

## **C20C - Climate of the 20th Century: Evaluation of simulations of 20th Century precipitation**

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We will describe the C20C project on precipitation of the 20th Century. The project aims at comparing model simulations of large-scale properties of precipitation against observations. Aspects to be evaluated include: 1) The simulated global mean and the long-term mean annual cycle over large domains (global, hemispheric, land/ocean, continental) and changes over the Century; 2) The simulation of precipitation features associated with large-scale coherent modes of climate variability, include the El Niño/Southern Oscillation (ENSO), the North Atlantic/Arctic Oscillation, the Pacific Decadal Oscillation, the Atlantic Multi-Decadal Oscillation, and others; and 3) The relationship of the features to be evaluated to observed atmospheric and sea surface temperature variations. Approximately 15 models simulations are available for these analyses. The precipitation anomaly simulations from these runs will be compared against the 20th Century reconstructed precipitation anomalies over the full period from 1900-2000 or later. GPCP and CMAP will be used for more detailed examination of the mean annual cycle on a regional basis and where greater spatial detail is required. Three periods are particularly relevant, mainly due to the various atmospheric reanalyses available, beginning in 1979, 1950 and 1900.