

Interactive comment on “Hydrometeorological Data from a Remotely Operated Multi- Parameter Station network in Central Asia” by Cornelia Zech et al.

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We thank Reviewer #2 for the constructive comments and suggestions. Concerning the four comments, the authors answer as follows:

Comment 1: a) The dataset is not easily accessible. I would recommend providing a direct link to the dataset without any need to create a user and password.

The data can be downloaded at <https://kurzelinks.de/romps-data> and <http://sdss.caiag.kg> without any registration or any user/password login which has been already described in the manuscript. With the acceptance of the paper, the

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data will be made available at GFZ's central data service long-term archive. The login is only necessary for administrating the web-side.

b) Data also need a postprocessing and the presentation of data must be simple.

As described in chapter 5 of the manuscript, the data has to be considered as raw data which have not undergone any post-processing as this is beyond the scope of the network operation and are subject of each responsible agency or user. Quality control procedures that should be considered are proposed in chapter 8. The Quality Control and dissemination of aggregated values is the responsibility of the national Hydromet-Services. The data can be easily displayed through the SDSS system (sdss.caiaag.kg).

c) Use simple indices such as P for precipitation, T for air temperature, RH for relative humidity, and so on for the time series in the website as well as the tables in the manuscript. Description of the file formats in sections 7.1 and 7.2 is excessive and needs to be polished and simplified.

The indices described in the manuscript refer to the technical implemented indices used by the sensors or in the station's datalogger. The data presented here has to be considered as raw data directly coming from the monitoring stations. Changing the indices would require a post-processing of all data. We believe retaining the original abbreviations helps the user in backtracing the data to the original sensors with different accuracies and measurement methodologies.

Section 7.1 & 7.2 are necessary as they describe the storage logic necessary to retrieve the data.

Comment 2: Are Tipping buckets the only precipitation gauges? Do they only record rainfall (e.g., Figure 4)? How about snowfall? Given the high range of elevation among the stations, a Tipping bucket gauge is not enough for representing snowfall portion of precipitation.

Prior to the network development, we evaluated which sensor types could be safely

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used in this remote network. Since then, we haven't changed hardware types to keep the maintenance and operation efforts small. The decision was based on the accuracy of the sensor and the power consumption and maintenance free (or at least minimal) aspects.

Measuring solid precipitation requires a heating system. As the power consumption for the heating is high and the stations depend on solar power only, these systems could not be used for this network.

Comment 3: Spell out all of the acronyms such as GNSS. Spell out all the acronyms on the figures and in the figure captions.

We follow the suggestion of the reviewer and changed the manuscript.

Comment 4: Combine Figures 2 and 3

We take the suggestion of the reviewer and changed the manuscript.

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