I appreciate all the revisions. But I still think the manuscript still failed to meet the requirement of publication in ACP. Firstly, although better than previous version, the manuscript was still written poorly and should further undergo extensive English revisions. Many measurement platforms were used in this article such as ground in-situ measurements, ground lidar and airborne in-situ measurements to present the comparison of lidar retrieved optical properties with airborne in-situ measurement-based ones, but the details in the comparison are very rough, which might lead to lots of errors in either the calculation of model optical properties or the lidar retrieved optical properties. How can they be comparable? Does the comparison make sense? Besides, I would suggest authors to address other major weaknesses, which are listed below.

1) Line 15: In the abstract, the author use "The study highlights the complexity of …", which is a well-known issue and is what we really want to solve. Through the whole manuscript, I can only find the author highlight the complexity without an actual solution, and there are few innovations for both results and the method during the comparison process.

2) Line 300: replace "2.1.2 Ground-based remote sensing" by "3.1.2 Ground-based remote sensing"

3) Line 316: "During the daytime, the signal-to-noise ratio in the Raman channels is too weak …" and the author use constant LR to retrieve aerosol optical properties, which will lead to huge errors especially for multi-wavelength lidar, different observation sites and experiment dates. The lidar data at night are free of the noise problem. Why not try to using these data to calculate the LR?

4) Line 344: replace "2.1.3 Airborne in-situ measurements" by "3.1.3 Airborne in-situ measurements"

5) Line 479-480: "… and slightly lower than…That indicates different aerosol populations in these layers" These might also result from errors during the calculation, such as the determination of refractive index and lidar ratio and the particle size distribution range used in Mie model, which can't be ignored and determine whether

the comparison results were meaningful.

6) Line 460, 515: The figure c), d) and e) are not easily readable. Some legends can't be found in the figure.

7) Line 515: The same as Line 479-480.

8) Line 627- 630: How long did the flights 20150617b, 0626a, 0628a, 0628b last? Which heights and locations were chosen for the LR calculation? If there the particle size distributions were influenced by air mass transported from other regions, how can you guarantee the changes in calculated LR were merely resulting from the relative humidity?

9) Line 929 - 942: Is the conclusion here necessary?