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Title: Ground based characterization of spectral optical properties of haze and Asian dust episodes under Asian continental outflow during winter 2014

Authors: Jinsang Jung et al.

Responses to the reviewer's specific comments and questions:

Reviewer #1 (Comments):

General comments:

The manuscript has been improved a lot. It can be accepted after minor revisions:

Specific comments:

1. The authors need to clarify in the last part of introduction on why PM10 and PM2.5 need to be measured for the haze optical measurement. They also need to mention why this experiment was focused in winter which I think due to wind direction from mainland China.

Response: The terms "[Size-segregated mass](#)," has been added in lines 108-109 in the revised MS.

Following sentence has been added in lines 107-108 in the revised MS.

["Because fossil fuel consumption increases during winter for space heating and northwesterly winds are dominant during winter, this study focused on winter."](#)

2. Line 153: Remove "Ca" because it has been mentioned in the previous paragraph

Response: The term "[Ca](#)" in line 153 in the original MS was removed.

3. Line 198: Include full name of "RGB" when it was first mentioned in the main text

Response: The term "[\(Red, Green, Blue\)](#)" has been added in line 200 in the revised MS.

4. On what basis were PM2.5 with concentration of $>80 \text{ ug/m}^3$ and $\text{PM}_{10} = 150$ used to determine haze episode? The value of PM2.5 far exceeds the WHO/USEPA standard. PM10 should be written as "PM10 concentration is higher than 150 ug/m^3 ".

Response: Following sentence has been added in lines 321-323 in the revised MS.

“These threshold values of the haze episode correspond to visibility of 8 km estimated by Jung et al. (2009b).”

The term “higher than” has been added in line 321 in the revised MS.