

## Supplementary Information

2

# 3 One-year measurement of organic and elemental carbon in size-segregated 4 atmospheric aerosol at a coastal and suburban site in Southeast China

5

6 Zhenchuan Niu <sup>a</sup>, Fuwang Zhang <sup>a</sup>, Xiangrui Kong <sup>b</sup>, Jinsheng Chen <sup>a,\*</sup>, Liqian Yin <sup>a</sup>  
7 and Lingling Xu <sup>a</sup>

<sup>a</sup> Key Lab of Urban Environment and Health, Institute of Urban Environment, Chinese Academy of Sciences, Xiamen 361021, China

<sup>b</sup> Department of Chemistry, Atmospheric Science, University of Gothenburg, SE-412  
96, Gothenburg, Sweden

12

13 \*Corresponding author phone/fax: +86 592 6190765; e-mail address:  
14 jschen@iue.ac.cn (J.S. Chen)

15

16 **Figure Captions**

17 **Fig. S1.** Temporal variations of the contributions of carbonaceous fractions to  
18 particulate matter mass in PM<sub>2.5</sub>.

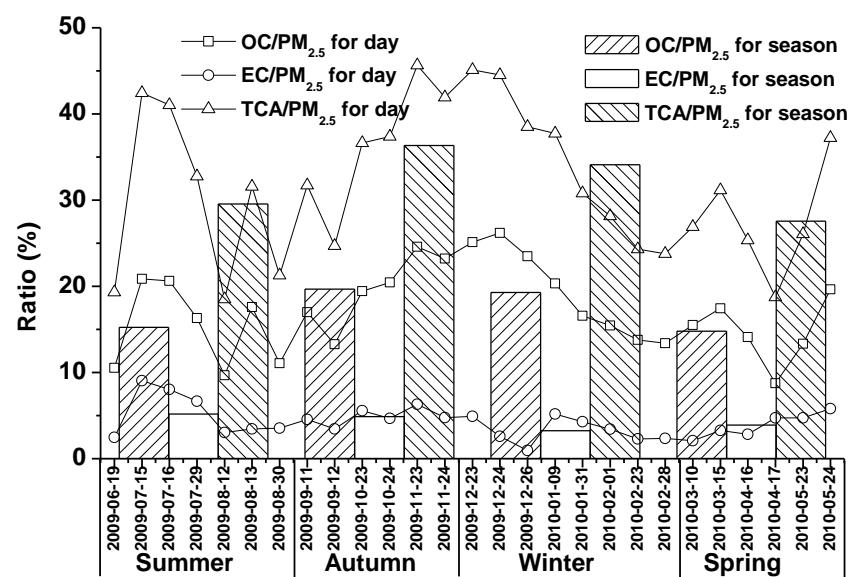
19 **Fig. S2.** Typical back-trajectories of air masses at the sampling site: summer (a),  
20 autumn (b), winter (c), spring (d).

21 **Fig. S3.** Correlation of organic carbon and elemental carbon in PM<sub>2.5</sub> at the sampling  
22 site.

23 **Fig. S4.** Temporal variations of ratios of organic carbon to elemental carbon and  
24 concentrations of secondary organic carbon in PM<sub>2.5</sub> at the sampling site.

