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Climate of the Past Discussions

Interactive comment on "Jens Esmark's Christiania (Oslo) meteorological observations 1816–1838: The first long term continuous temperature record from the Norwegian capital homogenized and analysed" *by* Geir Hestmark and Øyvind Nordli

Anonymous Referee #1

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The manuscript entitled "Jens Esmark's Christiania (Oslo) meteorological observations 1816-1838: The first long term continuous temperature record from the Norwegian capital homogenized and analysed" by Hestmark and Nordli describes the recovery of a new instrumental meteorological series for the early instrumental period, covering a particularly interesting time span for climate research (corresponding to the late Dalton minimum).

The authors put a considerable amount of effort in recovering metadata, which are

crucial for such old observations, and used them to aid the homogenisation of the temperature data. This is surely a good practice, however in many cases they had to turn to speculation to explain the causes of the inhomogeneities. In particular, they applied a correction for a possible overheating in the afternoon with very weak arguments to support it. I also have some reserve on the homogeneity testing, I think that reference series can and should be used. The other corrections applied should be improved, too.

In general I found the manuscript well organised, however it would benefit from an editing of the English language by a native speaker, because the structure of the sentences is often a bit weird and/or some punctuation is missing. The conclusions are poorly written and incomplete.

I recommend publication in Climate of the Past with minor revisions, in particular the homogenisation part needs in my opinion a bit of additional work.

See the attached pdf for additional comments.

Please also note the supplement to this comment:
http://www.clim-past-discuss.net/cp-2016-60/cp-2016-60-RC1-supplement.pdf

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