

Interactive comment on "A reconstruction of the August 1st 1674 thunderstorms over Holland" by Gerard van der Schrier and Rob Groenland

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Dear reviewer,

Many thanks for the review of this manuscript. While you note that you have no dispute with the science or the method and note that the study in interesting and a well-researched contribution, your main concern relates to the presentation. Style and formulation require attention and the reviewer notes the abundance of typo's.

We apologize for these avoidable problems – the revised manuscript will be proof read by one of our colleagues who is a native speaker with the expectation that this will bring the style and formulation of the paper to a more acceptable level.

Below are replies to concerns specific to parts of the paper. Comments of the reviewer

C1

are in italic.

SECTION 2

p.4, line 13. From whom is this 'personal communication'?

You have a point here: this should have been added. We have contacted local historical societies in cities like Leiden and Delft. This information will be added to the manuscript.

SECTION 3 Section 3.2 begins to get a bit technical and a couple of citations to refer the reader to fuller explanations of the processes might be helpful.

A more gentle start of the section and a few more references will be added to the revised ms.

SECTION 4 Section 4.1 might be a shade too long and would benefit from shortening. It's interesting but becomes a bit of a litany of reported disasters. I know why this evidence base in included, but some brevity might be in order.

There are indeed possibilities to make this part more brief, which will be realized in the revised ms.

Section 4.3 It would help to have a little (no more) justification for using the Finland series as the basis for the estimation of the return period. After all, it's in another part of Europe some distance from the Netherlands.

Clearly, the use of data from southern Finland is less than ideal. There is not much justification than what we provided in the ms. The single reason to use this data is that there is actually no alternative from a region closer to the Netherlands. However, the difference between southern Finland and the Netherlands in summer is actually smaller than one might think at first glance. In a revised ms., these similarities will be discussed in some more detail.

p.9, line 19 104 (10,000) or 103 (1000)? See your final line on p.12 where you state a return period of 1000 years

The reviewer has a point here. It reflects the uncertainty associated with this analysis and the uncertainty associated with the estimate of the diameter of the largest hail stones found during this event. Following this concern, and the concern of reviewer 1 who notes this issue as well, we will be more explicit about the uncertainty in the observed size of hail stones and in the resulting uncertainty in the return period.

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