Supplement of Atmos. Chem. Phys., 22, 10657–10676, 2022
https://doi.org/10.5194/acp-22-10657-2022-supplement
© Author(s) 2022. CC BY 4.0 License.

Supplement of

Atmospheric impacts of chlorinated very short-lived substances over the recent past – Part 1: Stratospheric chlorine budget and the role of transport

Ewa M. Bednarz et al.

Correspondence to: Ewa M. Bednarz (ewa.bednarz@cornell.edu)

The copyright of individual parts of the supplement might differ from the article licence.
Figure S1. Surface volume mixing ratios [ppt] of (a) CH$_2$Cl$_2$, (b) CHCl$_3$, (c) C$_2$Cl$_4$, and (d) C$_2$H$_4$Cl$_2$ as a function of time and latitude simulated in the ensemble mean VSLS.
Figure S2. Comparison of the time evolution of the monthly mean 30°S-30°N SSTs datasets imposed in the simulations. Black shows the CMIP6-recommended dataset (Durack and Taylor, 2016), red shows the dataset from Reynolds and Smith (1994).
Figure S3. Shading: 2010-2018 difference [ppt] in the (a) HCl, (b) ClONO\textsubscript{2}, (c) COCl\textsubscript{2}, and (d) ClO response between $\Delta$SD-5 and $\Delta$FR. Contours show the corresponding $\Delta$SD-5 responses.
Fig. S4. Shading: 2010-2018 difference [ppt] in the (a) HCl, (b) ClONO₂, (c) COCl₂, and (d) ClO response between ΔSD-I and ΔFR. Contours show the corresponding ΔSD-I responses.
Figure S5. As in Fig. 10 of the main paper but for linear trends in deseasonalised AoA [day/10yrs].
Figure S6. As in Fig. 11 of the main manuscript but for linear trends in COCl$_2$ mixing ratios [ppt/10yrs].
Figure S7. As in Fig. 9 of the main paper but for COCl$_2$ trends.