

## ***Interactive comment on “Observed temporal evolution of global mean age of stratospheric air for the 2002 to 2010 period” by G. P. Stiller et al.***

**P. Patra**

prabir@jamstec.go.jp

Received and published: 19 October 2011

I would like to congratulate the authors for being able to show us the 2-dimensional distributions of age of air. I think the paper would benefit from a comparison (or should I say validation?) of the age of air derived using MIPAS data with those based on balloon-borne measurements of SF<sub>6</sub>. The latter set of data has much higher accuracy. Here are couple of references, which you may find useful.

Harnisch, J., R. Borchers, P. Fabian, and M. Maiss (1996), Tropospheric trends for CF<sub>4</sub> and C<sub>2</sub>F<sub>6</sub> since 1982 derived from SF<sub>6</sub> dated stratospheric air, Geophys. Res. Lett., 23(10), 1099-1102.

Patra, P. K., S. Lal, B. H. Subbaraya, C. H. Jackman and P. Rajaratnam (1997), Ob-

C10577

served vertical profile of sulphur hexafluoride (SF<sub>6</sub>) and its atmospheric applications, J. Geophys. Res., 102(D7), 8855-8859.

---

Interactive comment on Atmos. Chem. Phys. Discuss., 11, 28013, 2011.