
MS Title: Drought risk in the Bolivian Altiplano associated with El Nino Southern Oscillation using satellite imagery data

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General comments

- The main comment in my first review was that the authors used near-surface air temperature measurements to "bias correct" remotely-sensed land surface temperature. This approach is not acceptable, as land surface temperature is not the same as near-surface air temperature, which I explained in my previous review in more detail. The authors have responded to this comment as follows:

"The database used previously in our manuscript was global monthly land surface air temperature from the Global Historical Climatology Network and the Climate Anomaly Monitoring System (GHCN and CAMS) defined by Fan and van den Dool (2008). In the revised version we now used the monthly air temperature dataset from University of Delaware developed by Willmott and Matsuura."

The respective data set is not a remote sensing product, but a globally gridded data set that is based on the spatial interpolation of in situ-measurements¹. However, the authors characterize this data set as a "satellite air temperature dataset" (page 4, line 4), which is false.

- Furthermore, the land surface temperature data set used in the MS was obtained from the Global Land Data Assimilation System (GLDAS) by the Noah Land Surface Model L4 monthly version 2.0. As the name suggests, this is not remotely sensed land surface temperature, but outputs from a land surface model that is forced with observations, including remotely sensed data. However, the authors claim this data to be a "satellite imagery product" (see abstract). Why was this data set chosen? The authors could have used remotely-sensed LST from AVHRR or MODIS, instead.
- Also, the abstract states that the authors "tested the performance of satellite imagery products for providing vegetation, land surface temperature (LST), precipitation and air temperature data on a local level". To my understanding, the MS only evaluates air temperature and precipitation against in situ measurement, not NDVI or LST.
- Please correct these misrepresentations. Also include a description of the gridded air temperature and LST data used in your study and justify why you chose those products.

Minor comments

P01L18 "With *this* information ...". Vague formulation. Be more explicit

P06L05 "These measures were used to evaluate the satellite estimations" Which variables?

¹https://psl.noaa.gov/data/gridded/data.UDel_AirT_Precip.html

P06L05 Temperature biases are usually assessed in absolute rather than relative terms. Please replace the relative bias and MAE in Figure 4 with absolute values.

P07L10 "Healthy vegetation [...] shows a low surface temperature due to the absorption of thermal infrared radiation". This does not make any physical sense.

P09L04 "Precipitation is the main source of water in the Altiplano because only 9% of the Bolivian cropped surface area are irrigated". What is with the supply of water from melting glaciers?