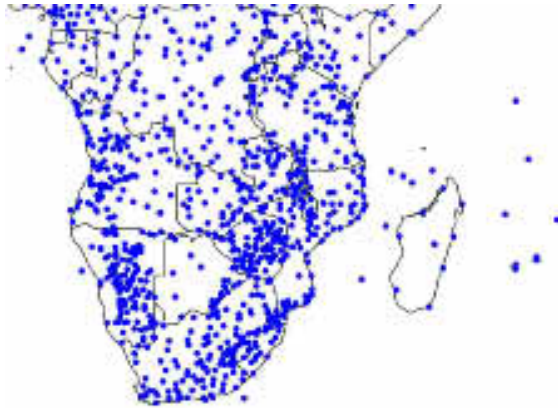


SAFARI 2000 Global Historical Climatology Network, V. 1, 1874 -1990

This dataset consists of a southern African subset of the Global Historical Climatology Network (GHCN) Version 1 database. All stations with the following bounding coordinates are included in this subset: 5W - 60E and 5N - 35S. There are 3 files available one each for precipitation, temperature, and pressure data. Within this subset the oldest data dates from 1874 and the most recent, 1990.

Precipitation Stations



Pressure Stations



Temperature Stations



Data Set Information:

The ghc_n_safari.dat files for precipitation, pressure, and temperature all contain a subset for the Safari 2000 study area of the Global Historical Climatology Network; Long-Term Monthly Temperature, Precipitation, Sea Level Pressure, and Station Pressure data set.

These data sets contain monthly temperature, precipitation, sea-level pressure, and station-pressure data for thousands of meteorological stations worldwide. The database was compiled from pre-existing national, regional, and global collections of data as part of the Global Historical Climatology Network (GHCN) project, the goal of which is to produce, maintain, and make available a comprehensive global surface baseline climate data set for monitoring climate and detecting climate change. The subsets contain data from 218 temperature stations, 985 precipitation stations, 0 sea level pressure stations, and 180 station pressure stations. Most stations have at least 10 years of data while some have more than 100 years of data.

This README file contains information regarding:

- 1) Data File Format Information
- 2) Procedure used to create the southern Africa subsets

This data set consists of 3 separate data files. Each file is comma-delimited ASCII containing station ID# and one of three parameters:

- 1.ghcn_precip_dat.zip -- precipitation data
- 2.ghcn_pressure_dat.zip -- pressure data
- 3.ghcn_temp_dat.zip -- temperature data

A fourth file "ghcn_stations.dat" contains station location information.

File Compression Information

For this archive, the data files have been compressed with the MS Windows-standard Zip compression scheme. These files were compressed using Aladdin's DropZip on a Macintosh. DropZip uses the Lempel-Ziv algorithm, also used in Zip and PKZIP programs. The compressed files may be uncompressed using PKZIP (with the -expand option) on MS Windows and UNIX, or with StuffIt Expander on the Mac OS. You can get newer versions from the PKZIP Web site at <http://www.pkware.com/shareware/>.

PROCEDURE USED TO CREATE THE SOUTHERN AFRICAN SUBSET

The data were obtained from the ORNL DAAC website.

The data.Z files (available from the ORNL DAAC) were modified into three (precipitation, pressure, temperature) .csv files that contained ID#, longitude decimal degrees, and latitude decimal degrees and imported into ArcInfo. Point coverages were then created and added to a view in ArcView
3.1.

In addition to the point coverages, a polygon was created in ArcInfo using the guidelines for the Safari 2K Study Area.

Bounding Coordinates: West : 5
East : 60
North: 5
South: -35

Once the points and the polygon were displayed, ArcView shapefiles containing only the points located inside the polygon were created.

Finally the matching attributes from the Global Historical Climatology Network (GHCN) data were joined and comma delimited (.dat) files were created.