Supplement to

Unexpected characteristics of convective downdrafts in the upper-levels of tropical deep convective clouds

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Draft statistics with a lower diameter threshold

This section contains analysis with a draft diameter threshold of 100m. A detailed discussion is presented in Section 4.1 of the main manuscript.
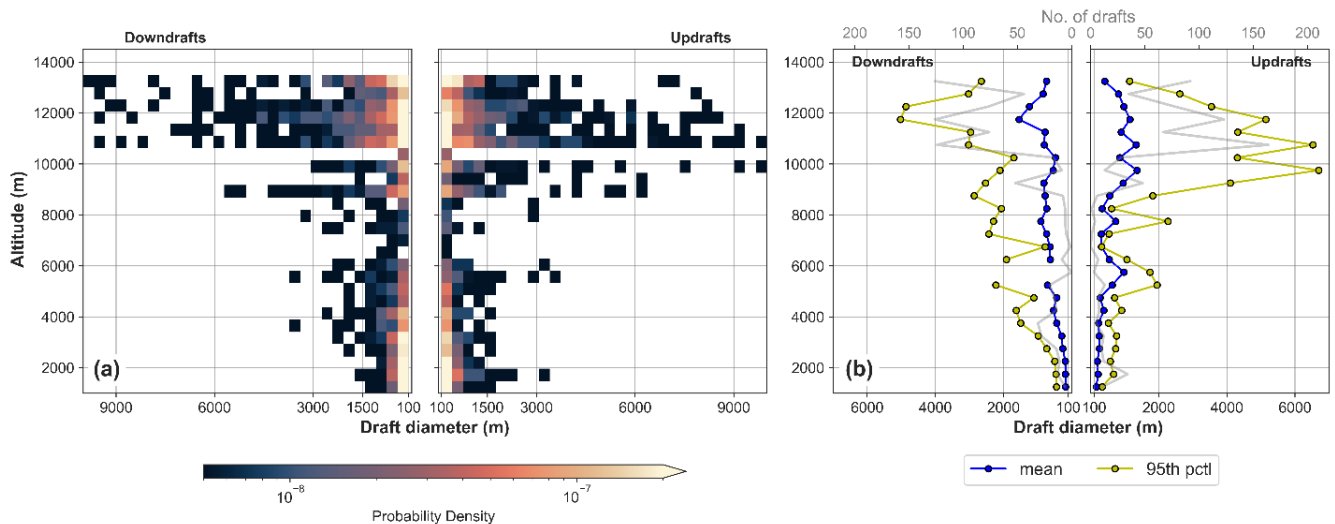
Figure S1: Altitude-wise draft diameter statistics of all in-cloud drafts with width > 100 m. (a) Probability Density Function (b) mean (blue) and 95th percentile (yellow) values of the diameter of drafts.
