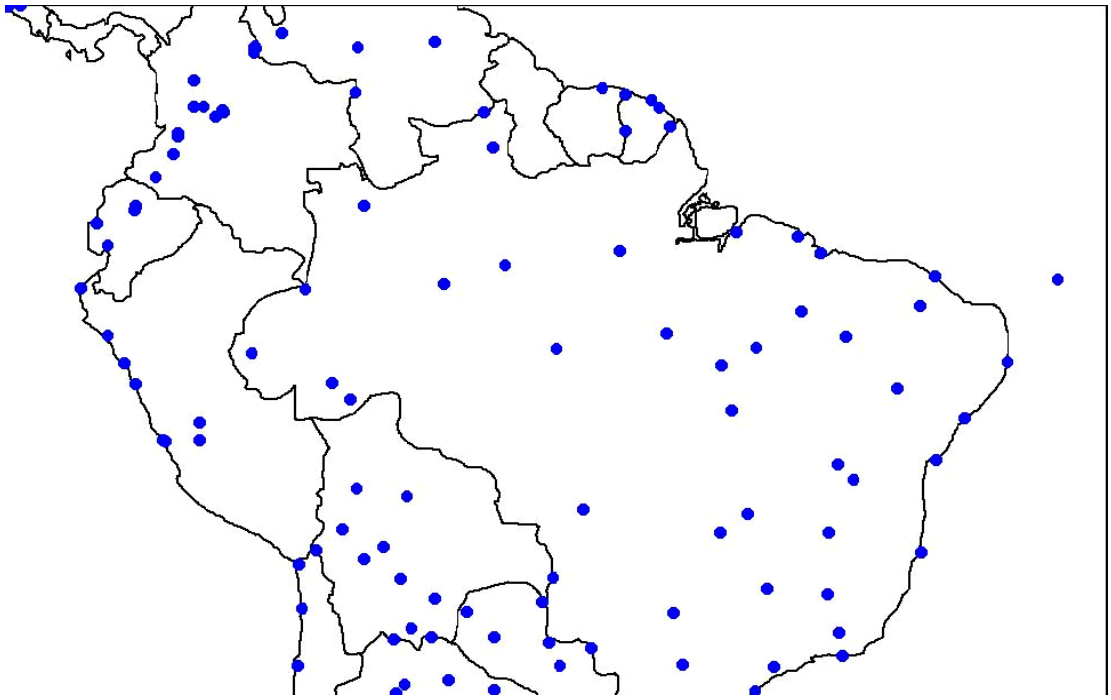
LBA Regional Global Historical Climatology Network, V. 1, 1832-1990

This data set consists of a subset of the Global Historical Climatology Network (GHCN) Version 1 database for the study area of the Large Scale Biosphere-Atmosphere Experiment in Amazonia (LBA) in South America (i.e., longitude 85° to 30° W, latitude 25° S to 10° N) . There are three files available, one each for precipitation, temperature, and pressure data. Within this subset the oldest data date from 1832 and the most recent from 1990.

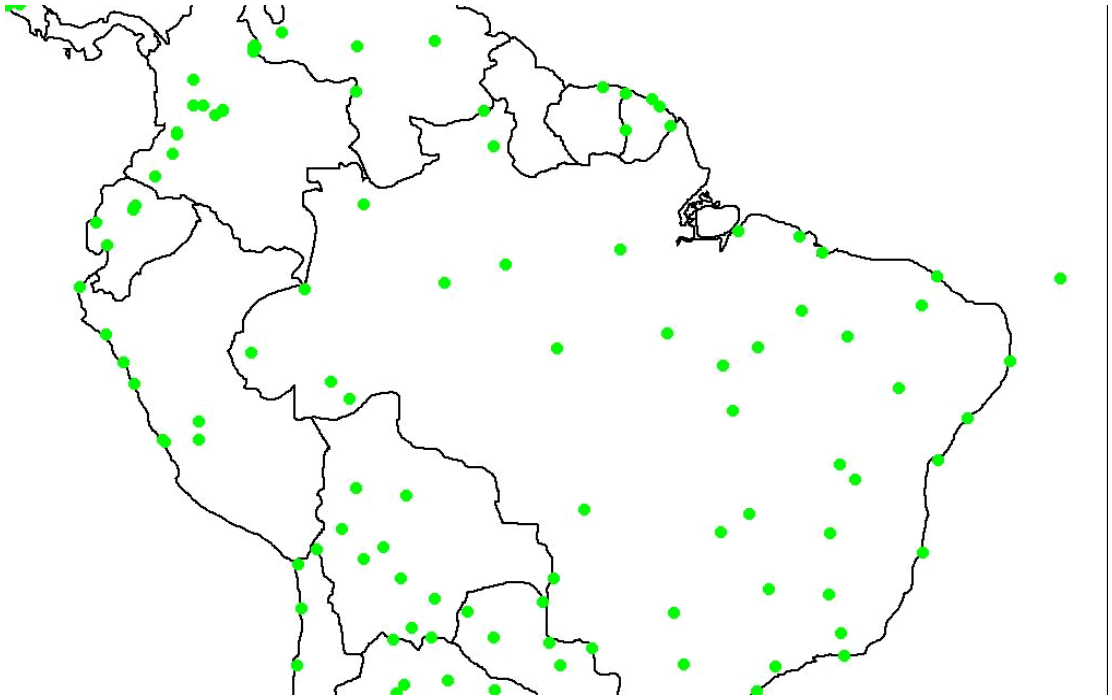
The subsets contain data from 225 temperature stations, 520 precipitation stations, and 106 station pressure stations. See figures below. Most stations have at least 10 years of data while some have more than 100 years of data.

