

Interactive comment on "Advanced characterization of aerosol properties from measurements of spectral optical depth using the GRASP algorithm" by B. Torres et al.

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I have realised that there was a comment without an answer due to an error during the (latex) compilation.

- I agree with the editor and other reviewers that you should add the case of AOD(440 nm)=0.1 to your sensitivity analysis section, since most data in the AERONET network are for AOD levels <0.3. Especially for the Lanai site the AOD=0.3 is much too high to be representative. This is a background marine site where AOD is predominately <0.15. The monthly mean AODs at Lanai do not exceed 0.08 at 440 nm except for the dust transport season in spring when they reach a monthly average maximum of</p>

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0.12 in April. I also agree with the editor that it would be useful to include very high AOD cases in your sensitivity analysis (1.5 or 2 at 440 nm) for dust and also fine mode smoke, since these cases are important for analysis of major aerosol events.

We have added 4 new aerosol cases: GSFC0 and LANA0 with $\tau(440)=0.1$ and SOLV4 ZAMB4 with $\tau(440)=1.5$ (low and large aerosol optical load). –

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2016-334, 2016.