

The authors present a reorganized manuscript of a study of TSP aerosol observations at a location in the northern South China Sea. The focus of the reorganization of the paper has been on presenting a clearer description of the results and a more thorough description of the methodology used in the study. In particular, they have added additional methodological detail in two supplemental sections that provide additional information on sample collection and analysis, and the use of back-trajectory analyses. They have also removed redundant information and presented the results in more clearly defined sections.

The authors adequately addressed most of the earlier concerns raised about the manuscript, though several minor issues remain. Overall, the presentation of the key phenomena in TSP aerosol variability that were observed are now presented effectively. There is not substantial treatment of the limitations TSP aerosol observations have in regards to interpreting the relative importance of various sources in the region. However, this facet of the analysis may not be necessary in order to present information on TSP and its variability in the region, or to comparisons of the results to other regions. I therefore recommend the manuscript to be published subject to minor corrections.

Specific comments:

1. Supplement S1. The additional description in the supplemental information adequately explains the sample collection process. I am used to seeing more of this in the main manuscript methods, but the authors may leave this here as long as they explain this in section 2.2.

2. Supplement S2. I believe TrajStat is an analysis package that is built on top of the NOAA HYSPLIT model. The details of how this was run are still needed. In particular, HYSPLIT version number, the meteorological dataset used (e.g. Gdas1 is often used), and the receptor height. If any sensitivity testing (e.g. time of day) was conducted to validate representativeness of the data, that could be included as well, though for this island receptor it may not be necessary. At minimum, a short mention and reference to HYSPLIT should be included in section 2.4.

3. Use of the NAAPS model for figure S1 should be mentioned in the methods somewhere.

Typos and minor correction suggestions:

L28: "Air mass source region" rather than "air masses"

L32: Should be "77.4% of Na⁺ and 99.3% of Cl⁻"

L43: "... anthropogenic sources, such as terrestrial..." could be "... anthropogenic sources, include terrestrial..."

L59: Should refer to boreal winter, northern hemisphere winter, or similar term, rather than just winter.

L61: Again, clarify the “cool season” refers to the boreal winter cool season, or the cool northeastern monsoon phase, etc.

L180: Is “local” intended here? Source regions were from remote ocean regions, rather than local regions?

L187: Should be “important”

L334: Secondary inorganic aerosol for the SIA acronym is not defined earlier.

L429: Consider phrasing as “Chemical composition of one year of aerosol samples...” or similar. Also, the beginning of the conclusion should make clear that results are for TSP aerosol samples (as opposed to PM10, PM1, etc...).

L438: The final conclusion should refer to only the SCS or northern SCS, rather than the wider northern Pacific ocean.

Figure 7. The labels on the chemical species are a bit small and hard to read.