Exploring the vertical profile of atmospheric organic aerosol: comparing 17 aircraft field campaigns with a global model

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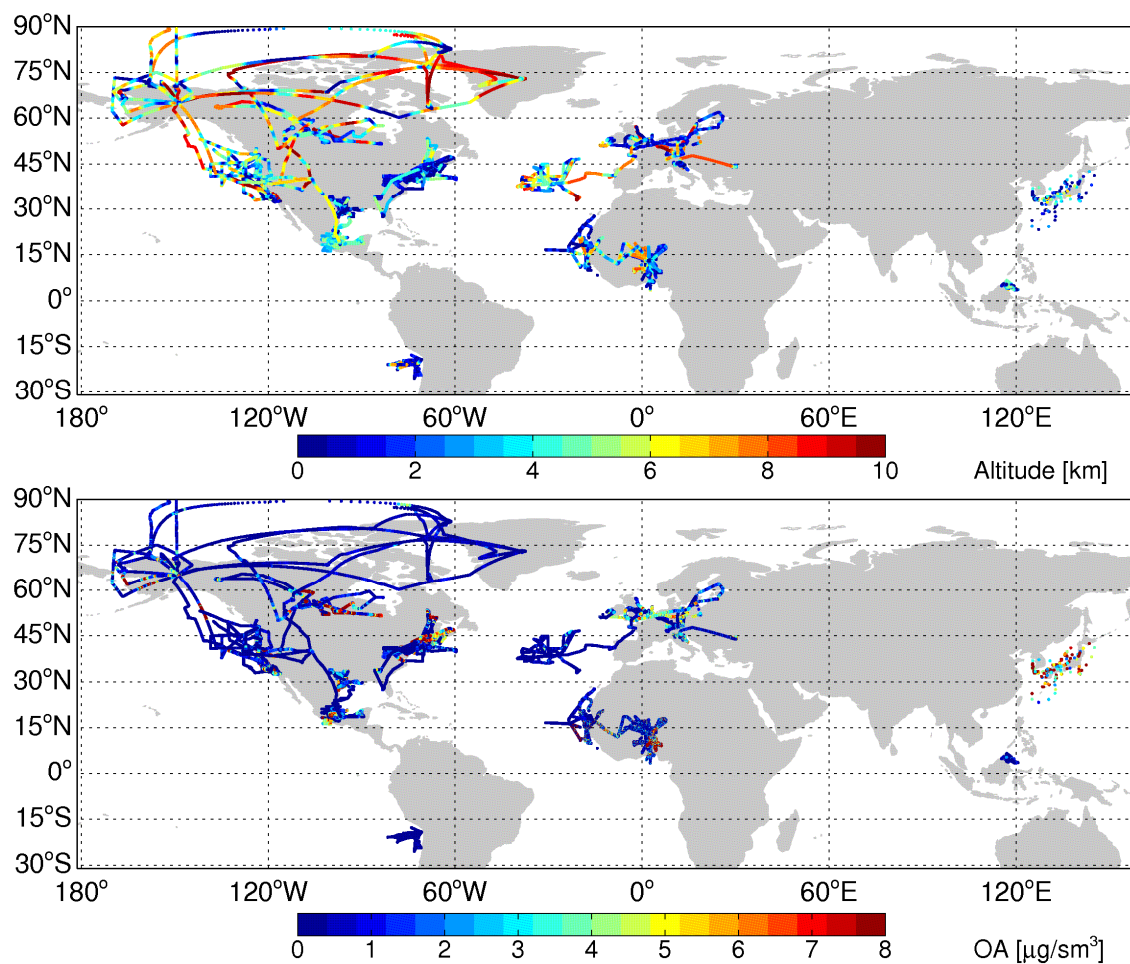
Figure S1: Flight tracks for the 17 aircraft field campaigns examined here colored by aircraft altitude (top) and observed OA concentrations (bottom). Color scales are saturated at their respective maximum values.
