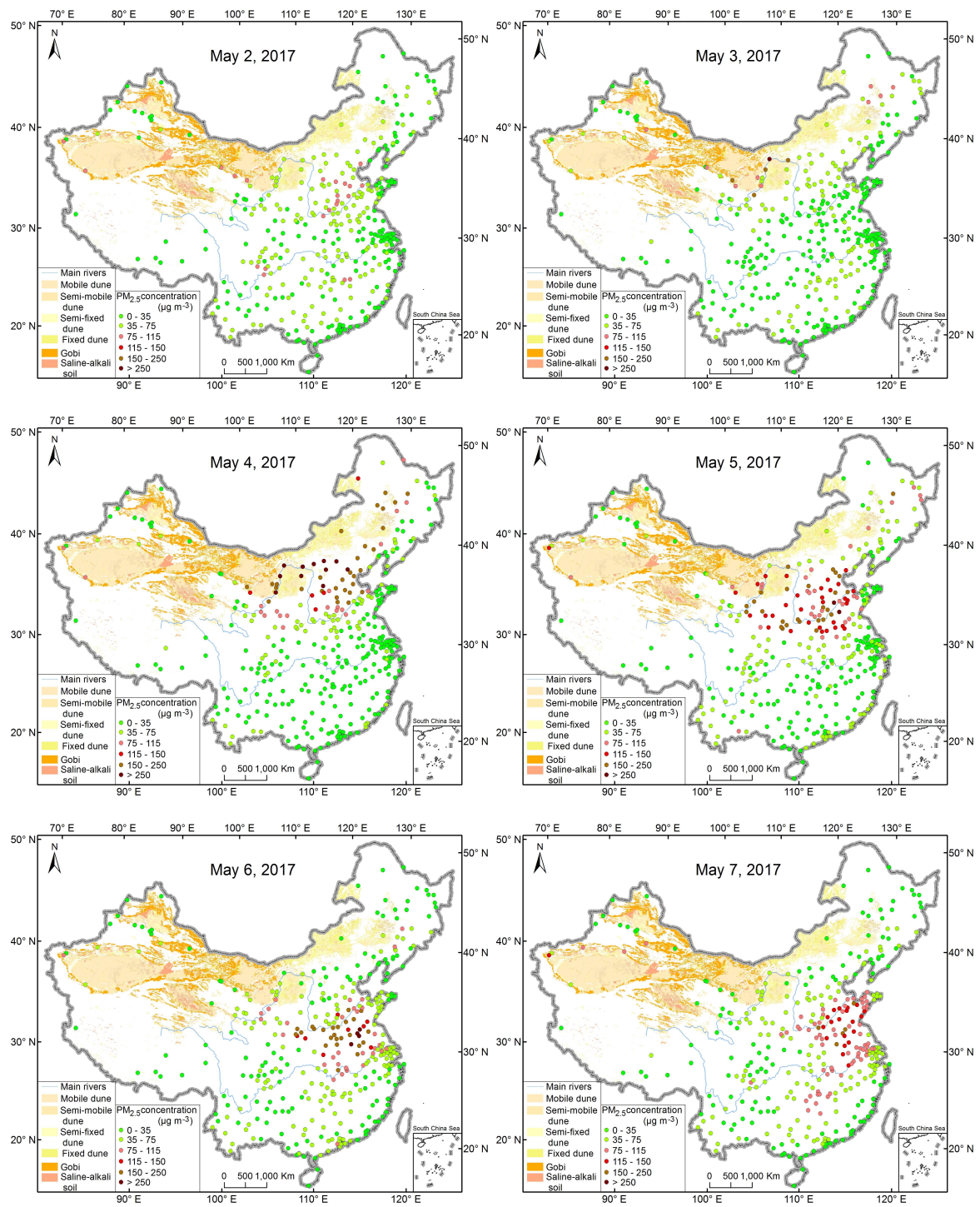Atmospheric
Chemistry
and Physics

Supplement of

East Asian dust storm in May 2017: observations, modelling, and its influence on the Asia-Pacific region

Xiao-Xiao Zhang et al.

