Supplement of

Properties of aerosols and formation mechanisms over southern China during the monsoon season

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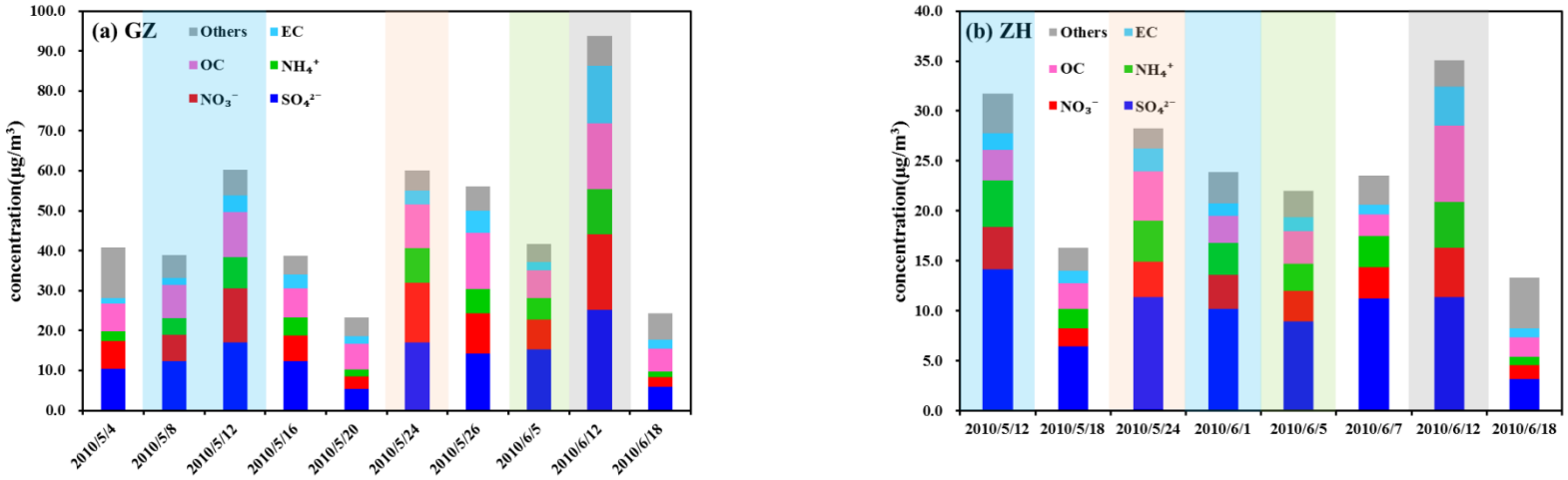
Figures

