

Supplemental material to: The Influence of Terrain Smoothing on Simulated Convective Boundary-Layer Depths in Mountainous Terrain

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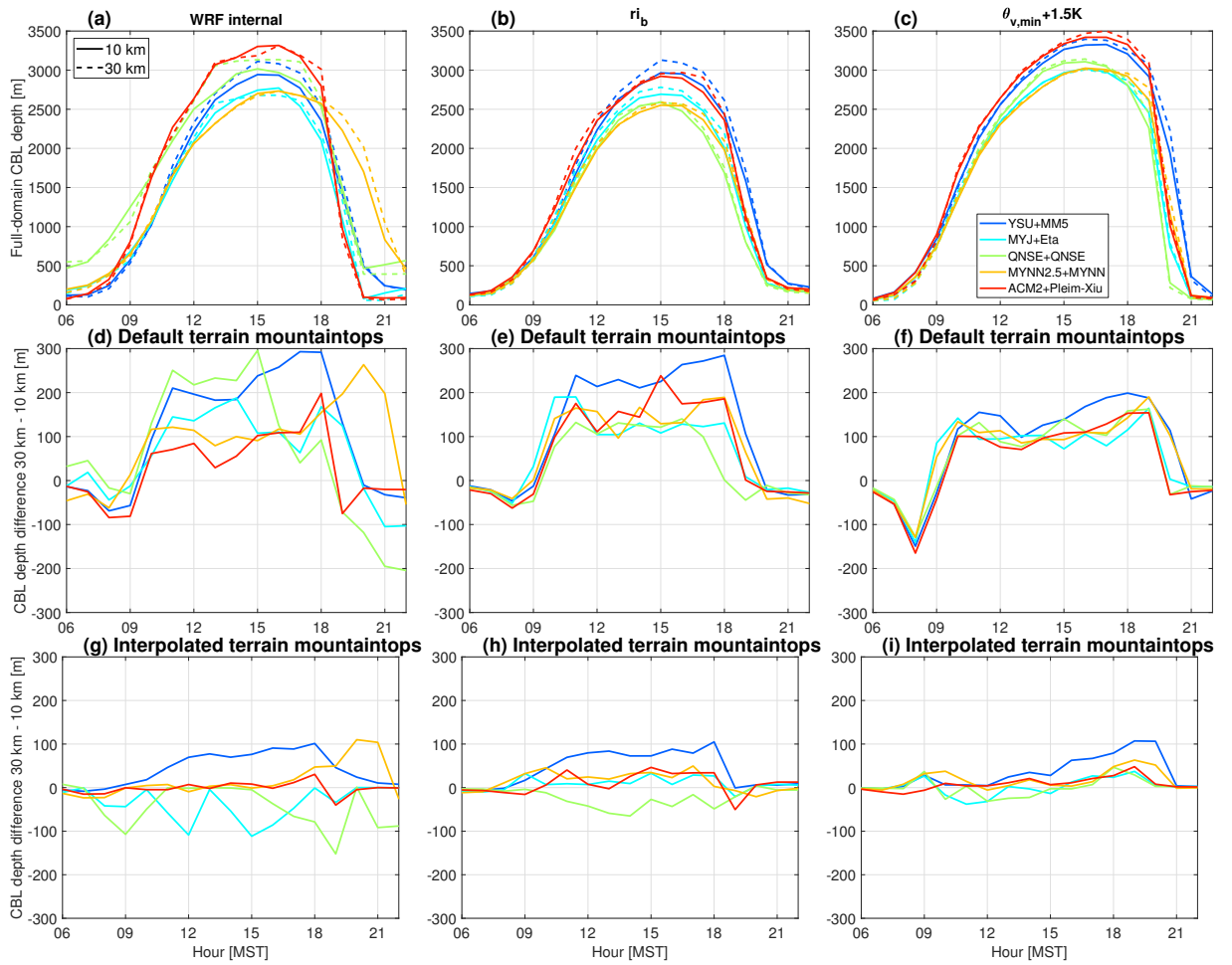


Figure S1: (a-c) Same as Fig. A1,a-c in the appendix of the main manuscript but for 30 km and 10 km grid spacing comparisons, (d-f) same as Fig. A1,e-g in the appendix of the main manuscript but for 30 km and 10 km grid spacing comparisons, and (g-i) same as (d-f) but for interpolated terrain simulations.

