

Interactive comment on “Space-time clustering of climate extremes amplify global climate impacts, leading to fat-tailed risk” by Luc Bonnafous and Upmanu Lall

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Thanks very much for the helpful comments

For comment 1) we can indeed provide separate plots for the wet and dry events For the related comment 2) we understand that drought may have significantly larger spatial correlation structure, and this is accounted for in the bootstrap hypothesis testing to an extent. Our point in showing the wet and dry is that there is a much higher probability of seeing wet and dry threshold exceedances because of the way the atmospheric circulation leads to persistent structures of extremes. We will try to clarify this in the revision. For production, we dont have long term production data as the mines are added

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over time and decommissioned. Our point was that for the current producing mines, a weighted risk can be derived using the production at each mine as a weight. Indeed the degree of concentration of risk varies by type of mining and also by agriculture or other areas. It is interesting to see that copper and gold are mined globally at locations that translate into the highest spatial risk concentration

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