

Interactive comment on “Exploring the inconsistent variations in atmospheric primary and secondary pollutants during the G20 2016 Summit in Hangzhou, China: implications from observation and model” by Gen Zhang et al.

Anonymous Referee #3

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The authors evaluated the effectiveness of pollution control measures implemented during the G20 2016 Summit in Hangzhou, China. Field observation on NO_x, SO₂, CO, VOCs, PM₁₀, PM_{2.5}, PANijñand O₃ were carried out. OBM and PMF model tools were used to analyze the data. It's valuable to publish in this journal. However, the English writing should be improved before publication.

Specific comments:

Line 269-270: CO showed a gradual increase (~20.7%), which is not consistent with

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SO₂, NO₂, and PM. It seems that CO sources are very different with NO_x and SO₂ sources in Hangzhou or pollution controls are not effective on CO reduction. Could the authors give more explanations? I also notice that 48i analyzer is used for the measurement. As we know, zero drift is inevitable for this kind of principle. So, pls provide the quality control measures during the observation.

In Fig. 1, TVOCs is needed to add.

It seems that PM₁₀ and PM_{2.5} results play no roles on the data analysis in the whole context.

Fig. S1 is better in the manuscript than in the supplement information.

Fig.5, Similar fuel combustion contributions are found in DG20-II and AG20, which is very different with that in BG20. Why?

Much more contents are done in section 3.4 (VOCs source identification and OFP quantification). How do those results relate with the inconsistent variations in the primary and secondary pollutants?

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