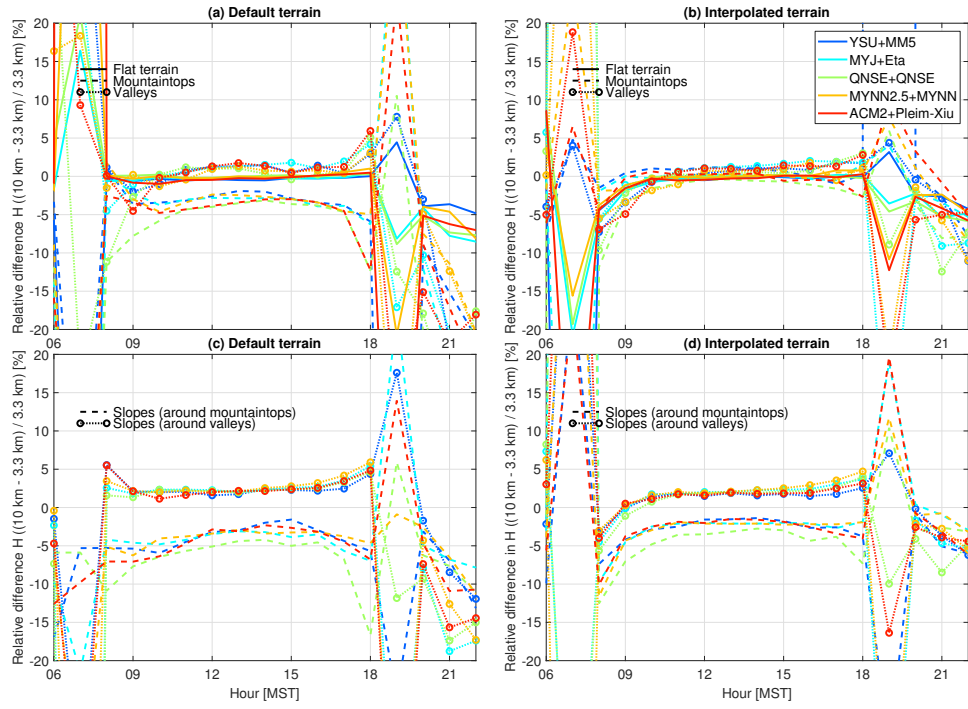


Figure S2: Same as Fig. 6 in main manuscript but for relative differences.

