

Interactive comment on “Sensitivity of stratospheric Br_y to uncertainties in very short lived substance emissions and atmospheric transport” by R. Schofield et al.

B.-M. Sinnhuber

bjoern-martin.sinnhuber@kit.edu

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Referee #4 suggests that Schofield et al. should test the realism of the ERA-Interim convective detrainment rates. Clearly, there are potentially large uncertainties in the detrainment rates and, as Schofield et al. state, the uncertainty is difficult to quantify. In addition to the referee’s suggestion, I would like to note that in Aschmann et al. (2009) we did compare the tropical mean convective turnover time (inverse of the detrainment rate) from ERA-Interim with estimates from Dessler et al. (2002), which were based on measurements of CO and ozone. Somewhat surprisingly, we found excellent agreement between ERA-Interim and Dessler’s estimates of the tropical mean

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convective turnover time in the TTL.

Björn-Martin Sinnhuber

References

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