

1. Old History

3. 70's: Global cooling -- Ice Age Coming

4. Wikipedia on climate

5. 2000's : Climate Change

6. USA government on climate

7. Other countries on climate

8. Math Reviews on climate

9. News 2007-2009

10. 2010

11. 2011

12. 2012

13. 2013

14. 2014

15. 2015

[back to the main climate page](#)

2. Plots

Plots and graphs from David Bernstein

Here are his comments.

These graphs describe the temperature fluctuations on the surface of our planet during the last

10 thousand years,
50 thousand years,
420 thousand years,
5 million years,
65 million years,
542 million years

These graphs show some interesting cycles

The most important (from our point of view) are the cycles from Kyr-420 and Myr-542

In Kyr-420 we see Ice ages (90% of the time) when Boston and Moscow were covered by a mile-thick layers of ice.

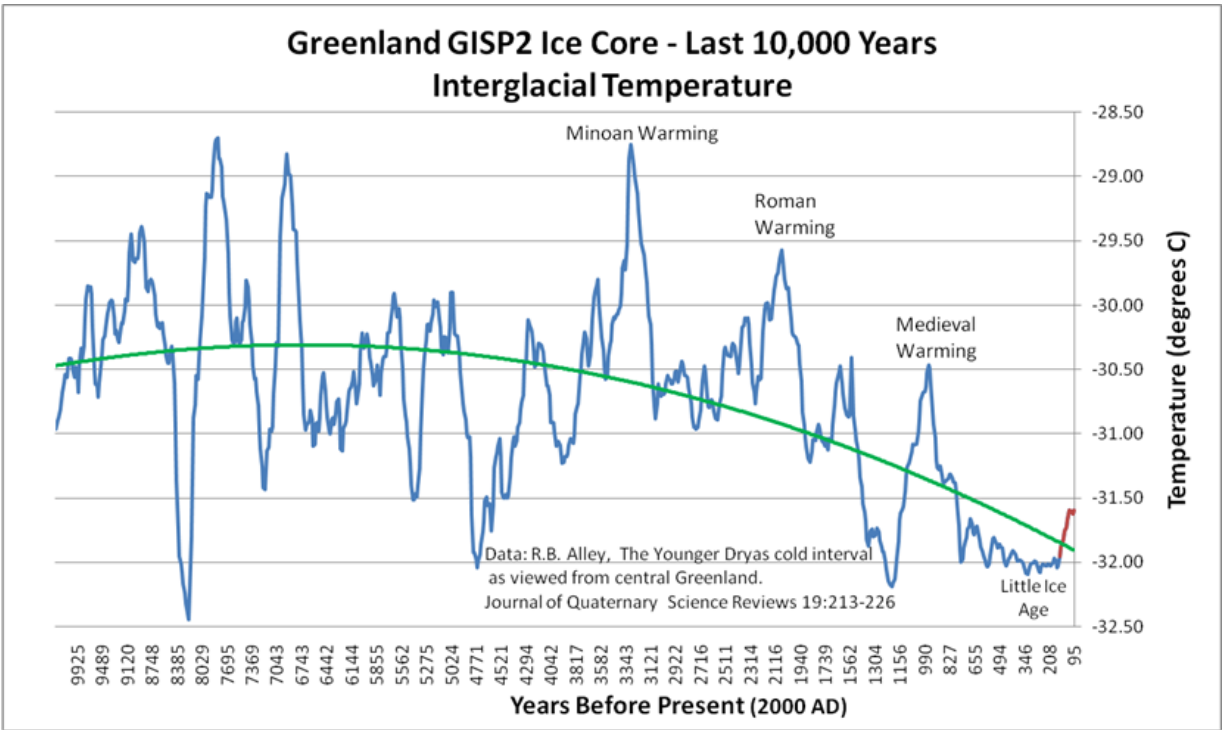
Every ~100Kyr they are interrupted by short (~10Kyr) interglacial periods, when life becomes possible in Europe (North of the Alps) and North America

Right now we are in one of these interglacials (probably at the end of it)

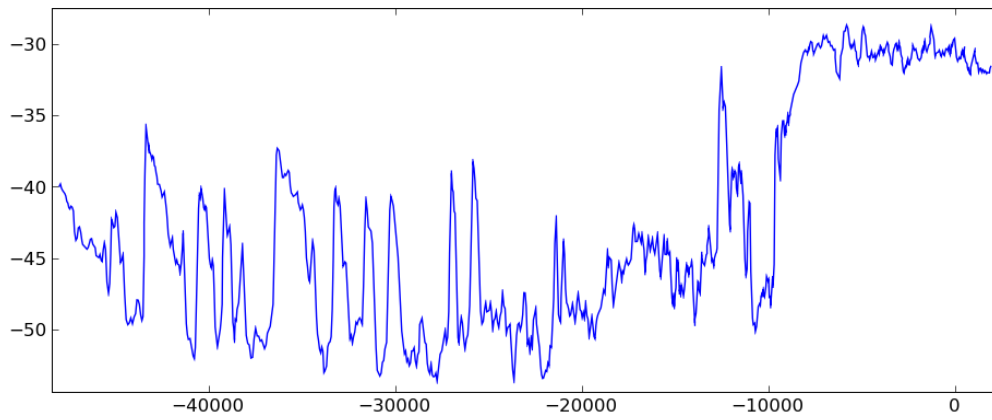
The most popular explanation is the Milankovich cycles (changes in the Earth's orbit)

On the other hand the cycles in Myr-542 are much longer (~300Myr) and most of the time the Earth is much warmer so that there is no ice on the poles (tropical climate in Greenland) but occasionally the Earth enters the era of Ice ages (like during the last 2Myr)

