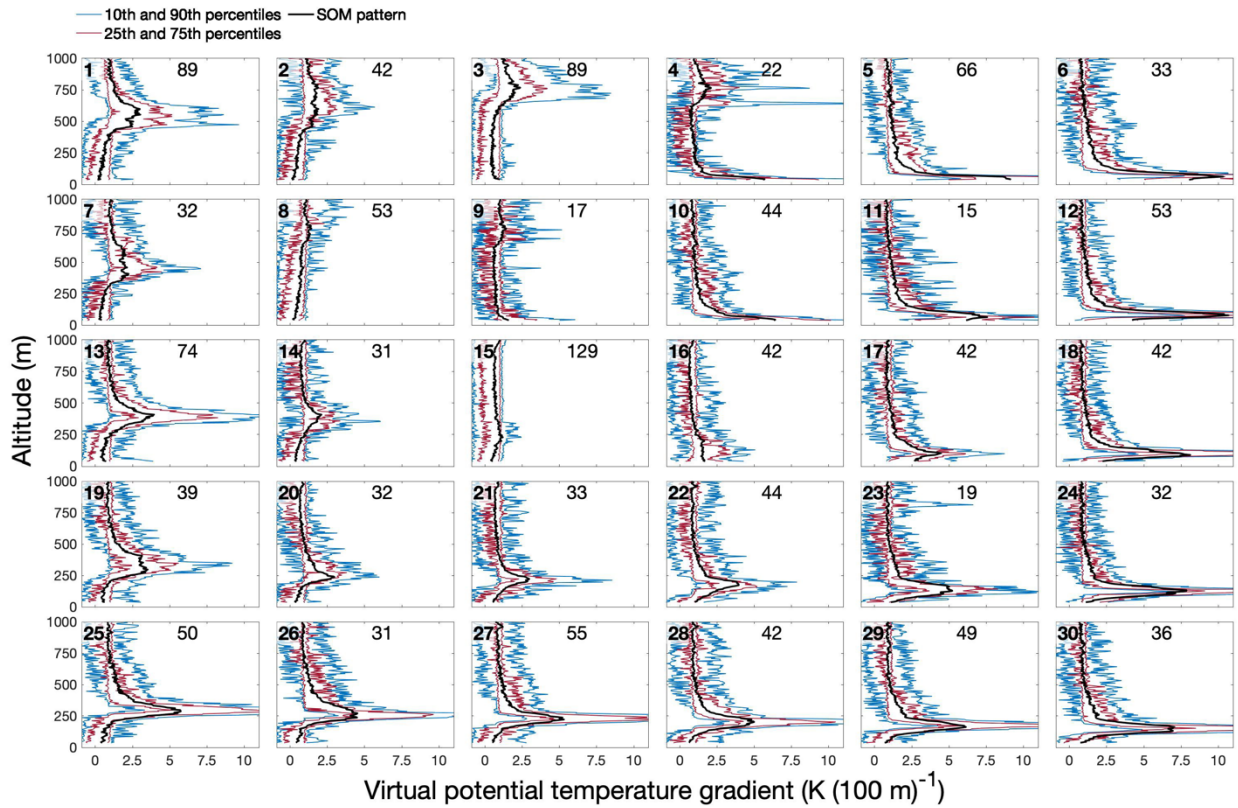Atmospheric
Chemistry
and Physics

*Supplement of*

An overview of the vertical structure of the atmospheric boundary layer in the central Arctic during MOSAiC

Gina C. Jozef et al.

Correspondence to: Gina C. Jozef (gina.jozef@colorado.edu)

Figure S1. The 30 SOM patterns resulting from training with 1377 MOSAiC $d\theta_v/dz$ profiles. On each subplot, the black line is the SOM defined profile of $d\theta_v/dz$. The 10th and 90th percentiles (blue) and the 25th and 75th percentiles (red) are shown for all radiosonde data that maps to each pattern. The bold number in the upper lefthand corner of each subplot is the number of that pattern (1 through 30), and the number in the upper center of each subplot is the number of radiosonde profiles which map to that pattern.

Statistical significance of ABL features
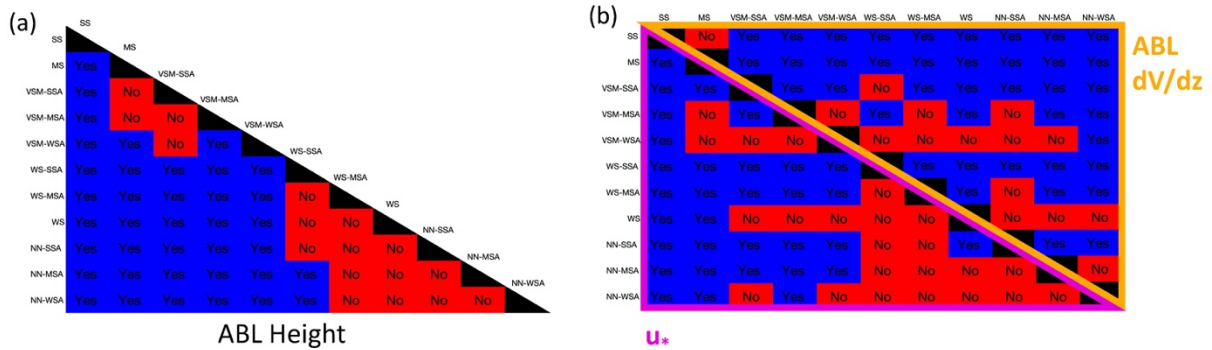
Figure S2. Grid plots indicating whether the means of (a) ABL height, (b) u* (pink outline) and dV/dz over the depth of the ABL (yellow outline) are statistically significantly different between stability regimes, where blue shading and the word "yes" indicate that the means are significantly different and red shading and the word "no" indicate that the means are not significantly different.