Earth Syst. Dynam. Discuss., https://doi.org/10.5194/esd-2018-4-RC2, 2018 © Author(s) 2018. This work is distributed under the Creative Commons Attribution 4.0 License.



## Interactive comment on "How intermittency affects the rate at which rainfall extremes respond to changes in temperature" by Marc Schleiss

## **Anonymous Referee #2**

Received and published: 7 June 2018

This manuscript is a well deployed, aptly presented contribution to Earth System Science, even if more statistically than dynamically oriented.

A rare feature these days, this manuscript was a breeze to study: very clear and effective, ensuring a smooth assessment.

Overall, I recommend publication of this manuscript subject to minor revisions (very minor indeed).

In addition to the comments from the other reviewer, with whom I agree, and to which the author already gave a satisfactory answer, I would merely raise minor and technical notes:

My main concern pertains the largely descriptive nature of the study, notwithstanding

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the technical merits of the analysis and the relevance of the presented developments for modelling purposes.

## Minor remark:

As the title itself indicates, this is a study of "how", not necessarily of "why". Therefore, I would not require the authors to delve into the fundamental mechanisms behind the features being identified and analysed as that would make for a different study. Even so, it would be a nice addition to the paper to complement what is currently a good discussion with further remarks of mechanistic nature (a couple of sentences should suffice). This way, the physically oriented readers among the ESD community would be even more appreciative.

Technical/notational remarks:

Equation 1: the opening and closing brackets in the Probability operator should be the same - either [] or ().

Equations 2 and 3: 'ni' should actually read  $n_i$  (subscript i as it is an index), otherwise it will appear as if n is multiplying by i.

Page 5, last line: The variable q should come in math type (italicised) (Same remark on Page 6, line 14)

Equation 4: The Expectation operator should be identified as such in the text.

Equations 5, 7: The hierarchy of brackets would be recommended: [()] rather than (()).

Thank you!

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