

Interactive  
Comment

# ***Interactive comment on “An assessment of the performance of the Monitor for AeRosols and GAses in ambient air (MARGA): a semi-continuous method for soluble compounds” by I. C. Rumsey et al.***

**I. C. Rumsey et al.**

rumsey.ian@epa.gov

Received and published: 9 December 2013

Response: Thank you for your comment. We have now referenced the Phillips et al. (2013) paper and have added a discussion on the influence of the N<sub>2</sub>O<sub>5</sub> artifact on the comparison between the sampling techniques and also on measured concentration levels. The discussion added to the manuscript is provided below:

“It is acknowledged that both the Na<sub>2</sub>CO<sub>3</sub> denuder and the WRD are sensitive to measuring N<sub>2</sub>O<sub>5</sub> as NO<sub>3</sub><sup>-</sup> during the nighttime (Phillips et al., 2013). However, since both

C9304

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



sampling techniques are likely influenced in a similar way, it will not affect the comparison between the Na<sub>2</sub>CO<sub>3</sub> denuder and the WRD. This artifact may influence measured concentration levels. However, the influence of N<sub>2</sub>O<sub>5</sub> on measured HNO<sub>3</sub> is likely to be small as N<sub>2</sub>O<sub>5</sub> concentration levels are expected to be low due to high NO and biogenic VOC concentrations and warm air temperatures, which decrease N<sub>2</sub>O<sub>5</sub> concentrations.”

---

Interactive comment on Atmos. Chem. Phys. Discuss., 13, 25067, 2013.

ACPD

13, C9304–C9305, 2013

---

Interactive  
Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

C9305

