

Interactive comment on “Tula industrial complex (Mexico) emissions of SO₂ and NO₂ during the MCMA 2006 field campaign using a Mini-DOAS system” by C. Rivera et al.

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General comments

This is an interesting work that shows emissions from the Tula region can be monitored using passive techniques, and also it is possible to compare those with models.

Specific comments

The release height of the Tula complex emissions looks that it is underestimated. Using the EI 1999 (SINE) it is possible to obtain the height, velocity and temperature in the stack and using that data the *effective stack height* release varies from 300m to 1,050m

C6

,using Briggs algorithm, also this variations depends on the ambient conditions (ambient temperature and wind speed).

It is important to consider the *effective stack height*, because winds at a higher level could have different velocity and direction that those near surface and the dispersion will be different too.

References

SINE <http://aplicaciones.semarnat.gob.mx/sine/bienvenida.asp>

Briggs, G.A. "Discussion of Chimney Plumes in Neutral and Stable Surrounding", *Atmospheric Environment* 6:507-510, 1972

Please also note the Supplement to this comment.

Interactive comment on Atmos. Chem. Phys. Discuss., 9, 5153, 2009.