## Response to Referee 2

Franziska Schranz, Susana Fernandez, Niklaus Kämpfer, Mathias Palm January 30, 2018

The authors are grateful to Referee 2 for carefully reading the manuscript and providing constructive comments which helped to improve the manuscript. This document contains the authors response to the comments of Referee 2.

1)

It would be interesting to see example spectra from the GROMOS-C and OZO-RAM instruments.

The quality of the spectra and the corresponding residuals are discussed in detail in the instrument description papers of GROMOS-C (Fernandez et al., 2015) and OZORAM (Palm et al., 2010). As we cite the two papers, which are freely available at the Copernicus Publications webpage, we do not think it is necessary to show the spectra in the scope of this publication.

2)

Pressure scale is used to display the altitudes in the figures. I suggest that also the altitudes in km are displayed to the left at least in figures 3, 4 and 15.

We agree that adding the altitude information in km would improve the figures. The figures 3 and 4 have therefore been modified. The plots in figure 15 (now Fig. 16) are already small and we prefer not to add additional y-axes.

## References

Fernandez, S., Murk, A., and Kämpfer, N.: GROMOS-C, a novel ground based microwave radiometer for ozone measurement campaigns, Atmos. Meas. Tech., 8, 3001–3048, doi:10.5194/amt-8-2649-2015, 2015.

Palm, M., Hoffmann, C. G., Golchert, S. H. W., and Notholt, J.: The ground-based MW radiometer OZORAM on Spitsbergen description and status of stratospheric and mesospheric O3-measurements, Atmos. Meas. Tech., 3, 1533–1545, doi:10.5194/amt-3-1533-2010, 2010.