

Interactive comment on “Exceptional sequence of severe thunderstorms and related flash floods in May and June 2016 in Germany. Part I: Meteorological background” by D. Piper et al.

Anonymous Referee #1

Received and published: 19 October 2016

Comments on the article nhess-2016-275

The paper investigates the meteorological characteristics of a severe thunderstorms episode that affected Germany and central Europe during 15 days in the spring 2016. Interesting diagnostics are used such as a rainfall severity index and weather type classification schemes. The authors point out the interaction between several ingredients : convection-favouring conditions, low stability, low wind speed. They characterise the scarcity of the episode from the point of view of the weather background. It was found that this 15-days episode is very rare even if not unique. The article clearly is relevant to the field of the “NHES” journal. The topic of the article is interesting and fully addressed. The language seems correct to me. So the paper need minor revision in the

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light of the general and specific comments listed below.

General comment:

1. Does the paper address relevant scientific and/or technical questions within the scope of NHES? Yes
2. Does the paper present new data and/or novel concepts, ideas, tools, methods or results? The paper does not really present novelties. It focuses on one particular event and makes use of several methods to characterize it.
3. Are these up to international standards? Yes, the different methods used seems useful for any meteorologist who would like to characterise the severity of this kind of high impact weather event.
4. Are the scientific methods and assumptions valid and outlined clearly? Yes
5. Are the results sufficient to support the interpretations and the conclusions? Yes
6. Does the author reach substantial conclusions? Yes
7. Is the description of the data used, the methods used, the experiments and calculations made, and the results obtained sufficiently complete and accurate to allow their reproduction by fellow scientists (traceability of results)? Yes
8. Does the title clearly and unambiguously reflect the contents of the paper? Yes
9. Does the abstract provide a concise, complete and unambiguous summary of the work done and the results obtained? Yes
10. Are the title and the abstract pertinent, and easy to understand to a wide and diversified audience? Yes
11. Are mathematical formulae, symbols, abbreviations and units correctly defined and used? If the formulae, symbols or abbreviations are numerous, are there tables or appendixes listing them? Yes

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12. Is the size, quality and readability of each figure adequate to the type and quantity of data presented? Yes
13. Does the author give proper credit to previous and/or related work, and does he/she indicate clearly his/her own contribution? Yes
14. Are the number and quality of the references appropriate? No comparison with studies of the same kind is provided. It would be interesting to add some references where this kind of approach is adopted.
15. Is the overall presentation well structured, clear and easy to understand by a wide and general audience? Yes
16. Is the length of the paper adequate, too long or too short? I seems adequate.
17. Is there any part of the paper (title, abstract, main text, formulae, symbols, figures and their captions, tables, list of references, appendixes) that needs to be clarified, reduced, added, combined, or eliminated? I don't think so
18. Is the technical language precise and understandable by fellow scientists? Yes
19. Is the English language of good quality, fluent, simple and easy to read and understand by a wide and diversified audience? I think so.
20. Is the amount and quality of supplementary material (if any) appropriate? No supplementary material

Specific comment : I have found only one typing error page 5 line 7. Please replace "beetween" by "between"

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., doi:10.5194/nhess-2016-275, 2016.