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Interactive comment on "Dehydration of the stratosphere" *by* M. Schoeberl and A. Dessler

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We would like to draw attention to a publication which the authors might have overlooked, but which is of relevance for the manuscript:

In Schiller et al. (2009), we used a diabatic trajectory scheme (Plöger et al., 2010) for water reconstruction and comparison to several high resolution aircraft experiments in South America, Northern Australia and Africa in different seasons. Our results are very similar to those derived by Schoeberl and Dessler, i.e. beside a remarkable agreement of the reconstructed water with the measurements also the importance of the TWP, but also that of South America (during NH winter) and of India (during NH summer) have been identified. So the latter regions have been indeed already been discussed in the literature before (in contrast to the statement on page 10170 line 15). However, the presented manuscript is an excellent complement of that previous work as it generalises

previous findings by extending them to a global perspective.

C. Schiller, J.-U. Grooß, P. Konopka, F. Plöger, F. H. Silva dos Santos, N. Spelten, Hydration and dehydration at the tropical tropopause. Atmos. Chem. Phys., 9, 9647-9660, 2009.

F. Ploeger, P. Konopka, G. Günther, J.-U. Grooß, R. Müller, Impact of the vertical velocity scheme on modeling transport in the tropical tropopause layer, J. Geophys. Res., 115, D03301, doi:10.1029/2009JD012023, 2010.

Interactive comment on Atmos. Chem. Phys. Discuss., 11, 10159, 2011.