

Interactive comment on “Diurnal variation of stratospheric HOCl, ClO and HO₂ at the equator: comparison of 1-D model calculations with measurements of satellite instruments” by M. Khosravi et al.

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Received and published: 31 August 2012

First of all this is a nice analysis.

We have made estimations of total chlorine over Hyderabad (17N), India, which I thought may be very useful for validating remote sensing products and model simulations. Further details can be found in the reference below. I may also be able to dig out data in digital format, if needed.

Patra, P. K., S. Lal, V. Sheel, B. H. Subbaraya, C. Bruehl, R. Borchers and P. Fabian,

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Chlorine partitioning in the stratosphere based on in situ measurements, *Tellus*, 52B(3), 934-946, 2000.

Just an example plot from Patra et al. is shown here (Figure 1).

Interactive comment on Atmos. Chem. Phys. Discuss., 12, 21065, 2012.

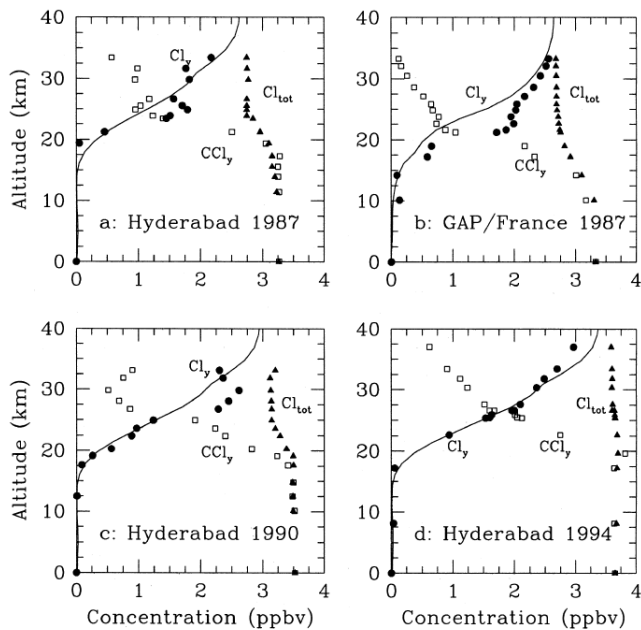


Fig. 6. Vertical distributions of Cl_{total} (filled triangle), CCl_y (open square), Cl_y (filled circle) as calculated using eq. (7). Those calculated using the observations over Hyderabad are for (a) 27 March 1987; (c) 9 April 1990 and (d) 16 April 1994. The distributions estimated using the profiles obtained from GAP, France are shown in (b). Estimated Cl_y from MPIC 2D model derived profiles of HCl, $ClONO_2$ and ClO_y is shown as continuous line.

Fig. 1.

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