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> Interactive Comment

Interactive comment on "Evaluation of balloon and satellite water vapour measurements in theSouthern tropical UTLS during the HIBISCUS campaign" by N. Montoux et al.

N. Montoux et al.

Received and published: 20 November 2008

The major concerns of the referee are the use AIRS measurements shown by Gettleman et al (2004) to be unreliable at mixing ratios below 10 ppmv, and the absence of clear conclusions on which satellite provides the most reliable data in the UTLS.

The referee is right. It was not a good approach to use AIRS. As suggested, the study has been completely renewed using ECMWF analyses up to 95 hPa extended above with the Reprobus model and clearer conclusions have been derived regarding the performances of the various systems in the stratosphere, the TTL and the UT.

One of the big advantages of using ECMWF/Reprobus is the provision of an indication of atmospheric variability between the location of balloon in situ and satellite remote



measurements never totally collocated, allowing to better estimate instrumental contributions. Moreover, as suggested a profile of saturation ratio has been added in the plots allowing better understanding the situation of each measurement relative to saturation or super saturation.

Interactive comment on Atmos. Chem. Phys. Discuss., 7, 6037, 2007.

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Interactive Comment

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