

Interactive comment on “Technical Note: The impact of spatial scale in bias correction of climate model output for hydrologic impact studies” by E. P. Maurer et al.

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Downscaling sets of GCM rainfall and temperature data using quantile transforms from surrogates modelled by NCEP and NCAR time series, to a range of scales from 2 degrees down to 1/8th of a degree, are used to drive the SWAT hydrological model over 185 basins in the Western USA. The sensitivity of the basin responses is determined by comparing their modelled runoff, trained on a 30 year period, against observed data during a following 22 year validation period. It turns out, rather counter-intuitively, that

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the 'best' result is obtained by the $\frac{1}{2}$ degree discretisation; coarser and finer division appears to add noise.

The attractive and valuable characteristics of this paper are that the authors do not try and sell their product, but let the data speak for themselves. The thoroughness, care and clear exposition in the paper is an exemplar. This is the first paper I have ever reviewed in over 40 years which needed not one correction. It is impeccable.

Publish as is!

Geoff Pegram 06 November 2015

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