

Interactive comment on “Possible influence of atmospheric circulations on winter hazy pollution in Beijing-Tianjin-Hebei region, northern China” by Z. Zhang et al.

Anonymous Referee #1

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The relations between the atmospheric circulations and the winter hazy pollution over the BTH region was studied in this paper, using the daily records of atmospheric visibility and the number of hazy days from the synoptic weather stations since 1980. The results are useful for predicting and preventing the potential heavy pollution in case of an anomalous circulation. The data are substantial and research methods are innovative in this paper. The results are enlightening significance for the research in the same field.

Some parts of the article need to be improved or discussed: 1. The abstract is not only an overview; some important conclusions should be listed in this section. 2. In this pa-

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per, the statistical relationship between the atmospheric circulations and visibility (hazy days) was discussed, which is significant for the pollution potential prediction. What is the authors' opinion about the long-term statistical forecasting of pollution? On the basis of the present research work, how to consider the long-term quantitative forecast of visibility and hazy days? 3. The atmospheric circulation and pollutant emissions are the two major factors influenced visibility and haze days. A series of changes have taken place in the emission discharge from 1980 to now. How to consider the impact of the atmospheric circulation with removal of emissions? 4. The number mark in the Fig.3, 4, and 6 is not very clear.

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