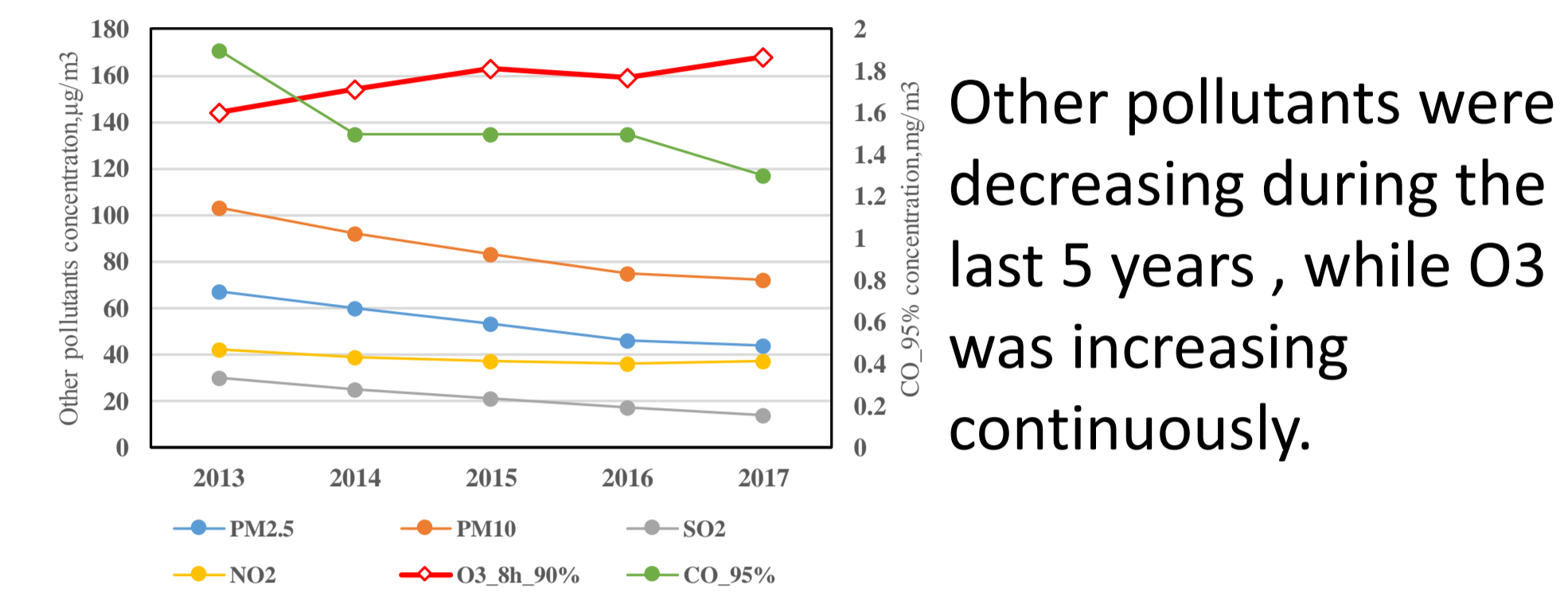
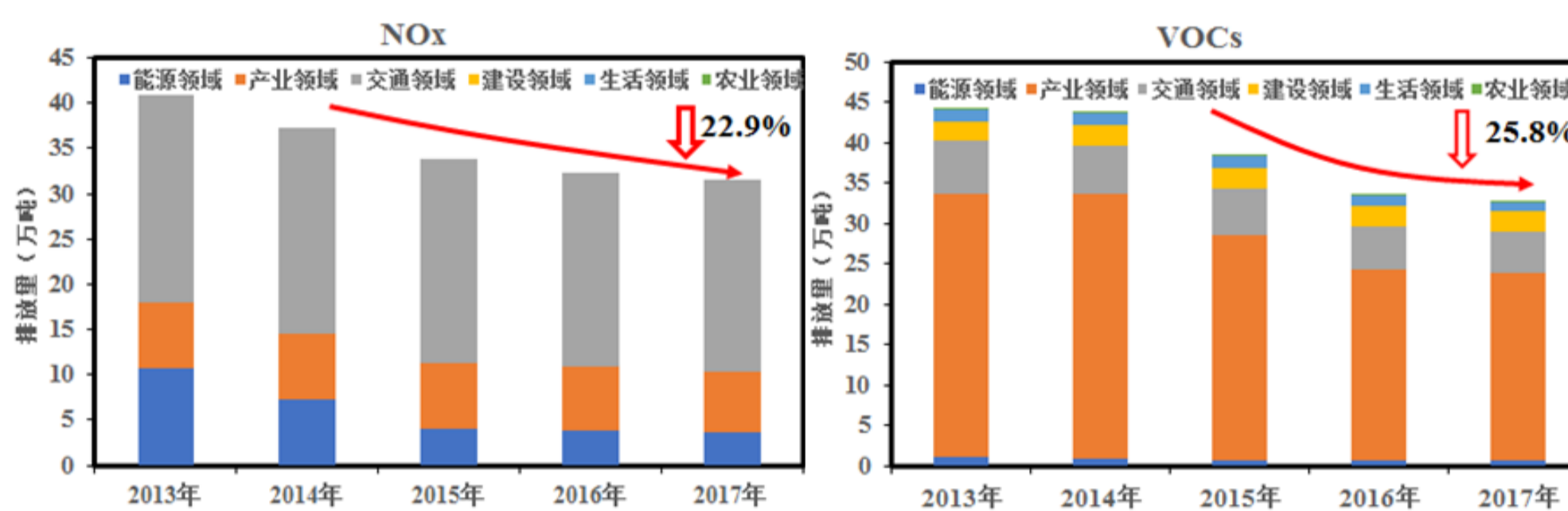


