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Supplement of

TransCom N_2O model inter-comparison – Part 2: Atmospheric inversion estimates of N_2O emissions

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TransCom N_2O model inter-comparison Part II: atmospheric inversion estimates of N_2O emissions

Supplementary Material

Figure S1. Comparison of the daily mean N_2O mole fractions (ppb) for 2009 simulated by integrating the CTMs with their corresponding posterior fluxes. Note for MOZART4-I only monthly means were submitted. (Legend: observations, black; MOZART4-I, orange; ACTMt42l67-I, green; TM5-I, blue; TM3-I, red; LMDZ4-I, magenta).

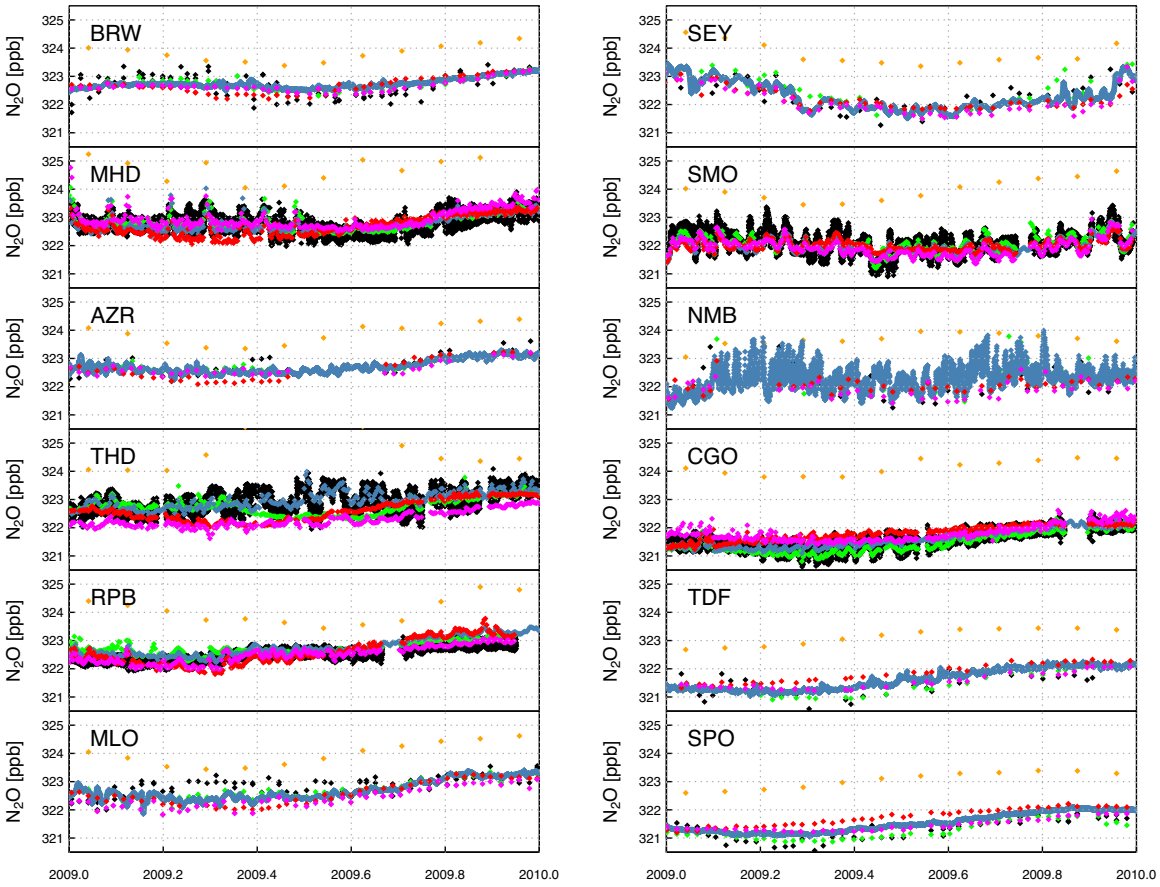

Figure S2. Comparison of model simulations with pressure-weighted column averages from HIPPO aircraft profiles for January (top) and November (bottom) 2009. The column average was calculated from the surface up to 2000 m. (Legend: observations, black; MOZART4-I, orange; ACTMt42l67-I, green; TM5-I, blue; TM3-I, red; LMDZ4-I, magenta).

