



NOAA's Office of Global Programs Climate Change Data and Detection Applied Research Center (ARC)

12/28/2004

The Global Historical Climatology Network:

The Global Historical Climatology Network (GHCN) data base contains time series of temperature, precipitation, and pressure for thousands of land surface stations worldwide. A WMO baseline data set, GHCN is used operationally by NCDC to monitor climatic variability, and it is widely applied in studies of climate change and in international assessment activities. GHCN's widespread application in climate analysis is a function of many factors, including its size, quality, and accessibility. It is also a function of NOAA's continuing commitment to climate monitoring, a commitment which necessitates that baseline data sets such as GHCN be maintained and updated on a regular basis.

1) Basic Description of Data Set:

A) Variables: Temperature (maximum, minimum, and mean), precipitation, and sea level pressure.

B) Type of Observations: Instrumental measurements from near- surface weather stations.

C) Geographic coverage: Global

D) Resolution: Monthly temporal and variable spatial resolution

E) Duration: 1697 – present

F) Update Interval: Monthly via CLIMAT, GTS

G) Access Mechanisms: WWW, FTP

H) Operational Applications: International assessments (e.g. IPCC)

2) Scientific Stewardship Activities Required for Continued Production of the Climate- Quality Data Set

Quality Control

Bias Identification

Reprocessing Work

Utilization Activities

Data Set Champion: Russ Vose (NCDC)

3) Funding Request

A) Personnel: Vose (2 months)

B) Other resources: Travel and page charges; 5K per year

C) Funding History: NOAA Climate and Global Change 1990- 1995