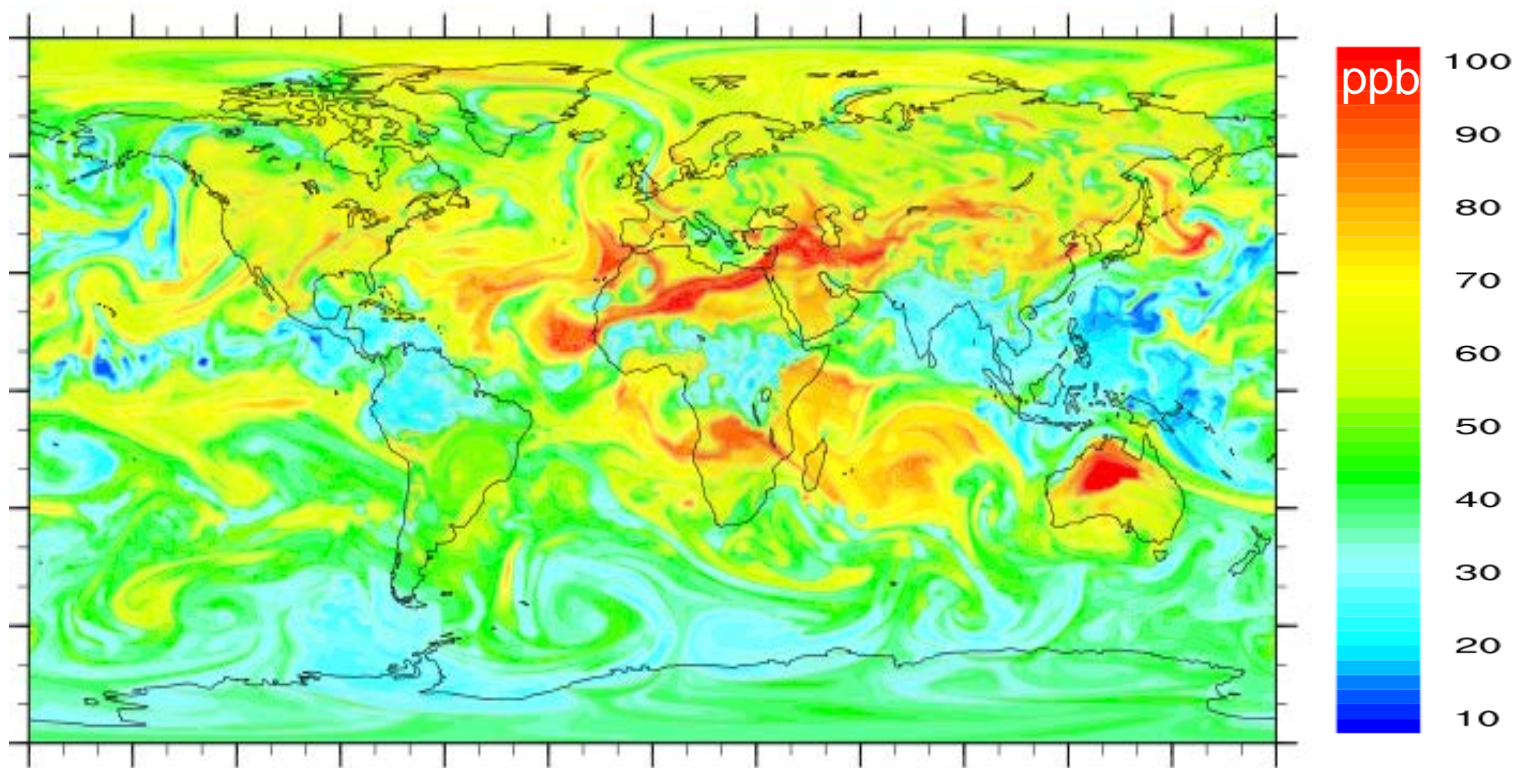


Very high resolution simulation of tropospheric chemistry enabled by the GEOS-Chem module in the GEOS DAS

- The GEOS-Chem chemical module now in place in the GEOS DAS provides a highly scalable platform for massively parallel global simulations of tropospheric chemistry
- Capability has been demonstrated in simulations with $\sim 50 \times 50 \text{ km}^2$ horizontal resolution
- A global $\sim 7 \times 7 \text{ km}^2$ simulation will be completed in summer 2015 to serve as basis of observation system simulation experiments (OSSEs) for the geostationary constellation

500hPa ozone
on July 15, 2006



M.S. Long, R. Yantosca, J. E. Nielsen, C.A. Keller, A. da Silva, M.P. Sulprizio, S. Pawson, D. J. Jacob, *Geosci. Model. Dev.*, 8, 595-602, 2015.

