We are thankful to the reviewers for their insightful comments and help improving the manuscript.

Reviewer #1 (Comments to Author (shown to authors):

Thank you very much for your suggestions and the insightful comments. We have made changes to the manuscript following your suggestions. The changes are highlighted in yellow.

1. Line 59: The season abbreviation for September to December is given as SON. In analogy with other season MAM, it should be SOND?

Corrected. Thank you for pointing this out. Line 59

2. Line 143-150: The section gives an idea what authors did in the present manuscript. However, the connectivity from the previous paragraphs is not there. The section should be improved to clearly state the objective of the present work blended with the previously known knowledge.

We have added two sentences to make connections between the two paragraphs (line 143-145)

3. Section 2, Line 154: is it GPGP or GPCP?

Corrected. Thank you for pointing this out. Line 156

4. Line 173: Can authors explain the rationale behind choosing the MODIS Aqua data and particularly deep blue algorithm?

Deep blue algorithm was developed to detect aerosols over bright surface, which is not the case for this study. So, we have removed deep blue algorithm. Thanks for pointing this out.

We have added discussions on the use of the MODIS AOD data that have been used previously in many studies over the region in line 178-183.

5. In general, it was observed that the magnitude from re-analysis data is different to the satellite observations. Can authors comment on this aspect for their work, and how MERRA-2 was still able to pick up the dynamics expected by the authors?

MERRA2 aerosols flux data have been used to have an understanding about the dominant species of aerosols present and transport over the region in the study. The MERRA2 data have been used previously to understand global aerosols transport. MERRA2 aerosol reanalysis data have been validated against many AERONET stations data globally. We have mentioned that in lines 208-217.

In our study, to compare with the satellite data, we have shown the MODIS AOD map (Figs. 7A-C) over the region along with the MERRA2 aerosols mass flux (Figs. 7D-H). The Figures show a reasonable agreement between MODIS June AOD (Fig. 7A) and MERRA dust mass flux (Fig. 7D). We have added this in lines 377-381. However, we agree with the reviewer that a detailed further study is need to understand the role of the regional dynamics on the aerosol transport over the region. We have added that in the conclusion section in lines 449-455: "Our analysis using MERRA2 reanalysis data indicates that the location and strength of the AEJ-N and the tropical easterly jet might play an important role in the AOD variation (Fig. 7). However, further analysis is required to tease out the role of these jets and their interannual variability on the dust mass flux and wet season onset. MERRA2 reanalysis data suggest the possibility of long-range aerosol transport by AEJ-N. A detailed analysis using satellite as well as ground-based measurements and model simulations can shed more light on the role of dynamics over the region on the aerosol concentration."

6. Figure 6: I am unable to believe the correlation and fit provided by the authors. Please check the June AOD fit and corresponding r value given. Which points the line is fitting to? It seems that the scattering is too high and somewhere in between the software fit the line to give some result. Same goes with JJA AOD fit.

We have added the r values and the p values plotted using the scipy module of python.

7. Can authors give few bullet points in their conclusion?

We have added the bullet points in the discussion section on how aerosols led to an early onset.