

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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Comments on the paper by Schrier and Groenland by Adriaan de Kraker A Reconstruction of the August 1st 1674 thunderstorms over Holland

The authors have looked into the issue of what nature the August 1674 weather event over the Low Countries must have been. In order to have a better understanding they compare this event with a similar event that occurred in 2010. Both events are described in full detail, which is most unusual for a weather event of the 17th century to have been so completely recorded in so many different areas and from so many different perspectives (written accounts, poems, engravings, etc.). This certainly is already a big novelty of this paper. The 2010 event has been noticed by both contemporaries, people on the ground and all the modern meteorological

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data available at KNMI. The authors have used an appropriate scientific methods to discuss the matter in order to reach their conclusions, all being up to international standards. The additional novelty is that they also reconsidered the study by Pfeifer about the 1674 event by rejecting their conclusion. Still, there are some aspects in the paper that need to be looked at again 1. The use of geographical names is quite clear to a Dutchman, but not to anyone else. In the title it says Holland, but they really mean the Netherlands. In the abstract it is the low countries, but they actually mean the Low Countries. But if they do, it should be clarified these Low Countries consist of the Netherlands and Belgium. During the seventeenth century it was: the Dutch Republic and the Spanish Netherlands. It even gets much more confusion talking about the 17th century. Holland at that time was the province of Holland (now provinces of South- and North-Holland). However the town of Utrecht was in the province of Utrecht (not Holland), where the disaster church was located. So I would like to suggest the authors to be consequent in using geographical names. Perhaps it would be best to indicate some names on one of the map figures. 2. LT and UTC should be explained. LT is most probably local time. It should be explained that there were different time zones, even in the small Dutch Republic. 3. The authors have used a plan of the town of Utrecht of Blaeu (1649) which comes closest to 1674, quite understandable. However, the Van Deventer plan of a century earlier had the north already at the top of the map. All churches and other public buildings are already on this map. 4. On page 7 fallen trees are discussed. During August trees are in full leave. Some species have such a wide spread foliage that the whole tree or even a branch functions like a big sail on a ship. It therefore can be tipped over or rolled over very easily. Evidence like snapped-off tree tops in a row is much more telling. 5. Page 10, line 31 Vethuizen? Where is this located? In general it would be appreciated to have all the places mentioned in the text on one of the map figures. 6. About figure 1. Would it not be useful to inform the reader which direction he is looking. About figure 2. There seems to be one report from the Doesburg-Zuthpen area, which is outside the disaster area. Explain this. About figures 3 Would it not be useful to inform

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the reader about the direction he is looking? Figures 6 and 7 all seem to have been drawn long after the event. Is this correct? Compared with the previous figures which look fresh, I notice overgrown grass and shrubs in the ruins. 7. Finally page 12, line 5. The lack of buttresses. Do the authors mean the lack of buttresses in general of flying buttresses. This make quite a difference, especially when wide side aisles are involved. In conclusion it should be remarked this is a fine paper, which, after some revision should certainly be published.

Please also note the supplement to this comment:

<http://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2016-263/nhess-2016-263-RC3-supplement.pdf>

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., doi:10.5194/nhess-2016-263, 2016.