

Review of “Comparison of GRUAN Data Products for Meisei iMS-100 and Vaisala RS92 Radiosondes at Tateno, Japan” by Shunsuke Hoshino et al.

The authors have undertaken a set of revisions that respond to the majority of the comments left by the three reviewers to the public review version. It is perhaps unfortunate that a comparison of the uncertainty ranges is not given (as suggested by reviewer 1). Reviewer 3 also has a legitimate concern that the screening may impact the comparison in important ways when, as the authors have clarified, the screening is unique to this comparison and will not be applied operationally.

Overall, the work remains publishable. I suggest at a minimum the authors attend to the points and suggestions made below.

Major comments

1. It may be valuable in the discussion around line 405-409 to discuss what the comparisons to both satellite data and the new RS41 product imply about whether this temperature difference may arise in the current RS92 processing.
2. It would be worthwhile considering whether a reason for the difference in RH behaviour in the presence of sharp gradients as discussed at the end of page 15 could be given. I assume it arises because of the difference between having a heated sensor or a passive sensor. I would furthermore hypothesise that the effect would be more marked in going from high to low humidity than from low to high humidity if this were the case. It is well known that passive sensors have issues of residual wetting on exit from cloud tops such that there is an asymmetry in the effect.

Minor comments

1. Line 7 I would say 0.5 K cooler rather than 0.5 K lower
2. Line 106 hese → These at start of the sentence
3. Line 109 called as the → termed the
4. Line 146 change to ‘near Japan is one of the regions with large differences’
5. Line 184 it is unclear what you mean by supporting latitude and longitude. I assume you mean requiring latitude and longitude information or similar?
6. Line 191 Each of these components [...]
7. Line 198 convert → converts
8. Line 205 which of the two correction models is [...]
9. Line 248 uncertainty amounts → quantified uncertainty estimates
10. Lines 392-394 do you not need to make clear that the consistency ranks correspond to satisfying $k < 1$, $k < 2$, $k < 3$ and $k > 3$ respectively?
11. Line 428 change ‘of’ to ‘the’
12. Line 432 reason for these difference could be [...]
13. Line 473 different → difference
14. Several of the figures have very small font size. Where possible increasing the font size would increase the figure readability.