

Response to Anonymous Referee #2:

We would like to thank this referee for his/her thoughtful comments on how to improve our paper.

Referee #2's original comments are in italics and our responses follow in-line.

*Page 2555, line 1: The authors should elaborate a bit more on why these particular data sets mentioned have been selected. Wouldn't it been possible to even choose more differing marine data sets? A bit more explanation would be helpful to the reader.*

Additional explanation was added: "These eight campaigns were selected from all NOAA PMEL field campaigns with published data (<http://saga.pmel.noaa.gov/data/>) where total and submicron extinction or scattering coefficients were measured. We initially focus on two disparate data sets representing two hemispheres, one containing highly polluted marine air and the other relatively clean background marine air, so we can observe the SDA+ performance in high and low extinction regimes."

*P 2564, l 7: Wouldn't it have been helpful to use more data sets where submicron data are available from measurements such as submicron absorption? Again, it would be good to explain how data sets for this paper haven been chosen.*

Our verification methodology required that at a minimum both submicron and total scattering were measured and at best both submicron and total extinction were measured. We used every data set on the NOAA PMEL website that met our minimum requirements. The sentence was changed to better explain this: "In order to further test our methodology on data sets spanning the globe, we applied the SDA+ to every available field campaign performed by NOAA PMEL (<http://saga.pmel.noaa.gov/data/>) where total and submicron extinction or scattering coefficients were measured ..."