

Interactive comment on “Validation of MIPAS IMK/IAA temperature, water vapor, and ozone profiles with MOHAVE-2009 campaign measurements” by G. P. Stiller et al.

Anonymous Referee #1

Received and published: 20 August 2011

This paper presents a comprehensive validation study that will be valuable to anyone using MIPAS data or planning a similar comparison of satellite data with surface-based measurements and other satellite instruments.

It gives a thorough explanation of how bias and significance are determined. It also discusses the validation of measurement precision estimates. In many applications, such as data assimilation, it is critical to have realistic measurement precisions as well as known biases.

The paper is well written and as concise as could be expected for such a large set of

C1421

instruments in the comparison. I only have a few minor comments.

ABSTRACT:

- 1) I would include a sentence that these results confirm that MIPAS is biased with respect to ECMWF for temperature around the tropopause.
- 2) I would include a sentence about also validating measurement precisions.

Sec. 4 Validation method

p4418 Line 6: delete the phrase: “which in many cases was small anyhow”

p4418 Line 8: “do not differ in any case” to “do not differ significantly”?

Interactive comment on Atmos. Meas. Tech. Discuss., 4, 4403, 2011.

C1422