

*Preliminary Evaluation of the NMC/NCAR
CDAS-Reanalysis*

Kingtse C. Mo

Climate Analysis Center

NMC/NWS/NOAA

Washington D. C. 20233

Abstract

The National Meteorological Center - National Center for Atmospheric Research (NMC/NCAR) reanalysis project started in 1994. At the present time, a 10 year (1985 - 1994) reanalyses have been finished and data are available for the scientific community to use. The basic idea of the reanalysis is to use a frozen assimilation system and general circulation model to perform assimilation using past input data from 1958 to the present so there will be a continuous 40 year data to study climate change and interannual climate variability.

Some earlier results will be presented here and an intercomparison study between the NMC/NCAR reanalysis and the reanalysis from the DAO/NASA will take place to examine the uncertainties in the data set. Since the reanalyses will be extended to earlier pre-satellite years, the impact of satellite data on both analyses and forecasts have been assessed. The impact of satellite data is smaller than that obtained in previous impact studies during the FGGE in 1979. This implies the effect of improvements of both the GCM and analysis scheme. There is no significant differences between analyses with and without satellite in the Northern Hemisphere and largest impact can be found in the Southern Hemisphere south of 60S.