

Firstly may I commend and thank the authors for efforts they have made to make the paper more readable and accessible to a wider audience and for the much improved notation too. Reading the new draft was so much easier and enjoyable even.

General comments

1. The only major pushback I would have is that while the authors have made considerable efforts to put their work into context in the introduction they still fail to do this with their results. This is most notable with other attributions studies such as Vautard et al. 2020 which seems a bit odd given the overlap in authors. For example their estimated return periods seem to be way smaller (more frequent) than those presented here for the same locations (fig 6b) even when considering your lower bounds (S6b). But also a other studies are returning numbers much more frequent for the recent hot events, particularly Northern Europe and the UK. Similarly there are other studies that calculate climate change terms for EV parameters (your μ_1 & σ_1 and Fig 5b & 5d) e.g Brown 2014 - yes they look at TX1x rather than TX3x and use regional models but one would expect the impact on EV parameters not to be that different. And you also mention the use of regional models in your Perspectives (section 6) as something that would be useful to do - it would be good to acknowledge that this has already been done at least to some degree.
2. I think it would be much better for the Paris results of S8 column 1 to be placed in the main text, perhaps as part of Figure 3.
3. Line:419 "which are supposed to be records (and therefore rare), are becoming the norm". Surely we as a community need to be moving away from such terminology. The whole point of your work is to show that the climate is warming and thus we should expect records to be broken - it is now normal and expected for records to be broken, it is not exceptional. Perhaps there was a time when this was a useful communication tool but surely that has now passed. Now it looks more like headline grabbing and scare mongering. It is my view that record breaking is no longer a useful metric or tool and we need to move to a risk based perspective, that is quantification of risk, which this paper does admirably and which the "record braking" trope does a disservice to.

Minor

1. l.399 "generally constant across the map" - well this is a matter of perspective and more a feature of the colour scale. The UK being ~ 1 and Spain ~ 2 seems rather big to me in terms of actual changes in temperature being double in Spain what it is un the UK and other more northerly regions. Also with Fig 5b it looks like all numbers are positive so it is a bit of a waste having a diverging colour scale. A colour scale more like 5a might be more appropriate.
2. Fig 5d could the scale be narrower please as it does not really show anything at the moment.
3. Fig 6c There seems to be a slight "cubism" in the shades of red. Is this an artifact of the printing or does this mean something?
4. l.494 - "their uncertainties are lower" - I think this misses the point. The uncertainty in future climate (given a forcing scenario) comes from a lack of understanding in the physical processes that produce the various feedbacks. Using well defined forcings does not mitigate these uncertainties, it just ignores them and will thus be misleading.

References

Robert Vautard et al 2020 Environ. Res. Lett. 15 094077, DOI 10.1088/1748-9326/aba3d4

Brown, S.J., Murphy, J.M., Sexton, D.M.H. *et al.* Climate projections of future extreme events accounting for modelling uncertainties and historical simulation biases. *Clim Dyn* **43**, 2681–2705 (2014). <https://doi.org/10.1007/s00382-014-2080-1>