Atmos. Chem. Phys. Discuss., 6, S4104–S4105, 2006 www.atmos-chem-phys-discuss.net/6/S4104/2006/ © Author(s) 2006. This work is licensed under a Creative Commons License.



ACPD

6, S4104–S4105, 2006

Interactive Comment

## *Interactive comment on* "First Odin sub-mm retrievals in the tropical upper troposphere: ice cloud properties" by P. Eriksson et al.

## P. Eriksson et al.

Received and published: 27 October 2006

The paper is found by Cory Davis to be good and to make some important contributions. The main criticism in this thread is the quality of the actual text. We note this and we will put high emphasis on language and grammar when preparing the final version of the manuscript. The accompanying paper by Ekström et al. was found by Cory Davis to be well written. The text of this manuscript was written by the same persons, but during a shorter time period and this apparently affected the text quality.

The detailed comments given are all of relevance, and will be considered when revising the manuscript.

Regarding the first sentence of the abstract: It is mainly a comment referring to IR measurement techniques. Yes, CloudSat will also penetrate thick clouds and will have



high vertical resolution, but retrieved ice water content profiles will still have limited accuracy. The main point is that CloudSat observes only at a single wavelength (lidar data will not be at hand for thicker clouds). The problems associated with this fact are discussed in the introduction. Anyhow, as CloudSat was launched just recently, we have to wait some time before usage of satellite based high frequency radars can be treated as an established technique. It can be added that we plan to incorporate CloudSat data in the analysis of Odin-SMR measurements, as soon as CloudSat data are made publicly available (see answer in next thread).

Interactive comment on Atmos. Chem. Phys. Discuss., 6, 8681, 2006.

## ACPD

6, S4104–S4105, 2006

Interactive Comment

Full Screen / Esc

**Printer-friendly Version** 

Interactive Discussion

**Discussion Paper**