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Interactive comment on "Sensitivity of tracer transport to model resolution, forcing data and tracer lifetime in the general circulation model ECHAM5" *by* A. Aghedo et al.

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We would like to thank all the referees for their valuable comments. The response to the individual referees comment is provided separately. We would like to point out that the study presented in the manuscript was not intended to be a full study of transport processes in the ECHAM5 model. The study is a result of our investigation of sensitivity of transport of tracers to various model configurations, during the course of our effort to embed the global three-dimensional chemical transport model MOZART into ECHAM5, which is part of an effort of the Max Planck Institute for Meteorology, Hamburg towards building an Earth System Model. We noted some very similar comments among the referees, which are:

- More precise description of the model setup: vertical layers, top of the model, transport parameterization e.t.c.
- The separation of the sensitivity of vertical and horizontal transport of tracers, and their discussion.
- The height of ejection of the tropopause tracers.
- The calculation of the inter-hemispheric transport time and removing the assumption that the ITCZ is located at the equator.

We have revised the manuscript as specified in our response to individual referees.

Interactive comment on Atmos. Chem. Phys. Discuss., 8, 137, 2008.