Anonymous Referee #2

Based on the unique case of G20 held in Hangzhou, the authors systematically evaluated the effectiveness of powerful control measures implemented by the Chinese State Council on reducing atmospheric primary (i.e., NO_x, SO_2, and CO) and secondary pollutants (PAN and O_3) after discriminating the effect of meteorological condition during G20. Then, they explored the underlying mechanisms of photochemical pollution including PAN and O_3 by using MCM, appointed the source of VOCs by PMF model and further calculated the OFP for these various sources. The observational dataset are valuable, and the manuscript reports the measurement results well. In summary, the topic is very interesting and the manuscript is also of good quality. Thus I strongly recommend it could be published in the ACP after minor revision below.

Response: Thanks so much for your positive comments on our manuscript. According to your suggestions, we made the corresponding corrections in the revised manuscript.

1) line25-26 reconstruct this sentence as ": : :during G20 Summit provide us a unique opportunity to address this issue. Surface concentrations of: : :"
Accept

2) line 53 add the phase "matter" after "particulate"
Accept

3) line 89-90 rewrite this sentence
According to your suggestion, we have corrected it as "During these events, the effectiveness of a series of emission control measures on reducing atmospheric primary pollutants, in particular to the particulate matter, has been comprehensively evaluated, but less on photochemical pollution." in the revised manuscript.

4) line 120-121 add some detailed information about the $PM_{2.5}$ measurement.
Accept. We added the statement that "Ambient $PM_{2.5}$ samples were collected using co-located Thermo Scientific (formerly R&P) Model 1405D samplers. PM-Coarse and $PM_{2.5}$ particulate, split by a virtual impactor, each accumulate on the system's exchangeable TEOM filters. By maintaining a flow rate of 1.67 L min^{-1} through the coarse sample flow channel and 3 L min^{-1} through the $PM_{2.5}$ sample channel, and measuring the total mass accumulated on each of the TEOM filters, the device can calculate the mass concentration of both the $PM_{2.5}$ and PM Coarse sample streams in near real-time." in the revised manuscript.

5) line 124-125 the abbreviate phase of "EMC" and "EEC" are not consistent with those below. Revise them.
Accept. We revised this sentence as "To quantify the separate effects of meteorological condition (EMC) and emission control measures (ECC) on observed particulate concentrations,…" in the revised manuscript.