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5 **Figure S1.** Observations of PM$_{2.5}$ concentrations across China during 2-7 May, 2017.
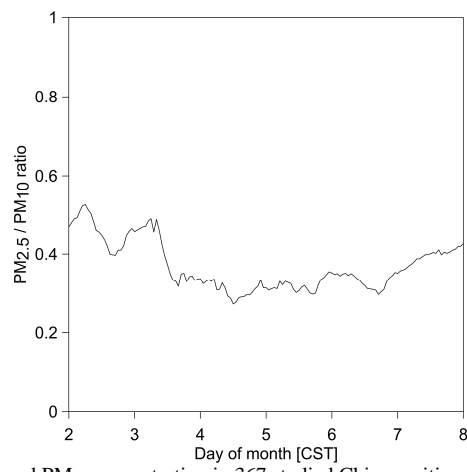
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Figure S2. Changes of ratio between hourly PM$_{2.5}$ and PM$_{10}$ concentration in 367 studied Chinese cities during 2-7 May, 2017.
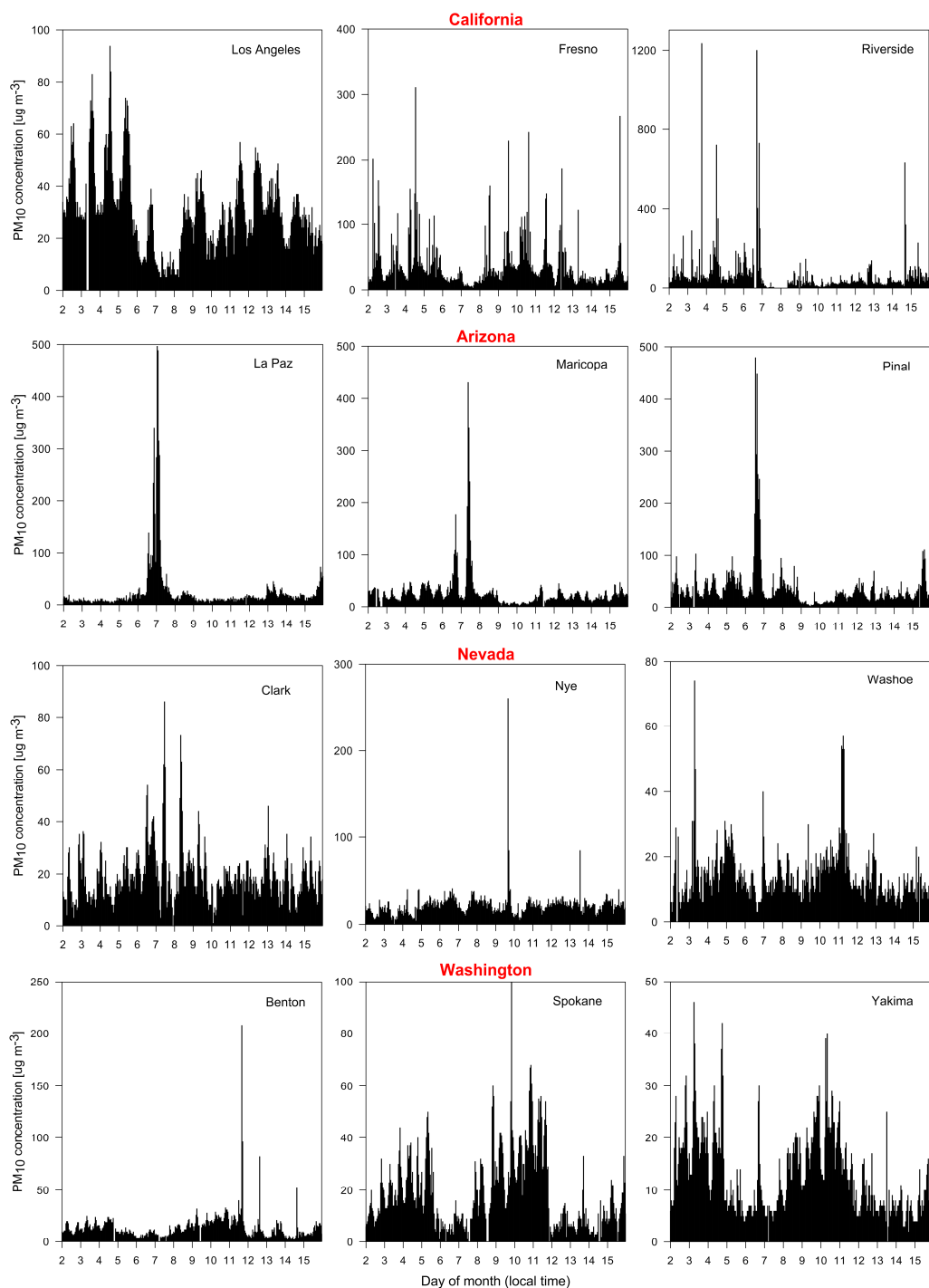
Figure S3. Hourly PM$_{10}$ concentrations change in western coast of United States during 2-15 May, 2017.
