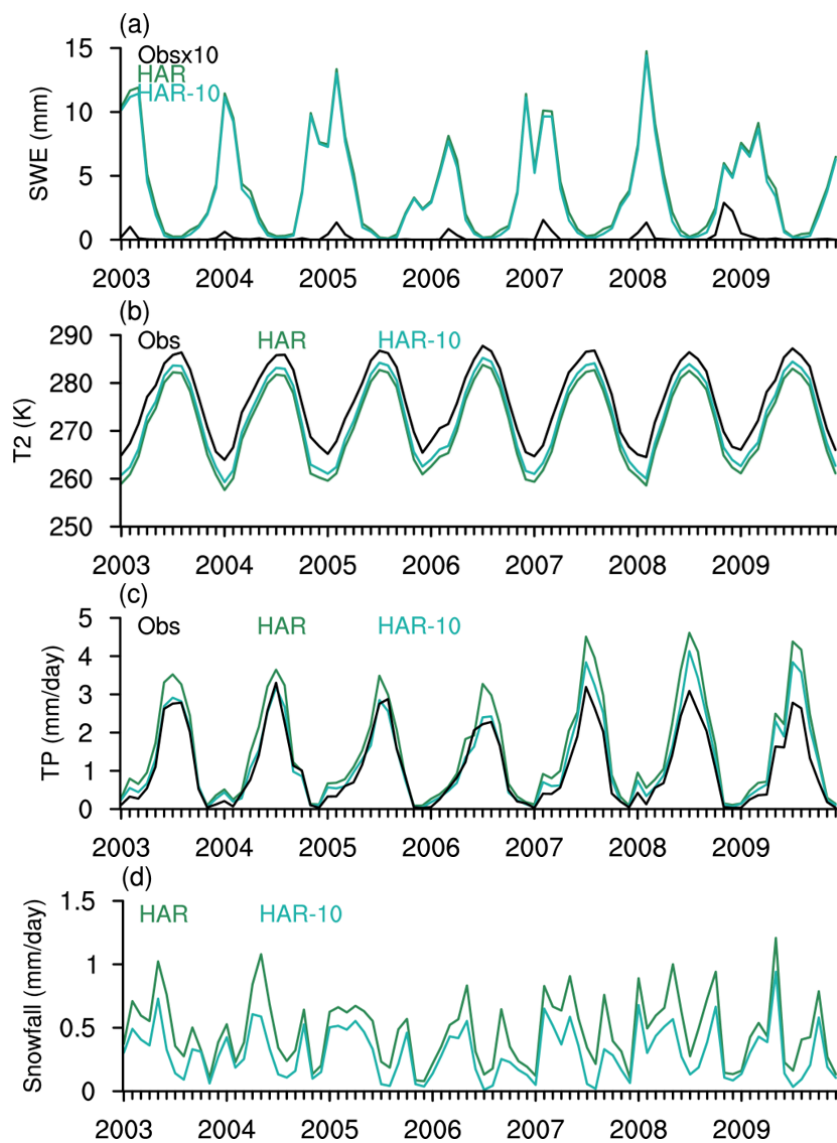


FIG. S1. Temporal variations of monthly (a) SWE, (b) 2 m air temperature (T2), (c) total precipitation (TP), and (d) snowfall, averaged over the 28 stations, west of 100° E among the 40 stations, from January 2003 to December 2009 from the *in situ* observations, HAR and HAR-10. The observed *in situ* SWE have been multiplied by ten; Other datasets are unaltered.

