

***Interactive comment on* “Switching cloud cover and dynamical regimes from open to closed Benard cells in response to the suppression of precipitation by aerosols” by D. Rosenfeld et al.**

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In the opinion of Referee #1, this paper is of excellent merit, and should be published in ACP. In the opinion of Referee #2, the manuscript merely restates hypotheses that have already been raised in the literature and debated extensively in conference halls, and thus should not be published.

While I agree with Referee #2's assessment that the novelty of the ideals contained within were overstated in the original manuscript, I concur with Referee #1 that there is enough new material to warrant publication. The primary contribution is the artic-

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ulation of specific feedback mechanisms among the boundary layer aerosol budget, cloud microphysical processes, and cloud dynamics. A secondary contribution is the introduction of new remote sensing data.

This paper adds to a growing body of literature exploring aerosol-cloud interactions in marine stratocumulus and, more specifically, the role of aerosols in the behavior of pockets of open cellular convection. While the ideas within are certainly not revolutionary, the hypothesis and supporting analyses help to focus discussion. The manuscript implicitly calls for subsequent studies that would test its hypotheses and assumptions with more detailed and integrated data from the field, remote sensing platforms, and models.

Interactive comment on Atmos. Chem. Phys. Discuss., 6, 1179, 2006.

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