



Uncertainty Propagation of Snowfall and Atmospheric Forcings in Modeled Seasonal Snowpack Evolution during SnowEx 2017 — Implications for Microwave Remote Sensing of Snow and Data Assimilation

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Ensemble Simulations

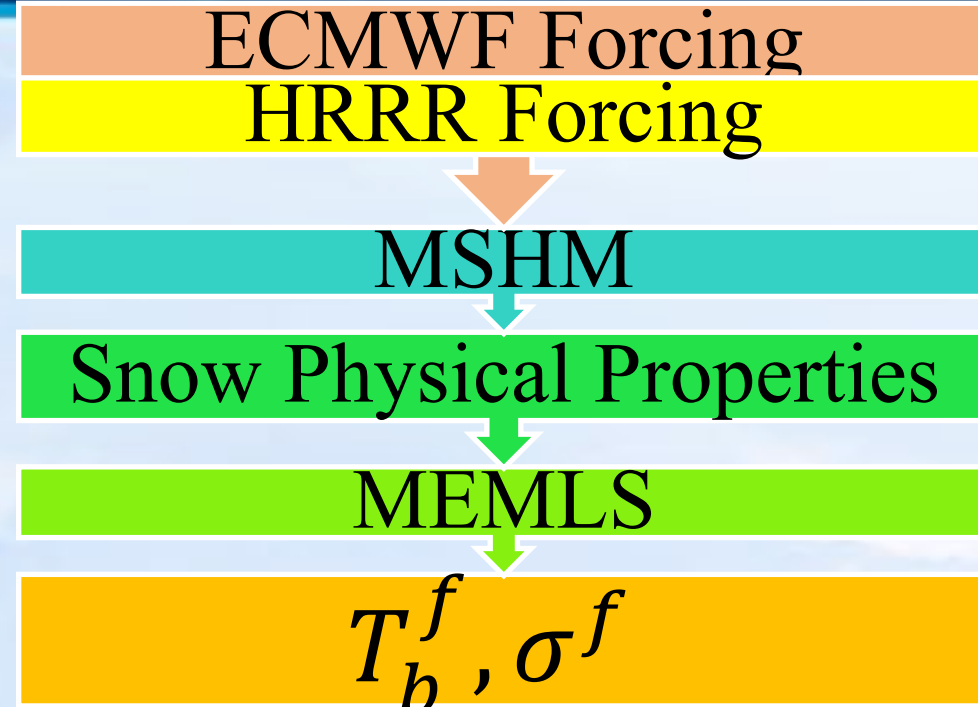
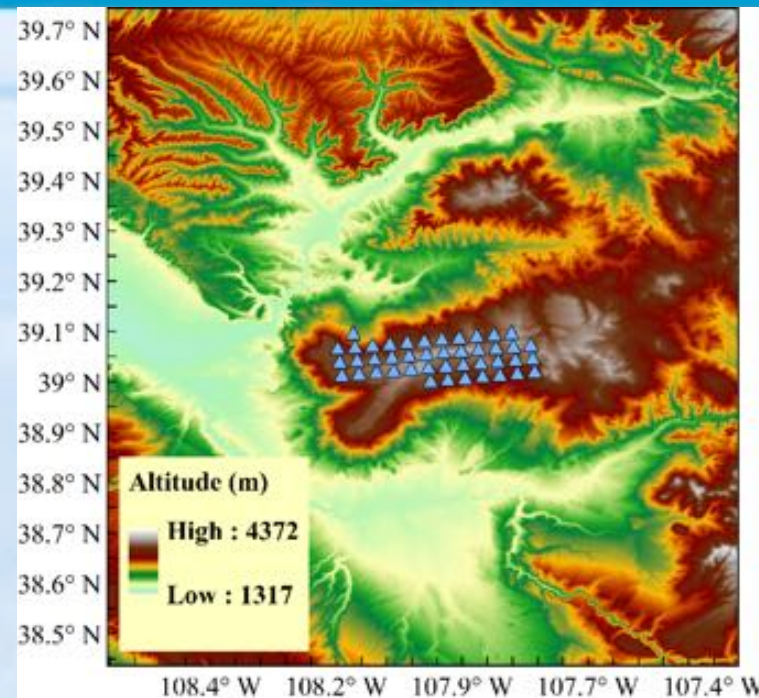
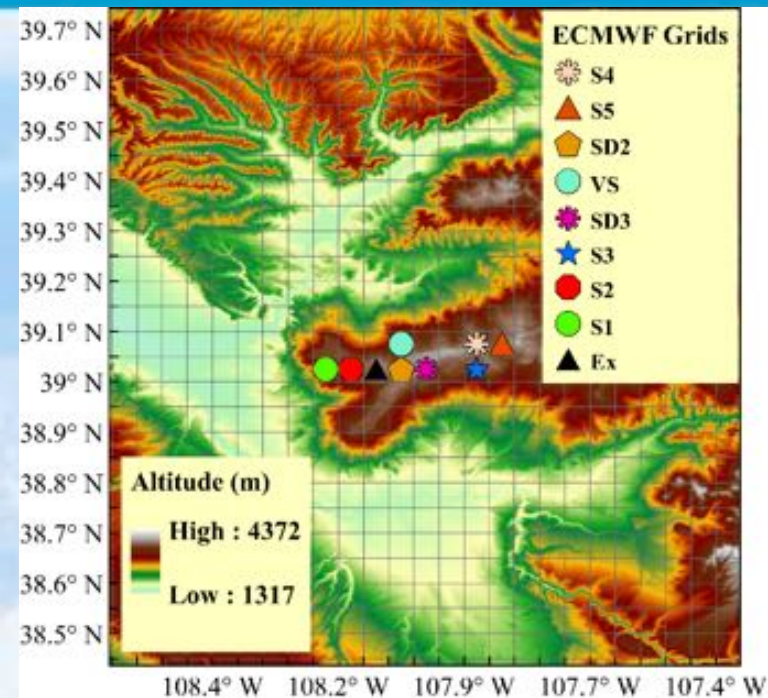
