

Atmos. Meas. Tech. Discuss., referee comment RC2  
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## **Comment on amt-2022-157**

Anonymous Referee #2

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Referee comment on "Comparison of two photolytic calibration methods for nitrous acid"  
by Andrew J. Lindsay and Ezra C. Wood, Atmos. Meas. Tech. Discuss.,  
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Lindsay and Wood report a new photolytic calibration method for HONO, which can be operated in an actinic mode and in an "NO<sub>2</sub>-proxy" mode. The manuscript is well written and straight forward and is publishable in AMT once the comments below have been addressed by the authors.

### General comments

- The manuscript would benefit from a critical discussion of the new method. For example, how does this new calibration method compare to existing ones?
- The manuscript would also benefit from sample data on how the new calibration method performs in the field. How stable is the calibration source (e.g., how often does the Hg lamp need to be recalibrated)?

### Specific comments

- Figure 2: The HONO background signal is very large. Why is that?
- Figure 4 : Why is the precision so low at low water concentration?