

Interactive comment on “Measurements of atmospheric mercury in Shanghai during September 2009” by H. R. Friedli et al.

Anonymous Referee #1

Received and published: 24 January 2011

The manuscript reports on total gaseous mercury (TGM) measurements made in Pudong, Shanghai in August/September 2009, and compare TGM relation with NO_x, SO₂, CO and wind directions. This work is contributed to understand mercury pollution in China since the ongoing industrialization of China might result in increased release of mercury to the atmosphere. The reviewer would like to recommend publication of the manuscript with proper revision as suggested in the following.

General comments:

On pages 30289, lines 7-11, the authors have attempted to discuss the contributor to observed TGM during the plume events based on the SO₂, CO, and NO_x. This method seems too simplified since the sampling site is bordered by major traffic arteries (Fig. 1), where the emission of NO_x is much higher than SO₂. For example, based on data of

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table 1, the ratio of NO_x/SO₂ is 11 on the “background” period, when the air is from easterly oceanic air, much higher than “major” period. More Elemental composition analysis is needed to discuss the source of TGM.

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 30279, 2010.