

This manuscript investigated the aerosol hygroscopic properties for relatively large particles with a diameter larger than 300nm. As previous studies focus on fine particles, this work presented the significant hygroscopic variation of large particles. This unique measurement can enhance our understanding of aerosol hygroscopic properties. Therefore, I recommend the manuscript for publication in *Atmos. Chem. Phys.*, after properly addressing following technical but important problems.

Specific Comments:

1. Line 14: Please define the GF.
2. Line 28-29: Please check the citation format again.
3. Line 48: The citation is wrong, should be (Swietlicki et al. 2008).
4. Section 2.1: I did not understand why the authors introduced the AERONET station here, since it has not been used in this study.
5. Line 131: The GF should be defined before.
6. Line 142: Why the third-moment mean values? Please specify.
7. Line 143: “... *can be calculated from GF_{mean} using the equation above.*” Please specify which equation. The author should number the formula.
8. Line 152: It seems that the BC information is not used in this study. Is there a need to mention this?
9. Section 4.2: The Mie theory was used to describe the aerosol effects on visibility degradation. Please describe to what extent this theory can be used in the estimation.
10. In Fig.7(b): Please accurately replot this panel with the wind direction. I do not understand the color bar, which only shows south wind and north wind.
11. Line 290: It’s better to specify the Koschmieder relation here.
12. Line 293: Please at least give some descriptions about the calculation method instead of just putting a citation here. Some necessary but not key information can also be offered in the supplement.