

Very extreme seasonal precipitation in the CMIP and NARCCAP ensembles: Model performance and projections.

Michael Wehner[†];

[†] Berkeley Lab, USA

Leading author: mfwehner@lbl.gov

Extreme daily precipitation is analyzed in terms of seasonal twenty-year return values from the ensemble of CMIP5 global and NARCCAP regional climate models. Significant variation in the models' abilities to reproduce available metrics of observed precipitation extremes is found. In addition to substantial biases, the replication of the seasonal cycle of these rare events proves problematic for most of the models. The implications for confidence in the projection of future changes in seasonal precipitation extremes are discussed.