Supplements of

The interhemispheric gradient of SF$_6$ in the upper troposphere

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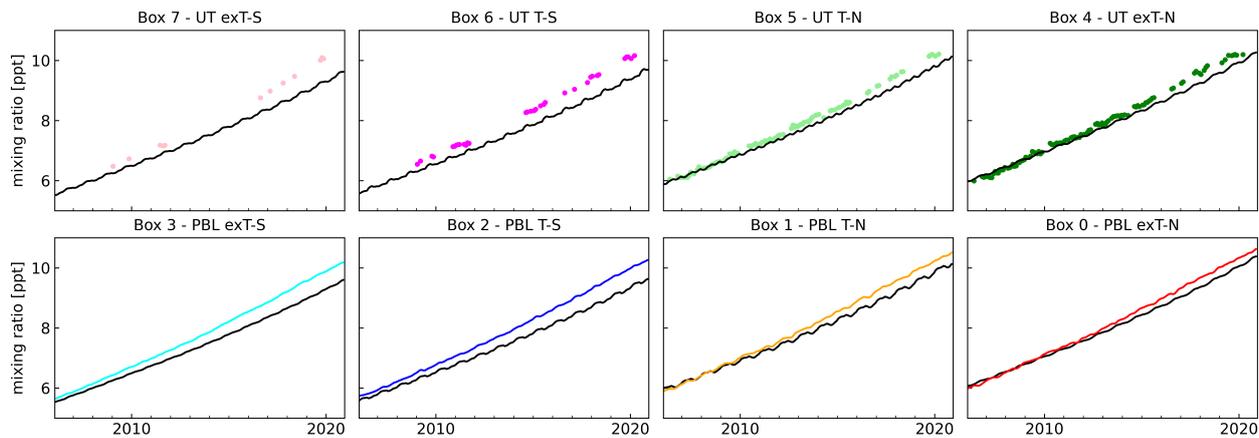**Correspondence:** Tanja J. Schuck (schuck@iau.uni-frankfurt.de)

Figure S1. Comparison of mixing ratios from the AGAGE 12-box model (black lines) with aircraft observations (Boxes 4, 5, 6, 7) and measurements at observational sites (Boxes 0, 1, 2, 3).
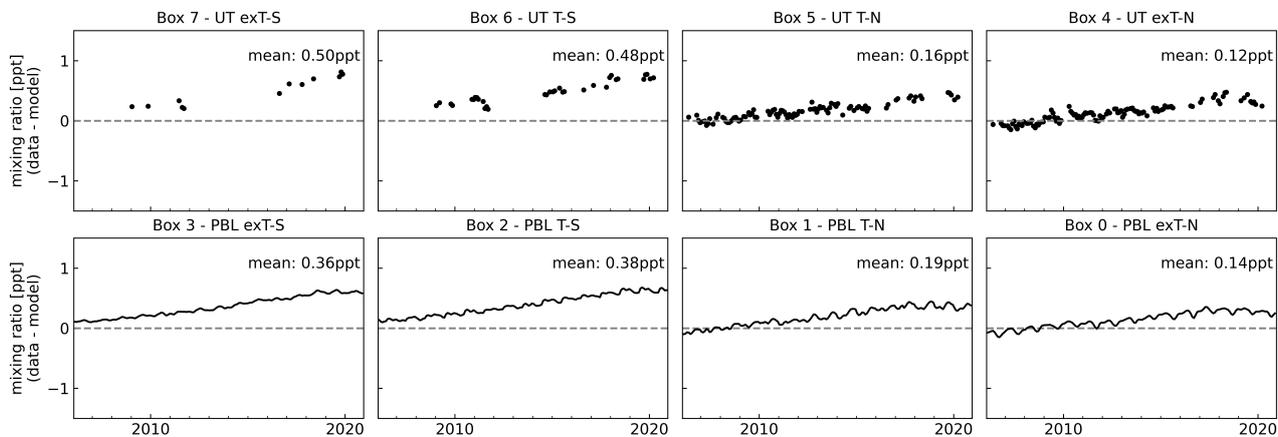

