

***Interactive comment on “Hydrological drought across the world: impact of climate and physical catchment structure” by H. A. J. Van Lanen et al.***

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This paper set up a controlled modeling experiment to investigate the impact of climate and physical catchment structure to hydrological drought. The experiment program designed in this work is detailed and logical and the climatic data derived from WATCH Forcing Data is valuable. The combination of conceptual hydrological model and simple spatially lumped groundwater model is reasonable and effective for the investigation of large scale hydrological drought mechanism, although some assumption is idealized, even may inconsistent with actual situation. The quantitative results from statistical analysis strongly supported the conclusions in this article, and the discussion and conclusion is very interesting. The authors use Köppen-Geiger climatic map to randomly

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select the land grid cells for hydrological model running. I suggest adding the distribution map of selected random points to illustrate the spatial representativeness of selected random points.

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