Comment on essd-2022-79
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Community comment on "HRLT: a high-resolution (1d, 1km) and long-term (1961–2019) gridded dataset for surface temperature and precipitation across China" by Rongzhu Qin et al., Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2022-79-CC1, 2022

This manuscript produced a downscaled temperature and rainfall dataset by comprehensive methods. As the author points out, such high-resolution dataset is very valuable for research in related fields, especially revealing the effects of extreme temperature and precipitation events on plant growth, etc.

However, I am more concerned about how to interpolate data in mountainous regions (such as the Qinghai-Tibet Plateau), as we all know that the topography in these areas is complex, and the interpolation accuracy in mountainous regions may be relatively low compared to other regions. Did the authors perform different methods in these regions to ensure high accuracy? I’m interested in whether this dataset has improved interpolation accuracy in mountainous regions compared to other existing datasets.

In addition, I found that some figures in the manuscript are of poor resolution and need further improvement.