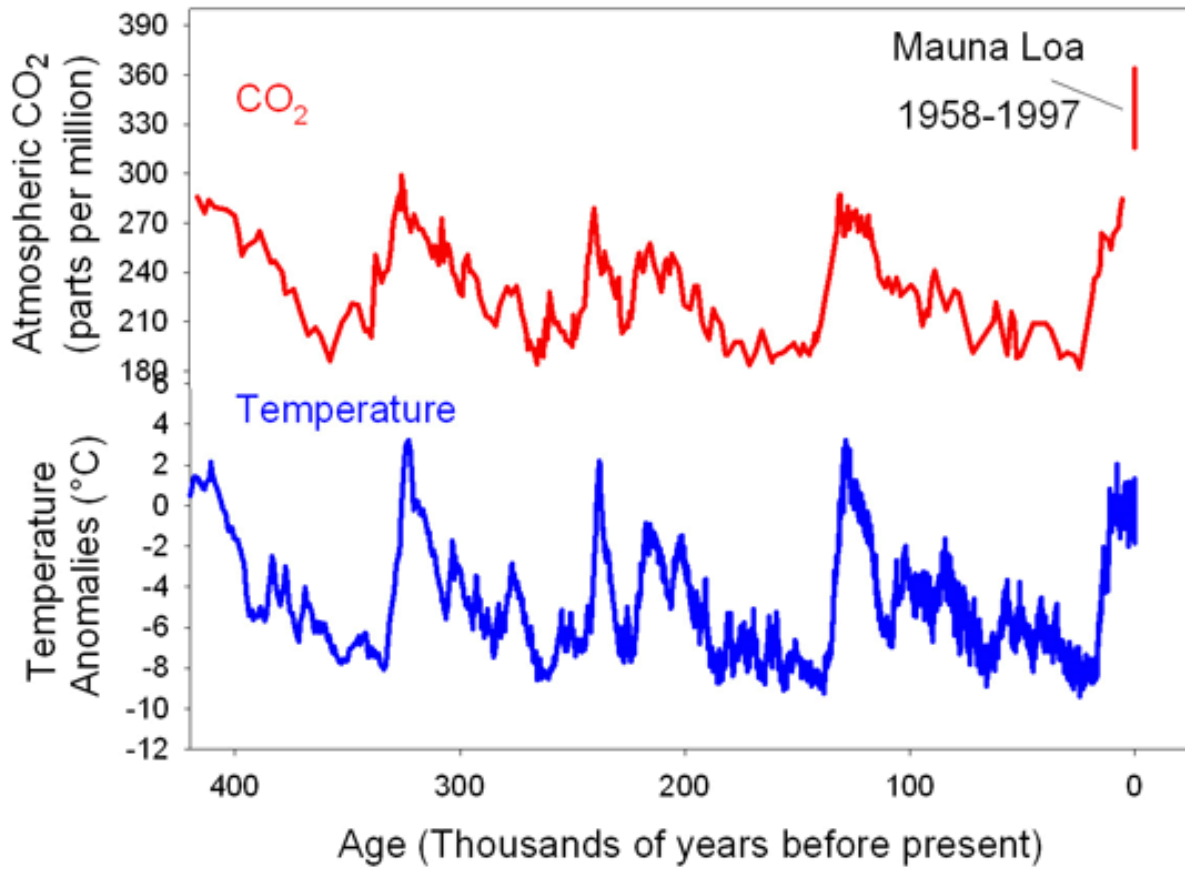
The most popular explanation is the movement of the solar system around the galactic centers where occasionally we travel not far from regions rich in Supernovas that increase the flux of cosmic rays which facilitate the cloud formation and decrease the Earth's temperature



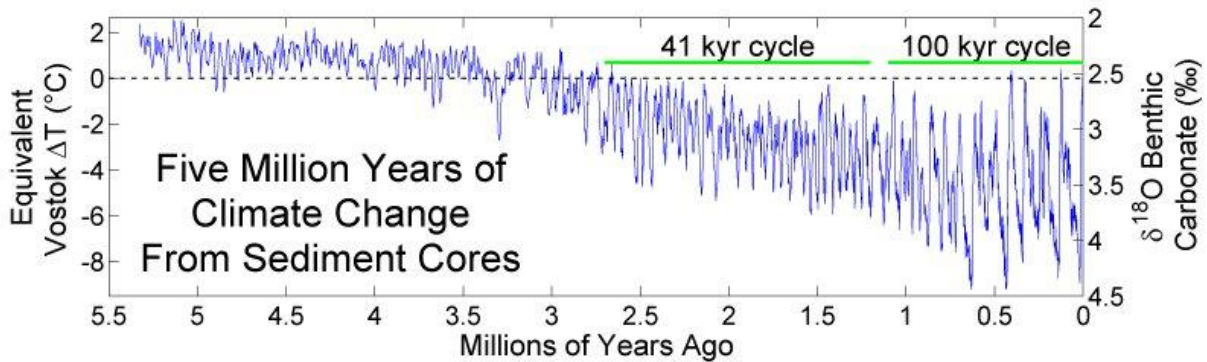
Temperature of Lower Atmosphere
Last 50,000 Years
From S.Hemisphere ice and air data

