Atmos. Chem. Phys. Discuss., 8, S8191–S8192, 2008 www.atmos-chem-phys-discuss.net/8/S8191/2008/© Author(s) 2008. This work is distributed under the Creative Commons Attribute 3.0 License.



ACPD

8, S8191-S8192, 2008

Interactive Comment

Interactive comment on "Temporal trends of anthropogenic SO₂ emitted by non-ferrous metal smelters in Peru and Russia estimated from Satellite observations" by M. F. Khokhar et al.

Anonymous Referee #1

Received and published: 13 October 2008

The third major comment was truncated in the original review. Here is the full paragraph:

3) The main new information in this paper is the temporal evolution of the SO2 emissions from the three smelters as derived from GOME data. Considering the large scatter in Fig. 3 and 5, the question is how significant the trends derived are. For this, estimates of the uncertainties for the individual weekly and 10 day averages of SO2 columns are needed which can then be used to investigate the significance of the trends derived. So far, the manuscript contains only a few numbers on uncertainties, and these are not explained at all. I'm also surprised by the magnitude of the estimates

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



for the uncertainties of the emissions (between 7% and 18%) which appears to be very optimistic given the uncertainty in the atmospheric life time of SO2, the broad assumptions made in the AMF calculation and the small signal of SO2 over the smelters. A more detailed error discussion is needed to make the numbers derived in this study useful.

Interactive comment on Atmos. Chem. Phys. Discuss., 8, 17393, 2008.

ACPD

8, S8191-S8192, 2008

Interactive Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