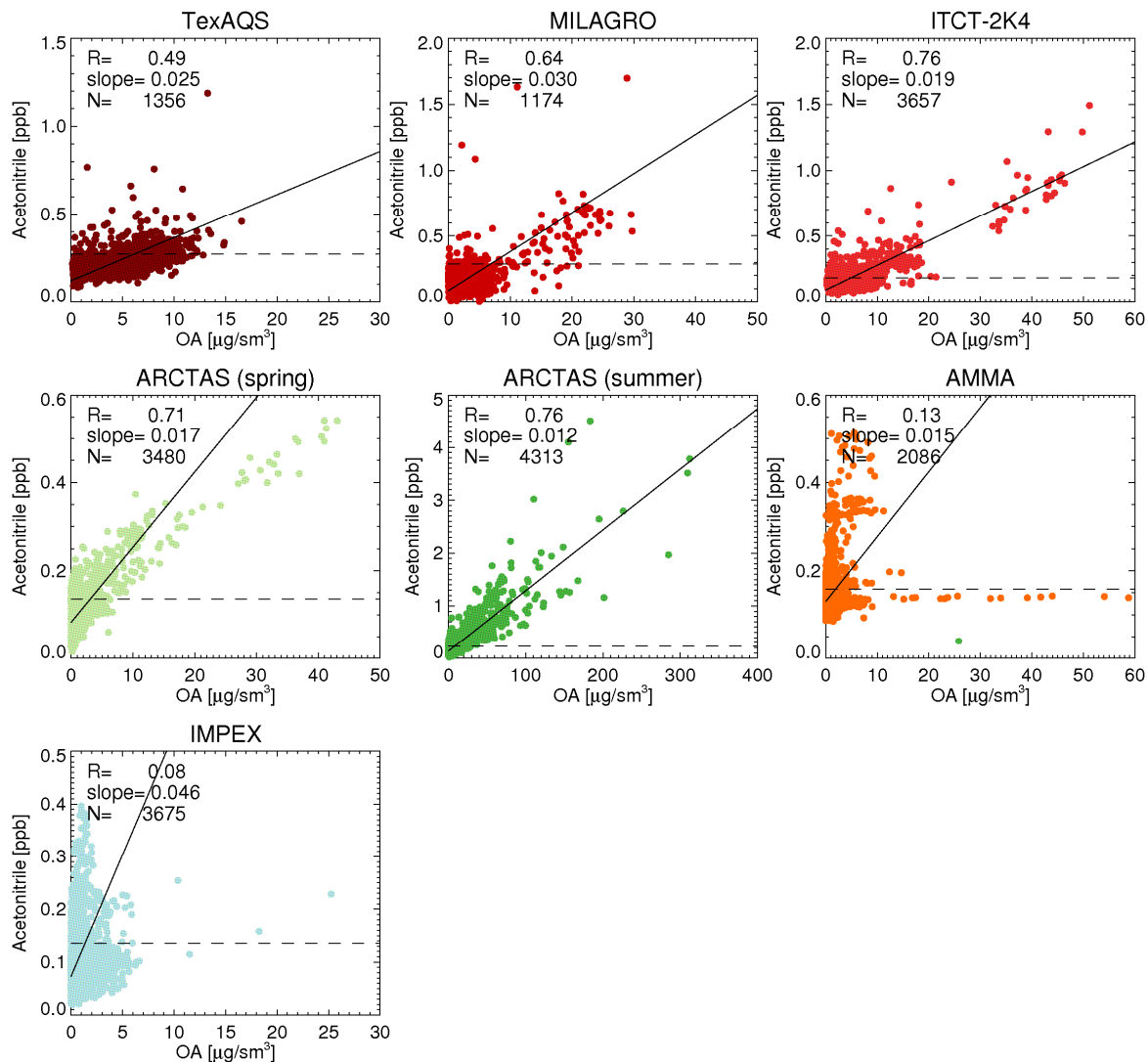
Figure S2: Scatter plot of observed acetonitrile and OA concentrations for seven campaigns. Correlation coefficients and slopes from a reduced-major axes fit shown in inset, line of best fit shown in black. 80th percentile acetonitrile concentrations for each campaign are indicated with a dashed line.
