Interactive comment on “Early instrumental meteorological observations in Switzerland: 1708–1873” by Yuri Brugnara et al.

Anonymous Referee #1

Received and published: 16 January 2020

General comments

The paper enlightens on a new historical database, unpublished so far, which partially covers a period of time prior to the institutionalization of meteorological observation in Switzerland, and of great climatological interest. This element is the main novelty, since the methodology applied in the quality control process has already been applied previously. Efforts made to document the various instruments and units of measurement used in Switzerland, the periods in which they were active, and the conversion to the modern system are also highly appreciated by this reviewer.

The paper becomes the natural continuity of the previous one by Pfister et al. (2019), which describes in detail the contents of the new documentary collection, and their potential. The present paper focuses on giving details on how typing was performed, under what criteria and which quality control was applied. Detailed information is provided regarding the available metadata, and at all times the authors are transparent about the uncertainty of records (units of measurement, exposure), which later in a forthcoming paper (already announced), it will be relevant for homogeneity analysis.

Specific comments

- Line 50. It is mentioned that figure 2 refers to the "distribution of stations" when in fact the figure shows the cities where information is available. That is, for the same city there are up to 10 stations or series. The term "cities" or "locations" would be preferable.

- Line 222. The presence of "problematic packages" is mentioned but the reason why they are problematic is not commented on. It would be nice to state the reasons, if the same issues may be found in other later digitization initiatives.

- Line 220. On dataresqc it could be added that this is, at the moment, an absolute quality control, which works with the data in the series itself and does not contextualize the data with coexisting and close series.

- Line 230. Figures on the amount of erroneous data detected by dataresqc is provided, but it is not discerned between errors from the original data or errors entered in the digitisation process. Is this information available? It would be good to know which one has a stronger weight. At the same time, it is not stated if during the typing process, any distinction is made between a record that is not available because it does not exist, or because it could not be read. Is this information detailed in the metadata file?

Technical corrections

- Line 36. Apparently, there is a grammatical error in the phrase "amount of records the we found". "The" should be a "that".

- Line 290 - References. The link to the DOI of the publication by Brugnara, does not work.