

Interactive comment on “Speciation of organic aerosols in the Saharan Air Layer and in the free troposphere westerlies” by M. Isabel García et al.

Anonymous Referee #1

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This study focused on organic aerosol composition in the free troposphere from airflows transported by westerlies over the north Atlantic as well as airflows from the Saharan Air Layer. Organic tracers were used to identify possible atmospheric particulate matter sources. Saharan Air was dominated by dust and only contained about 1.5% organic mass. The Westerlies had significantly higher amounts of organic mass fraction, most of which was dicarboxylic acids and isoprene SOA. These measurements highlight the importance of atmospheric transport as an aerosol source.

Minor comment: In figure 2 and 3 you claim that there are multiple tendencies that can reasonably be explained to be from different source locations, however the argument is weak if you do not have some further evidence to support that there are multiple tendencies rather than no correlation when fitting all the data. This is especially important since there are such a few amount of samples. Did you actually find evidence for this

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in back trajectories or any other analysis.

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