Introduction

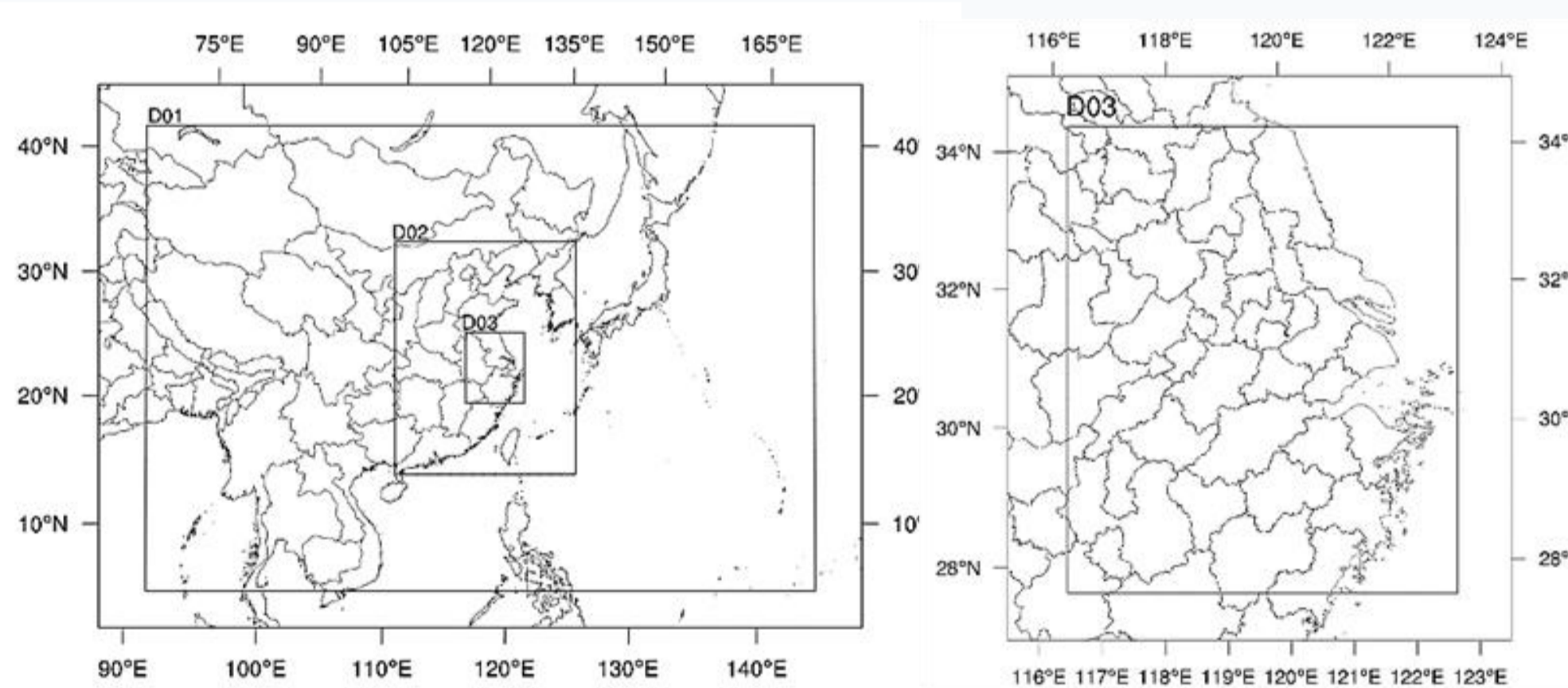
1. The trend of ozone pollution in YRD region.



