We thank you for your valuable input. As we address the issues raised by you, we will better understand the uncertainties of the estimates we provide. We also feel that some of the issues you raised came from an insufficient understanding of our manuscript, in which case, we still need to revise our paper to better explain the points. For example, our best estimate of sAOD (which is from integrating the MODIS, MISR and AERONET data) is able to reproduce the AERONET sAOD with an overall error of $13\pm2\%$, when the AERONET sAOD used for the validation is not used for the best estimate. This means that even if there is no AERONET station in some area our sAOD estimate is accurate in that area with an error of 13%. To demonstrate this, we conducted a sensitivity study as below.



Figure 8. sAOD trend from 2001 to 2010 in units of the change over the 10 years. The trend is computed from annual means for each grid. (From Lee and Chung, 2012 ACPD)





As you can see, our sAOD trend does not depend too much on the AERONET data. Of course, the accuracy improves with AERONET data. We believe that generating a reliable estimate of global sAOD (over both the ocean and the land) is a significant advance. To demonstrate the accuracy of our estimate, we need to convince skeptics like you. This is why we appreciate your criticism and as a result of addressing your points we will strengthen the paper. We will address all of your issues and revise the paper.