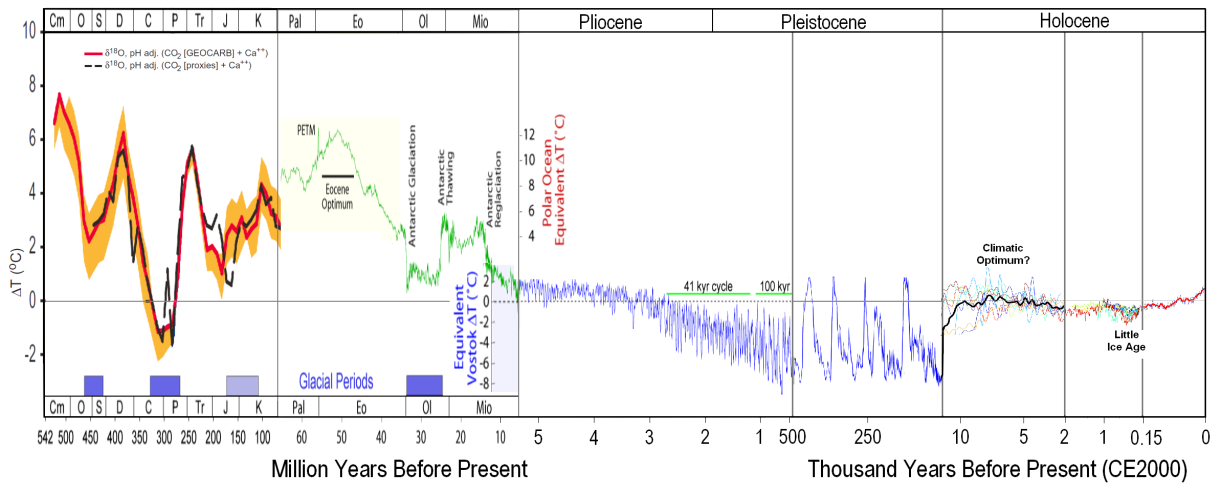
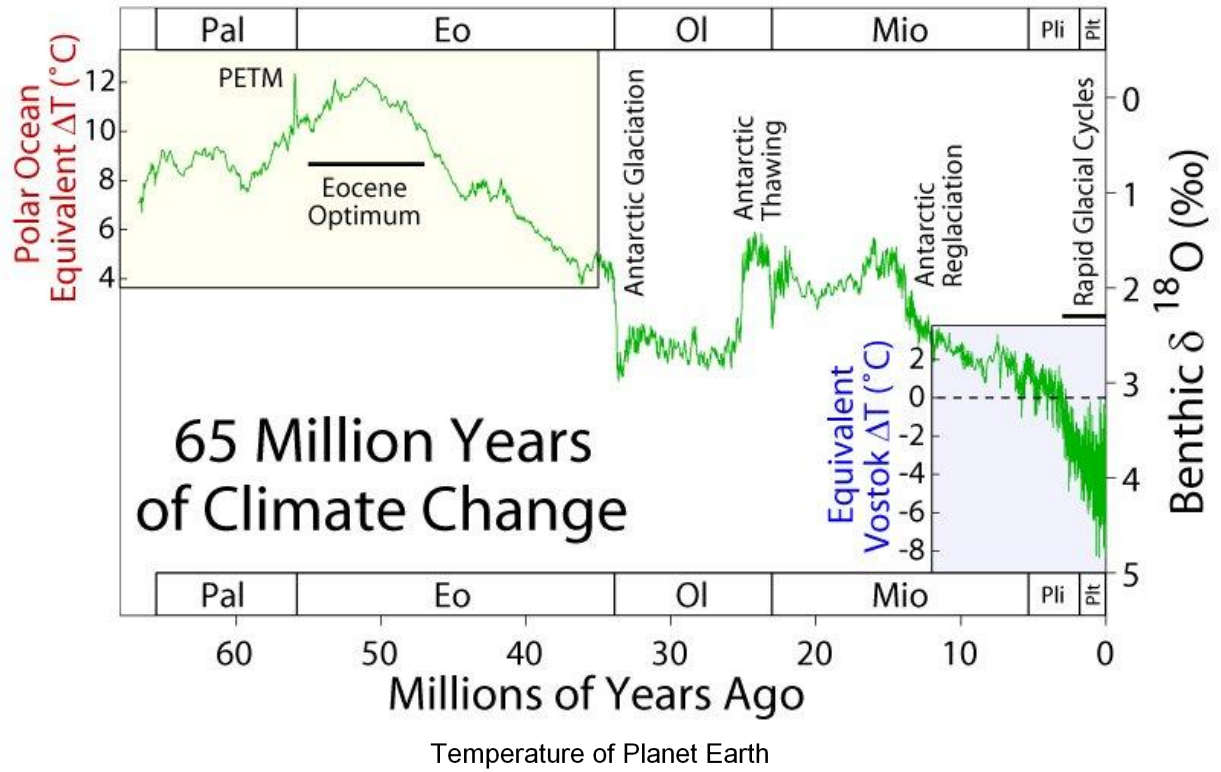