2. Why ozone increased with the reduction of its precursors? How does meteorological impact on ozone?



Method

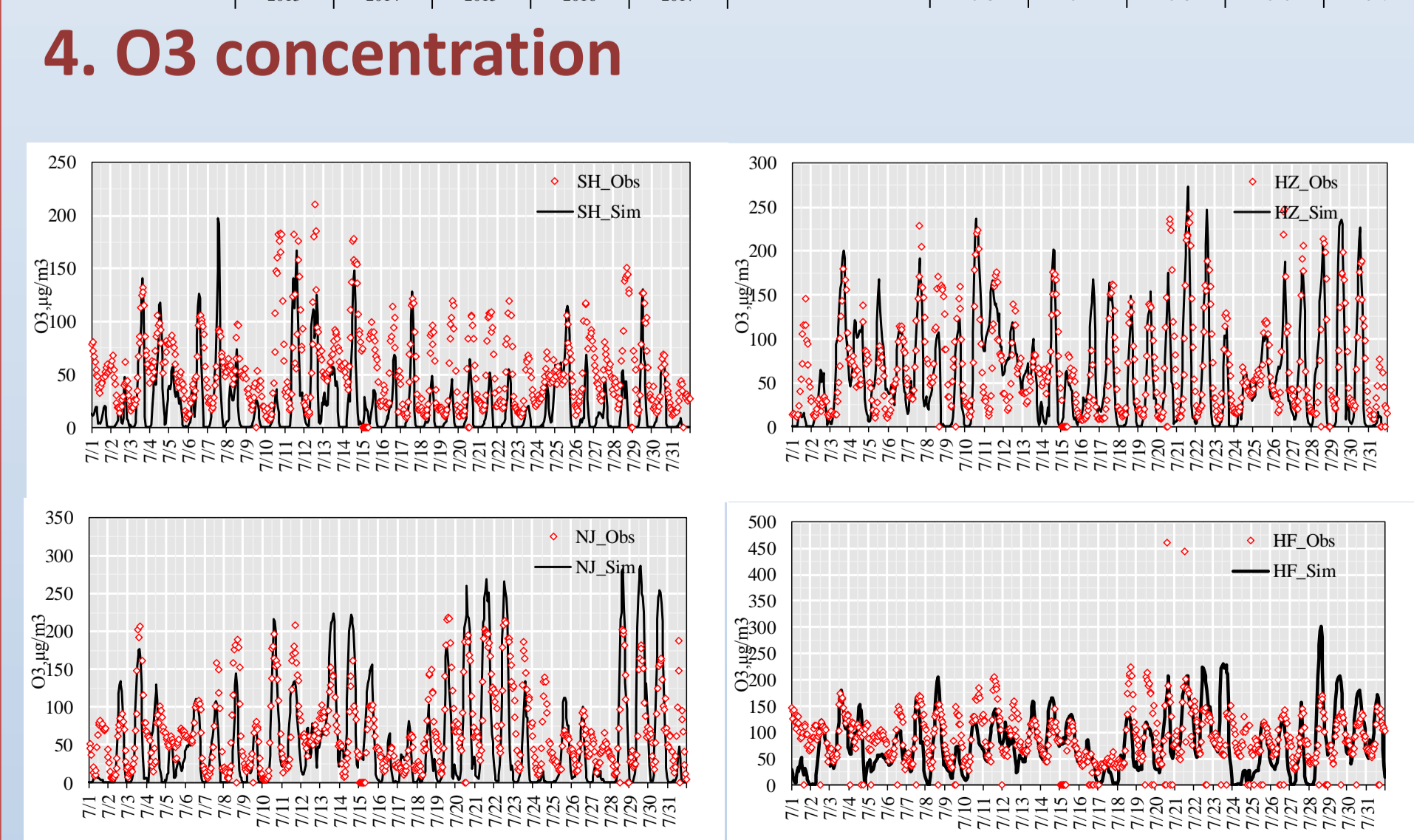
