

Editor comments on ACP-2015-114 Revised

Author list: Jörn Ungermann should read J. Ungermann, thus initial+last name as it is done for the other authors.

P4, 171: Add “spatial” so that it reads “spatial resolution”.

P4, 184: How does this result in less dehydration? The explanation given in the text is not that clear. It should be mentioned as well that the vortex in the NH is not as cold as in the SH and therefore less ice particles are formed that can sediment.

P5, 185-87: Dehydration is even rare observed in the mid-latitudes than in the Arctic. In my case study dehydration was observed in the mid-latitudes in connection with a polar filament. The sentence should be corrected accordingly that this becomes more clear. The sentence could e.g. be rephrased as follows: “For instance, Khosrawi et al. (2006) presented a case study where dehydration was observed in the Northern hemisphere mid-latitude in connection with a polar filament.”

P6, 1136: Without landing in Antarctica.....I would suggest to be more specific and to write without “stopover” or “intermediate landing” and even also adding from where to where the flights over Antarctica are performed.

P13, 1315 and 329: Isn't that somewhat inconsistent? If HAI and FISH have fairly good agreement, how can these then be in remarkable good agreement with GLORIA?

P18, 1445: 11.5 to 12.5 km are not really low altitudes.

P21, 1549: Skip line break in the middle of the paragraph.

P23, 1582-584: I also don't like the explanation with the katabatic winds. You should either skip the sentence or be more specific so that the connection between surface winds and stratospheric dynamics becomes clear. As it stands now it is very confusing and could also be misleading.

P24, 614: Singular or Plural? Thus it should read either “with a water vapour.....” or with “water vapour mixing ratios.....”.