Interactive comment on “Diurnal variation of stratospheric HOCl, ClO and HO$_2$ at the equator: comparison of 1-D model calculations with measurements of satellite instruments” by M. Khosravi et al.

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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,

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

Fig. 1. Vertical distributions of Cl\textsubscript{total} (filled triangle), CCl\textsubscript{4} (open square), Cl\textsubscript{2} (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\textsubscript{2} from MPIC 2D model derived profiles of HCl, Cl\textsubscript{NO\textsubscript{2}}, and ClO\textsubscript{2} is shown as continuous line.