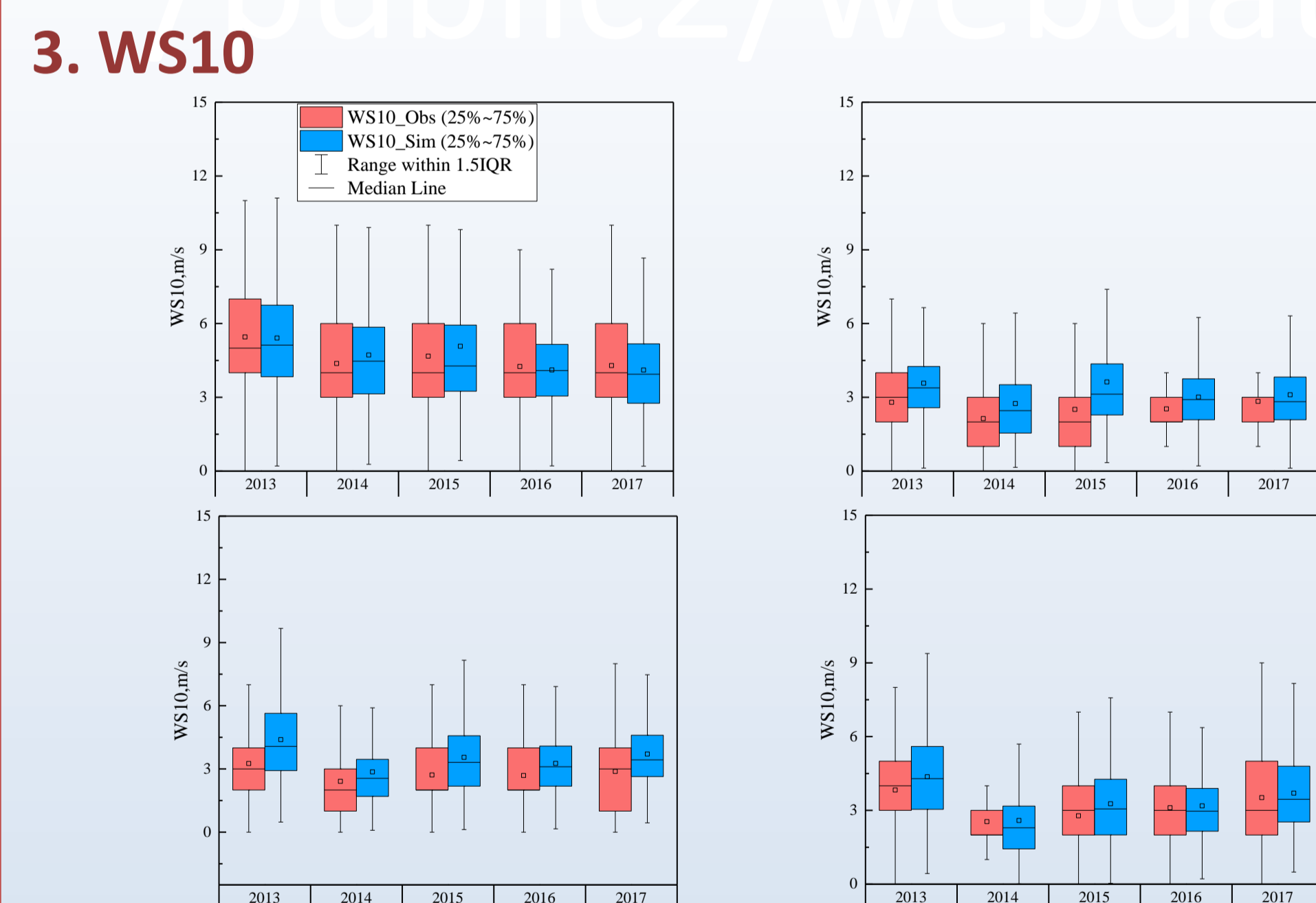
