

Supporting Material for: Deconvolution of Boundary Layer Depth and Aerosol Constraints on Cloud Water Path in Subtropical Stratocumuli

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Figures

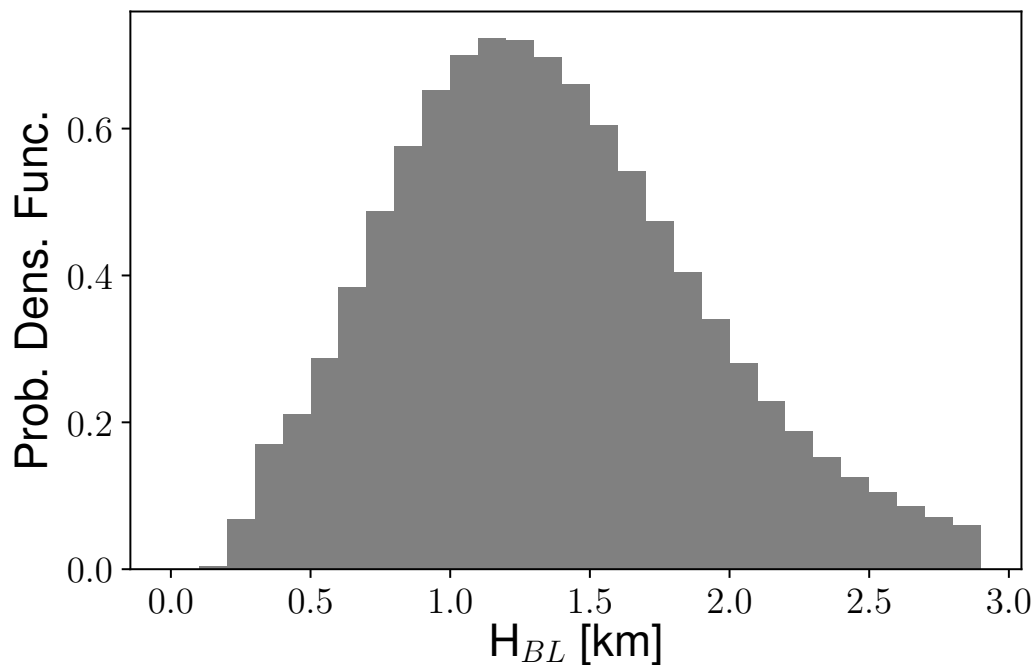


Figure 1. Probability density function of Boundary Layer Height (H_{BL} in Subtropical stratocumulus regions shown in Fig. 2 in main manuscript.

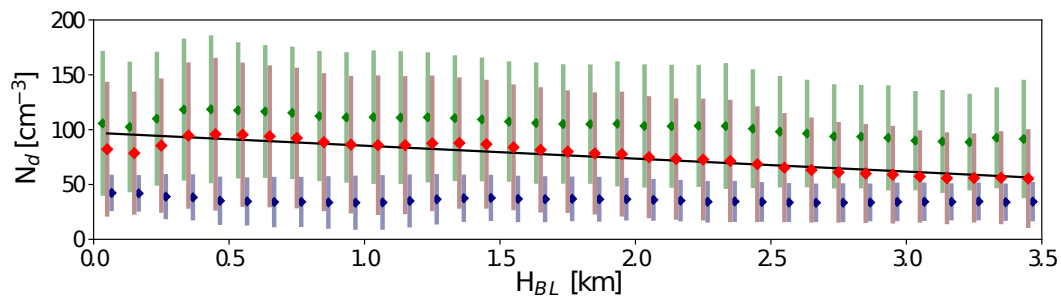


Figure 2. Effective radius (R_{eff}) plotted against precipitation probability at cloud base for all sub-tropical marine stratocumuli. The precipitation probabilities at cloud base were obtained from the Advanced Microwave Scanning Radiometer for (AMSR/E) 89 GHz brightness temperature, for which a retrieval algorithm has been developed based on light rain CloudSat retrievals in collocating regions (Eastman *et al.* [2019]). Only data for the year 2007 are included here for which the precipitation probability retrieval is available.

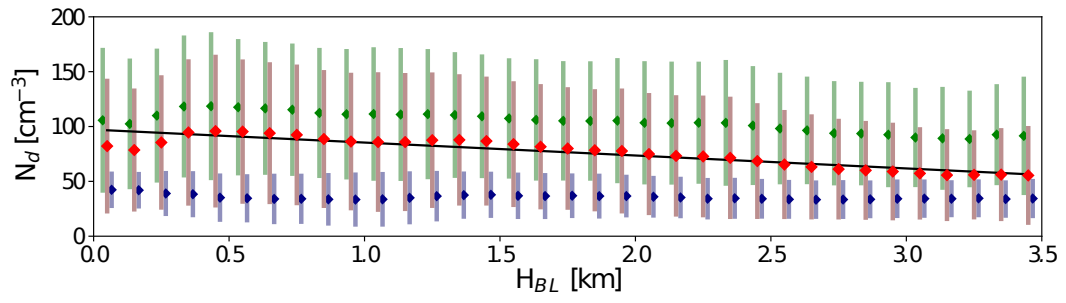


Figure 3. De-seasonalised and de-regionlised N_d climatology against H_{BL} . Markers denote climatological mean and bars denote the standard deviation for all clouds (red), precipitating clouds (blue) or non-precipitating clouds (green).