Dear Editor,

Thank you so much for reviewing our revised manuscript.

In light of your comments, we made further improvements to meet the requirement of the GMD code and Data Policy:

- We packed the data into compressed tar-archives, which can be accessed through the "Storage Location URL" indicated in https://doi.org/10.26165/JUELICH-DATA/X5HPXP
- 2. As it was suggested by the editor, we have checksum the tar-files with md5 hash function, and a text file including the checksum values is uploaded to the (https://doi.org/10.26165/JUELICH-DATA/X5HPXP) to ensure the ability to further verify the integrity of the data. We have explained this in detail in the newly added description to the Metadata section of the data description page.
- 3. The writing permission is withdrawn by Forschungszentrum data portal admins, therefore, no co-author of the manuscript will have further access to the provided data.

Regarding your concern about "climatology_t2m_1991-2020.nc", we would like to mention that in our manuscript (I.605) we describe "climatological mean which is inferred at each grid point from the ERA5 reanalysis data between 1990 and 2019 in this study. Since the 2m temperature involves a seasonal and a diurnal cycle, the climatology is calculated separately for each month of the year and each hour of the day". This results in 24 hours timestamps per month, which are stored on the first day of each month in netCDF file. The dataset, therefore, is complete. To make this clear, we add this to the b2drop dataset description.

In addition, we capitalize "Zenodo" in our manuscript.

Many thanks, Best,

Bing Gong on behalf of the authors