Vostok Ice Core, Antarctica



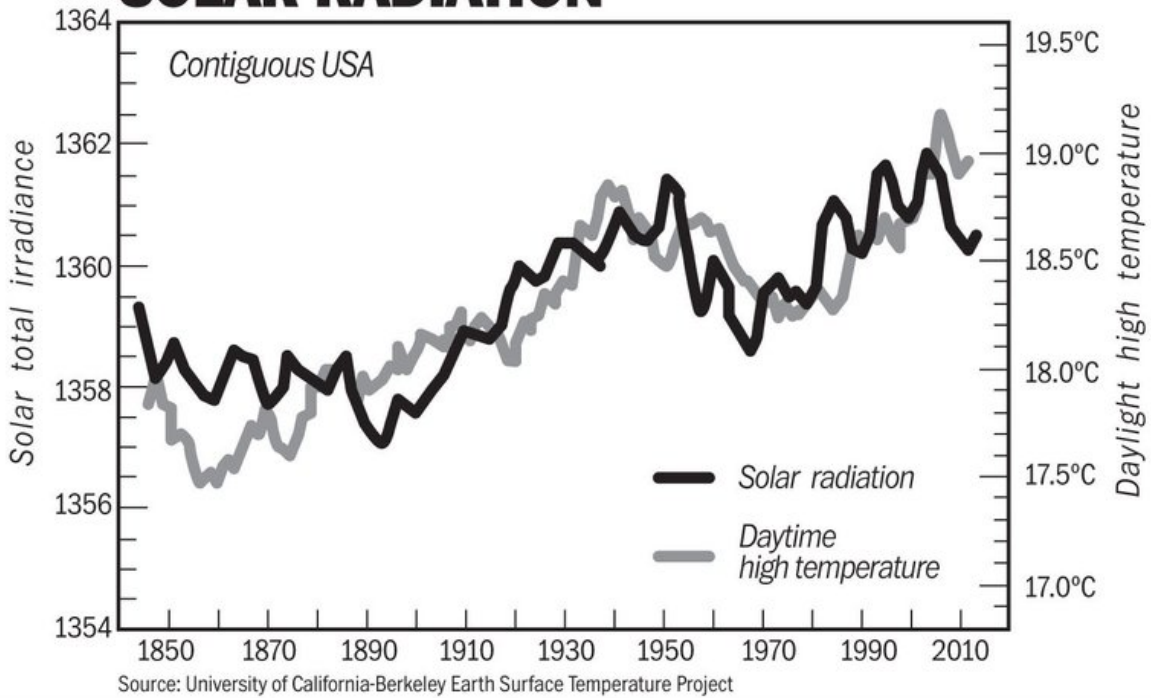
Petit et al. 1999 Nature





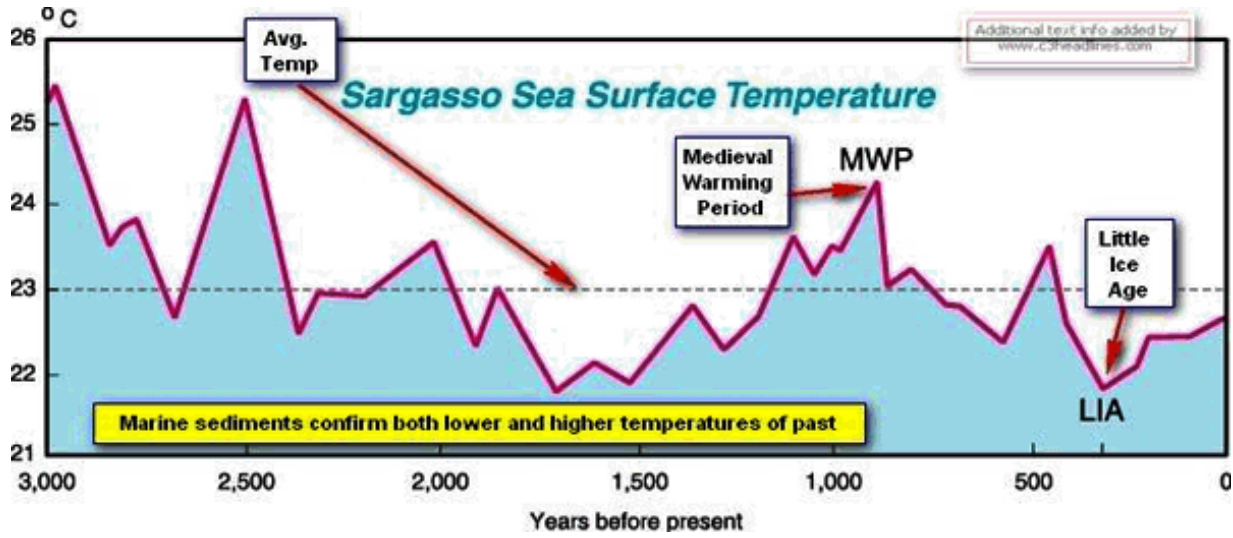
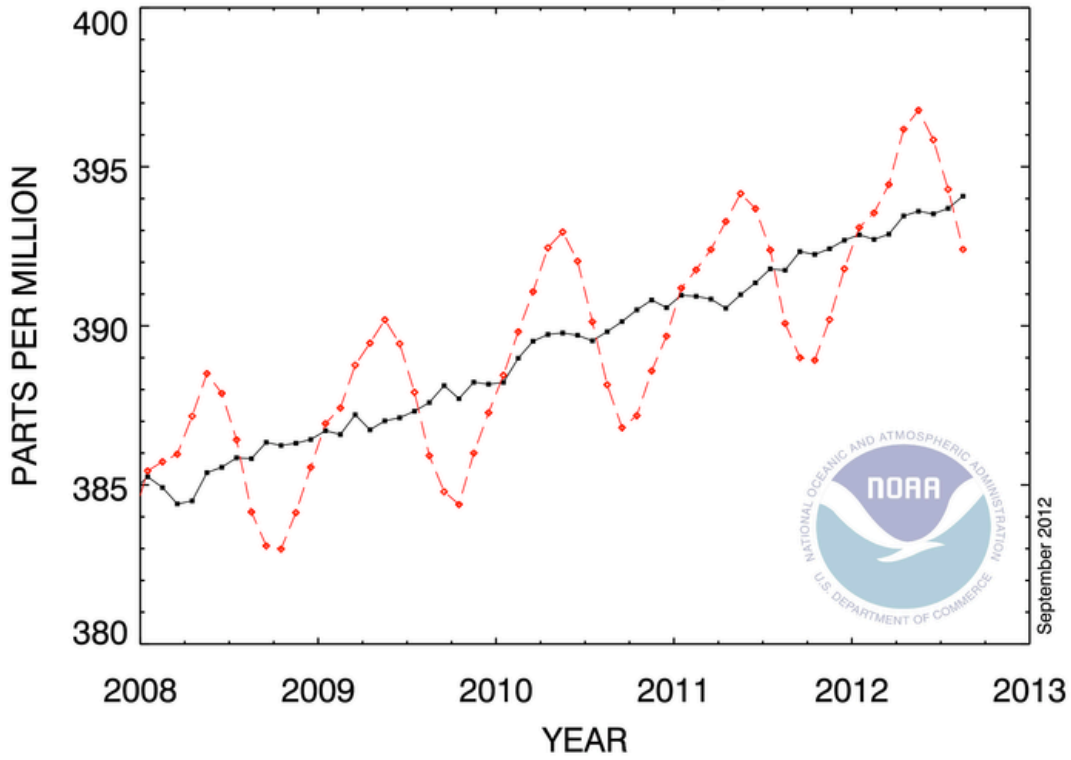
Other plots

