

General Comments

The authors have made a good effort to respond to the reviewer comments. My main remaining concern is that I still think that the paper as written is mostly descriptive and I think it would benefit from more in depth discussion of the significance of the work. I've pointed out a few specific areas where I think discussion could be added/improved in the comments below.

Specific Comments

pp 2, ln 38-42 – I wonder if it would be more effective to frame the opening here in terms of the air pollution itself, rather than haze, which I think of as being one of the side effects of air pollution.

pp 2, ln 47 – Similarly, I think the opening would be stronger if you provided more specifics about the health impacts of PM

pp 3, ln 68 – Is this ozone and PM or just PM?

pp 15, ln 352-354 – It would be nice to have some discussion in the paper (not necessarily in this section) of why different factors are more important in different regions

pp 15, ln 365-369 – Similarly, I think it would be valuable here to have some discussion of why winds are important in the Beijing-Tianjin-Hebei, but less important in summer. I'd imagine it has to do with having stronger, and more large-scale, circulation in winter?

pp 20, ln 416-420 – Why do you think precip might be more important in places with lower pollution levels? Is the air cleaner because the regions are wetter, or for another reason?

pp 22, footnote 6- For completeness, I think you should probably report the correlation coefficients or cite a paper that does.

pp 24, ln 548 – 552 – I'm still not convinced of this point. I think there is a difference between showing which meteorological factor is most dominant vs. showing sensitivity to changes in meteorological factors (for example, the anthropogenic greenhouse effect is dominated by CO₂, but the atmosphere is much more sensitivity to changes in CH₄). You said in your response that you looked at year-to-year variability, but I didn't see any discussion of it in the paper. Did it add any insights?

pp 24-25, conclusions section – I think this section could be deepened by making clear how this study fits in with the existing literature. How do these results compare to the literature, and what new knowledge has been added? As someone who is admittedly not well versed in the literature on air quality-meteorology interactions in China, this was not clear to me.

Technical corrections

pp 1, ln 20-22 – The wording of this sentence is unclear.

pp 2, ln 63 – should read “ozone concentrations were linearly correlated...”

pp 3, ln 66 – should read “... during the summer monsoon.”

pp 3, ln 86 – should read “... humidity and solar radiation...”

pp 5, ln 141 – should read “8am-8pm”

pp 9 – Figure 1 appears blurry in the pdf file.

pp 13, ln 312-313 – should read “... are influenced by similar dominant meteorological factors...”

pp 14, ln 318 – should read “the higher the local PM2.5 concentrations,”

pp 14, ln 322 – should read “spring and summer are comparatively low.”

pp 20, ln 410-413 – this sentence is a bit unclear.

pp 22, ln 501 – this wording is unclear.