

Referee: *In this paper the authors present the measurements of surface trace gases, including O₃, NO_x, SO₂ and CO in the North China Plain. The dataset is high valuable as China is known to undergo a fast development with rapidly increasing population, urbanization and industrialization. All these developments are known to be associated with increasing emission rates of pollutants. Characterization of air pollutants spatial and temporal variations all over China would be very informative to all the atmospheric science community because they are expected to have an impact on the local/regional air quality as well as on the global atmosphere. This manuscript provides detailed statistical analyses of the measured air pollutants and their characteristics. Correlations between gaseous air pollutant concentrations and meteorological data are also made to better understand the observed data. This paper is well-written and scientifically important.*

This referee would like to recommend its publication on Atmospheric Chemistry and Physics if the authors can carefully address the following comments and suggestions for correction/improvement have been addressed.”

Comment: *We thank the referee for the reviewing and the comments.*