TEMPERATURES TRACK SOLAR RADIATION

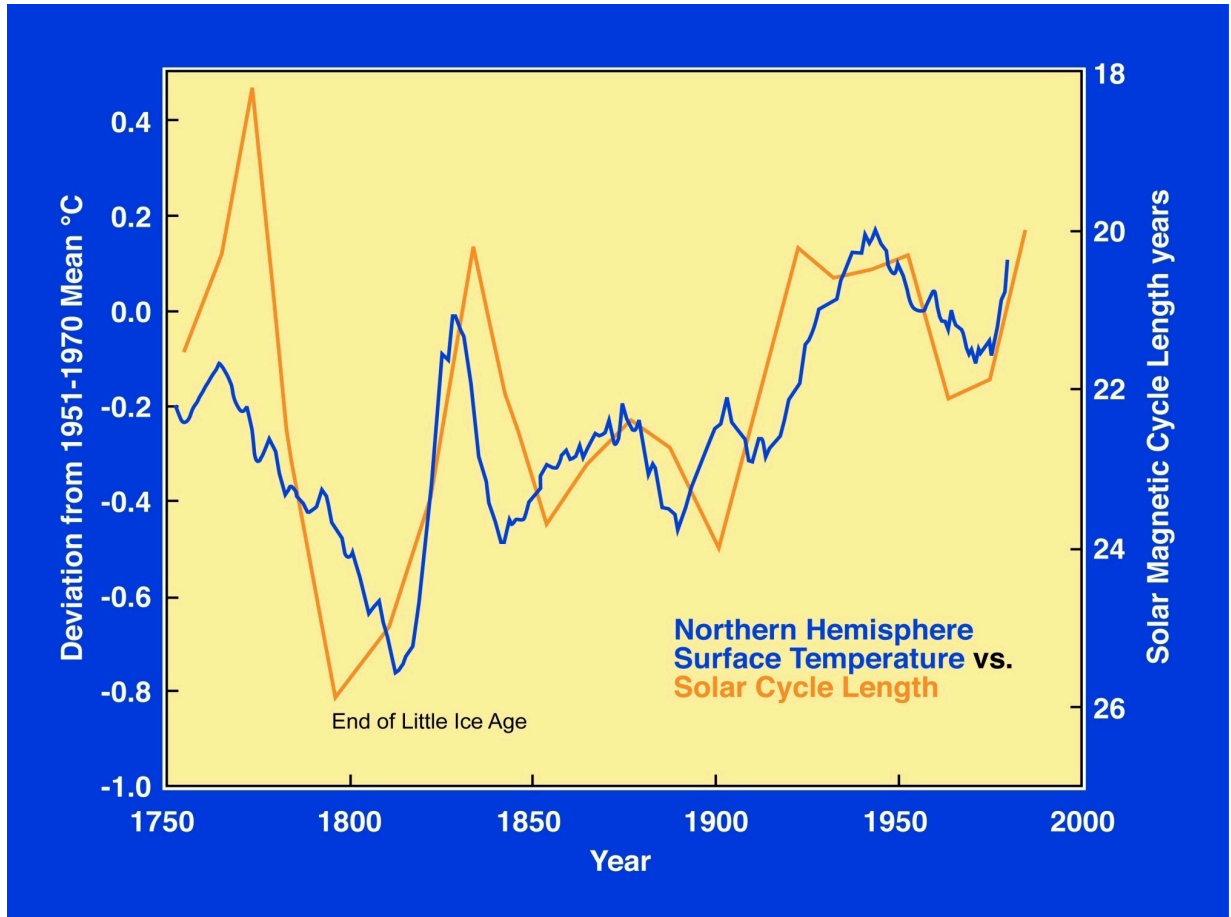
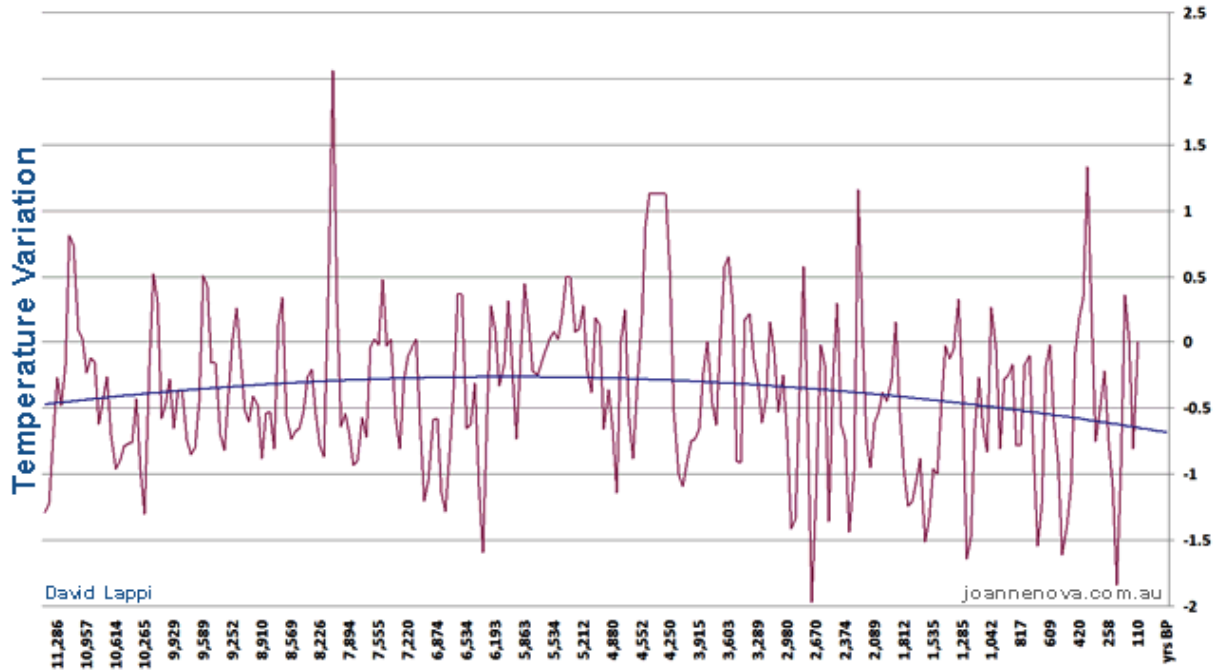


