

## ***Interactive comment on “Progress in managing the transition from the RS92 to the Vaisala RS41 as the operational radiosonde within the GCOS Reference Upper-Air Network” by Ruud Dirksen et al.***

**Anonymous Referee #1**

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This manuscript reports about estimation methods and estimates of differences between Vaisala RS92 and RS41 radiosondes. It is an interim report, not a final report, but yet it already contains a wealth of valuable information on what to expect when switching from RS92 to RS41 radiosondes. As can be expected by a reference network like GRUAN, utmost care is taken to characterize measurement errors through laboratory experiments, twin launches and comparison with ancillary satellite information. Results of the comparisons are already quite robust, however some comparisons particularly in the Tropics and over Antarctica have yet to be completed. The authors

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ask for active participation of radiosonde station operators and also offer logistical help so that the number of twin launches can be maximized. The authors also describe in some detail how the information about the transition will be provided to interested users. From the experience with already available sounding data from GRUAN, one can expect a mature presentation of those results.

I have very little to criticize and rather would suggest to publish this manuscript quickly.

There are only two comments from my side:

The title is rather long and likely a better title can be found. It does not need to be so specific. Suggestions from my side are: "Managing the transition from Vaisala RS92 to RS41 radiosondes within the GRUAN: a progress report" or "Fully traceable switch from Vaisala RS92 to RS41 radiosondes within the GRUAN: a progress report". I think one should either write GRUAN or "Global Climate Observing System Reference Upper-Air Network", since there will be few readers who know GCOS but do not know GRUAN.

There is some redundancy in stating the importance of characterizing the errors and differences. For example, the description of differences with the transition handling at Tateno (I130-136) could be omitted.

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