

Interactive
Comment

Interactive comment on “Use of a mobile laboratory to evaluate changes in on-road air pollutants during the Beijing 2008 Summer Olympics” by M. Wang et al.

M. Wang et al.

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We would like to thank J. He for the short comment.

We have taken a number of measures to reduce the contamination of both generator and vehicle emission:

- 1) the sample inlets are located in the front top of the vehicle, while the exhaust of the generator and vehicle are located at the rear bottom of the vehicle;
- 2) For this study, we did not use the generator; instead, we used two sets of UPS and batteries as power supply for the instrument, so the generator caused no contamina-

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tion;

3) During each measurement trip, the vehicle was maintained at a speed of 60 km/h, or 17 m/s, which is much higher than the normal wind speed in Beijing. So during the measurement trip, the exhaust of the vehicle could not reach the front by wind from the backside of the vehicle;

4) For measurement lasting longer than 6 hour, the battery is not enough to supply power for the instruments, we have to use generator; Since the exhaust of the generator is located on the rear bottom of the platform, the contamination of the generator can be avoided as long as we maintain the driving speed at 60 km/h.

To exam the level of the self-contamination of the platform, we drove it at 60 km/h on a new highway with almost no vehicle. The pollutant concentrations measured were at background level in this region, e.g. the NO_x concentration was only 1-3ppb. This proves that the self-contamination of the platform is negligible.

Interactive comment on Atmos. Chem. Phys. Discuss., 9, 12857, 2009.

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