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## Interactive comment on "Reactive oxygen species associated with water-soluble PM2.5 in the southeastern United States: spatiotemporal trends and source apportionment" by V. Verma et al.

## M. Pardo (Referee)

levinmichal2@gmail.com

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The paper "Reactive oxygen species associated with water soluble PM2.5 in the south-eastern united states: spatiotemporal trends and source apportionment" by Verma et al. assessed the potential of the water-soluble fraction of atmospheric fine aerosols in the southeastern US to generate ROS and identify major ROS associated emission sources. The study used a very large data set, after a year of sampling in several different sites and seasons. PM chemical components indicated diverse ROS reaction

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at these sites in different seasons. Biomass burning and secondary aerosol formation were quantified as the strongest sources of DTT activity. Several correlations were used to identify ROS activity by DTT and WSOC in summer.

The article is well written, it uses a large amount of samples which could explain variations seen in other small scale studies. Sampling was performed in several different locations, with different aerosol content. Analysis and correlations were performed comprehensively. Minor revitions:1. Graphs of the same figures should be at the same panel nominated a. b. ect. there is no need for:"Figure 2. Continued" 2. Since paragraphs are long, please add the number of graphs you refer to, in parenthesis, as a reminder to which figure you are referring to

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