

Interactive comment on “Typical types and formation mechanisms of haze in an eastern Asia megacity, Shanghai” by K. Huang et al.

Anonymous Referee #2

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The manuscript combined multiple-technique to study three types of haze pollution and the results are interesting and useful. This reviewer has only some minor comments for authors considering. Page 21721, lines 1-19 could be moved to supporting information. Page 21722, lines 1-2 could be discarded since the two sentences are deviating from the main theme of discussion. Page 21722, lines 4-5, “The mass ratio of PM1/PM2.5 ranged from 0.90 to 0.99, indicating 5 particles tended to accumulated in smaller sizes.” The sentence needs to rewrite because the meaning is not clear to this reviewer. Page 21724, lines 1-4, the paragraph does not read well and the information presented is very negative. This reviewer believes that the authors are combining aerosol optical and chemical properties to support their classification later. This is fine, but it does not mean that the classification presented early is problematic. Rewrite. Page 21724, lines 7-8, references are missing (e.g., Gao et al., 2011, AE, 45, 3069-3077). Page 21725, C9276

lines 3-5, here are too speculated and more evidences are needed. Page 21725, line 8, not “ANYWAY”, should be “However” Page 21725, lines 13-14, this reviewer cannot follow the logic and the potential impact of dust storm should be elaborated. Section 2.5 is informative, but does not focus. Suggest making some revisions. Page 21735, What is the role of “The problem for the present and future would be nitrogen oxides.’? Lines 6-19 are deviating from the main theme and need to be reorganized. Page 21738, “In this study, although there was no OC data of high time resolution available due to restrictions of instruments, we believed that CO could be regarded as proxy of organic aerosol during the biomass burning events, which indirectly linked itself to the particle formation.” This reviewer still has concern on this statement. Please consider to revise. Page 21738-21741, This reviewer cannot understand how Section 4 links to the main theme. Please clarify.

Interactive comment on Atmos. Chem. Phys. Discuss., 11, 21713, 2011.