

Supplementary Material

Boundary layer evolution over the central Himalayas from Radio Wind Profiler and Model Simulations

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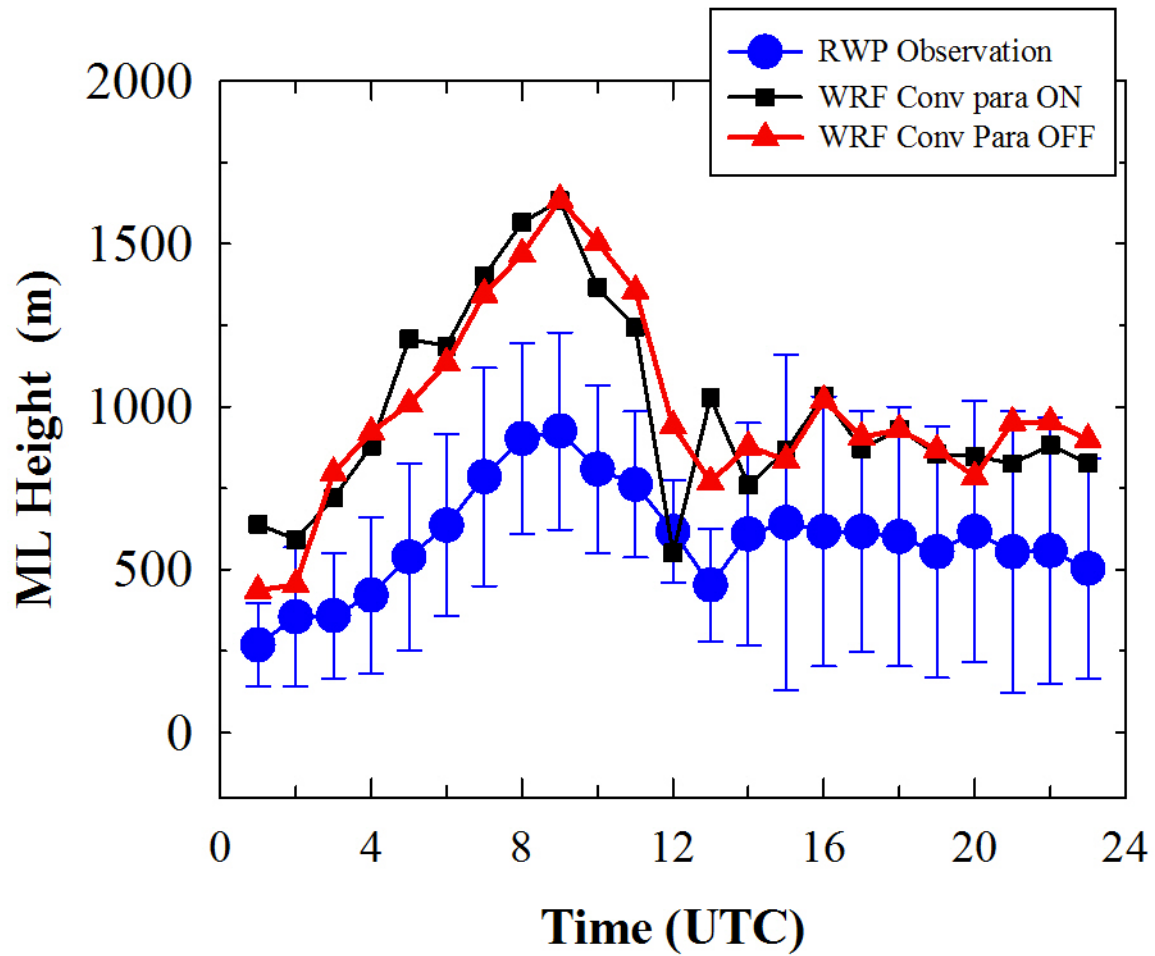


Figure S1: Comparison of mean diurnal variation in boundary layer height from the RWP measurements and WRF simulations (5 km x 5 km) to investigate the effect of convective parameterization. When convective parameterization has been kept ON for nested domain, boundary layer descent is much faster at 11 UT as compared to observations.