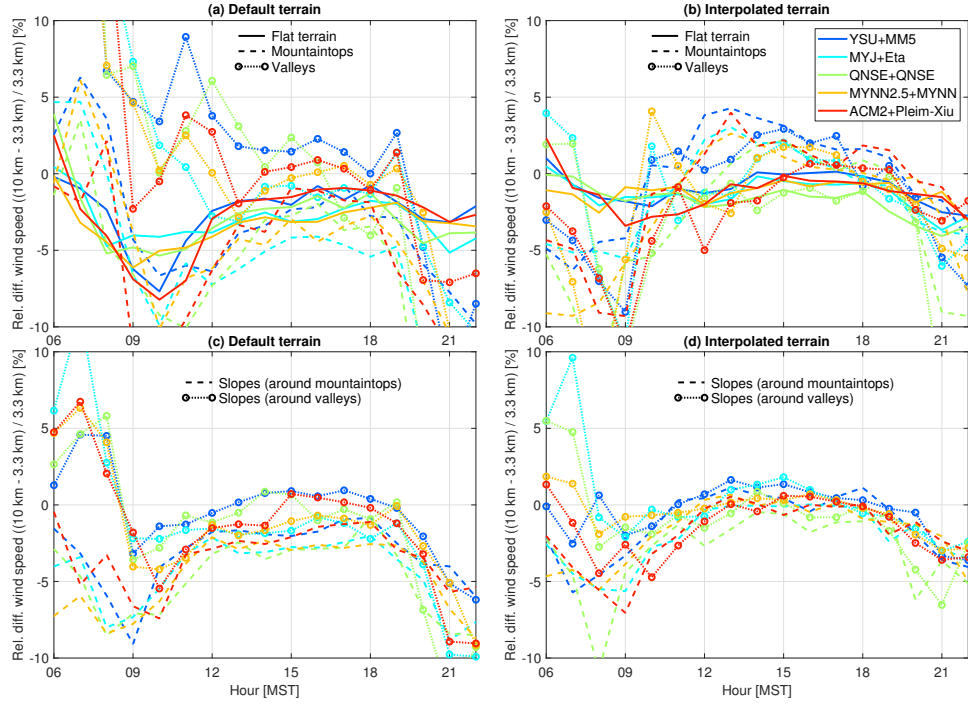


Figure S3: Same as Fig. 7 in main manuscript but for relative differences.

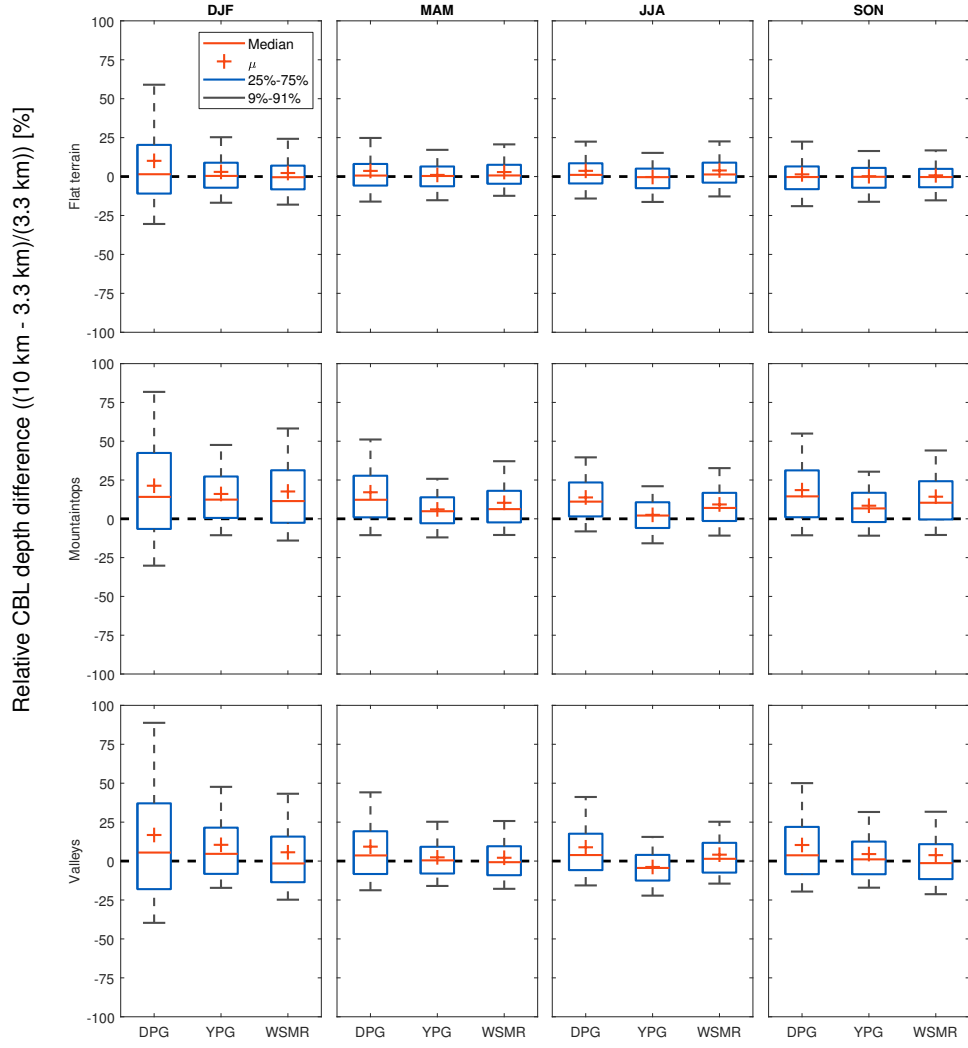


Figure S4: Same as Fig. 10 in main manuscript but for relative differences.

