# Long-term real-time measurements of aerosol particle composition in Beijing, China: seasonal variations, meteorological effects, and source analysis 

Y. L. Sun et al.<br>Correspondence to: Y. L. Sun (sunyele@mail.iap.ac.cn)

The copyright of individual parts of the supplement might differ from the CC-BY 3.0 licence.

Table S1. Threshold values $\left(75^{\text {th }}\right.$ percentile, $\left.\mu \mathrm{g} \mathrm{m}^{-3}\right)$ for the PSCF of aerosol species during four seasons.

|  | Summer | Fall | Winter | Spring |
| :--- | :---: | :---: | :---: | :---: |
| Org | 30.0 | 36.9 | 43.6 | 29.2 |
| $\mathrm{SO}_{4}{ }^{2-}$ | 14.4 | 9.6 | 10.8 | 10.9 |
| $\mathrm{NO}_{3}{ }^{-}$ | 21.4 | 17.3 | 16.6 | 20.9 |
| $\mathrm{Cl}^{-}$ | 1.0 | 2.0 | 4.7 | 2.3 |



Fig. S1. Correlation between NR-PM $M_{1}$ and $\mathrm{PM}_{2.5}$ for the entire year.


Fig. S2. Fire spots in north China plain during (a) 15-30 June, 2012 and (b) $1-15$
October, 2011 (https://firms.modaps.eosdis.nasa.gov/firemap/).


Fig. S3. Comparison of the average diurnal cycles of (a) organics, (b) $\mathrm{SO}_{4}{ }^{2-}$, (c) $\mathrm{NO}_{3}{ }^{-}$, and (d) $\mathrm{Cl}^{-}$between weekdays and weekends during four seasons.


Fig. S4. Comparison of the average diurnal cycles of (a) NO , (b) $\mathrm{SO}_{2}$, (c) CO , and (d) $\mathrm{O}_{3}$ between weekdays and weekends during four seasons. $\mathrm{SO}_{2}$ and CO were not measured in summer and fall in this study.

