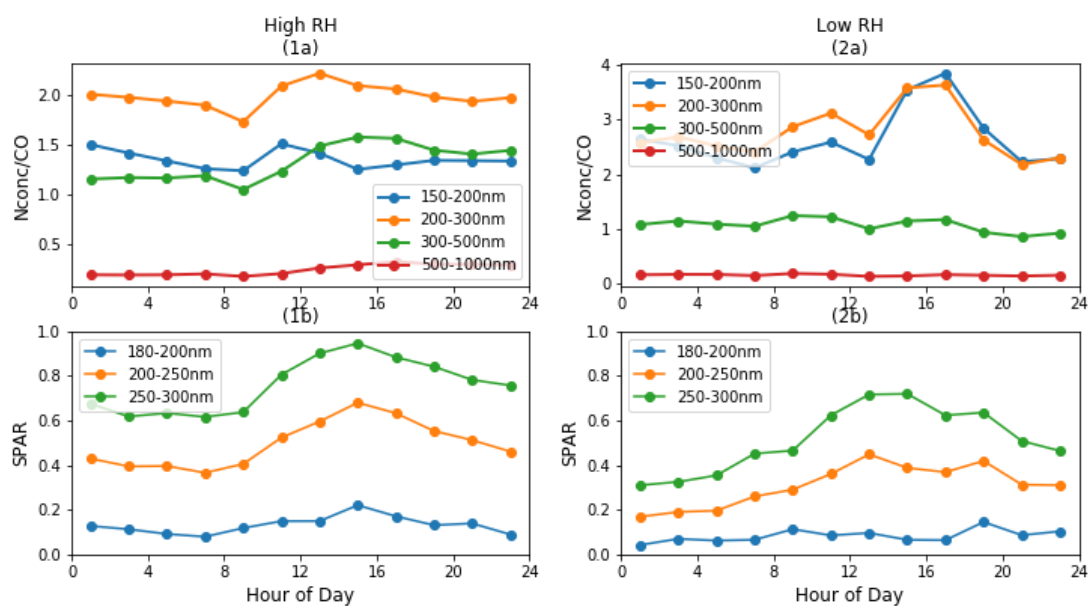


1 **Supplements of “Secondary aerosol formation alters CCN activity in**
2 **the North China Plain”**

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4

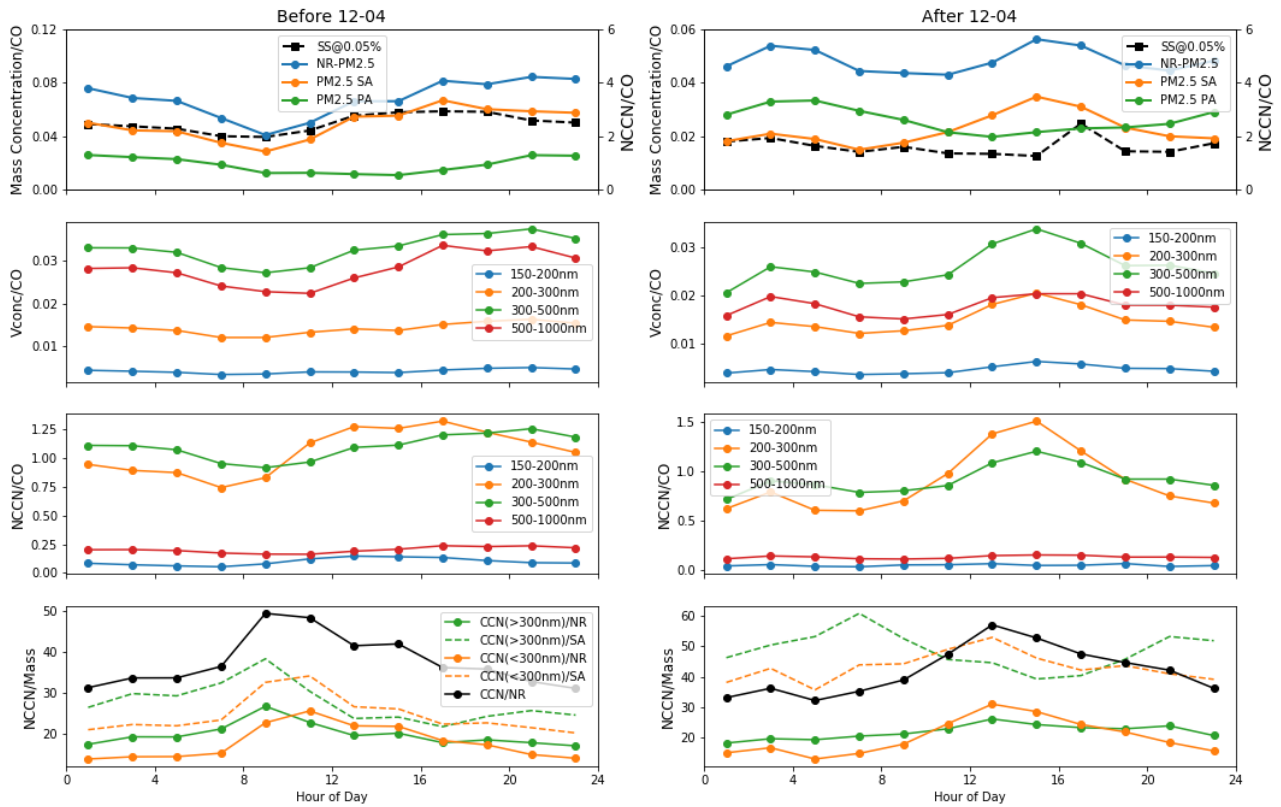


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6 Figure S1. Under different RH conditions, diurnal variation of (a) the ratios between particle number
7 concentration (Nconc) of different particle size range (indicated by colors) and CO concentration; (b)
8 SPAR of different particle size range (indicated by colors).

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12 Fig S2. The same as Figure 4 but for periods before and after 12-04. The average diurnal variation of
 13 (a) the ratios between particle mass concentration (dots with solid lines; blue: NR-PM2.5; yellow:
 14 PM2.5 SA; green: PM2.5 PA) and CO concentration, and the ratio between NCCN at SS of 0.05% and
 15 CO concentration (squares with solid line); (b) the ratios between particle volume size concentration
 16 (Vconc) of different particle size range (indicated by colors) and CO concentration; (c) the ratios
 17 between NCCN of different particle size range at SS of 0.05% (indicated by colors) and CO
 18 concentration; (d) the ratios between NCCN at SS of 0.05% (black: bulk NCCN; yellow: NCCN with
 19 particle size larger than 300nm; blue: NCCN with particle size smaller than 300nm) and mass
 20 concentration of NR-PM2.5 SA and the ratios between NCCN and mass concentration of NR-PM2.5
 21 (dashed lines).

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