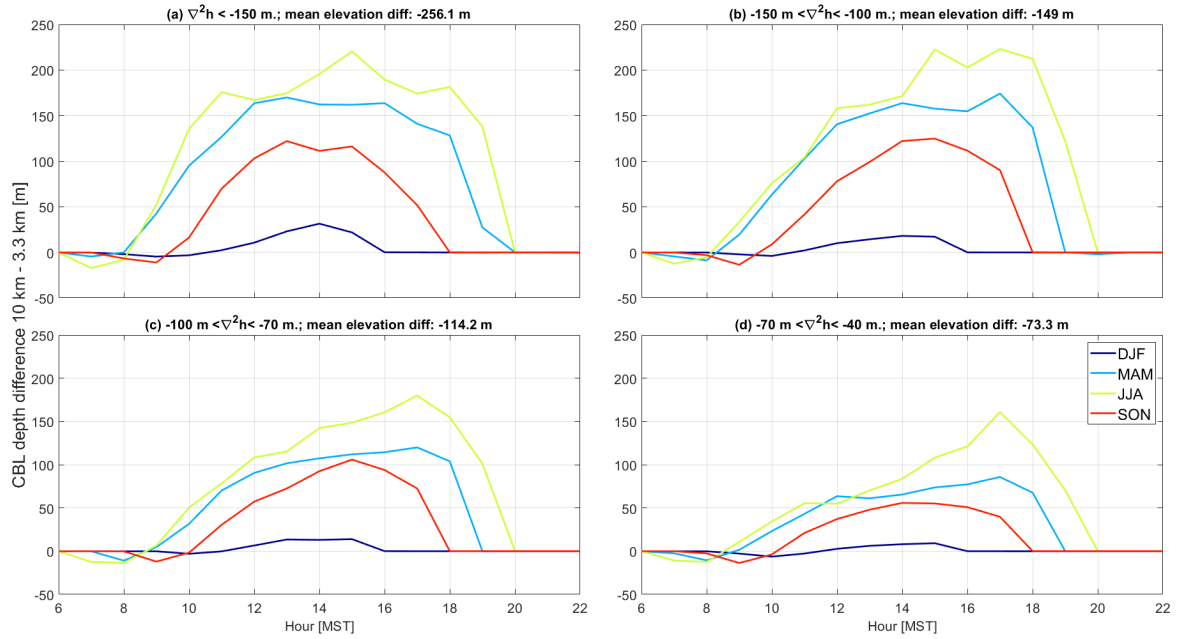


Figure S5: Hourly and seasonal medians of CBL depth difference between the coarse (10 km) and fine (3.3 km) domains for the DPG area for steeper and higher mountains in the DPG area than shown in Figure 9b in main manuscript. Each panel title indicates the laplacian range for this subselection of and the mean terrain elevation difference between coarse and fine grid domains of the selected grid cells. See Table 2 in main manuscript for the number of available days per season per area.

