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Discussions

Interactive comment on "Rescue and quality control of sub-daily meteorological data collected at Montevergine Observatory (Southern Apennines), 1884–1963" *by* Vincenzo Capozzi et al.

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Review to the paper ESSD-2020-38: Rescue and quality control of sub-daily meteorological data collected at Montevergine Observatory (Southern Apennines), 1884-1963

General impression: For climate analysis (past, present and future) it is essential to rescue past instrumental data. These data rescue projects involve a great effort and a very rigorous work. The paper and dataset presented contribute to recovery a significant amount of sub-daily data and especially data from the 19th century. They have

done a great job of digitizing data and recovering some metadata. 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. I would recommend acceptance of this paper after a minor revision.

Review The writing is clear, concise and it is good English. Abstract: Brief and indicate the purpose of the work and what was done. Introduction: The purpose is clear. Goals and lacking in science are well illustrated. Section 2. Materials, data and methods: In an easier way it allows the reader to figure out the characteristics of the dataset and the methodology followed. Some comments: âĂć Subsection 1: as important as data rescue is metadata rescue, metadata recovered is clear and give an image of the characteristics of observations through the time. It could be great if the authors can add some historical image. âĂć Subsection 2: well explained and correct methodology. Only one comment, about ELP (lines 247-255) is required a reference about methodology applied and if it's possible add an schematic. Section 3: Quality control of digitized data âĂć Lines 278-283: improve the way to flag the QC results, specially considering that not all variables pass all the tests. It is necessary to have a clear identificatory to flag (correct, suspicious and wrong values).

Section 4. Application examples of MVOBS sub-daily dataset: This section tries to give value to the dataset rescued, but I'm not in favour to keep this type of sections. On one hand, I think that for a specialist on this topic is obvious the value of the work done and on the other hand, (especially for the second part) they are trying to do a "climatological analysis" with potential inhomogeneous data (metadata reveals different potential breakpoints). So: âĂć Maybe I'm in agree to keep the first part but, clearly stating that data used is not subjected to any homogenisation procedure and metadata indicates potential breakpoints. âĂć I consider that is better to delete the second part. Section 5. Data availability: Really, good to know the availability of the data on an open access repository. Section 6. Conclusion. The conclusion is clearly stated and nice to read future aims. Tables: Clear to understand and information well summarized. Some

comments: âĂć Table 3: Give information about what means QC =1 , QC = 2... Due to the way to name the flags, for cloud cover, rainfall and snowfall is not clear if 100 / 99.9 % of values are suspicious...

Figures: The figures are clear to understand and figure out the characteristics of the data rescued. Comments: âĂć Figure 1. About the map, please add a reference on the repositories consulted. âĂć Figure 4: The diagram is fine a clear, but the way to flag the results need to be improved (see comments above). âĂć Figure 6: review the dots. According the graph and the text there are not blue dots âĂć Figure 7: higher percentages needs to be well explained and maybe some visual information to explain this. âĂć Figure 8: add a comment about data was only submitted to a QC not to a homogenisation procedure âĂć Figure 9: I'm not sure that variability is only due to natural evolution. Needs to consider deleting this part. References Relevant and appropriate

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Please also note the supplement to this comment:
https://www.earth-syst-sci-data-discuss.net/essd-2020-38/essd-2020-38-SC1-supplement.pdf

Interactive comment on Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2020-38, 2020.