These parent data sets contain monthly temperature, precipitation, 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.

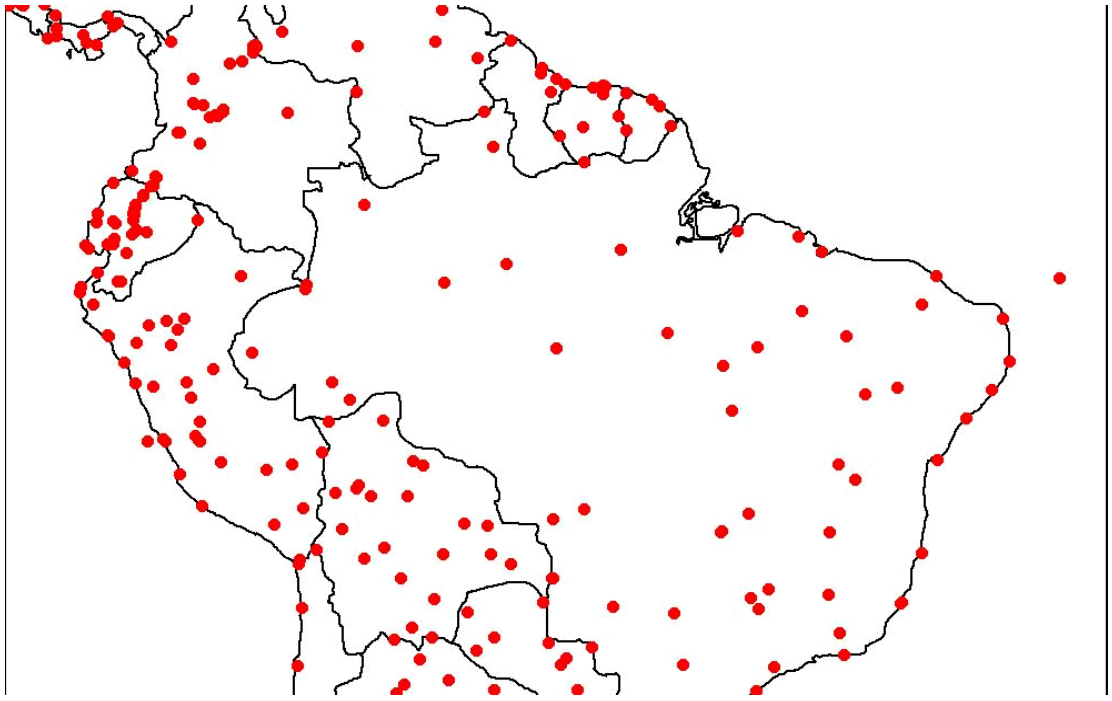
LBA Subset of the Global Historical Climatology Network Data Set



LBA Precipitation



LBA Pressure



LBA Temperature

This README file contains information regarding:

1) Procedure used to create the LBA subsets

PROCEDURE USED TO CREATE THE LBA SUBSETs

The data were obtained from the ORNL-DAAC website.

The data.Z files 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 generated 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 LBA Study Area.

Bounding Coordinates: West : -85
East : -30
North: 10
South: -25

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 files were joined and comma delimited (.dat) files were created.