

Interactive comment on “SCDNA: a serially complete precipitation and temperature dataset for North America from 1979 to 2018” by Guoqiang Tang et al.

Anonymous Referee #1

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General comment

The manuscript presents and advertises a very interesting dataset of temperature and precipitation observation collected over several years in North America. The work is certainly well suited for the readership of ESSD and it is overall very important for the meteorological and climatological community. Furthermore, creation of quality-controlled databases is an important contribution to the scientific community in the age of data science. I have a few points to consider before publication, which I recommend, listed below.

C1

1. **Measurement instruments:** from my background, I am much closer to the instruments themselves (and their peculiarities and issues), as hardware tools. What I missed here was a description of the stations and their instruments. Questions like: which are the instruments deployed in the stations? How is precipitation measured (tipping buckets? buckets? Weighing gauges? Note for example that some instruments may have biases when measuring snowfall while others may not)? How is it temperature measured? How is this different from station to station in your database?
2. **Codes:** have you considered adding a little reader with a few capabilities, as additional tool for the interested users?

Minor/Details

1. P2: as trivial as it can be, it is worth to define the term "station".
2. P3, L96: Why exactly the variables of T_{min} , T_{max} , and precipitation have been chosen? Is it a matter of (lack of) availability of other measurements? (humidity, wind, etc). I just suggest to clarify.
3. Is precipitation the daily amount? I probably missed this information.

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