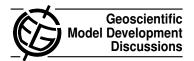
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Interactive comment on "The Lagrangian chemistry and transport model ATLAS: simulation and validation of stratospheric chemistry and ozone loss in the winter 1999/2000" by I. Wohltmann et al.

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After a short email correspondence, the reviewer and the authors were able to clarify the following issues:

 Major comment 3: The reviewer pointed me to the fact that not only the Match method, but also the vortex-average method can produce inherently different results than the method using passive ozone from the CTM. Particularly, the vortexaveraged passive ozone profile in the vortex-average method cannot be changed C206

by mixing from outer vortex air, while the passive ozone tracer in the model can (see Grooß et al., ACP, 8, 565–578, 2008). I have added a remark in the corresponding paragraph in the manuscript.

• Minor comment 13: Unfortunately, I did miss that Figure 53 indeed does exist in the supplement. Now Figure 53 shows CIO_x , which is not influenced by the diurnal cycle of CIO and CI_2O_2 .

Interactive comment on Geosci. Model Dev. Discuss., 3, 769, 2010.