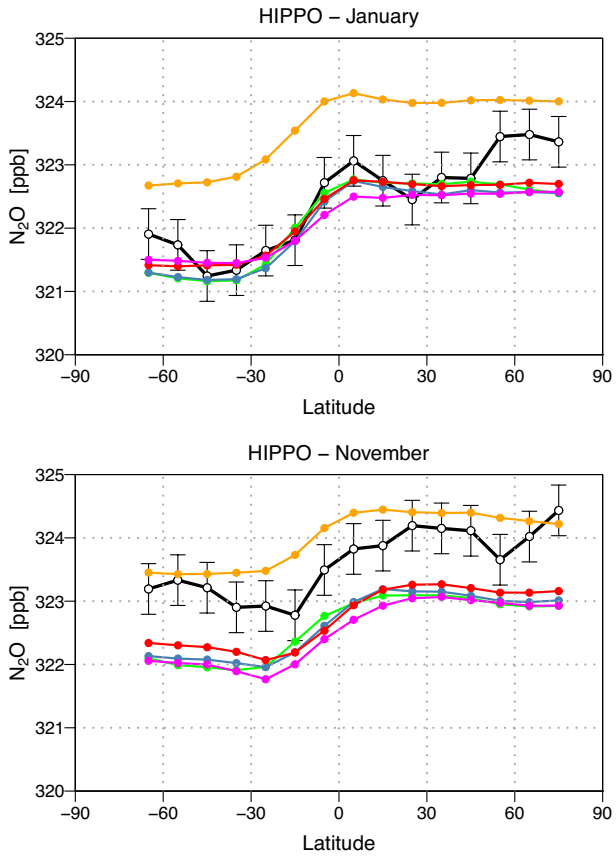

Figure S3. Growth rate in atmospheric N_2O mole fraction (ppb yr^{-1}) for 2006 to 2009. (Legend: observations, black; MOZART4-I, orange; ACTMt42l67-I, green; TM5-I, blue; TM3-I, red; LMDZ4-I, magenta).

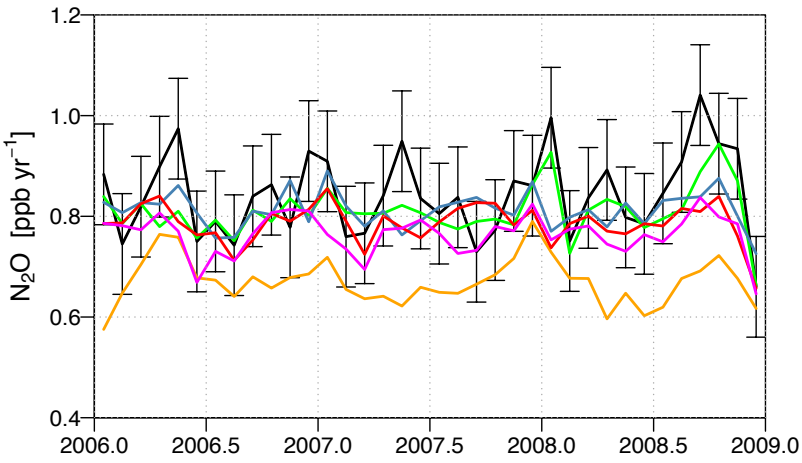

Figure S4. Map of the 7 sub-continental regions used in the analysis. (North America = green, Tropical & South America = red, Africa = yellow, Europe = cyan, North Asia = blue, South Asia = purple, Australasia = magenta).