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

Anonymous Referee #1

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General This paper is an interesting run through the hugely diverse ways in which the words and concepts of weather and climate are currently used. This makes it useful to all those who encounter, or use these concepts themselves in the course of their work. It helps increase awareness of both ambiguities and incorrect uses of these terms. So in that sense it makes an interesting read, and can deepen the understanding of readers of some of the potential pitfalls of lack of clarity and consistency in the use of these terms.

However beyond the well-known and frequent confusion of ’climate’ and ’weather’ in the media and among lay audiences (including by climate sceptics highlighting short-term weather trends as invalidating long-term climate projections), it is not clear there is really a need for an agreed definition of ’climate’. The term is used loosely in public utterances (and has a wide semantic variation outside pure science), but the case has not clearly been made in the paper that this variability in terminology has seriously
hindered either science or public understanding.

Even if one accepted the objective of one agreed clear definition, the definition advocated in the paper:

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.

seems extremely complex (the sentence is off the scale of the FOG index) and quite incapable of comprehension outside a very limited field of scientific experts.

It might help if the authors include in the concluding section, which is where readers will want to see their 'takeaways', a plain language expansion or paraphrase of the core definition. This would be the minor revision I would suggest. The rest of the paper seems accurate and comprehensive.