

Interactive comment on “Discriminating raining from non-raining clouds at mid-latitudes using multispectral satellite data” by T. Nauss and A. A. Kokhanovsky

Anonymous Referee #1

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The paper presents a novel approach to retrieve raining from non-raining clouds from multi-spectral satellite imagery. The focus is given towards the estimation of precipitation fields from stratiform systems. The authors demonstrate the feasibility to combine multi-spectral MODIS imagery with the SACURA algorithm for the retrieval of precipitation fields. A delineation curve between high- and low rainfall probability is derived from the comparison to ground radar data. The obtained results are very promising, yet they are based on a very poor sample size (the least possible).

The paper is well written and structured, concise and comprehensive both in terms

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of methodology and presentation. With reference to the other reviewers' comments stated earlier, I agree to the following points of (minor) criticism:

- please make clear, that a retrieval of precipitation intensity and sums is not possible
- please include short elements of your reply, in which you describe the outcome of the statistical validation tests in more detail
- please comment in more detail about the applicability and validity of the approach to other (less extreme) meteorological conditions

Overall, the manuscript is nearly excellent. Besides the well reception by atmospheric scientists and the obvious acceptance of RADS by the other referees, the contribution also reveals interesting perspectives for hydrologists, who may benefit a great deal from the improved identification of raining clouds to estimate the plausability of rainfall intensities used for hydrologic model applications.

Once the above mentioned issues are adressed in the paper, I strongly recommend to publish the manuscript within ACP.

Interactive comment on Atmos. Chem. Phys. Discuss., 6, 1385, 2006.

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