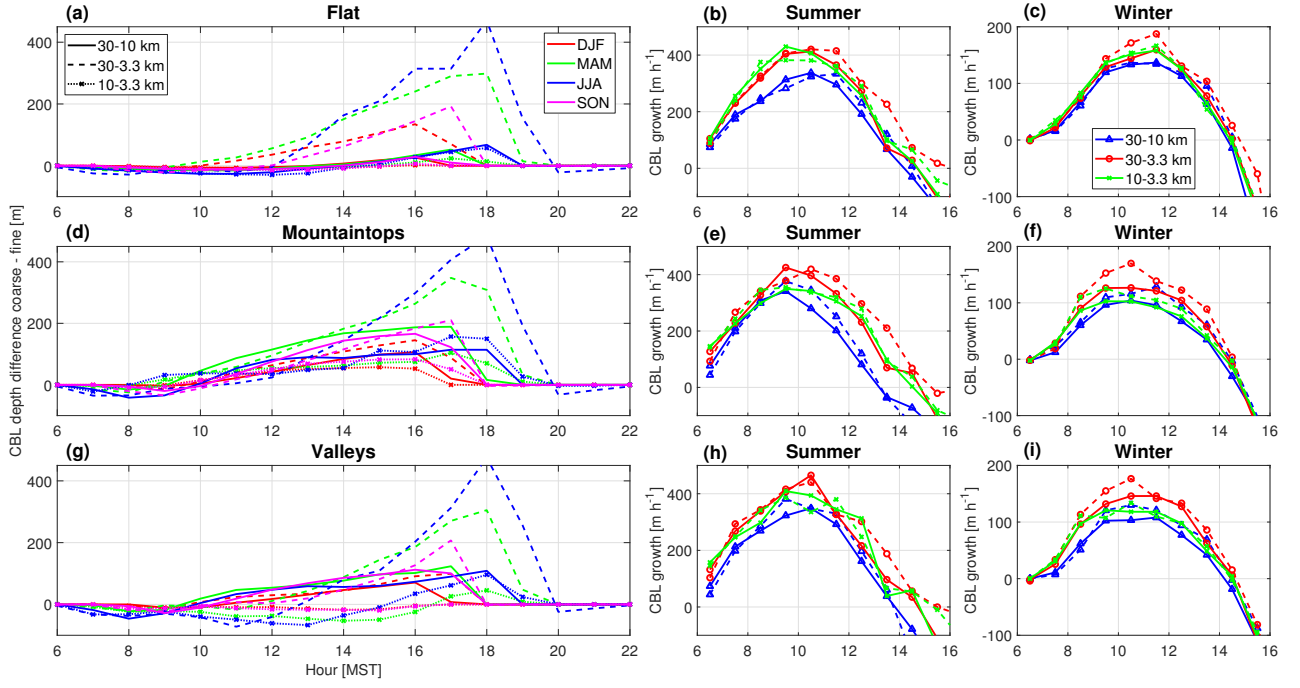


Figure S6: Same as Fig. 11 in main manuscript but for WSMR area.

