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**Atmospheric Measurement Techniques Discussions**

# *Interactive comment on* "MIPAS-STR measurements in the arctic UTLS in winter/spring 2010: instrument characterization, retrieval and validation" *by* W. Woiwode et al.

**Anonymous Referee #1**

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The paper "MIPAS-STR measurements in the arctic UTLS in winter/spring 2010: instrument characterization, retrieval and validation" by W. Woiwode et al. presents results derived from measurements performed by the Michelson Interferometer for Passive Atmospheric Sounding – STRatospheric aircraft (MIPAS-STR) onboard the M55 Geophysica aircraft during the RECONCILE campaign in the arctic 5 winter/spring 2010, these results being validated with collocated in-situ measurements of temperature, O3, CFC-11, CFC-12 and H2O. The paper is interesting and well adapted to Atmospheric Measurement Techniques. However before publication I would like to make the following comments/remarks.



General: The paper is written like a PhD thesis i.e. giving details which would be OK for a thesis but are not really adapted for a scientific paper. In particular sections 2, 3 and 5 are somewhat tiresome to read since they do not really concentrate on MIPAS-STR giving many details which have already been given in many papers for the "similar" balloon and satellite instruments. I suggest strongly shortening these sections.

Other comments: - What do the authors mean with: "comprehensive agreement" - Page 7042: "...low data age"??? - I do not like very much "deep space" since in the present case it is not really a deep space measurement. It is then somewhat misleading and I would suggest to replace it by "Zenith view measurement". - Fig. 1 can be suppressed - Fig. 5 is not really readable: I suggest removing one or 2 spectra. - The various figures 14 are totally illegible: I suggest either to give a smaller number of examples or to enlarge the figures. - The same remark applies to figures 15.

In conclusion the paper is worth publishing in AMT but needs to be shortened.

Interactive comment on Atmos. Meas. Tech. Discuss., 4, 7035, 2011.