

Extra-tropical cyclone activity in the ensemble of 20th Century Reanalysis (20CRv2)

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An objective cyclone identification/tracking algorithm is applied to each of the 56 runs of the 20th Century Reanalysis (20CRv2) for 1871-2008, to infer extra-tropical cyclone activity and historical trends therein. The analysis is done for the northern and southern hemispheres (NH and SH), separately. The presentation includes ensemble mean and spread of cyclone counts and intensity. A preliminary assessment of temporal homogeneity of the 20CRv2 cyclone activity index is also presented. The 20CRv2 is found to be comparable to modern reanalyses and homogeneous over 100+ years for many NH regions, although it uses surface pressure data only.