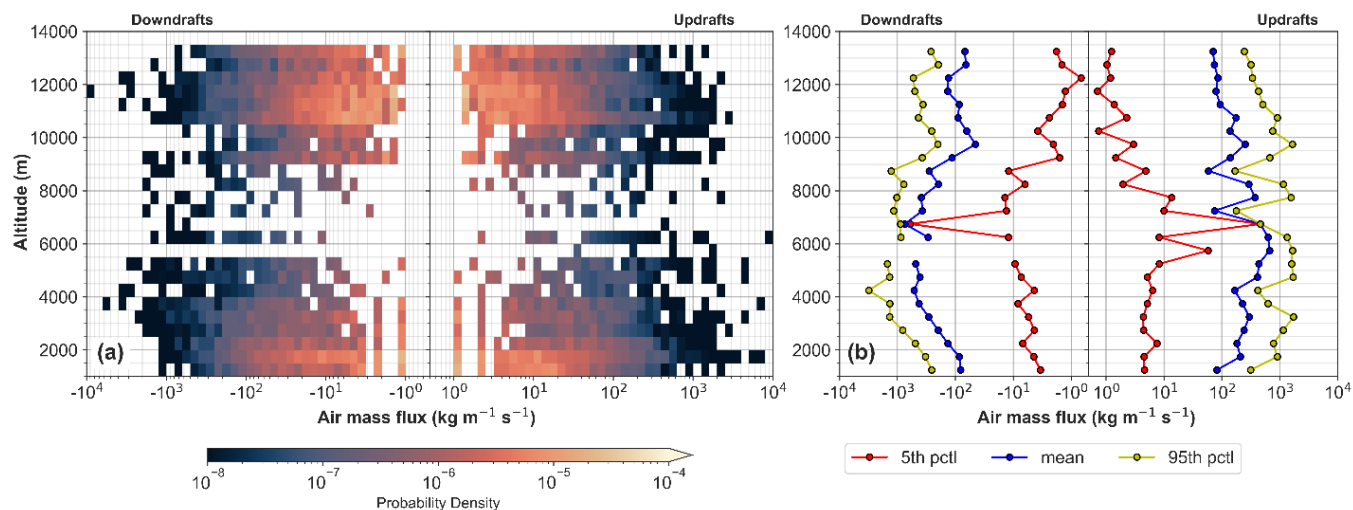
Figure S2: Altitude-wise air mass flux statistics of all in-cloud drafts width > 100 m (a) Probability Density Function (b) mean (blue), 5th percentile (red) and 95th percentile (yellow) of air mass flux.
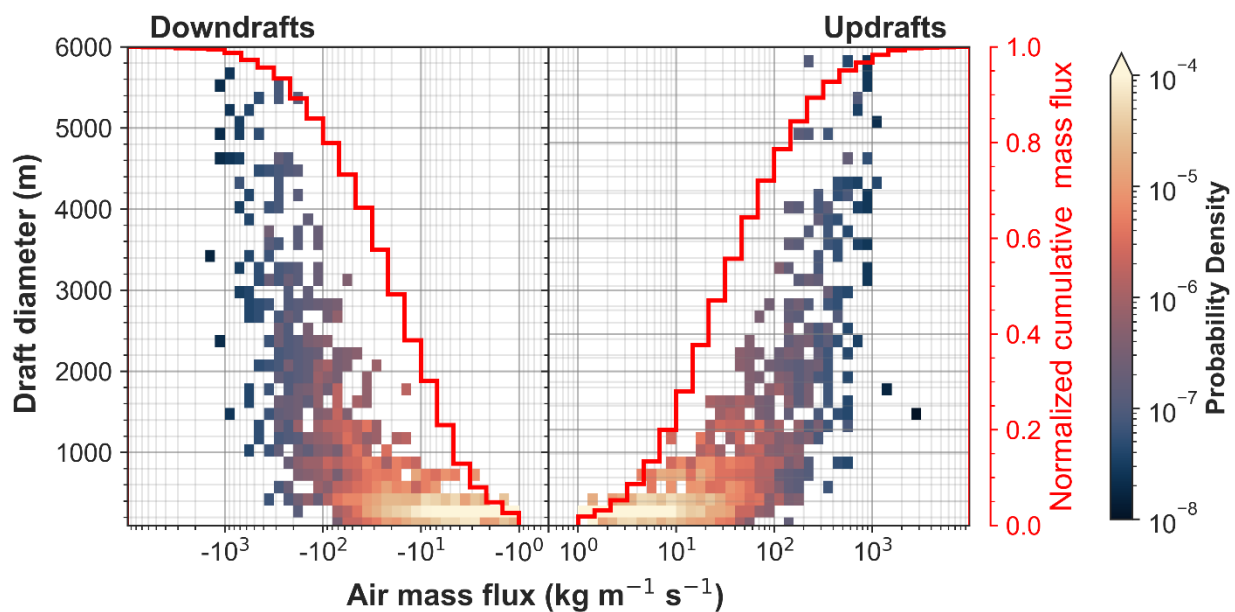
Figure S3: Probability Density of air mass flux vs draft diameter for in-cloud up and downdrafts with width > 100 m at altitudes 10 – 14 km.
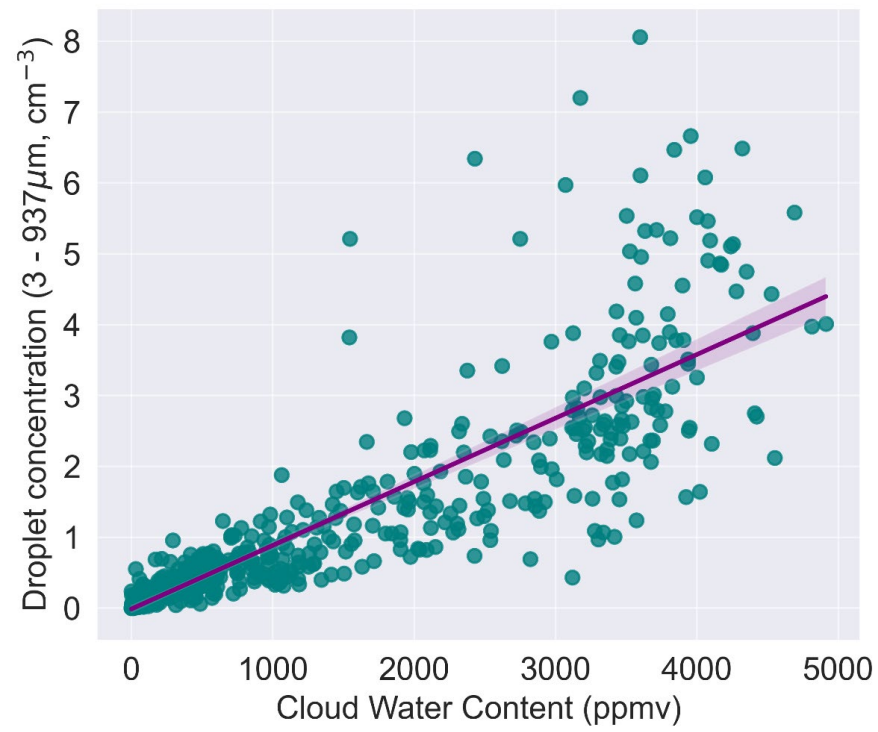
Figure S4: Cloud water content (ppmv) versus droplet number concentration (3 - 937 μm, cm^{-3}) for upper-levels (10-14 km).