

Interactive comment on “Variability of vertical structure of precipitation with sea surface temperature over the Arabian Sea and the Bay of Bengal as inferred by TRMM PR measurements” by Kadiri Saikranthi et al.

Anonymous Referee #2

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Please find the comments and suggestions on the manuscript (acp-2018-638) “Variability of vertical structure of precipitation with sea surface temperature over the Arabian Sea and the Bay of Bengal as inferred by TRMM PR measurements” by Kadiri Saikranthi, Basivi Radhakrishna, Thota Narayana Rao, and Sreedharan Krishnakumari Satheesh. First of all, I should complement the author for the good quality and novel work.

This manuscript is nicely crafted, starting from the defining the problem to the results. The results presented in this work address the key point on the vertical structure of

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rain over Arabian sea (AS) and Bay of Bengal (BoB) also they related with the SST variations. This article is worthy to publish such kind of results in scientific journals like Atmos. Chem. Phys. and I recommend for publication. But before publishing, I have made specific comments and recommend the authors to answer them before publishing.

Specific comments:

Figure 5: Why CER of the ice show a decreasing trend and CER of water showing an increasing trend over BoB beyond 30°C? Whereas over AS, both CER liquid and Ice shows an increasing trend?

Figure 5: Why CER of ice(water) shows a reverse trend beyond 30°C(28.5°C) over AS and BoB.

Figures 2 and 5: Higher values of reflectivities beyond 8 km beyond 30°C over AS is due to the higher values of CER liquid (Fig. 5)? That means higher convection over AS than BoB?

Whether similar explanation holds good for LTS over AS?

Looking forward to the replies.

Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2018-638>, 2018.

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