



HANSEN Global Temperature Indices

This analysis of average global temperature is available here as [a dataset](#), including an interactive viewer and downloadable datafiles.

This data and documentation is taken from GISS, and is more extensively documented [there](#).

Meteorological Station Data

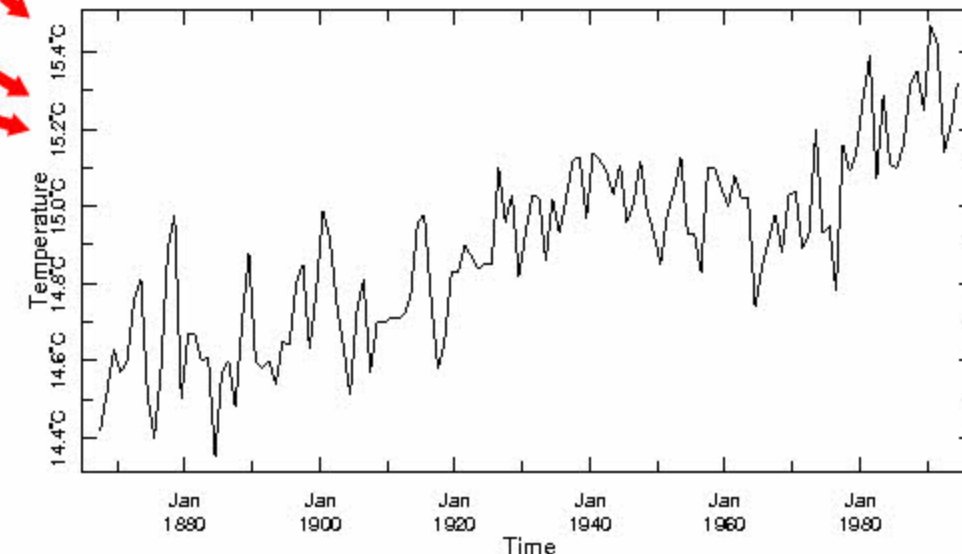
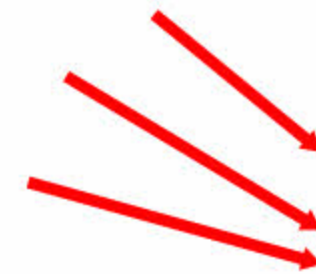
These data are an update of the analyses described by [Hansen and Lebedeff \(1987\)](#). Discussions of the data are given in the [references below](#). The input data for these analyses are principally the Monthly Climatic Data of the World (MCDW) from about 2000 meteorological stations around the world, supplemented for the most recent several months by NOAA near real time data for most of these stations.

This analysis is updated each month. The data for earlier months and years changes slightly as additional stations are added and as the near real time NOAA data is replaced by MCDW data.

Nonclimatic influences, e.g. urban warming, have not been expunged from the meteorological station data. [Hansen and Lebedeff \(1987\)](#) estimate that urban effects cause a warming of about 0.1°C/century on global average, but the effects can be larger and smaller in different regions. The annual-mean global-mean temperature anomaly in recent decades is estimated to have a two-sigma uncertainty of about 0.07°C due to incomplete spatial coverage of stations. Thus the relative rank of different years is uncertain for years whose temperatures differ by less than that amount.

References:

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