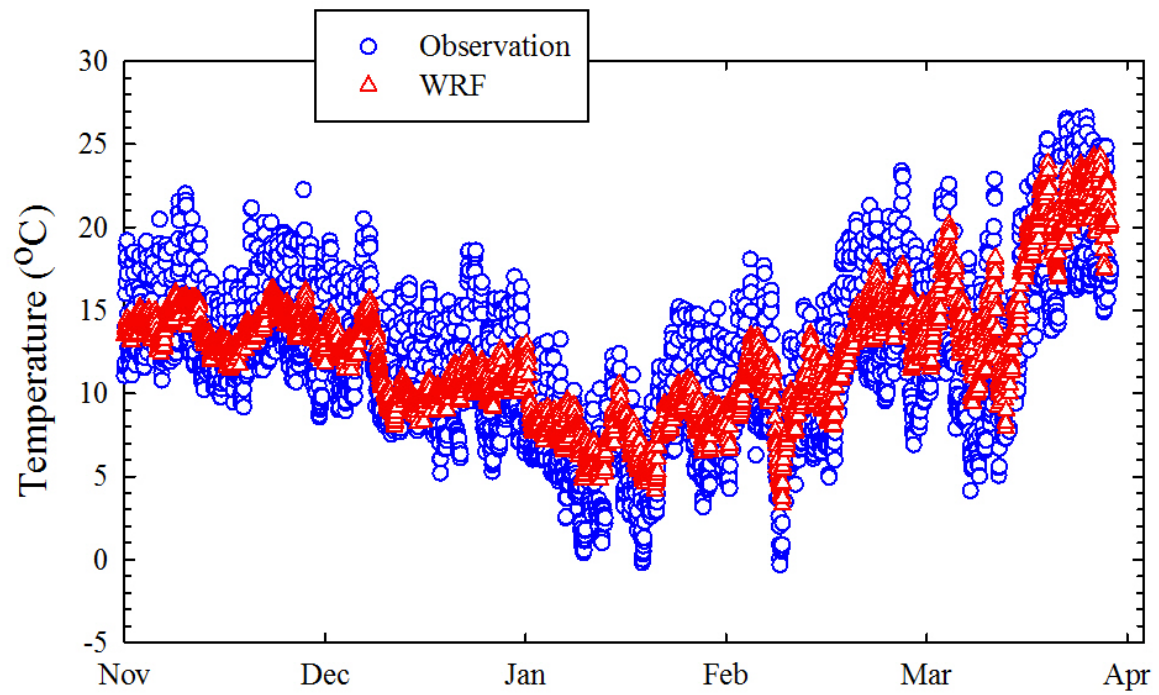


Figure S2: Comparison of observed air temperature from Automatic Weather Station (AWS) with WRF simulated temperature at Nainital during study period.

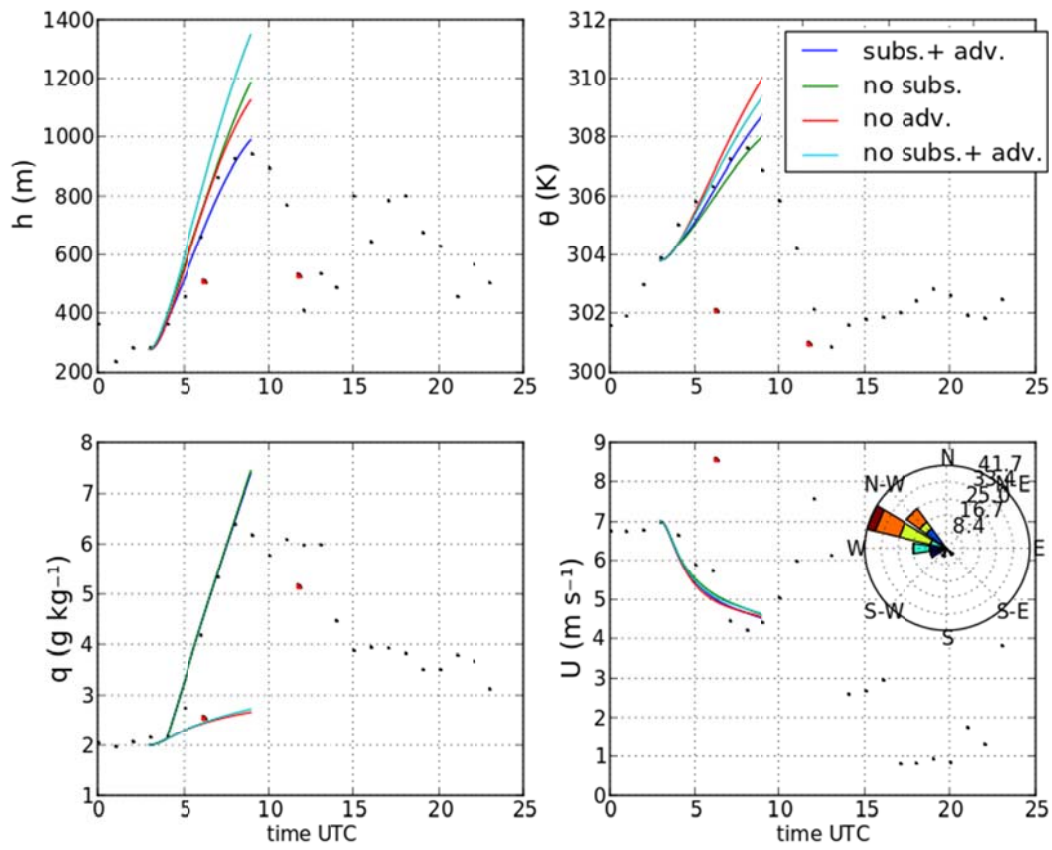


Figure S3: Diurnal variations in (a) boundary layer height, (b) potential temperature (c) water vapor and (d) wind on 15th March 2012.