Interactive comment on “Detection and quantification of gas-phase oxidized mercury compounds by GC/MS” by C. P. Jones et al.

Anonymous Referee #2

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This paper presents the details of a GC-MS method to quantify gaseous HgII compounds which are thought to exist in the atmosphere but as of yet been unquantified. There is currently no method to collect these compounds from ambient air and determine their concentrations. GC-MS appears to be a promising technique and the authors present a nice study of the details involved in generating standards, which materials to use, and what limits were encountered with suggestions for future work.

I found the manuscript clearly written, properly cited, the figures were clear and results clearly explained. I have no major criticisms and found nothing specific for the authors to address.

My only reservation is that the ultimate goal of detecting and quantifying HgII in ambient may not be achievable with this technique. The authors do a good job of not overstating optimism so I can’t fault them for that. Hopefully this initial work will lead to steady improvements in this area.