

Interactive comment on “Seasonal variation of black carbon over the South China Sea and in various continental locations in South China” by D. Wu et al.

Anonymous Referee #2

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Review of “Seasonal variation of black carbon over the South China Sea and in various continental locations in South China” by Wu et al.

The paper exams the measured black carbon concentrations in southern China, including a measurement site in southern China Sea. The results are valuable to study the black carbon concentrations in both the background (in the ocean site) and polluted areas (urban sites) to get insights the magnitude of the urban emissions on the regional black carbon concentrations. The paper is well written, and the methods are reasonable. However, the figures need to replotted, and more detailed analysis of results should be conducted. I think this paper can be published after address the following

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comments.

Comments;

(1) The figures need to be re-plotted. For example, in Fig. 1, the lower panel shows the location of the measurement, which is very important information. However, the words are too small, which cannot read by readers. I suggest to add an individual table. (2) All the information in Fig.2 is impossible to read, and should extensively revised. (3) There are large differences of the BC concentrations during the rainy and dry seasons, which is a major portion of the paper. I suggest the Authors should address this issue with more detailed analysis. For example, for the effect of the wind direction, the Authors should give some information regarding the upward emissions to analyze the individual contributions for the measured BC due to transport of pollutants, precipitation, and other factors.

Interactive comment on Atmos. Chem. Phys. Discuss., 13, 17375, 2013.

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