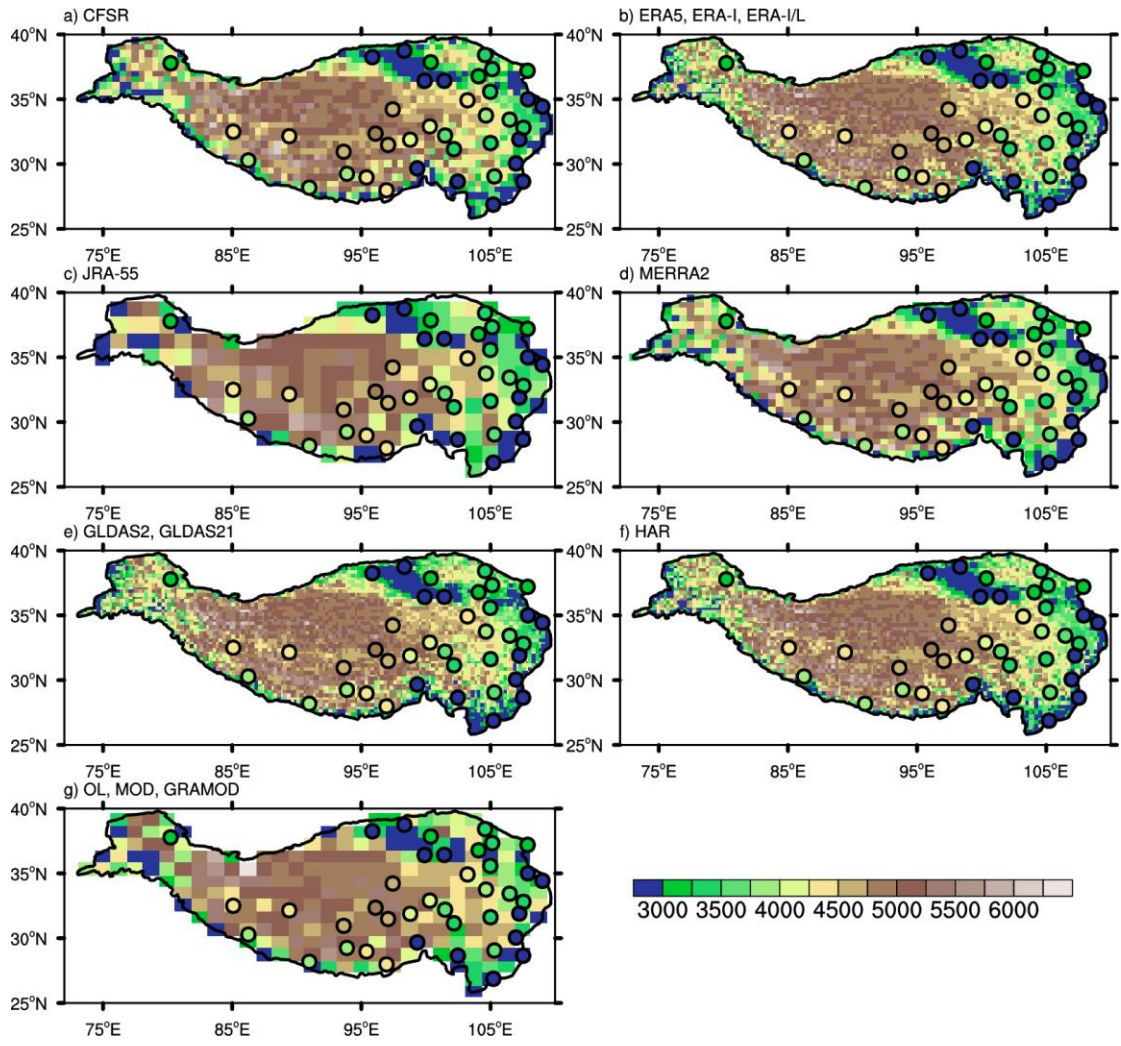


FIG. S2. Topography (in meters) of the Tibetan Plateau at the original resolution of each dataset. The locations of the 40 stations are shown with colored circles indicating the range in altitude.

TABLE S1. Temporal correlation matrix between the 11 datasets. Correlations are calculated using the year-round daily SWE over the 7-year (2003–2009) period, and averaged over the Tibetan Plateau.

	CFSR	ERA5	ERA-I	ERA-I/L	JRA-55	MERRA2	GLDAS2	GLDAS21	HAR	OL	MOD
ERA5	0.72										
ERA-I	0.71	0.70									
ERA-I/L	0.75	0.74	0.75								
JRA-55	0.73	0.71	0.67	0.74							
MERRA2	0.67	0.62	0.64	0.71	0.61						
GLDAS2	0.62	0.59	0.62	0.68	0.59	0.57					
GLDAS21	0.69	0.69	0.66	0.75	0.66	0.61	0.69				
HAR	0.73	0.67	0.69	0.68	0.64	0.63	0.54	0.59			
OL	0.66	0.59	0.65	0.72	0.64	0.62	0.56	0.62	0.59		
MOD	0.64	0.58	0.64	0.68	0.62	0.58	0.55	0.61	0.57	0.82	
GRAMOD	0.64	0.59	0.65	0.71	0.63	0.60	0.57	0.63	0.59	0.86	0.88