

Interactive comment on “Ionic and carbonaceous compositions of PM₁₀, PM_{2.5} and PM_{1.0} at Gosan ABC superstation and their ratios as source signature” by S. Lim et al.

Anonymous Referee #2

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The manuscript presents an interesting assessment of OC and EC at Gosan station. I have only a few remaining comments, since most of my original suggestions were addressed prior to the discussion phase.

- page 20529, line 25: the OC/EC ratios obtained are really low, and the authors state this could be due to a relatively higher EC concentration than OC in this study. What is the reason for this? This needs to be justified. These low OC/EC ratios are typical of heavy traffic sites in EU, very far from what would be expected at Gosan supersite.
- page 20536, line 6: what does "reduced burning sources" mean? Even if mass concentrations are low, there could be a good correlation. Please clarify.
- Table 4: this

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analysis should probably be done for the EC1/PM and EC2+3/PM ratios, not for the absolute concentrations, given that the absolute concentrations may be driven by other factors and not only by precipitation. If thenon-rainy days were mostly strong advection days with low PM concentrations, or if conversely they were stagnation periods with high PM, the results would probably be very different. The authors could try this other approach. - page 20537, line 7: "all air masses", statistical evidence needs to be provided to back this statement up. - page 20540, line 25: "indicator of continental effects": if the ratio EC2+3/EC1 is an indicator of continental effects, why is it lower than average for Beijing-typical air masses? This interpretation seems contradictory.

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