

## Meta-analysis

### Dataset of components in PM<sub>2.5</sub> during three periods

- PM<sub>2.5</sub>
- Aerosol composition (OC, EC, secondary inorganic aerosol ( $\text{SO}_4^{2-}$ ,  $\text{NO}_3^-$ , and  $\text{NH}_4^+$ ), other)
- NS, NSN, SOR, and NOR

## National measurements

### Monitoring and satellite data



The change of pollutant

year

PM<sub>2.5</sub>  
hazy day

PM<sub>2.5</sub>  
non-hazy day

=  
The changes in  
PM<sub>2.5</sub> components

### Identify critical factor of PM<sub>2.5</sub> reduction

WFR-CMAQ model

Scenarios	Period I 2010	Period II 2014	Period III 2017	Special control by lockdown 2020
Scenario 0	baseline	baseline	baseline	baseline
Scenario 1	50 % NH <sub>3</sub> reduction			
Scenario 2	—	—	50 % acid emission reduction	—

### The response of SIA and PM<sub>2.5</sub> mitigation

### Identify strategic options to mitigate PM<sub>2.5</sub> pollution