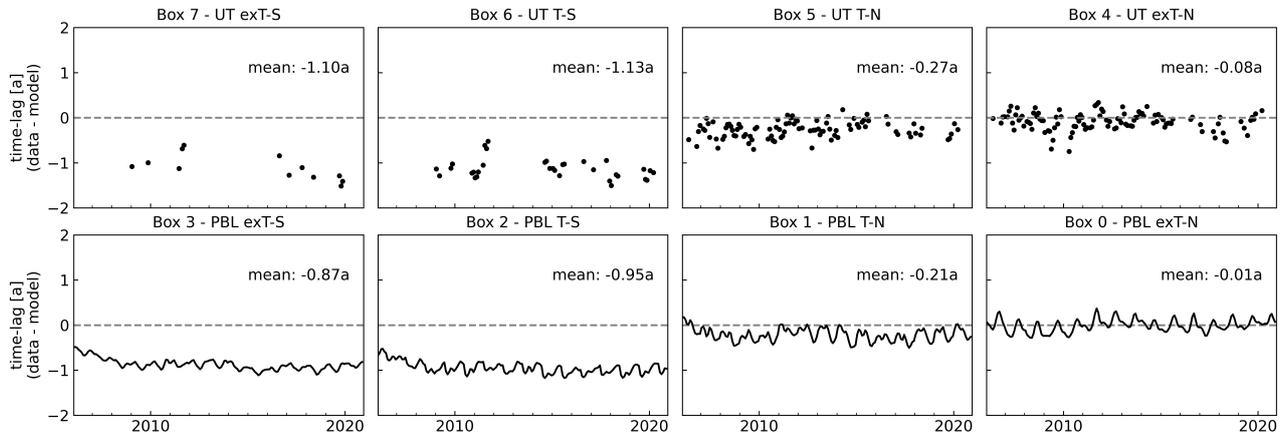**Figure S2.** Mixing ratio difference per model box as a function of time.

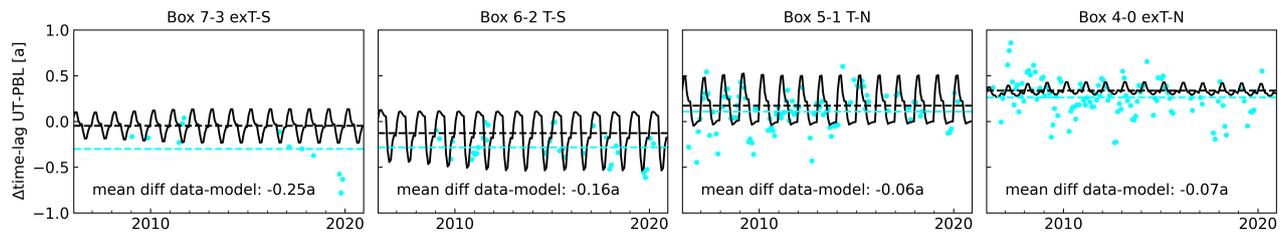**Figure S3.** Time lag difference per model box as a function of time.

