

Thanks for the nice response to my review.

Given the limited data (not even a year) it is understood that evaluations are somewhat limited. Although the general approach is promising, the admitted 20% bias indicates the need for significant improvements (maybe that can also be stated in the abstract).

The offered comparison of retrieval SSA and fine-mode AOD to Aeronet are quite interesting. The SSA comparison indicates that retrieval AOD are likely too low (in case of absorbing aerosol). This also can explain that AOD_f is mainly too low in case for major (absorbing) wildfire/pollution cases.

On size, AERONET size-distributions cover radii up to 15 μ m, although with limitations of degradation for concentrations of radii of above 5 μ m. Mode radii are given with respect to number of volume – which is why I prefer eff.radii. When the mode radii you listed with respect to number than R_{mode} 2.3 is close to reff 5 μ m ... then no complaints, but if R-mode is with respect to volume (reff is then smaller) then an important big (and solar absorbing) dust size is missed in the retrieval.

Figure 2 is now much better. Retrieval overestimations at low AOD, as in most retrievals, is confirmed (what happened in case of negative AOD ... or is this not an option?)

Figure 7 shows that high AOD cases are missed (in part as they are also probably more absorbing than the retrieval allows, as the SSA comparison to AERONET demonstrates).

The comparisons between AOD, 10*AAOD, AOD_f and AOD_c are quite interesting (thanks for using a similar color scale) especially when comparing to the relevant DJF season of MAC. However, it looks like that $AOD > AOD_f + AOD_c$... why? Your AAOD seems rather low (compared to MAC). And retrievals over NH land (probably due to snow cover) are largely missing... so having a complete year for evaluation would be more insightful.

Do not work with research algorithms from MISR, these are just as the name said short lived usually with limited coverage ... better work with operational products

I like to bias presentation of the bias distribution for the different AOD ranges.