

***Interactive comment on “Oceanic influence on atmospheric mercury at coastal and inland sites: a springtime noreaster in New England” by J. M. Sigler et al.***

**Anonymous Referee #1**

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The manuscript has a lot of interesting features and a lot of good data are shown. I'm still a bit concern about the interpretation of the RGM data and the flux calculations. But in total this is a good manuscript. I do have some questions and comments. Given by page and line. Page 8738 line 25: The end of the sentence reads “as a source of Hg<sup>0</sup> using ambient measurements”. There are ambient measurements dealing with this and I believe at least a few should be mentioned. Page 8739 line 7-22. I believe that there are papers on measurements missing. For example there are new papers on atmospheric mercury measurements from the Mediterranean Sea area. I also think that some of the halogen papers should be mentioned. Result part. On a lot of pages in the result part I'm missing the actual value. There are comparisons but you don't for

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example get the background value. I believe this is needed. Page 8742 line 24: The author is talking about sites and only giving one reference. There are several publications on mercury concentrations at coastal sites. Some more are needed here. Page 8746 line 23: According to my knowledge 0.36 cannot be considered a correlation. So how can you base your calculations on this and state that this is “this tracer-based flux estimate is useful for Hg” (Page 8747 line 3-4) Page 8747 line 14-15: Maybe add some references on the mercury halogen chemistry.

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Interactive comment on Atmos. Chem. Phys. Discuss., 9, 8737, 2009.