

Interactive comment on “Black carbon aerosol mixing state, organic aerosols and aerosol optical properties over the UK” by G. R. McMeeking et al.

Anonymous Referee #2

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This manuscript deals with analysis of results of two research flights over UK. Analyses include BC, mixing state of BC, chemical composition and optical properties. It is interesting paper and analyses are well done. Though, in my opinion the scientific outcome for bigger picture is quite shallow since only few flights are analyzed, but this is the case in this kind of studies. Manuscript is well written and organized. Overall I think this is certainly suitable to be published in ACP. I would like the authors to consider few points: Why these two day were picked for the analyses, and why only two ? Figures 3,4 and 6 are not very informative, could authors consider using some other illustration method like in figures 2 and 5 were done. Introduction line 13, . . . McMeeking et al. 2011), there are two papers from McMeeking et al. 2011 in reference list, which one ? Page 15005, lines 12-14. Would authors like to explain these possibilities more detailed and maybe give their favorite explanation Page 15006, line 4, how well $\tau_{A\lambda}^{-1}$ dependency

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suites in this case ? Why just this ?

Interactive comment on Atmos. Chem. Phys. Discuss., 11, 14991, 2011.