Figure S4. Time lag difference between vertically neighbouring boxes for the AGAGE 12-box model (black lines) and observations (coloured lines and symbols).
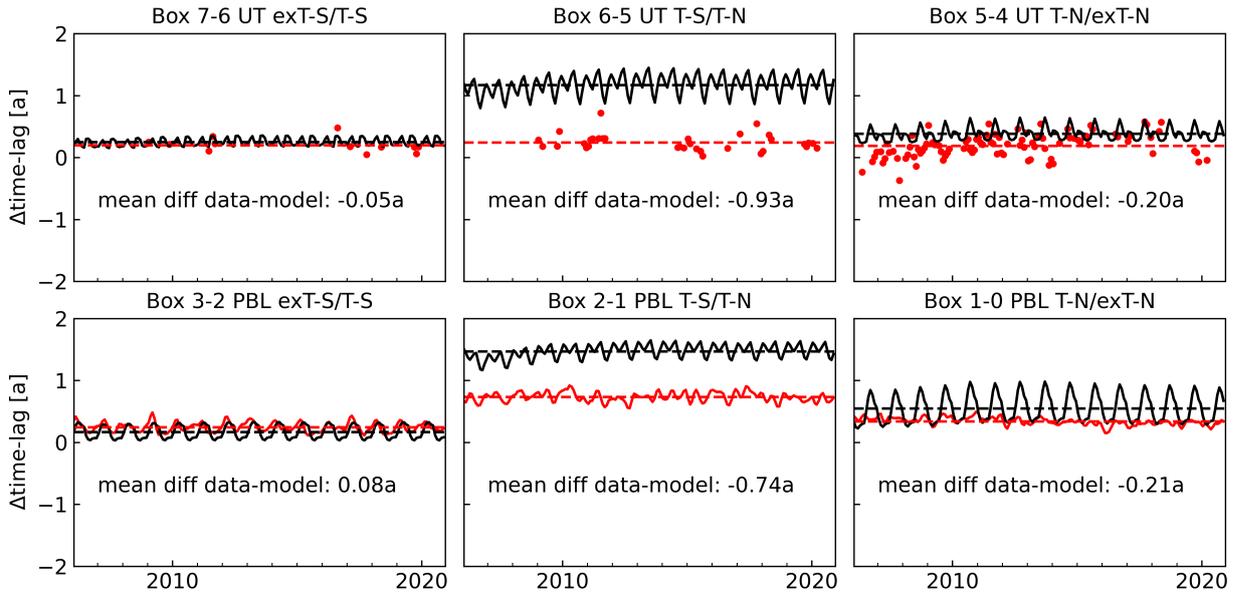
Figure S5. Time lag difference between horizontally neighbouring boxes for the AGAGE 12-box model (black lines) and observations (coloured lines and symbols).
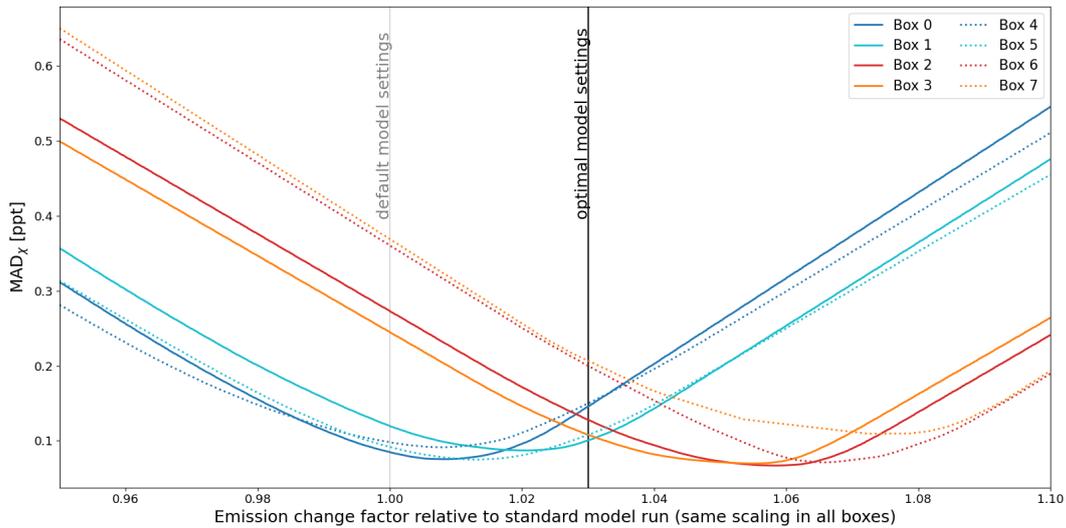

Figure S6. Mean absolute deviation of modelled and observed mixing ratios in the lower troposphere for all model boxes. The lowest overall MAD is obtained for an upscaling of EDGAR 7.0 emissions by 3.25 % indicated by the black vertical line.