

Interactive comment on “Observations of the temporal variability in aerosol properties and their relationships to meteorology in the summer monsoonal South China Sea/East Sea: the role of monsoonal flows, the Madden–Julian Oscillation, tropical cyclones, squall lines and cold pools” by J. S. Reid et al.

Anonymous Referee #2

Received and published: 30 October 2014

1. In this study, the nature of southwest monsoonal aerosol in the South China Sea was evaluated via the 7SEAS program. Two drier periods occurred with higher aerosol concentrations were also observed. The different mechanisms of convection suppression: lower free-troposphere dry-air intrusion from the Indian Ocean, and large-scale

C8627

TC-induced subsidence were also verified. If possible, authors could provide the detail interpretation to address the effect of aerosol in this issue for clarity. 2. During the ambient sampling periods, the significant biomass burning events were observed in the research area. In addition to the MODIS+MISR data presented in this study, are there any results regarding the chemical or components analysis of sampling aerosol can be discussed in the study? 3. In this study, the implications for aerosol, cloud, and precipitation interaction were further evaluated. The potential for confounding studies is also significant. Aerosol injections into the SCS/ES regions were clearly modulated by this research. However, regarding the effect of the climate change and extreme weather event related to this study. Could authors provide more interpretation and information to address this issue?

Interactive comment on Atmos. Chem. Phys. Discuss., 14, 20521, 2014.

C8628