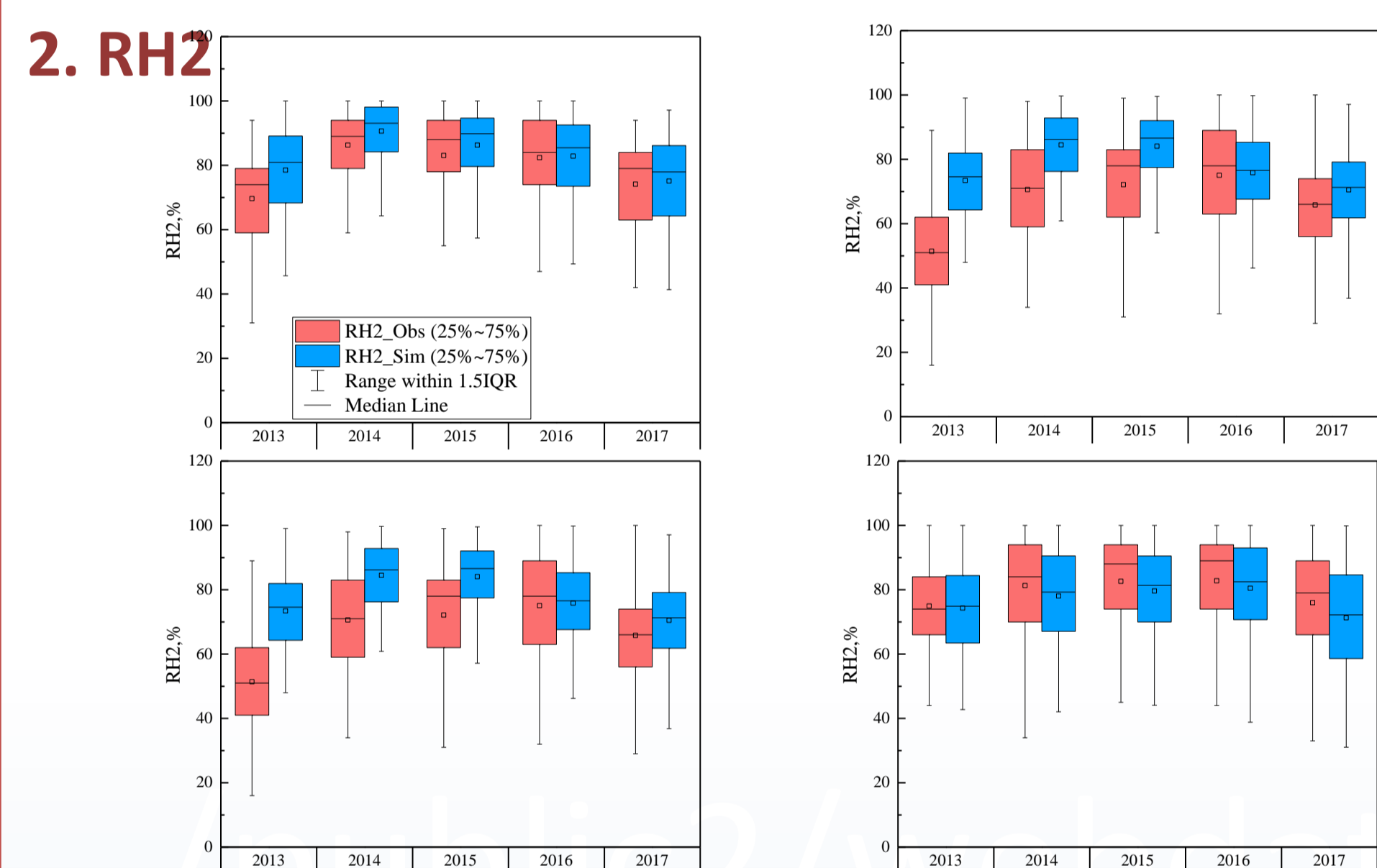
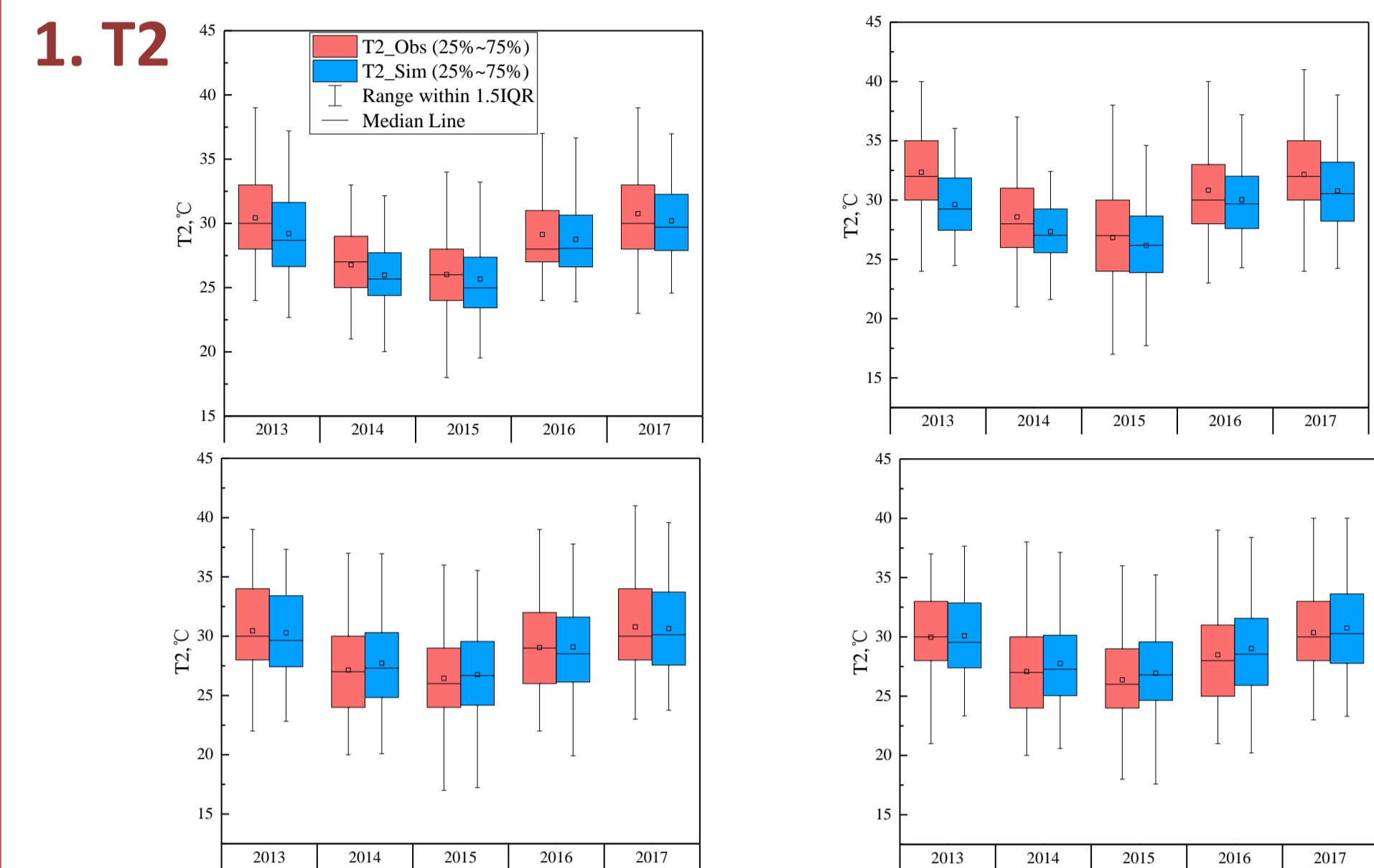


