Atmospheric
Chemistry
and Physics
Discussions

Open Access

# *Interactive comment on* "Atmospheric Mercury Concentrations observed at ground-based monitoring sites globally distributed in the framework of the GMOS network" *by* Francesca Sprovieri et al.

**T. Dvonch (Referee)**

dvonch@umich.edu

Received and published: 17 June 2016

This manuscript represents an immense body of effort and successful coordination among research institutions to greatly inform our understanding of the global distribution of atmospheric mercury concentrations. Results from the project importantly confirm a large inter-hemispheric gradient from north to south, while also providing a valuable measurement-based data set which can be used to validate atmospheric mercury models for scenario analysis in support of further mercury research and policy. It is also important to note the degree of detail that went into standardizing SOPs

and data QA/QC procedures, as this assures inter-comparability across the global data network, a large accomplishment considering over 40 research monitoring sites across many research institutions.

Suggested revisions: 1) While very impressive that the GMOS project has been highlighted by GEO as a flagship for future activities, it seems odd that this discussion of GEO is only discussed for the first time in the Conclusions section of the manuscript. Perhaps the detail of this accomplishment with GEO is more appropriate to be discussed earlier in the paper, with a more concise mention then also included as part of Conclusions. 2) The manuscript would benefit from another close proof-read for typos, especially due to the large amount of data description included (for example, page 11, line 12 – seems it instead should read "XN>XT>XS").

Interactive comment on Atmos. Chem. Phys. Discuss., doi:10.5194/acp-2016-466, 2016.