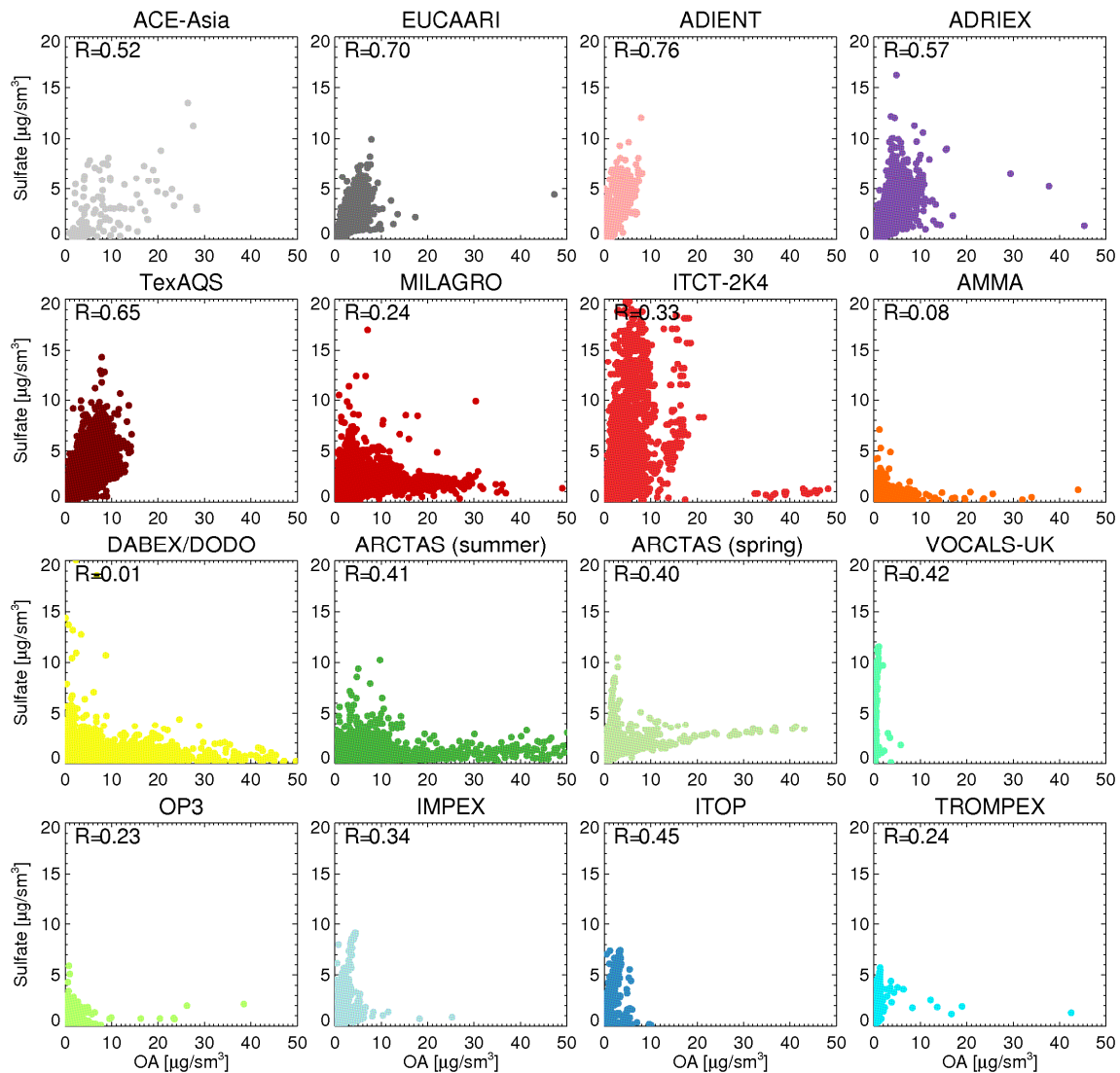
Figure S3: Scatter plot of observed organic aerosol (OA) to sulfate concentrations for 17 aircraft field campaigns. Correlation coefficients (R) shown in inset.