- **Models** : WRFv3.9.1, CAMx6.4
- **Resolution**: D01(36×36km), D02(12×12km), D03(4×4km)
- **Simulation periods**: July 2013-2017
- **Emission inventory**: 2014 (EI14)
- **Method**: 5 years WRF(Jul) with the same inventory(EI14)
- **Scenarios**: Met13EI14, Met14EI14, Met15EI14, Met16EI14, Met17EI14

Contact Information

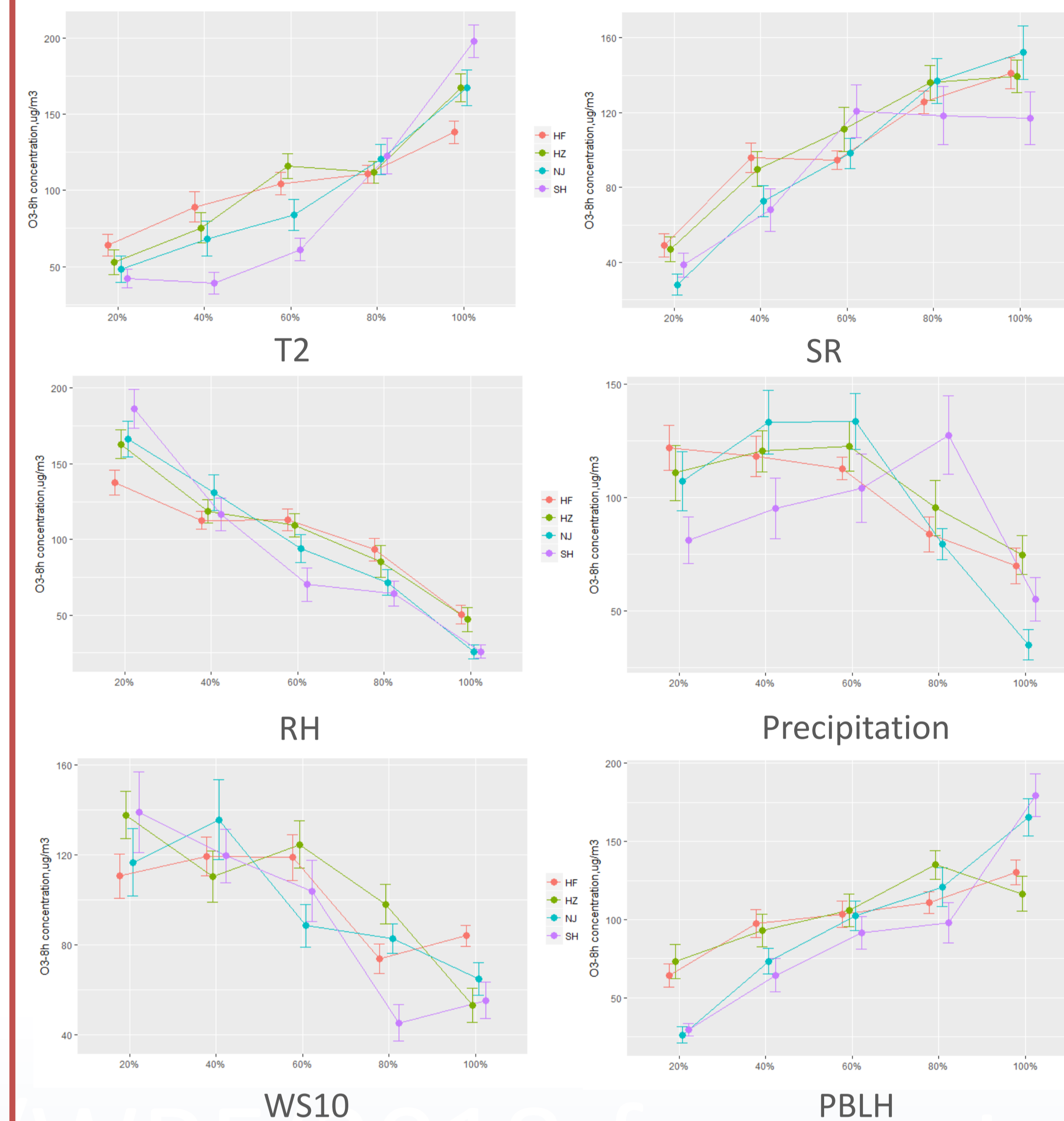
Rusha Yan
Email: yanrs@saes.sh.cn

Evaluation of meteorological and emission inventory



Results

1. Trends of O3 concentration with meteorological factors



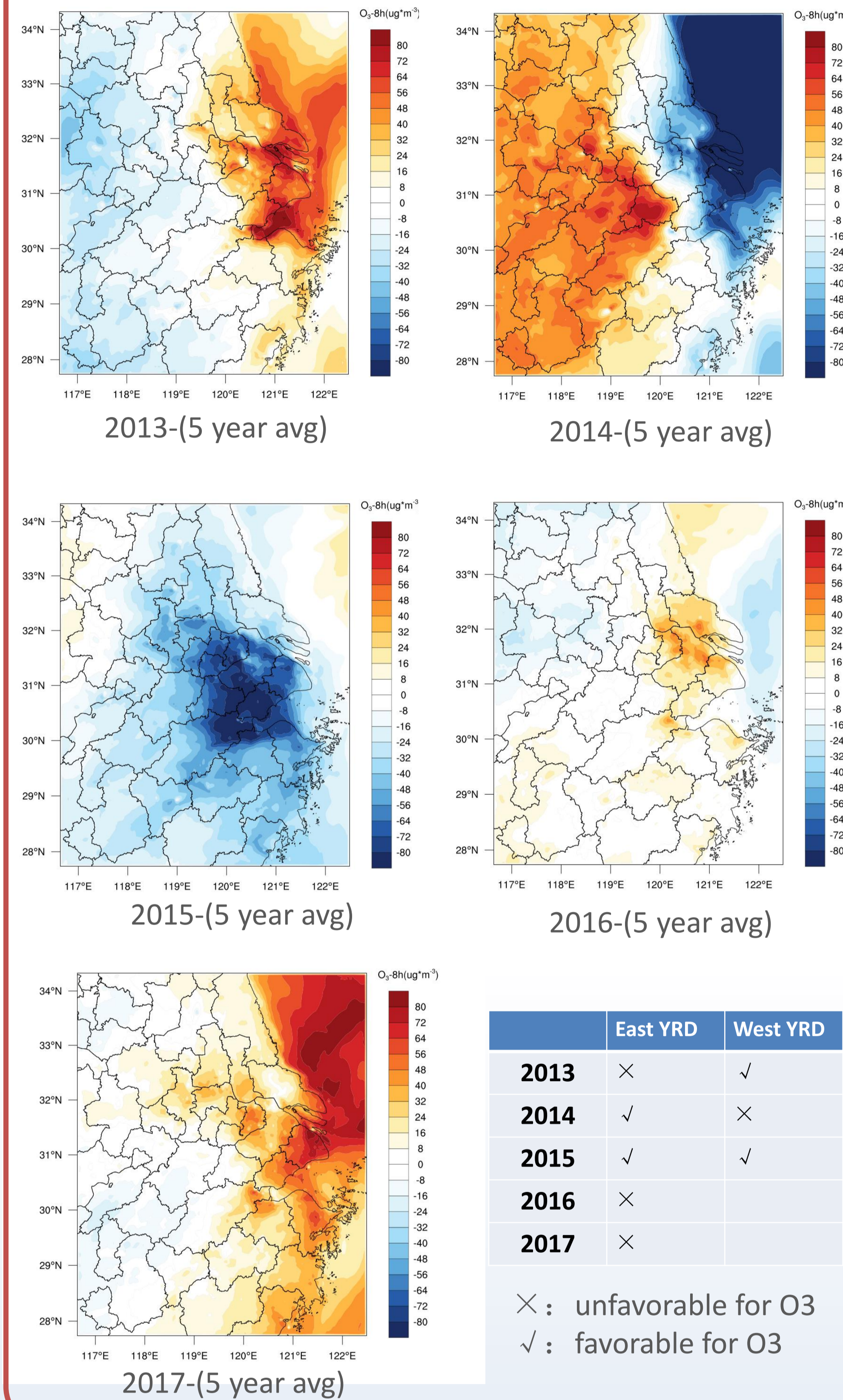
- Correlation between O3 and RH is good.
- Generally, O3 has the positive correlation with T2, radiation and PBLH, but negative correlation with RH and WS.
- The correlation between O3 and precipitation is uncertain.
- So comprehensive meteorological factors should be considered.

2. Quantification of meteorological effects



- The meteorological influences on O3 in different cities were different.
- The meteorological influences were more remarkable in east YRD(SH and HZ), less in west YRD(NJ and HF).

3. Spatial distribution of O3 differences caused by meteorological



Conclusion

- The meteorological conditions, especially RH and T2, had great influence on O3.
- The effects of meteorological changing on O3 were -50%~30%(SH), -45%~15%(HZ), -20%~20%(NJ), -10%~20%(HF), respectively, in July.
- In the east YRD, meteorological conditions were unfavorable for O3 in 2013 and 2017, but were favorable in 2014 and 2015.
- In the west YRD, meteorological conditions were unfavorable for O3 in 2014, but were favorable in 2015.