THE WASHINGTON TIMES

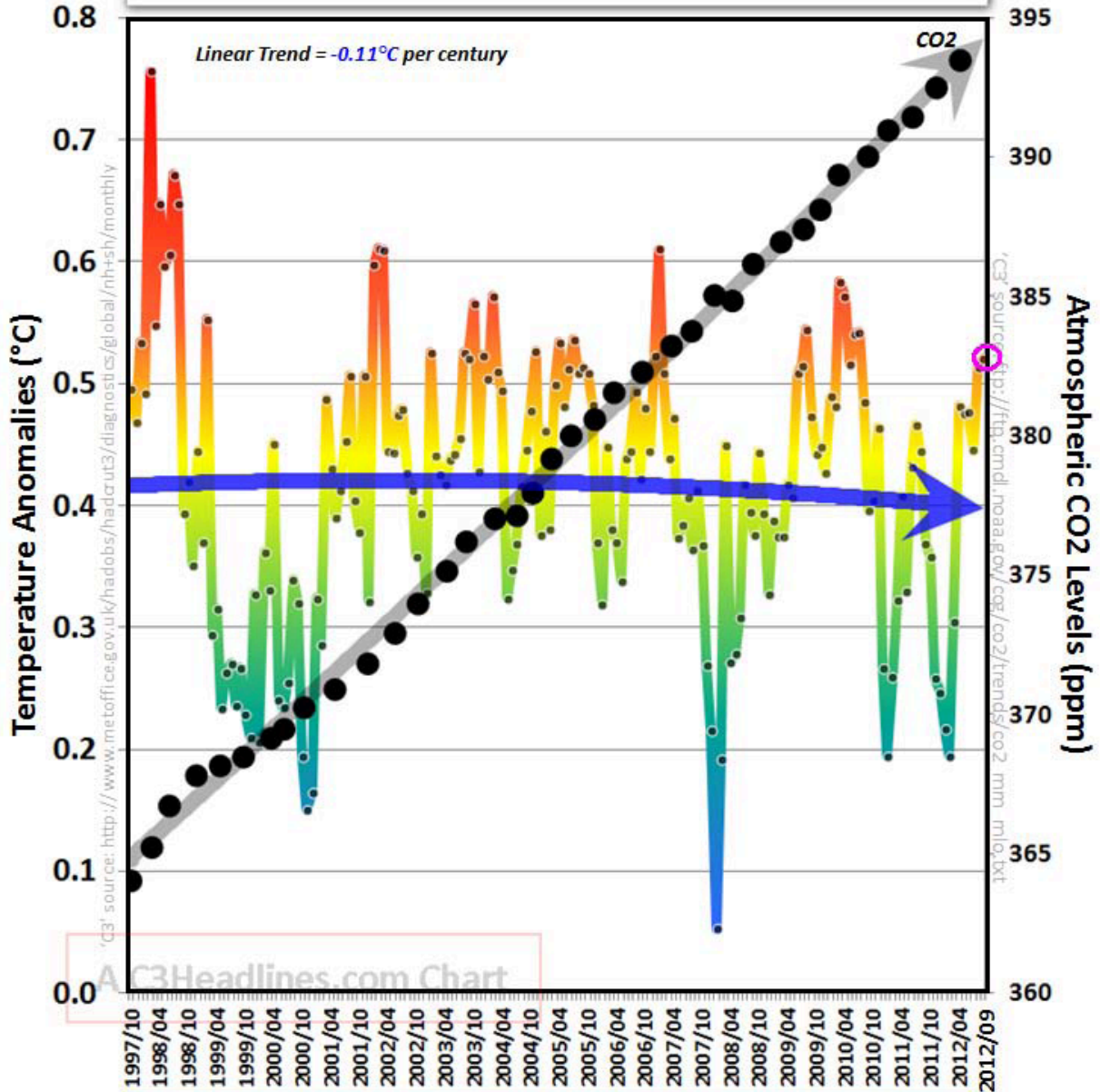
RECENT MONTHLY MEAN CO₂ AT MAUNA LOA



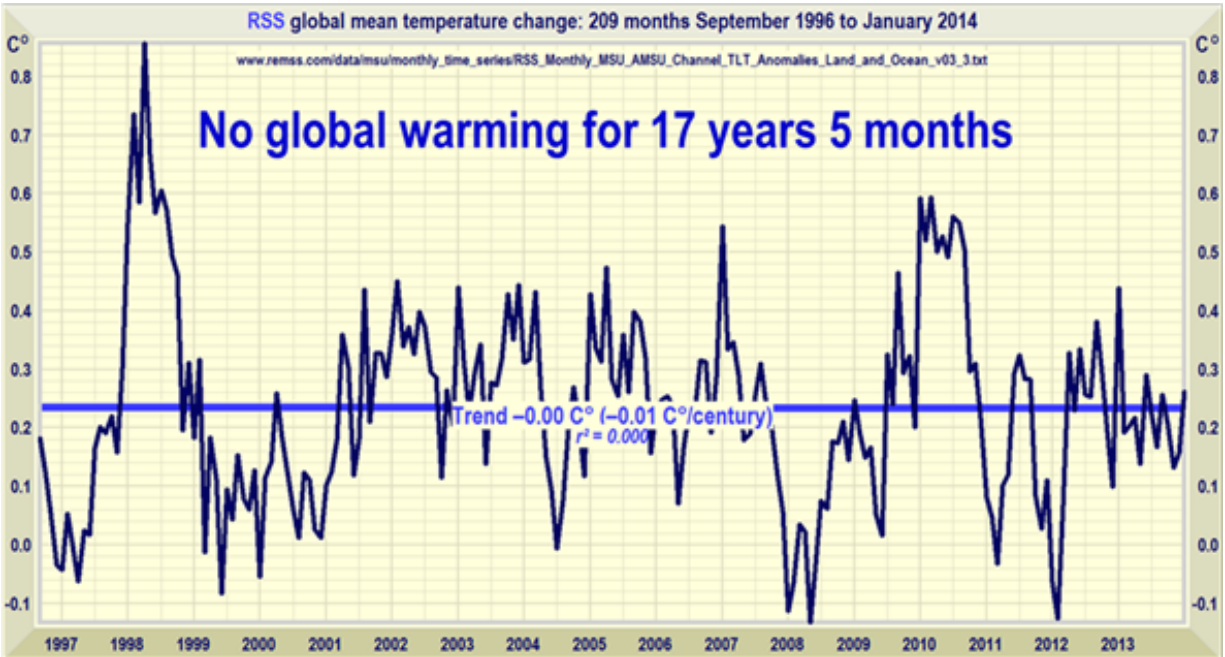
Vostok Antarctic Data - Last 12,000 Years
Interglacial Temperature (degrees C)



