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ACPD

10, C155–C156, 2010

Interactive Comment

## Interactive comment on "A comparison of ship and satellite measurements of cloud properties in the southeast Pacific stratus deck" by M. A. Brunke et al.

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Received and published: 16 February 2010

This paper is an interesting contribution to the remote sensing field. Indeed, in a given cloud there is just one "true" liquid water path (LWP) and it is of importance to understand which remote sensing technique provides us with the answer, which is closest to the truth. Authors compare the LWP (and other cloud parameters)derived from many instruments. They found that it many cases the results disagree. I would suggest the following corrections: 1. Authors need to rank studied remote sensing techniques in terms of their accuracy for a given cloud parameter (e.g., in a table). 2. They need to describe in more detail how they deal with mismatch of various satellite pixels and





lidar/radar scans. 3. Please, describe the limitations of CALIPSO with respect to cloud base determination( for thick clouds, e.g., see p.3308). 4. Did you use aircraft data shown in Table 1? How did you perform the match-ups of aircraft and satellite observation areas? To my knowledge, it is not an easy task to measure cloud LWP using aircraft in case of horizontally inhomogeneous clouds. How this problem was solved?

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Interactive Discussion

**Discussion Paper** 

