Interactive comment on “The STARTWAVE atmospheric water database” by J. Morland et al.

Anonymous Referee #2

Received and published: 17 January 2006

General comments: The paper “The STARTWAVE atmospheric water database” describes an interesting and useful attempt to archive and compare disparate measurement sources of water vapour. The paper is well written, gives a good discussion of the instruments and some typical results, and provides a good list of references. I recommend that this high quality paper be published.

Technical Comments: Since the derivation of IWV from Microwave Radiometers requires absorption models for both clear and cloud atmospheres, I think that the models used should be mentioned. Perhaps there is a discussion of the models in one or more of the attached references, but the model used should be spelled out here as well.

On pp. 10854, L 19 and 20, the authors point out that there is a 2.2 mm bias difference between TROWARA and radiosondes at 12:00 UTC. I think that this point requires
discussion about the cause of the difference.
Grammatical comments: pp. 10854, L4. Better to say: “corrected according to the method of Ruffieux”
In the document, the coordinates of the stations are mentioned several times. If space is a problem, a single mention would suffice.
It’s not clear to me, what Bern EXCI means in Figs. 7 and 8.
Interactive comment on Atmos. Chem. Phys. Discuss., 5, 10839, 2005.