

Our response to the comment of Referee #2:

Comment: The authors made substantive and compelling argument in their revised manuscript to support their implied causal relationships in relation to WSON sources (and processes) of marine origin. The manuscript is now very significantly improved and deserves to be accepted for publication.

As for technical corrections I would like to note that "some positive correlation" presented in Figure B (response) should be presented with "p-value" which determines significance or insignificance of the correlation.

Reply: We appreciate the referee's assessment and comment. According to the referee's technical comment, we added a p-value for the relation between sulfate and WSON concentrations in coarse particles. Although the p-value showed insignificance of the correlation, we believe that it does not affect our conclusions of the manuscript. The corresponding sentence has been revised as follows:

P.5, L.31; *“...On the other hand, sulfate and WSON concentrations in coarse particles showed some positive relationships, although the number of data is limited and the relation is not statistically significant ($p = 0.103$).”*