

Review to the paper: cp-2019-26

General impression:

Swiss Early Instrumental Meteorological Measurements. It's a very interesting paper! I really have the most positive things to say about this article. It is heading out for the science and innovative. Given these considerations and considering that the subject matter is clearly within journal scope I would recommend acceptance of this paper. I have only some small things to comment. Otherwise this is a very interesting focus.

Quality assessment:

Scientific significance: The paper has an impact on the field. It has a high significance in this scientific field (climatological data rescue) and is within journal scope (1).

Scientific quality: It is scientifically correct and robust. The scientific arguments and interpretation accurate and consistent with the work presented (1).

Presentation quality: The tables, images and supplementary information give a picture of the inventory made, but I really miss the link to the repository. Additionally, it would have been fine to add information on how to find the images or how the repository is structured (either in section 3 or with a new column in table 2) to more effectively and quickly link the paper and the repository (2).

Presentation

The writing is clear, concise and it is good English.

Abstract:

Brief and indicate the purpose of the work and what was done, what was found.

Figures:

The figures are clear to understand and make a very good summary. Only a minor comment: it would be fine if in figure 4, if a station continued operative change the colour or size of the point.

Tables: There are fine and useful tables and the captions are informative.

Review

Introduction:

I think the introduction is nice. The purpose is clear. Goals and lacking in science are well illustrated.

Section 2:

In an easier way it allows the reader to figure out the characteristics of the earliest measurements and most of the comments can be extrapolated to other regions. Only one question:

- Phenological data can give complementary information to past climate conditions. Did you find data (line 199)? If so, was it catalogued?

Section 3

Fine explained with figures and tables. This is very easily readable, and information presented well balanced. Comment: consider above comment about to link repository and paper. Two questions

- The authors considered ecclesiastical records and religious orders publications? It is quite frequent, for example, to find meteorological information from third countries measured by Jesuits in their Spanish libraries.
- About metadata information. You said (or I understood) that only data sheets were photographed (l 240-241) but in some cases metadata information or incidents of this type earlier publications (according my experience) were found at the beginning or end of the publication. The person in charge looked at the entire publication, to be sure that this type of information will not be lost?

Section 4

This section adds even more value to the work done, really well developed and clear. A minor comment:

- In line 300 - 301 you said “However, using not just the measurements but also the weather observations and comments (which were not the focus of the project and hence not systematically collected),...” As you have found, many times in very ancient observations, information, especially on precipitation, appeared qualitatively but it is very important information to analyse past extreme events like your event presented or droughts... Even so, it seems that this information will not be recovered anyway.

Conclusions / future work.

The conclusion is clearly stated and provide a complete picture of the study. It is summarizing well what has been learned and why it is interesting and useful. Nice to read that the inventory was added to a global registry and part of the data will be digitised.

References

Relevant and appropriate

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