

## ***Interactive comment on “Description and Evaluation of the Specified-Dynamics Experiment in the Chemistry-Climate Model Initiative (CCMI)” by Clara Orbe et al.***

**Beatriz Monge-Sanz**

beatriz.monge-sanz@physics.ox.ac.uk

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Please note that there are two additional published studies that are relevant for the discussions included in this manuscript and should also be mentioned in the main text. Details provided here below:

Page 2, line 20: Reference to Monge-Sanz et al. (2012) should also be added, in this study we built on the one you already cite and provided the comparison of different temporal sampling using the TOMCAT CTM.

Page 17, around lines 24-26: Please add reference, and brief context discussion, to a

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relevant published study in which we provided a comparison of stratospheric transport between TOMCAT offline simulations, free running GCM simulations and the corresponding nudged GCM simulations, using both ERA-40 and ERA-Interim reanalyses (Monge-Sanz et al., 2013). The comparison showed remarkably similar results for the offline and the corresponding GCM nudged simulations (see Fig. 9 in Monge-Sanz et al., 2013).

References: Monge-Sanz BM, Chipperfield MP, Untch A, Morcrette J-J, Rap A, Simmons AJ. 2013. On the uses of a new linear scheme for stratospheric methane in global models: water source, transport tracer and radiative forcing. *Atmospheric Chemistry and Physics*. 13, pp. 9641-9660, <https://doi.org/10.5194/acp-13-9641-2013>.

Monge-Sanz BM, Chipperfield MP, Dee DP, Simmons AJ, Uppala SM. 2012. Improvements in the stratospheric transport achieved by a CTM with ECMWF (re)analyses: Identifying effects and remaining challenges. *Q. J. R. Meteorol. Soc.* 139(672), pp. 654-673, <https://doi.org/10.1002/qj.1996>.

Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2019-625>, 2019.

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