Fig. S1. Comparison of estimated and measured aerosol volumes for (a) T0, (b) T1, and (c) G1 (UHSAS volume is restricted to below 0.5 µm). Some day-to-day variations in the agreement between estimated and measured volumes are observed for all three platforms, especially for the G-1 data for June 27 and 28, but the overall agreements are reasonably good.
**Fig. S2.** Examples of comparison of the number size distributions measured by the SMPS and APS in the overlap region: (a) T0 and (b) T1, both on midnight of June 15. SMPS measures mobility diameter ($D_m$), which is equal to geometric diameter ($D_g$), assuming the particles are spherical. Density of coarse mode particles is assumed to be that of sea salt ($\rho = 2.25 \text{ g cm}^{-3}$), and the APS aerodynamic diameter ($D_a$) is divided by 1.5 (i.e., square root of 2.25) to convert it to geometric diameter ($D_g$), assuming the particles are spherical. The dotted portion of the APS size distribution represents first 7 bins ($D_a = 0.523$ to $0.777 \mu\text{m}$) where the APS appears to underestimate the number concentration compared to SMPS.