

This manuscript published the daily 1 km (30 arcsec) meteorological forcing data set. It obviously improves the resolution of existing data products. It is very meaningful for climate impact studies and lays a foundation for the related topics. However, some other problems in the manuscript are still concerned in the following:

1. In the results (Table 5), the proposed CHELSA-W5E5 was only compared with WRF. Could the authors compare their data sets with more data sets for a better validation?
2. The correlation with observations at meteorological stations is evaluated in North America. How are other regions?
3. The organization of this manuscript should be added to the end of the introduction.
4. A flow chart of the data set production is suggested to be shown. It is very important for the coming readers.
5. A section of “conclusions” is suggested.