Supplementary Information

Biogenically driven marine organic aerosol production over the Northwest Pacific Ocean

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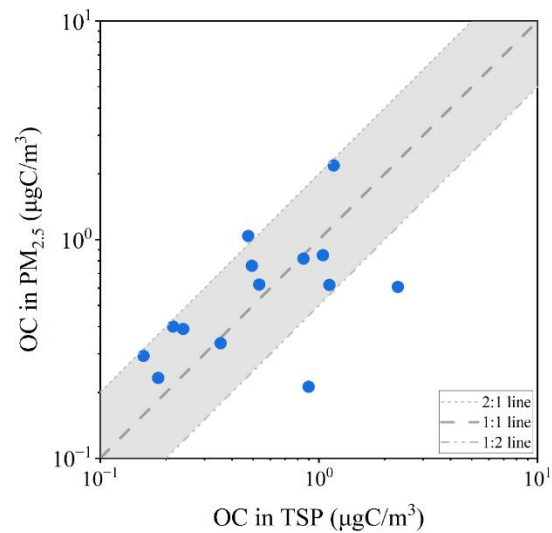

25 **Figure S1** Comparison of the OC concentrations in the PM$_{2.5}$ samples and the TSP samples during the spring observation (Cruise I)

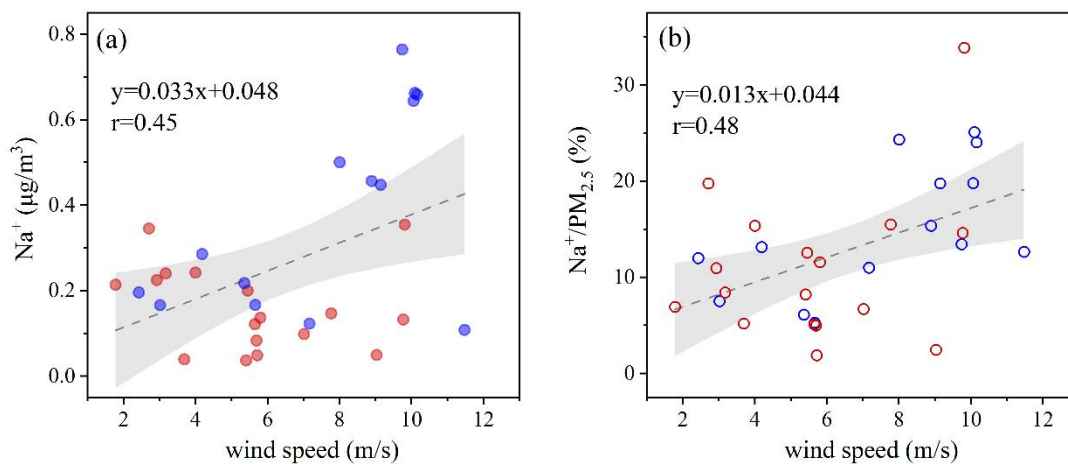



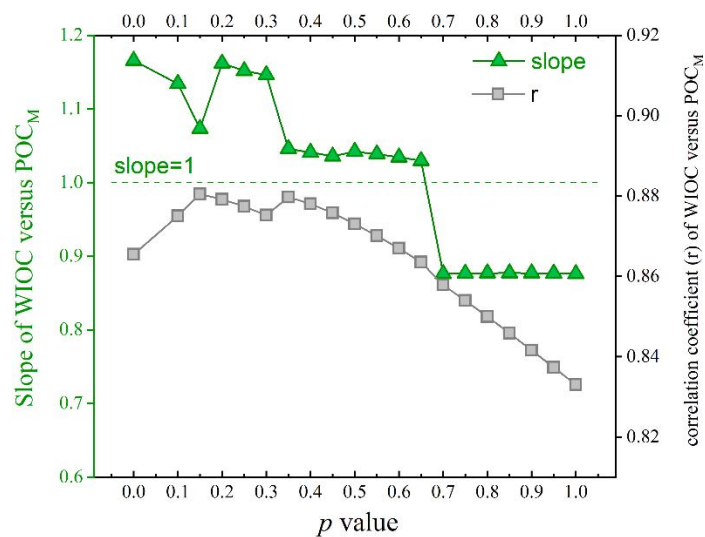
Figure S2 The variation of Na$^+$ concentration and Na$^+$/PM$_{2.5}$ as a function of the wind speed during the cruises.

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Figure S3 The variations of the fitting line slopes and correlation coefficients (r) of WIOC and estimated POC_M, using Eq. 3 with the p value changing from 0−1.
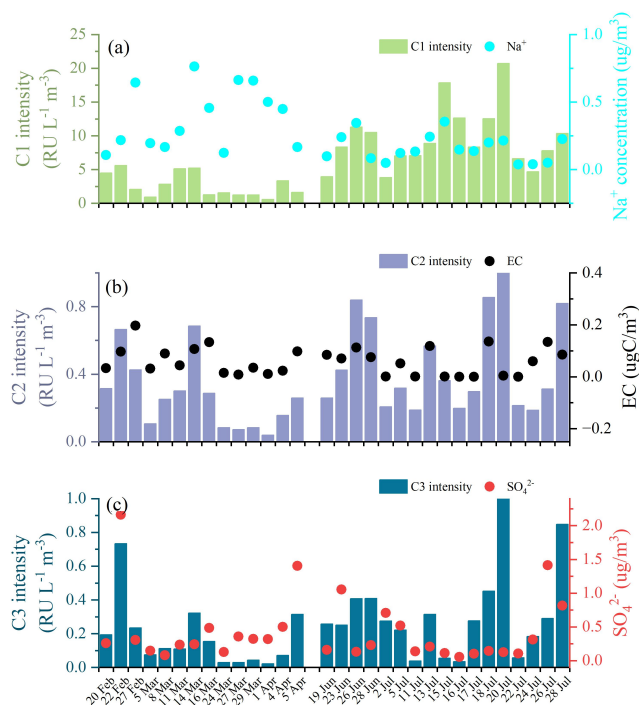
Figure S4 Variations of fluorescence component intensity identified by three-component solutions based on PARAFAC

35   model analysis and related aerosol components: (a) C1 and Na^+, (b) C2 and EC, (c) C3 and SO_4^{2-}.