No Global Warming For 15 Years Despite Large CO2 Emissions
HadCRUT Global Temps - 180 months thru Sept. 30, 2012

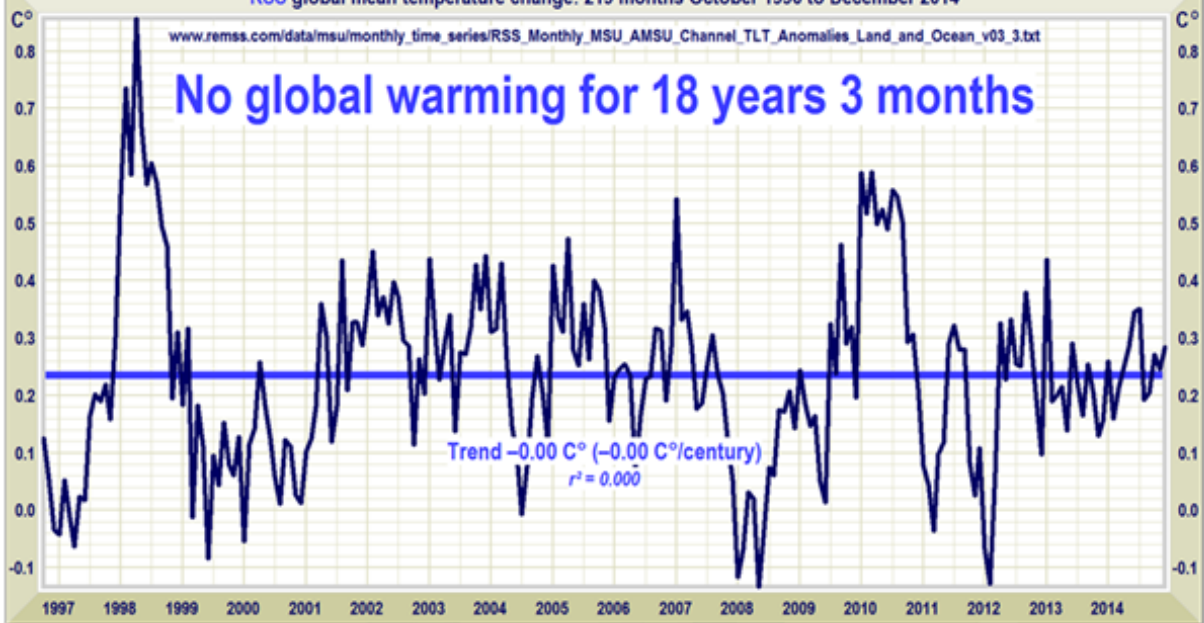


HadCRUT global temperature and atmospheric CO2 levels plots over last 180 months. Blue and grey curves are 2nd order polynomial fits - global warming to cooling. (As of September 30, 2012.)

