

Interactive comment on “Projected changes in US erosivity” by M. Biasutti and R. Seager

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This study uses bias-corrected daily precipitation fields from CMIP5 climate model runs to project changes in erosivity over the United States under the the RCP8.5 emission scenario. Overall it is well carried out and described, and the large uncertainties involved are appropriately emphasized.

1482: I would be concerned that to "estimate local R to F relationships for points in each 1 by 1 degree square" is essentially fitting interpolation noise, as neither field will have many actual observations within a typical square. This may explain the large variability in the regression coefficients seen in Figures 5 and 6. It may be better to estimate these relationships on a much larger scale, for example over each of the 9 climatic regions mentioned on p. 1472.

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1481: for observations of change in intense daily rainfall, can also now cite Asadieh and Krakauer (2015), Global trends in extreme precipitation: climate models versus observations, HESS, 19(2): 877-891

Figure 10b: Specify the intensity measure (e.g. "mean daily intensity").

Figures 11-13: I suggest using fewer distinct colors to make them easier to distinguish (similar to the color scale of Figure 10).

There are a few typos, such as

1475:7 curtesy → courtesy

1482:14 form → from

1483:10

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 12, 1469, 2015.

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