Figure S1 Time series of size-resolved aerosol compositions at the three sites



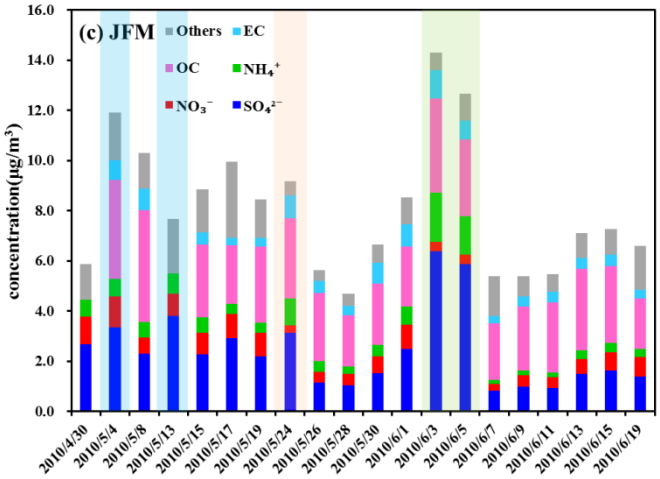
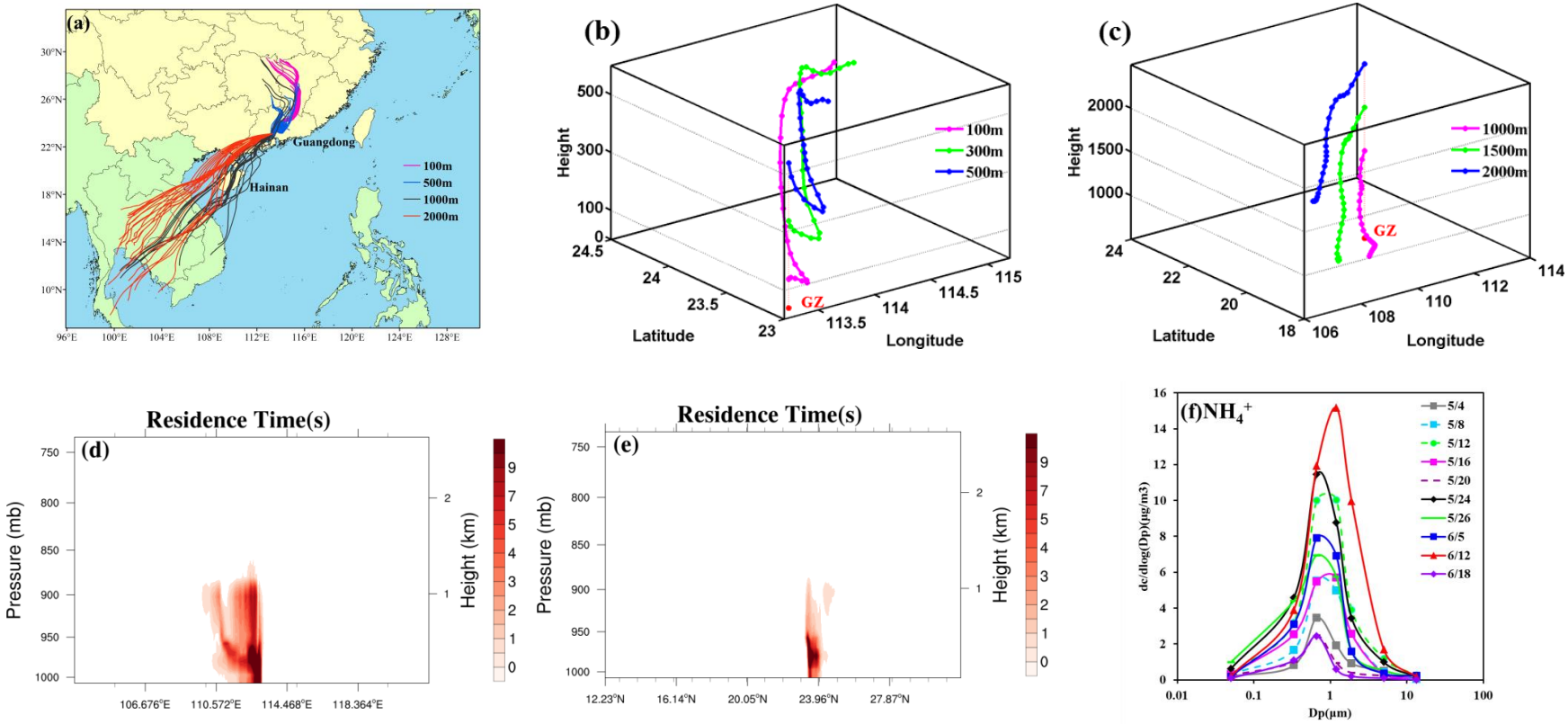
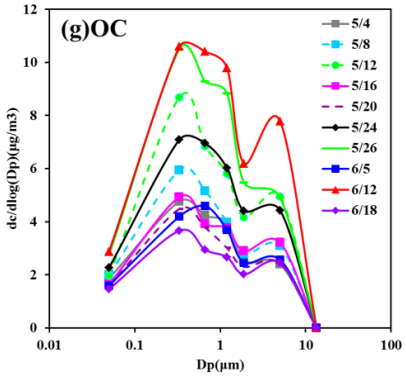
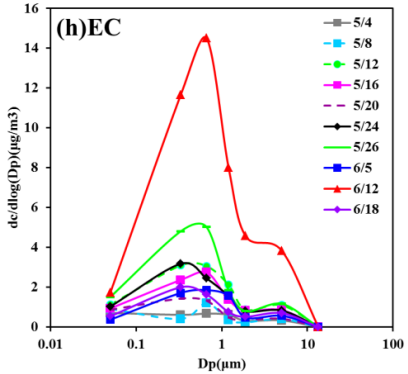
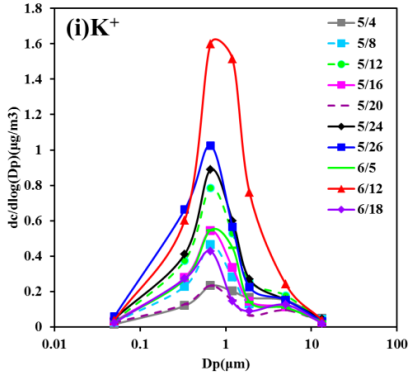

(c) JFM
Others
EC
OC
NH4+
NO3−
SO4 2−
concentration(μg/m3)
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
2010/4/30
2010/5/4
2010/5/8
2010/5/13
2010/5/15
2010/5/17
2010/5/19
2010/5/24
2010/5/26
2010/5/28
2010/5/30
2010/6/1
2010/6/3
2010/6/5
2010/6/7
2010/6/9
2010/6/11
2010/6/13
2010/6/15
2010/6/19