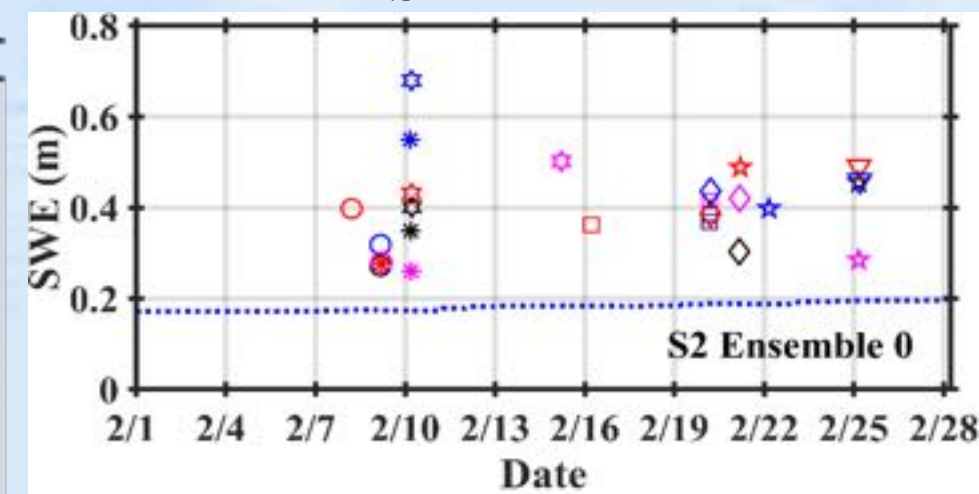
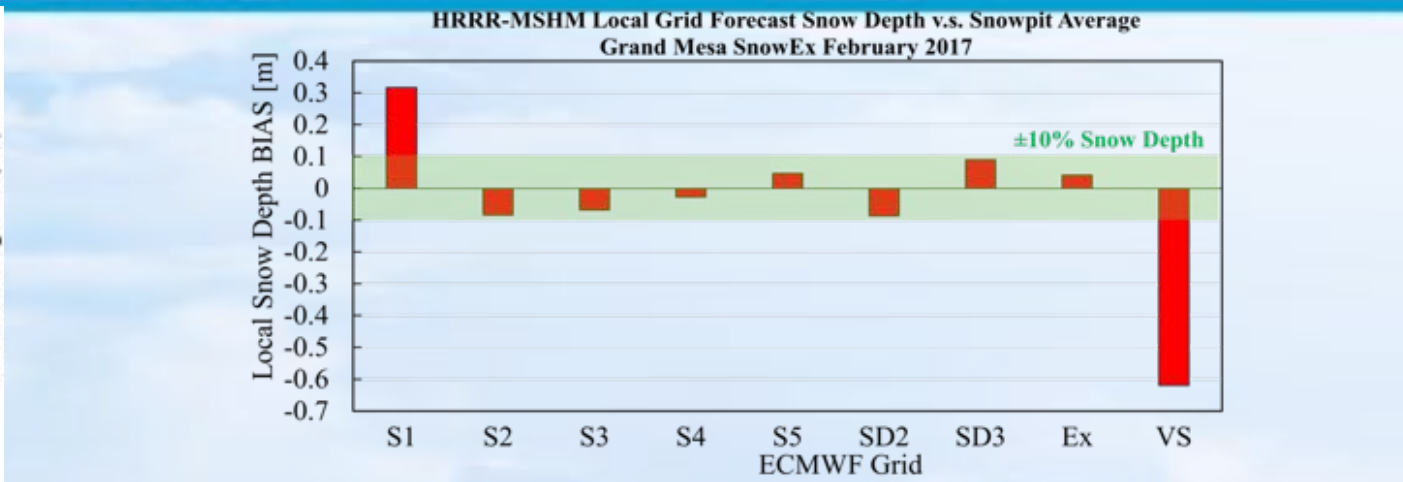
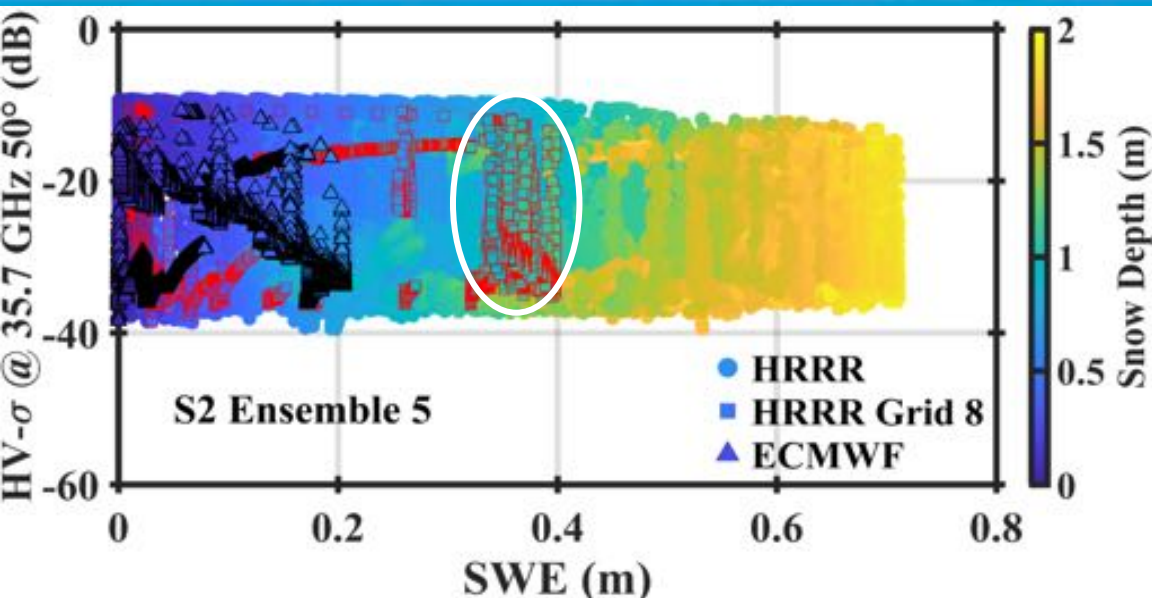


Table 1. Ensemble Forcing Composition

Ensemble	0	1	2	3	4	5
2m Air temperature (K)	ECMWF	HRRR	HRRR	HRRR	HRRR	HRRR
Snowfall rate (kg/m ² /s)	ECMWF	ECMWF	HRRR	HRRR	HRRR	HRRR
Rainfall rate (kg/m ² /s)	ECMWF	ECMWF	HRRR	HRRR	HRRR	HRRR
Air pressure (Pa)	HRRR	HRRR	HRRR	HRRR	HRRR	HRRR
Incoming shortwave radiation (W/m ²)	ECMWF	ECMWF	ECMWF	ECMWF	ECMWF	HRRR
Incoming longwave radiation (W/m ²)	ECMWF	ECMWF	ECMWF	ECMWF	ECMWF	HRRR
Albedo	NLDAS	NLDAS	NLDAS	NLDAS	NLDAS	NLDAS
10m Windspeed (m/s)	ECMWF	ECMWF	ECMWF	HRRR	HRRR	HRRR
2m Specific humidity (kg/kg)	ECMWF	ECMWF	ECMWF	ECMWF	HRRR	HRRR



Impact of Forcing



Seasonal Hysteresis of Backscatter Behavior

