

“A global drought dataset of standardized moisture anomaly index incorporating snow dynamics ( $SZI_{snow}$ ) from 1948 to 2010” by Tian et al.

## Response to Editor

We thank the Editor for your time and effort in handling and reviewing our manuscript. Here we address each of your comments and clarify the corresponding changes in the revised manuscript. The original comments are in **black bolded font**, our responses are in blue, and manuscript changes are in *bold italic*.

### Comments to the author:

**This paper proposed a new global drought product considering a relatively comprehensive extent of the hydrometeorological variables associated with snow information. This is a great contribution to the drought analysis at a global scale. I have several comments as follows:**

**1. Line 519: at the following URL: <http://data.tpdc.ac.cn/en/disallow/b039fde6-face-4d24-af45-d238a6af18b7/>. This data link seems to be only a temporary link. Can it be changed into a formal link?**

Reply: We have removed the temporary link and added a formal link in the revised manuscript as follows (Page 28, Lines 519-520):

*The  $SZI_{snow}$  dataset can be downloaded from this data center at the following URL: <http://data.tpdc.ac.cn/en/data/b039fde6-face-4d24-af45-d238a6af18b7/>.*

**2. Since you have put the data in National Tibetan Plateau/Third Pole Environment Data Center, you are welcome to cite the relevant introduction papers into the articles as: <https://doi.org/10.1175/BAMS-D-21-0004.1> and <https://doi.org/10.1175/BAMS-D-19-0280.1>**

Reply: We have added the two relevant introduction papers into the revised manuscript as follows (Page 28, Lines 516-519):

*In addition, we also published the dataset to the National Tibetan Plateau/Third Pole Environment Data Center, which has been accredited by the Earth System Science Data, and specializes in collecting, integrating, and publishing geoscientific data on and surrounding the Tibetan Plateau and the three poles (Li et al., 2020; Pan et al., 2021).*