

Authors analyze the dust outbreaks over Mediterranean basing on multiwavelengths lidar observations from four EARLINET sites. What is important, authors make next step: they use derived parameters of dust layers for estimation the dust direct forcing. Paper is well and clearly written and can be published in ACP. I have just technical comments.

Ln.110 the α_{aer} and β_{aer} vertical profiles, with systematic uncertainties of ~5–15% and ~10–25%, respectively

Probably should be opposite. Uncertainty of backscattering is lower

Ln 112 mean uncertainty for AE_{α} and AE_{β} is of order 7–21% and

Providing uncertainty of Angstrom in percents makes no sense (What if it is zero?). Should be absolute values.

Ln 187 The CRI grid was narrowed down to [1.4, 1.5]

Why it was limited by 1.5? Real part can be higher

Ln 188 and [0, 0.001, 0.005, 0.01] for the Imaginary part

So only four values for Im were used?

Table 3 Authors should pay attention to uncertainty in this table

IRI | **1.50 ± 0.00**

What does it mean? No error? The same is for imaginary part. For some cases error of IRI is 10%. I doubt it. Imaginary part has spectral dependence. For what wavelength results are provided?

Lidar ratios at 355 nm (with corresponding uncertainties) are not provided in the table.