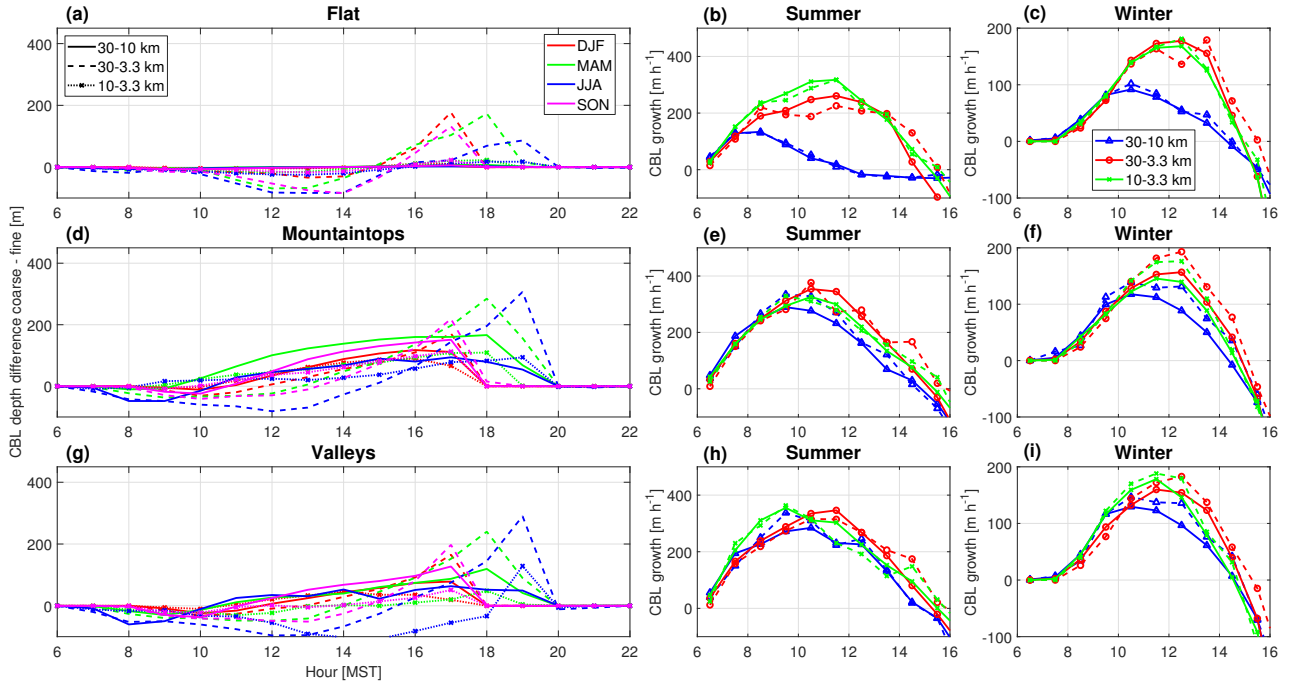


Figure S7: Same as Fig. 11 in main manuscript but for YPG area.

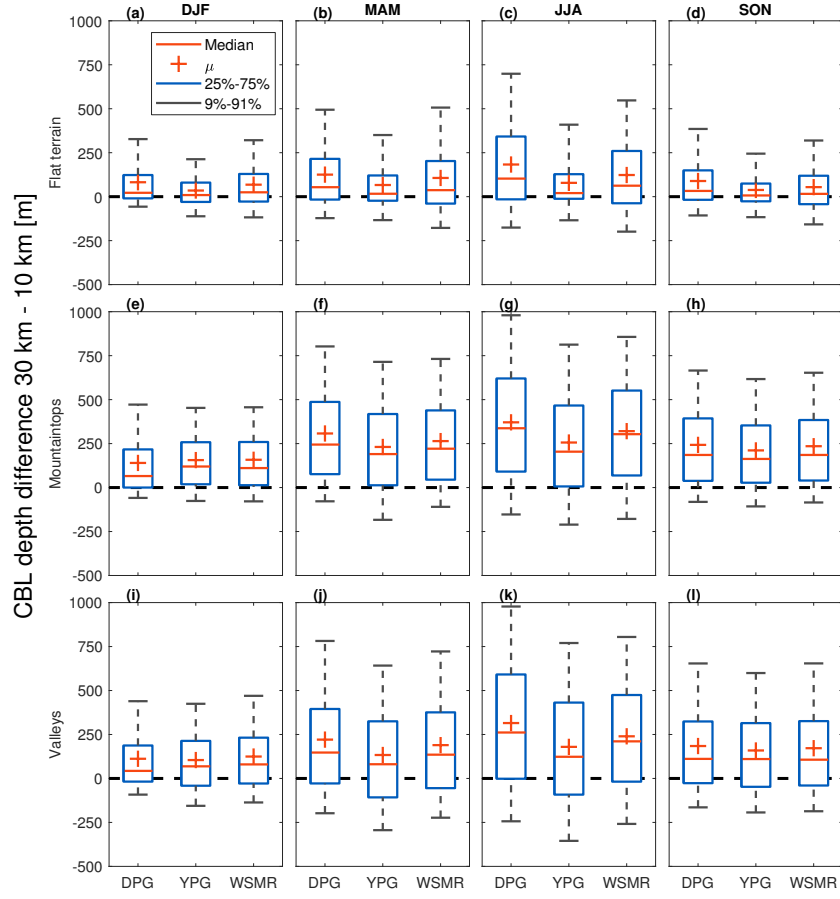


Figure S8: Same as Fig. 10 in main manuscript but for the comparison of 30 and 10 km grid spacing domains.

