

General comments

I would like to suggest adding a word 'detaching' or a synonymous in front of 'contributions' in the last part of title. The authors argue changes in PM2.5 trends when the meteorology is corrected throughout the manuscript rather than quantifying the amount of contribution from meteorology. Eventually readers could distinguish the contribution of meteorology at the end of the manuscript, the addition of a word would make it more straightforward based on how the manuscript was written.

Alternatively, expressions such as '12% weaker than in the original data' could be reworded as 'attributing additional 12% decrease to meteorology.' However, such expression was used frequently in the manuscript (e.g., L27-30, L199, L237) so the corrections would be somewhat broadscale and authors should pay great attention not to make confusion.

Suggestions

L40: complicated → biased

L68: Add a closing sentence describing the aim and the scope of this study.

L142 and Fig.1: colorbar is inappropriate to the explanation. Use finer scale.

L153: any discussion on increased CO in Sichuan in 2013-2015?

L167: northern China ← this refers which region defined in this study?

Section 3.2 and Fig.4: What about not showing $-0.4 < r < 0.4$ in the figure as they are not meaningful? Also, the explanation could be biased because correlation coefficients smaller than 0.4 were used when analyzing.

L188: other meteorological variables ← can you explain explicitly?

L212 and 215: it is difficult to see 2015-2017 flattening and increase from Fig.6. Looking together with Fig.2 helps.

Figure 2: why PM2.5 observation is thicker than others? Please explain.

Technical corrections

L20: CO → Carbon monoxide (CO)

L71: carbon monoxide (CO) → CO