Supporting Information for Microburst Scale Size Distribution Derived with AeroCube-6

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Contents of this file

Introduction

Text S1: Analytic Derivation of $\bar{F}(s)$ Here we derive the integral form of the $\bar{F}(s)$ under the assumptions that microbursts are circular with radius r and have a uniform spatial density of microbursts around AC6. Assuming the microburst viewing area of each AC6 unit in Fig. 5a-c and $A(r, s)$ given in Eq. 4 in the

$$A(r, s) = 2r^2 \cos^{-1}\left(\frac{s}{2r}\right) - \frac{s}{2}\sqrt{4r^2 - s^2}. \tag{1}$$

Mention rain bucket analogy

Text S2: Comparison of microburst to whistler mode chorus $\bar{F}(s)$