Atmos. Chem. Phys. Discuss., 9, C7317–C7318, 2009 www.atmos-chem-phys-discuss.net/9/C7317/2009/© Author(s) 2009. This work is distributed under the Creative Commons Attribute 3.0 License.



ACPD

9, C7317-C7318, 2009

Interactive Comment

Interactive comment on "Global estimates of CO sources with high resolution by adjoint inversion of multiple satellite datasets (MOPITT, AIRS, SCIAMACHY, TES)" by M. Kopacz et al.

Q. Zhang

zhangq@anl.gov

Received and published: 20 November 2009

I want to clarify that seasonal variations were included in the a priori inventories from some aspects. For example, we already noticed that CO emissions in China have strong seasonal variations, which is mainly driven by coal and biofuel use during the heating seasons. We estimated that the max/min ratio of monthly emissions is about 1.6, with maximum in December and minimum in July (Zhang et al., 2009). The seasonality of Chinese CO emissions derived from this paper is sharper than the a priori. One of the possible reasons is cold start emission, which is not considered in our estimates.

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



Zhang, Q., Streets, D. G., Carmichael, G. R., He, K. B., Huo, H., Kannari, A., Klimont, Z., Park, I. S., Reddy, S., Fu, J. S., Chen, D., Duan, L., Lei, Y., Wang, L. T., and Yao, Z. L.: Asian emissions in 2006 for the NASA INTEX-B mission, Atmos. Chem. Phys., 9, 5131-5153, 2009.

Interactive comment on Atmos. Chem. Phys. Discuss., 9, 19967, 2009.

ACPD

9, C7317-C7318, 2009

Interactive Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