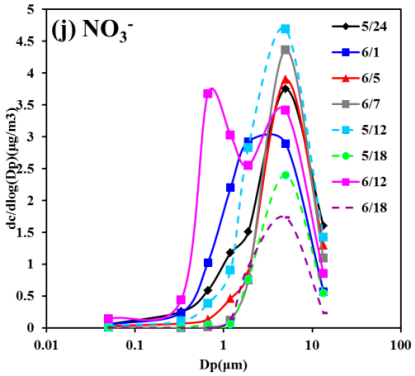
Figure S2 Case study on 12th Jun. in GZ and ZH ((a) 72 h air mass backward trajectories in GZ, (b-c) 3D distribution of 24h air mass back trajectories on lower level (100, 300 and 500m) and on higher level (1000, 1500 and 2000m) in GZ; (d-e) West-east and North-south cross-section of the vertical distribution of the residence times at 23.12° and 113.36° E (just in GZ); (f-i) The mass size distribution of NH_4^+, OC, EC and K^+ in GZ; (j)The mass size distributionof NO_3^- in ZH)




(g)OC
dc/dlog(Dp)(μg/m3)
Dp(μm)
5/4
5/8
5/12
5/16
5/20
5/24
5/26
6/5
6/12
6/18


(h)EC
dc/dlog(Dp)(μg/m3)
Dp(μm)
5/4
5/8
5/12
5/16
5/20
5/24
5/26
6/5
6/12
6/18


(i)K+
dc/dlog(Dp)(μg/m3)
Dp(μm)
5/4
5/8
5/12
5/16
5/20
5/24
5/26
6/5
6/12
6/18


(j) NO3-
dc/dlog(Dp)(μg/m3)
Dp(μm)
5/24
6/1
6/5
6/7
5/12
5/18
6/12
6/18

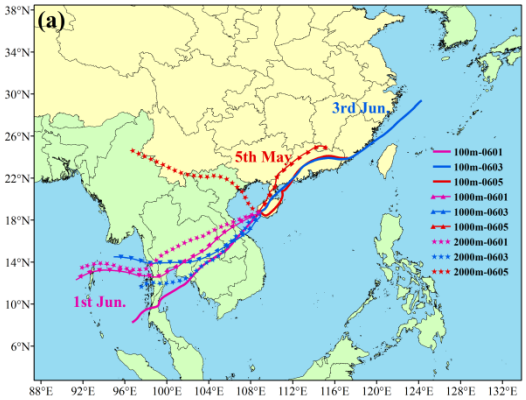
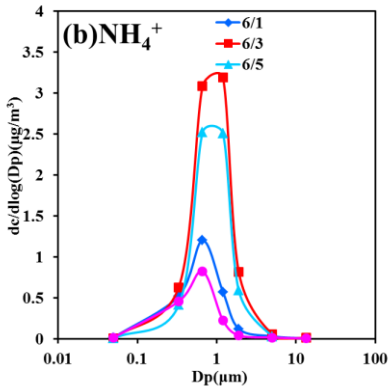
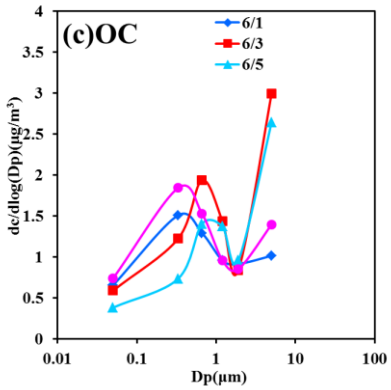
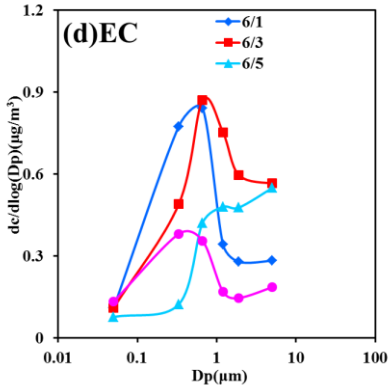
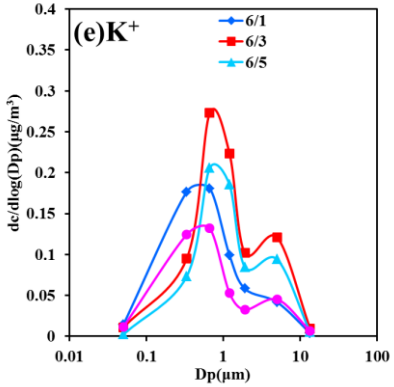



Figure S3 Case study on 1st, 3rd and 5th Jun. in JFM ((a) 72 h air mass backward trajectories; (b-e) The mass size distribution of SO_4^{2-}, NO_3^-, NH_4^+, OC, EC and K^+)