Atmospheric Chemistry and Physics
An Interactive Open Access Journal of the European Geosciences Union

Atmos. Chem. Phys., 6, 5037-5048, 2006
www.atmos-chem-phys.net/6/5037/2006/

MIPAS database: Validation of HNO_3 line parameters using MIPAS satellite measurements

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Abstract. Using new and accurate experimental results concerning the spectroscopic properties of the HNO_3 molecule as well as improved theoretical methods it has been possible to generate an improved set of line parameters for this molecule in the spectral range covered by the MIPAS (Michelson Interferometer for Passive Atmospheric Sounding) experiment. These line parameters, which have been validated using broadband atmospheric spectra recorded by MIPAS, have been included in the last version of the MIPAS spectroscopic database to be used for future processing of the MIPAS spectra.

Final Revised Paper (PDF, 548 KB) Discussion Paper (ACPD)

Citation: Flaud, J.-M., Brizzi, G., Carlotti, M., Perrin, A., and Ridolfi, M.: MIPAS database: Validation of HNO_3 line parameters using MIPAS satellite measurements, Atmos. Chem. Phys., 6, 5037-5048, 2006. Bibtex EndNote Reference Manager