Atmos. Chem. Phys. Discuss., 10, C4459–C4460, 2010 www.atmos-chem-phys-discuss.net/10/C4459/2010/

© Author(s) 2010. This work is distributed under the Creative Commons Attribute 3.0 License.



Interactive comment on "Formic acid above the

Jungfraujoch during 1985–2007: observed variability, seasonality, but no long-term background evolution" by R. Zander et al.

G.P. Stiller

gabriele.stiller@kit.edu

Received and published: 25 June 2010

Dear Rudy,

I am impressed on the high-quality long-term time series of HCOOH over Jungfraujoch. I would like to bring to your attention that HCOOH global distributions have been inferred from MIPAS-Envisat data for the years 2002 to 2008 and have been published recently (see: Grutter, M., N. Glatthor, G. P. Stiller, H. Fischer, U. Grabowski, M. Höpfner, S. Kellmann, A. Linden, and T. von Clar-

C4459

mann (2010), Global distribution and variability of formic acid as observed by MIPAS-ENVISAT, J. Geophys. Res., 115, D10303, doi:10.1029/2009JD012980; http://www.agu.org/pubs/crossref/2010/2009JD012980.shtml).

It might be interesting to you to see that MIPAS observes the seasonal cycle of HCOOH in the Northern hemisphere as well; maximum values are found at about June with $\sim\!100$ pptv at 8 km altitude, minimum values at about December with $\sim\!50$ pptv at 8 km, both decreasing rapidly with altitude (we have used the same spectroscopic data as you for the MIPAS retrievals).

I thought you might wish to refer to the MIPAS observations in the revised version of your paper. The MIPAS data are publicly available at http://www.imk-asf.kit.edu/english/308.php and are at your disposal for further comparisons.

Kind regards, Gabi Stiller

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 14771, 2010.