Atmos. Meas. Tech. Discuss., 7, C1875–C1881, 2014 www.atmos-meas-tech-discuss.net/7/C1875/2014/ @ Author(s) 2014. This work is distributed under the Creative Commons Attribute 3.0 License.



Interactive comment on "Reference quality upper-air measurements: GRUAN data processing for the Vaisala RS92 radiosonde" by R. J. Dirksen et al.

R. J. Dirksen et al.

ruud.dirksen@dwd.de

Received and published: 25 July 2014

We wish to thank the reviewers and the additional commenters for perusing the manuscript and for their constructive comments. It has been a pleasure to address their suggestions.

Our responses are attached as a separate PDF document in the supplement link.

Please also note the supplement to this comment:

C1875

http://www.atmos-meas-tech-discuss.net/7/C1875/2014/amtd-7-C1875-2014-supplement.pdf

Interactive comment on Atmos. Meas. Tech. Discuss., 7, 3727, 2014.

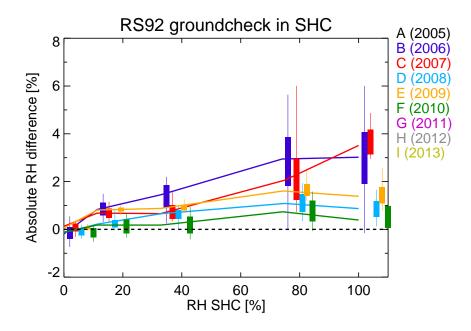


Fig. 1. Observed %RH difference over various standard saline solutions (0, 11, 33, 75, 100 %RH) for RS92 (various production years). Vertical bars: statistical spread; vertical line: range.

C1877

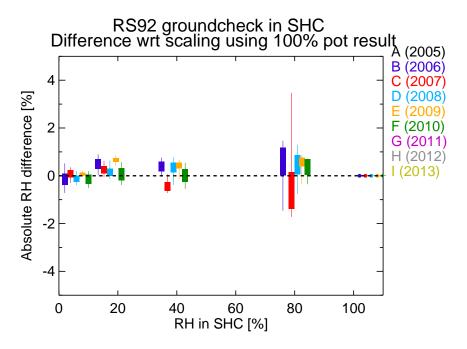


Fig. 2. Same as Fig 1, after scaling the RS92 data with the reading at 100%RH.

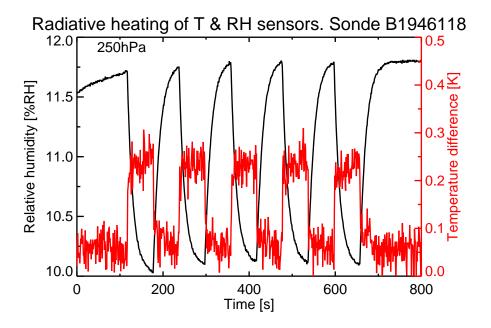


Fig. 3. Radiation experiment at 250hPa, RS92 B-batch. Black trace: reading of the humidity sensor, red trace: reading of the temperature sensor.

C1879

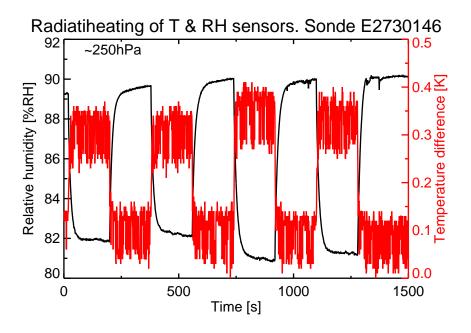


Fig. 4. Same as Fig 3, RS92 E-batch.

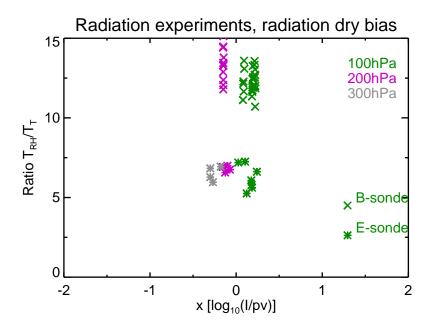


Fig. 5. Ratio of the heating of the temperature and humidity sensors. Heating of RH sensor is calculated from data in Figs 3 and 4. x-coordinate is the same as in Fig 3 of manuscript.

C1881