25

26

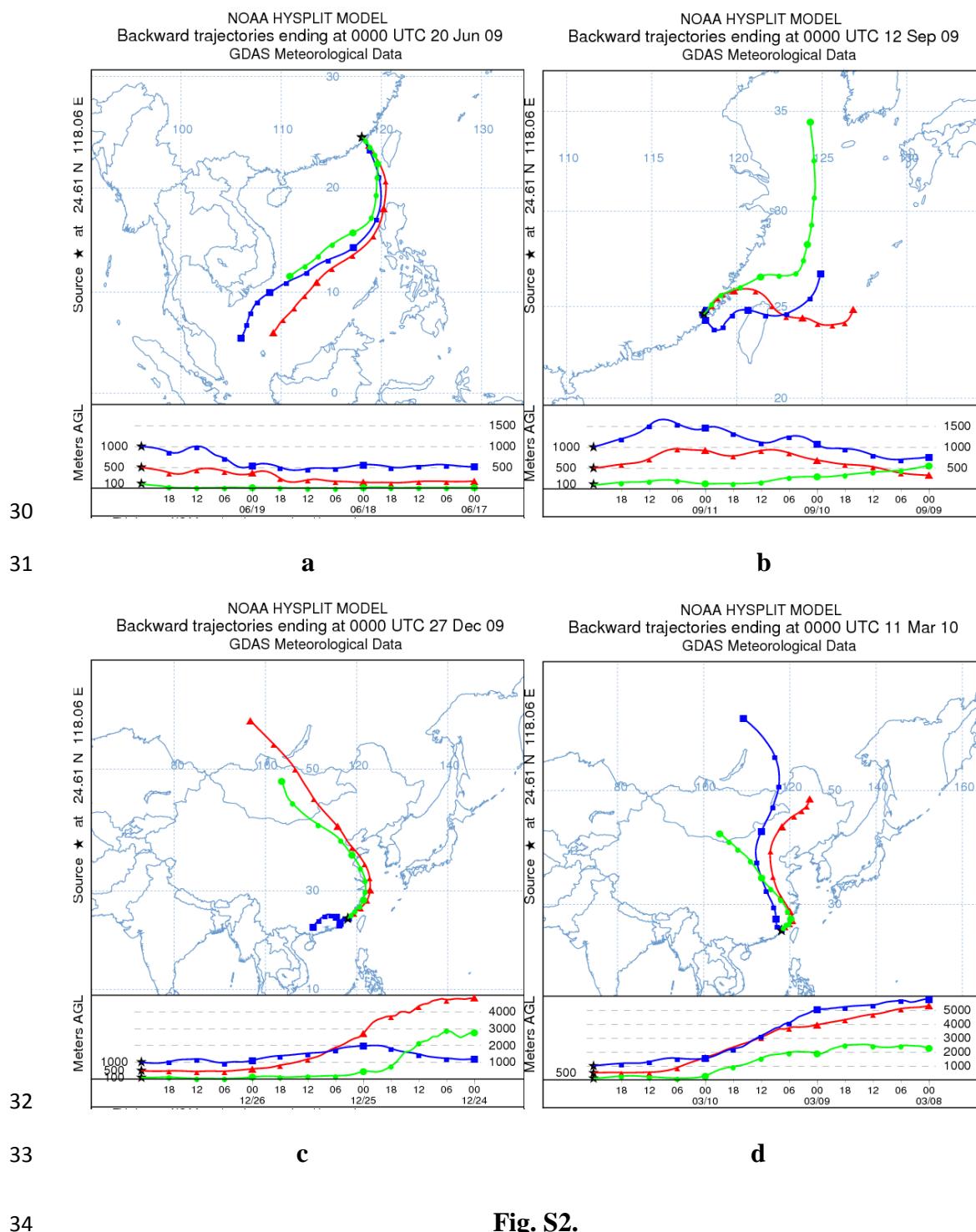


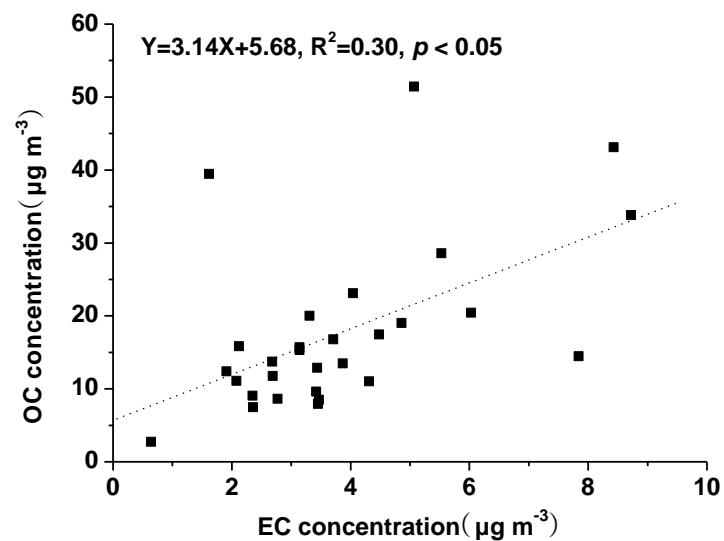
27

28

**Fig. S1.**

29



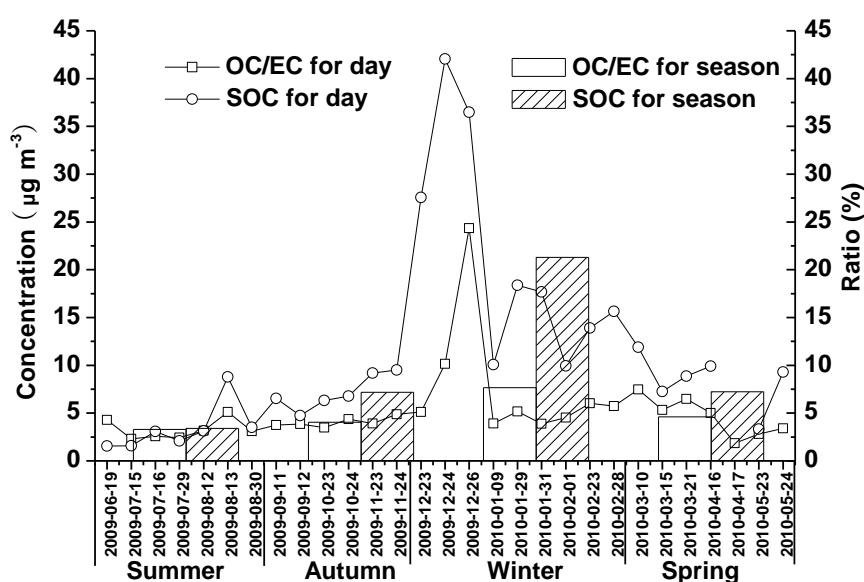


35

36

**Fig. S3.**

37



38

39

**Fig. S4.**

40