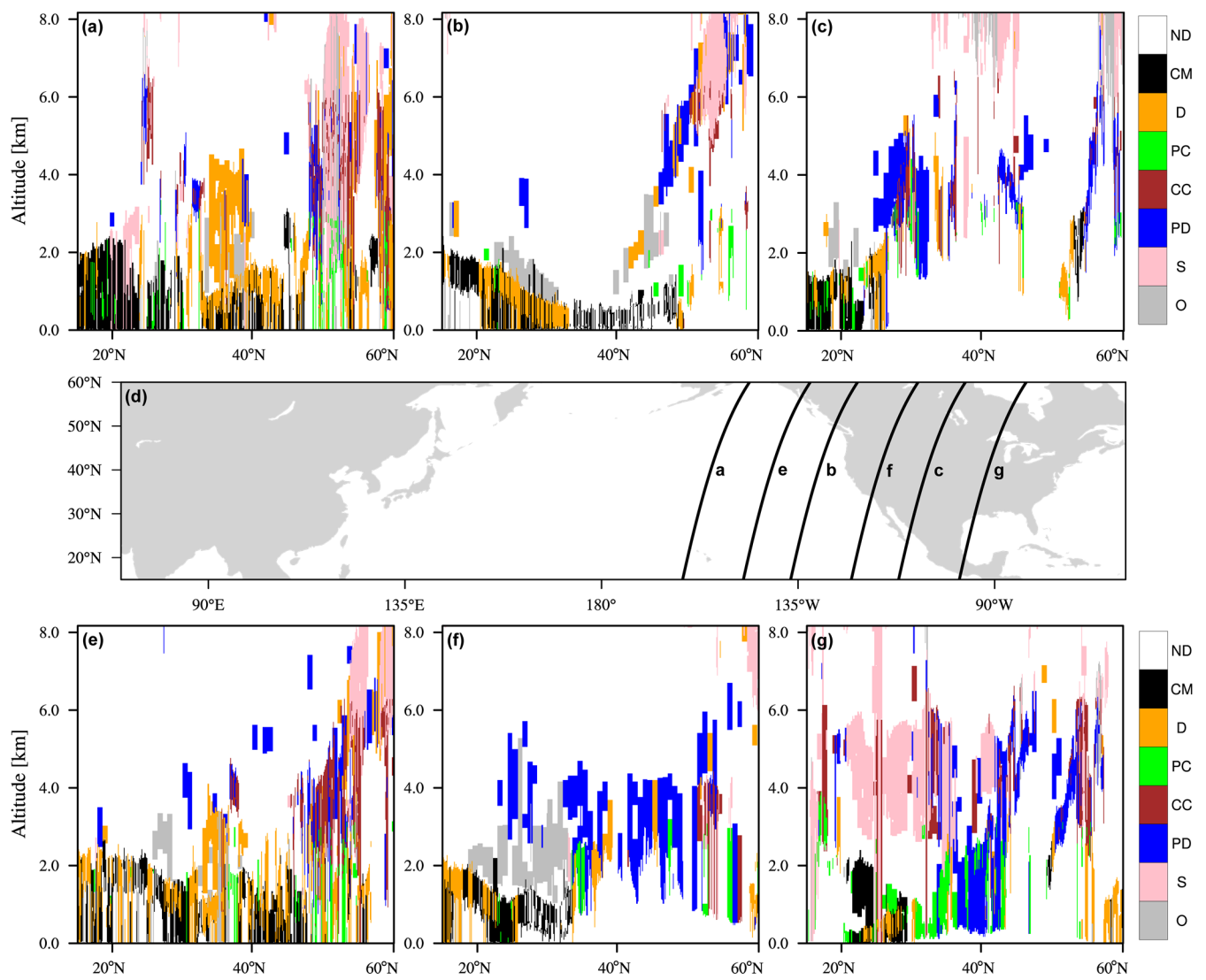
Figure S4. Vertical profiles of atmospheric features derived from CALIPSO satellite VFM data on 9 May (Fig. S4a, S4b and S4c) and 10 May (Fig.S4e, S4f, and S4g), 2017. (ND=Not determined, CM=Clean marine, D=Dust, PC=Polluted continental, CC=Clean continental, PD=Polluted dust, S=Smoke, O=Other). Each Satelllite trajectories of vertical profiles were presented in Fig. S4d.

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