We thank the reviewers for their suggestions, which certainly helped us improving the manuscript. We tried to account for many of the points which are listed below in the text. In the following the reviewer's comments are presented in italics, the author answer with normal letters in blue and the modifications on the manuscript with bold blue letters.

Anonymous Referee #2

Main comment The manuscript presents an interesting study of the atmospheric aerosol features in South Africa. The study area deserves some attention due to the variety of aerosols that affect the region. The approach used implies the processing of backscattering and absorption coefficients derived from Raman lidar processing. The presentation of the study is appropriate; the description of the analyses includes the estimation of uncertainties. The discussion of the results has been done with a good review of previous works in the field. The manuscript is suitable for publication after minor revisions.

Particular comments.
The study includes the statistical analyses in order to characterize the properties associated to different aerosol types. A study case if selected to illustrate one of the categories of aerosols considered in the classification. In this sense, I would ask the authors why they did not include study cases illustrating the two other categories?
In this study we present our results on 38 aerosol layers, from which 17 are referring to urban/industrial, 14 to biomass burning and 7 to mixed of biomass burning with desert dust aerosols. We think that the measurement example is a good and common way to **show the typical products of our system** and **only used to demonstrate the methodology** followed to derive the optical aerosol properties. Some information on the aerosol structure for each of the layer analyzed is already given in the Table 1 (bottom and top of each layer observed). Mean extinction coefficient at 355 nm and 532 nm for each of the layer observed are also added in the Table 1 of the revised manuscript as suggested by the reviewer#1. The intensive aerosol optical properties and some microphysical properties are also shown in Figures 5, 6 and 7 for each of the cases analyzed. The air mass transport paths are different also within one cluster of aerosol types, and thus we believe that the presentation of two additional case studies will not improve our publication.

Among the variables used for the characterization of the aerosol types it is include the linear particle depolarization ratio. The authors quote the uncertainty of this uncertainty in a relatively small value. I guess would be this quotation just in case the considered the papers would be used for the quotation of the linear particle depolarization ratio?
We are not sure that we have understod the reviewer's comment.

A final point is concerned with the size of some figures that are really small and difficult to interpret due to the size of the letter. This is the case for´figure 5 but specially for figure 8.
In the revised manuscript we enlarge the axis titles and numbers of Figure 5 and Figure 8

Another issue, related to Figure 8, is that in their use in the discussion of results the authors did not include any particular comments on some of the cases displayed.
There are many statistics of intensive aerosol properties for different aerosol types in the world available for comparison and discussion. We believe that Figure 7 (previously Figure 8) provides some of the basic literature values, and we discuss most of the references included in Figure 7. We use the literature values in general to compare them with our results. For example we believe it is enough to write that the lidar ratio at 355 nm shows similar values for urban / industrial aerosols in various regions of the world (as shown in Figure 7, left corner), while for biomass burning aerosol where the range of the reported literature values for the lidar ratio at 355 nm are wider, we explicitly compare our results with individual studies.