

Interactive comment on “Development of a photochemical source for the production and calibration of acyl peroxyxynitrate compounds” by P. R. Veres and J. M. Roberts

Anonymous Referee #1

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The paper describes a novel approach to the calibration of instruments that measure PAN type compounds, such as a I- CIMS spectrometer in this case.

The paper is refreshingly concise and I feel compelled to deliver an equally succinct review.

The paper is appropriate for AMT. I have three comments that I feel should be addressed before the paper can be published.

1. Figure 2: the authors should explain why the individual chromatograms differ from the mixture chromatogram in absolute and (more importantly) relative peak area and

C184

why the mixture numbers were chosen for the data in table 1 rather than the individual results.

2. The authors should comment on the larger relative production of PAN versus the target species when using the chlorides versus the ketones as precursors. Does this not eliminate the acetone contamination from rinsing theory?

3. Fix reaction 8

Interactive comment on Atmos. Meas. Tech. Discuss., 8, 1457, 2015.