

This paper details the rescue and quality control of historical data at SSH observatory. As an application of the data set, the phenomenon of geomagnetic jerk is analyzed. This work has important reference significance for the processing and quality evaluation of observation data, and the rescued data is important in the study of geomagnetic field and its secular variation.

Here are some suggestions for revisions of the manuscript:

1. It is suggested to give the specific algorithms for some calculations in the manuscript, such as FTD.
2. The manuscript said that the homogeneity of corrected data has been greatly improved. Can you quantify it?
3. Using the COV-OBS model for comparative analysis, can you explain the reasons for choosing this model?
4. It is recommended that the Chinese characters on the pictures in the manuscript can be translated into English.
5. There are 5 gaps in Figure 4, it is recommended that these gaps should be marked in the figure.