

Interactive comment on “Role of the dew water on the ground surface in HONO distribution: a case measurement in Melpitz” by Yangang Ren et al.

Hang Su (Editor)

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"In her/his major concern 3) intercomparison, the referee #1 would also like to point the authors to another recent paper in which also a MARGA system was intercompared with a LOPAP: Xu et al., AMT.12, 6737-6748, 2019, with very similar results to the other reference mentioned there (strong overestimation of HONO by the MARGA).

Response: We thank Dr. Su for his comment and this information. Accordingly, Xu et al., 2019 is now referenced and compared with our present result in Line 237-240 “The result is in excellent agreement with the former intercomparison of both instrument types in the Chinese field campaign (Lu et al., 2010; Xu et al., 2019) where the HONO mixing ratio measured with the wet-denuder-ion-chromatography (WD/IC) instrument was affected by a factor of three on average.”

References

Lu, K., Zhang, Y., Su, H., Brauers, T., Chou, C. C., Hofzumahaus, A., Liu, S. C., Kita, K., Kondo, Y., Shao, M., Wahner, A., Wang, J., Wang, X., and Zhu, T.: Oxidant (O₃ + NO₂) production processes and formation regimes in Beijing, *Journal of Geophysical Research: Atmospheres*, 115, 10.1029/2009jd012714, 2010.
Xu, Z., Liu, Y., Nie, W., Sun, P., Chi, X., and Ding, A.: Evaluating the measurement interference of wet rotating-denuder-ion chromatography in measuring atmospheric HONO in a highly polluted area, *Atmos. Meas. Tech.*, 12, 6737-6748, 10.5194/amt-12-6737-2019, 2019.