

Interactive comment on “Chemical climatology of the southeastern United States, 1999–2013” by G. M. Hidy et al.

Anonymous Referee #2

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The paper “Chemical climatology of the southeastern United States, 1999–2013” by Hidy et al. presents an overview and update of a long term measurement program. These data help document the evolving chemistry in this region, which has undergone significant changes in this time period due to air pollution controls. They also provide context for the SOAS experimental program in 2013. The paper is generally well written and includes discussions of a wide range of interesting data products. Pg. 17107 line 28, the phrase that night time winds transport ozone for several days is confusing. I assume you mean that high nighttime winds may persist for days, leading to large ozone transport. Pg. 17108 line 7. SOC has not yet been defined and is not in the glossary. Pg 17112 line 28–29. Does inconsistent mean it varies from year to year, or that OC is different than EC. How can an increase to summer be delayed to Fall?

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Pg. 17145 Fig. 1. What do the gray regions mean? Why do they have boundaries? Pg. 17118 line 6. What does the word “this” refer to? Pg. 17123 line 16. The period after 0600 should be a comma. Pg. 17125 line 18. Do you mean 23 June? Line 24. Power plant “plume” Pg. 17127 line 20. This what? Ample water, or water at night? Supplement: Many of the figures, such as S1,3,5,6,7,8 end in 2011. If possible they should be updated to 2013.

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