

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.

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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 N₂O₅ 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 Na₂CO₃ denuder and the WRD are sensitive to measuring N₂O₅ as NO₃⁻ during the nighttime (Phillips et al., 2013). However, since both

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sampling techniques are likely influenced in a similar way, it will not affect the comparison between the Na₂CO₃ denuder and the WRD. This artifact may influence measured concentration levels. However, the influence of N₂O₅ on measured HNO₃ is likely to be small as N₂O₅ concentration levels are expected to be low due to high NO and biogenic VOC concentrations and warm air temperatures, which decrease N₂O₅ concentrations.”

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