

Interactive comment on "Four years of atmospheric mercury records in Northwestern Patagonia (Argentina): potential sources, concentration patterns and influence of environmental variables observed at the GMOS EMMA station" by Maria C. Diéguez et al.

Anonymous Referee #2

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The manuscript by Diéguez et al, Four years of atmospheric mercury records in Northwestern Patagonia (Argentina): potential sources, concentration patterns and influence of environmental variables observed at the GMOS EMMA station, reports on valuable measurements of atmospheric mercury in the southern hemisphere. As a global en-

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vironmental concern, improved understanding of mercury transport and fate is a high priority particularly as international developments in mercury control through United Nations processes accelerate. It is widely recognized that southern hemisphere measurements are inadequate so these measurements are particularly valuable as only a limited number of sites are monitoring GEM in the SH. However, when compared to other articles published regarding GEM measurements in the SH, this manuscript does not offer anything new. (See Brunke et.al, from Cape Point, Slemr et al. Agnot et al. for Amsterdam Island). The main downfall of the paper is that only GEM and meteorological parameters were measured during the 4-year period thus making the conclusions from this paper very straight forward. No new findings or revelations. As ACP is a highly rated scientific journal (Impact Factor of 5.6) I would suggest that the authors revised the manuscript to the level of papers published in this journal before submitting for a second round of review. What the authors could do is discuss the comparison of their GEM measurements with other GMOS sites in the SH in a bit more detail. The authors state in the abstract that that GEM concentrations ranged between 0.23 - 1.43 ng/m3. Did they investigate why this low GEM concentration was observed? Was this a type of depletion event ect.

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