

Review paper Miri et al.

The following are the minor corrections to the revised article

- 1) The next sentence is confusing. I assume that you want to say that you use this channel instead of the other wavelengths because the signal-to-noise ratio for the other wavelengths was low. However, what you have indicated is totally the opposite. Or perhaps I am missing something. Please clarify this point.

Lines 76-78:

“For this study, the aerosol elastic backscatter coefficients (β) and the particulate linear depolarization ratio (PLDR) were computed at 532 nm from Mie-Raman observation (Ansmann et al., 1992) due to the low signal to noise ratio at this wavelength in comparison with the two others.”

- 2) The next sentence is not formulated correctly, as an increase in backscatter can occur due to changes in aerosol concentration, rather than solely due to hygroscopic processes related to relative humidity. Please clarify this point.

Lines 113-114: “In such cases, the elastic backscatter coefficient evolution can be attributed only to hygroscopic growth.”

- 3) In Equation 3, you have already included the normalization using the fluorescence backscatter, but you moved from equation 2 and 3 without mentioning this point. Please, correct this aspect.
- 4) I agree that the RH range of observation in which the hygroscopic parameter is obtained can have an impact on its values, however the results that are indicated are extremely high. So this point need to be clarify. How did you do this simulation. Here in this discussion of even in the manuscript should be shown how this calculation was done. I agree that the range of relative humidity (RH) observed when obtaining the hygroscopic parameter can impact its values; however, the reported results appear to be extremely high. Therefore, this point needs clarification. How was this simulation conducted? The discussion, either here or in the manuscript, should detail how this calculation was performed.

Lines 247-248: “The influence of a shift in RH on γ has also been examined. For the case of 9 March 2021, when RH is decreased by 0.1, the corresponding γ estimation becomes 0.82, while an increase of 0.1 in RH results in a γ value of 0.23.”

- 5) My comment regarding the revision of the references was not addressed. I can see that the citation of “Navas-Guzmán et al., 2019” still appears as “Guzmán et al.” in most of the citations. Please, verify that all your references are cited correctly.