

## ***Interactive comment on “Transport pathways of peroxyacetyl nitrate in the upper troposphere and lower stratosphere from different monsoon systems during the summer monsoon season” by S. Fadnavis et al.***

### **Anonymous Referee #2**

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I agree completely with Referee #1's review, so will only add a few additional comments.

Section 2.2: What inventories were used for the emissions? References should be given. Perhaps also a table summarizing the emissions totals. Acetone and acetaldehyde have significant biogenic emissions, but these do not seem to be included in the simulations (see, for example, Guenther et al., GMD, 2012).

Section 3.1: Many more observations of PAN are available than listed in Table 1 (e.g., see Fischer et al., 2014 Table 2). For a study like this it would be appropriate to obtain

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and reference the original data sets from each campaign instead of just referencing an out-of-date website.

Fig. 3: Are b and c, and e and f, the same thing with different altitude and color scales? I don't see the point of that.

Fig. 6: should be split into 2 figures.

Throughout the paper, the results are presented as agreeing with previous work. It is really not clear what the new results are from this research.

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