

## ***Interactive comment on “Successes and challenges of measuring and modeling atmospheric mercury at the part per quadrillion level: a critical review” by M. Sexauer Gustin et al.***

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One major statement in this overview paper is that the Tekran instrument may underestimate GOM concentrations by a factor of 1.6 to 12 depending on chemical composition of GOM. However, there is currently no consensus in the atmospheric mercury community on this point, as reflected in the presentations given by Tekran operators in the 2015 NADP spring meeting (Pacific Grove, CA, April 13-16, 2015). Approving the publication of this paper does not imply that I agree/or disagree with this conclusion. Instead, I hope the publication of this paper can stimulate the community to further develop advanced technology to reduce the measurement uncertainties, and to improve

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our understanding on the chemical composition of oxidized mercury and atmospheric mercury cycling processes. Researchers should proceed with caution when taking recommendations made in this paper, e.g., adjusting GOM concentrations to much higher levels. On the other hand, this study does provide us a sense of potential magnitudes of measurement uncertainties in the network monitored oxidized mercury concentrations.

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