Interactive comment on “Global evaluation and calibration of a passive air sampler for gaseous mercury” by David S. McLagan et al.

David S. McLagan et al.
frank.wania@utoronto.ca

Received and published: 16 March 2018

REVIEWER COMMENT: The present manuscript sounds as an extremely interesting study, useful for the scientific community involved in the global Hg monitoring in the atmosphere. Indeed, this study accurately reports the results of a monitoring campaign comprising 20 sites worldwide, where active measurements of TGM (GEM+GOM) were performed simultaneously by validated analytical instruments. A complete description of the PASs, as well as the sampling procedure and data analysis are reported, letting us to suppose that these easy-to-use devices can be a promising solution to implement the mercury monitoring network over the world.

RESPONSE: We appreciate the positive sentiments and support of the study.

C1

REVIEWER COMMENT: On the other hand, a more precise and clear description about the Blanks PASs should be provided in order to better clarify the procedure of the “Blanks” exposure (reported within the Supplements), their composition and handling, time of exposure and the meaning of their data treatment.

RESPONSE: The exact procedure, handling and time of exposure for the field blanks is outlined in Section S1 of the supplementary information. In a revised version of the manuscript the following could be added to the main paper to better relay this information: Line 203-204: “Field blank samplers were used at each site and their composition/makeup is identical to regular samplers.” Line 207-208: “Exact sampling procedures for field blanks are outlined in Section S1.”