

## ***Interactive comment on “What even is “Climate”?” by Oliver Bothe***

**Anonymous Referee #2**

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The paper analyzes various definitions of climate and weather, respectively, given by the literature. It aims at questioning these definitions and tries to provide a “new” one: “Climate is the time-varying uncertain summarising description of multiple properties of a representation of a system for a specified spatial and temporal domain dependent on external factors varying in time and space.” (p. 13). However, this definition is too general and can be accounted for every “time-varying uncertain summarising description of multiple properties”. Thus the proposal of a “new” definition is not convincing and even not new. It is a too general description of the main statistical definition of climate.

It doesn't become clear, why a new definition of climate is required. A good argument could be in case of policy reasons as given in the abstract. However this argument doesn't play any role in the paper anymore. Which is a pity as the author has a profound knowledge in climate research. Thus a deeper analysis of the given definitions would be helpful in developing a “better” definition of climate – “better” related to practical

C1

reasons, e.g. for climate policy.

Strangely, the review of the definitions given by the literature stops at 2015. Contemporary literature (e.g. Heymann et al. 2017) as well as leading authors like Paul Edwards, Arthur Petersen, Wendy Parker, etc. are missing. This gives the impression as if this is an older paper.

The paper should be reworked - by providing a deeper analysis of the given definitions, - by relating the aim of developing a new definition to practical reasons, - by updating the literature, - and finally by providing concrete advice what to do with such a new definition in order to answer “what even is climate”.

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