Atmos. Chem. Phys. Discuss., 13, C6575–C6576, 2013
www.atmos-chem-phys-discuss.net/13/C6575/2013/

Atmospheric Chemistry and Physics Discussions

Interactive comment on "The variability of methane, nitrous oxide and sulfur hexafluoride in Northeast India" *by* A. L. Ganesan et al.

P. Fraser (Referee)

paul.fraser@csiro.au

Received and published: 6 September 2013

Page 3 Line 6 and others: do not begin sentences with chemical formulae Line 7: Table 2.1 in Forster et al. 2007 shows that in 2005 N2O is the 4th largest RF due to LLGHGs, CFC-12 is 3rd; N2O did not surpass CFC-12 until 2009

Page 4 Line 7: Many new references on N2O budgets that should be reviewed here, in particular Park et al.

Park, S., P. Croteau. K. Boering, D. Etheridge, D. Ferretti, P. Fraser, K.-R. Kim, P. Krummel, R. Langenfelds, T. van Ommen, P. Steele & C. Trudinger, Trends and seasonal cycles in the isotopic composition of nitrous oxide since 1940, Nature Geoscience, 5 (4), 261-265, 2012 Saikawa, E., . . .R. Langenfelds, P. Krummel, M. van der Schoot,

Full Screen / Esc
Printer-friendly Version
Interactive Discussion
Discussion Paper

P. Fraser, P. Steele et al., Global and regional emissions estimates for N2O, Atmos. Chem. Phys. Discuss., 13, 19471-119525, 2013 Thompson, R., . . .R. Langenfelds, P.Krummel, P. Fraser, P. Steele et al., Inter-annual variability in tropospheric nitrous oxide, Geophys. Res. Letts., 40, 1-6, doi:10.1002/grl.50721, 2013 Thompson, R., . . .R. Langenfelds, P. Krummel, P. Steele, P. Fraser et al., Nitrous oxide flux history 1999-2009 from an atmospheric inversion, Atmos. Chem. Phys. Diss., 13, 15697-15747, 2013

Page 6 Line 5: use metric units, not feet and inches

Page 10 Line 27: Comment as quantitatively as possible on the performance of the model in comparing modelled and observed wind speed and direction

Page 12 Second para: quantify by data analysis the 'monsoon effect' on the concentration data – my analysis would suggest that SF6 is 0.15 ppt below mean during the height of the monsoon season

Page 17 The data can only be used to verify national emissions once a much longer record is obtained – minimum 3 years, preferably five year to give 4 years of a 3-yr running average.

Interactive comment on Atmos. Chem. Phys. Discuss., 13, 17053, 2013.