

***Interactive comment on* “Technical Note:
Continuity of MIPAS-ENVISAT ozone data quality
from full- to reduced-spectral-resolution operation
mode” by S. Ceccherini et al.**

Anonymous Referee #2

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General comments:

Knowledge about the degree of continuity in an instrumental record of atmospheric parameters is essential for its application e.g. in trend analysis. Thus, the work by Ceccherini et al. is a valuable and necessary contribution. My main comment, however, is that the analysis has been performed on basis of a very limited dataset of MIPAS reduced resolution mode data especially produced for first quality checks and validation. The retrieval set-up (e.g. the microwindow selection) used for this dataset might not be identical to the one which will be used for the regular processing and which will be made public. Thus, I strongly recommend that the authors add more spe-

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cific information on this topic at the end of the conclusion section where it is now only mentioned that the 'spectral intervals for the reduced-resolution measurements could be reconsidered,...'. If there is a decision on any 'final' selection it would be preferable to show some comparisons between retrieval results of that compared to the one used for the current investigation.

Further, the comparison for the MIPAS reduced resolution dataset has been made without distinguishing between the different measurements scenarios (nominal and utls-1). It would be interesting (if there are sufficient MIPAS/GOMOS co-incidences for both scenarios) to show the results separately. Especially since at around 40 km, where there are significantly different systematic errors between GOMOS and the MIPAS 2003-2004 and 2005-2006 datasets, the two scenarios do have different tangent altitude spacings.

Specific comments:

p.801,l.17: Should be updated: isn't the MIPAS duty cycle now 100%? (perhaps add the date related to this information).

p.803,l.12: Could you add the information that only a sub-set of the grid-points of these microwindows is used for the retrieval.

p.805,l.21: 'The error estimation': can you specify whether this is the estimation of random errors since on p.810,l.8 it is mentioned that an estimation of GOMOS systematic errors is not available.

p.805,l.28: 'The additional scintillation error seems to be overestimated in the GOMOS product used in this work'. Can you give a reason for this statement?

Technical comments:

p.800,l.22: 'vibrational' -> 'ro-vibrational'

Interactive comment on Atmos. Chem. Phys. Discuss., 8, 797, 2008.

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