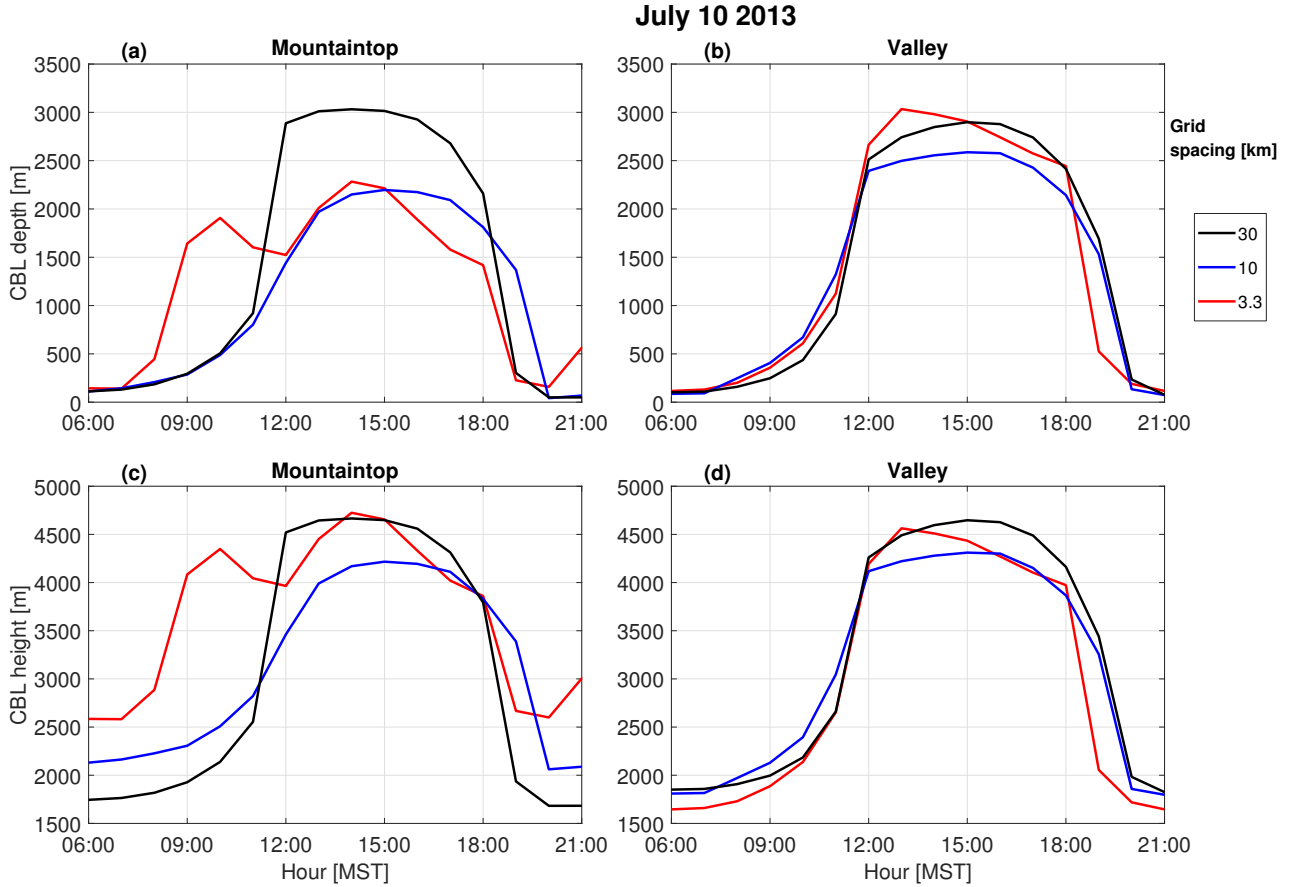


Figure S9: Same as Fig. 12 in main manuscript but for July 10 2013, $r=0.54$.