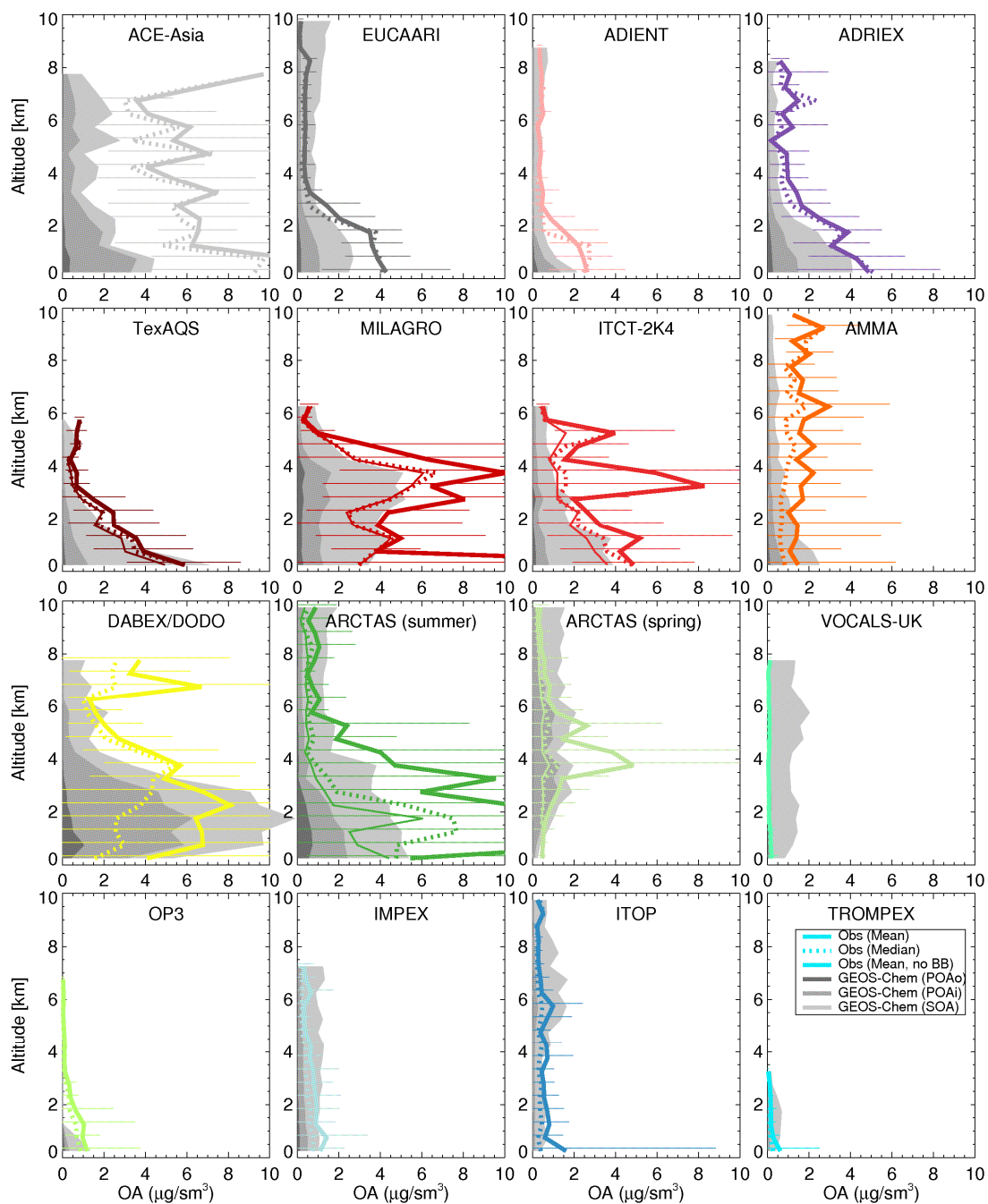
Figure S4: As in Figure 4, mean simulated OA (grey) is compared to observed (color) concentrations for 17 field campaigns, however the model simulation here includes an additional source of biogenic SOA (BSOA) of ~ 100 Tgyr^{-1} estimated by scaling simulated BSOA by a factor of 4.