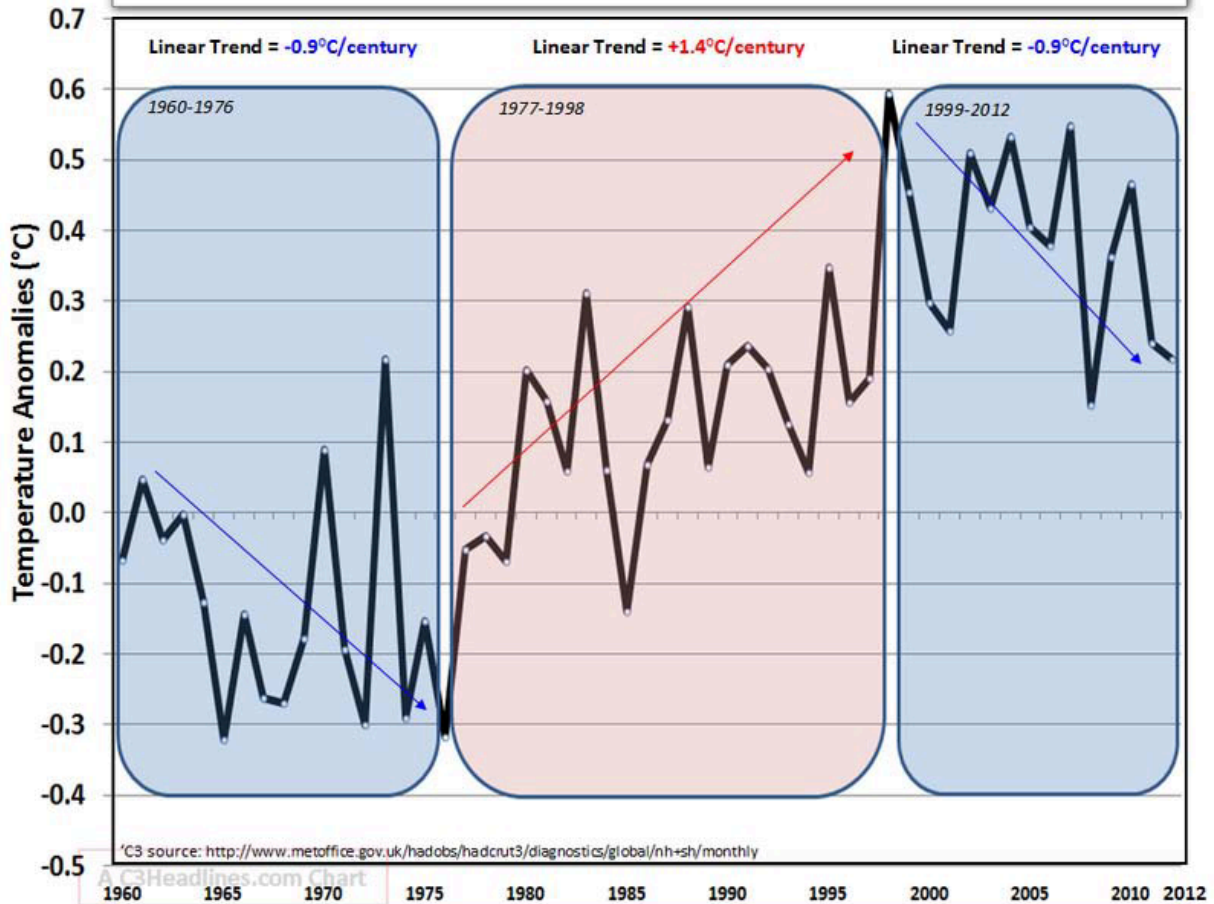


Satellites show no global warming for 17 years 5 months [Anthony Watts](#) / [February 6, 2014](#)

RSS global mean temperature change: 219 months October 1996 to December 2014



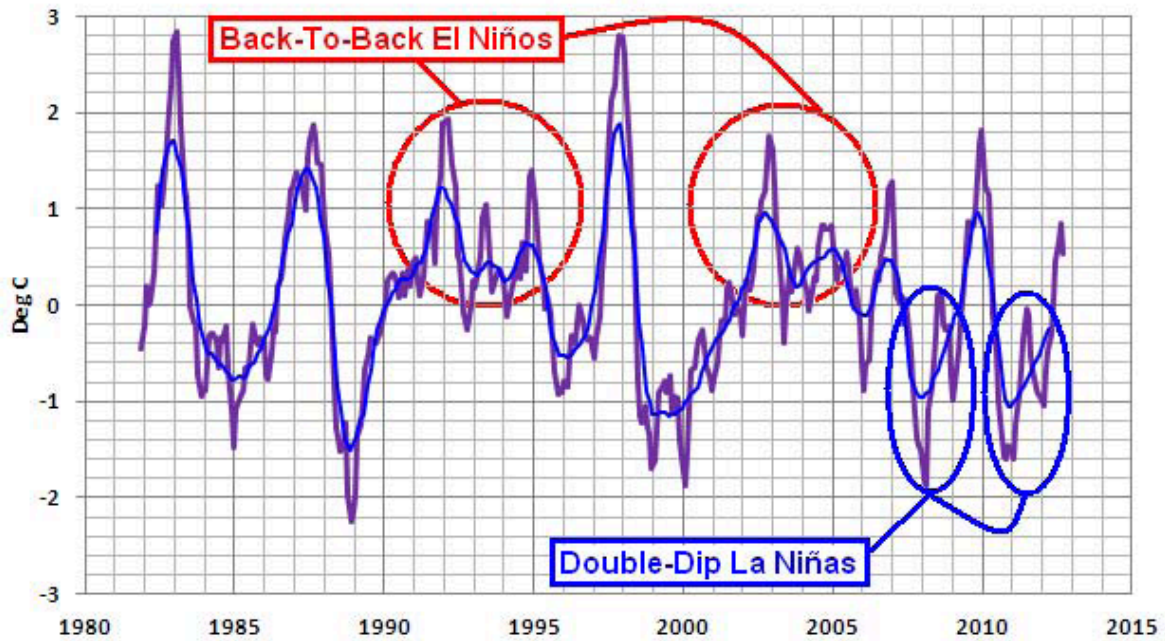
Trillion+ Tons of CO2 = Little Impact On Temperatures
 December-January-February HadCRUT Global Temps - 1960 thru 2012



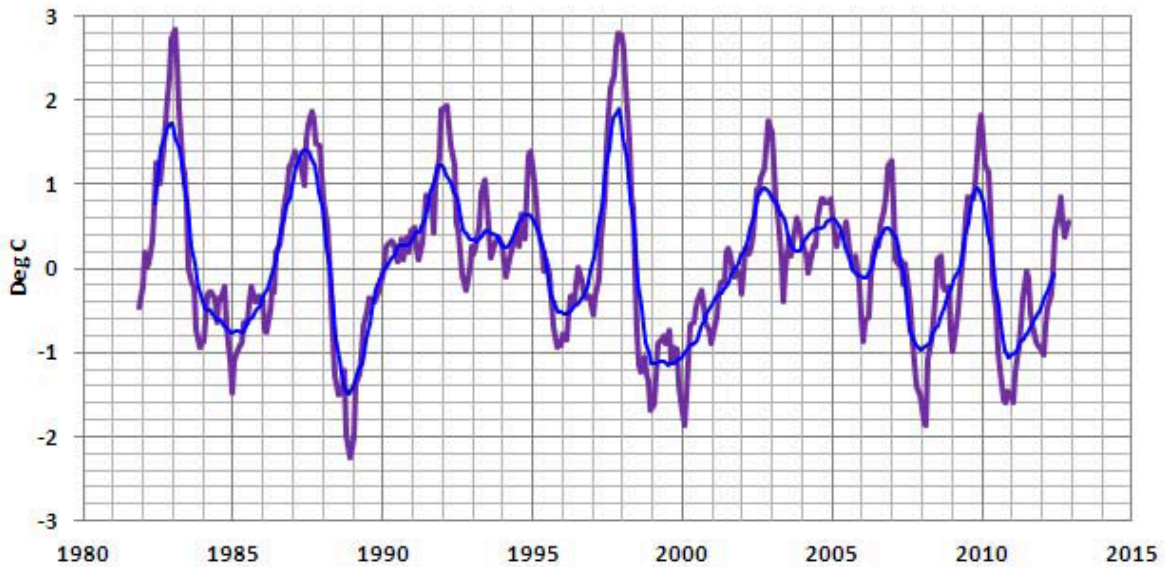
Above chart depicts the global cooling and warming phases experienced during the months of December, January and February, from 1960 through 2012. (Simple avg. of 3-months' anomalies.) Per the AGW theory and IPCC climate models the observed cooling trend from 1999 to 2012 should not have happened.

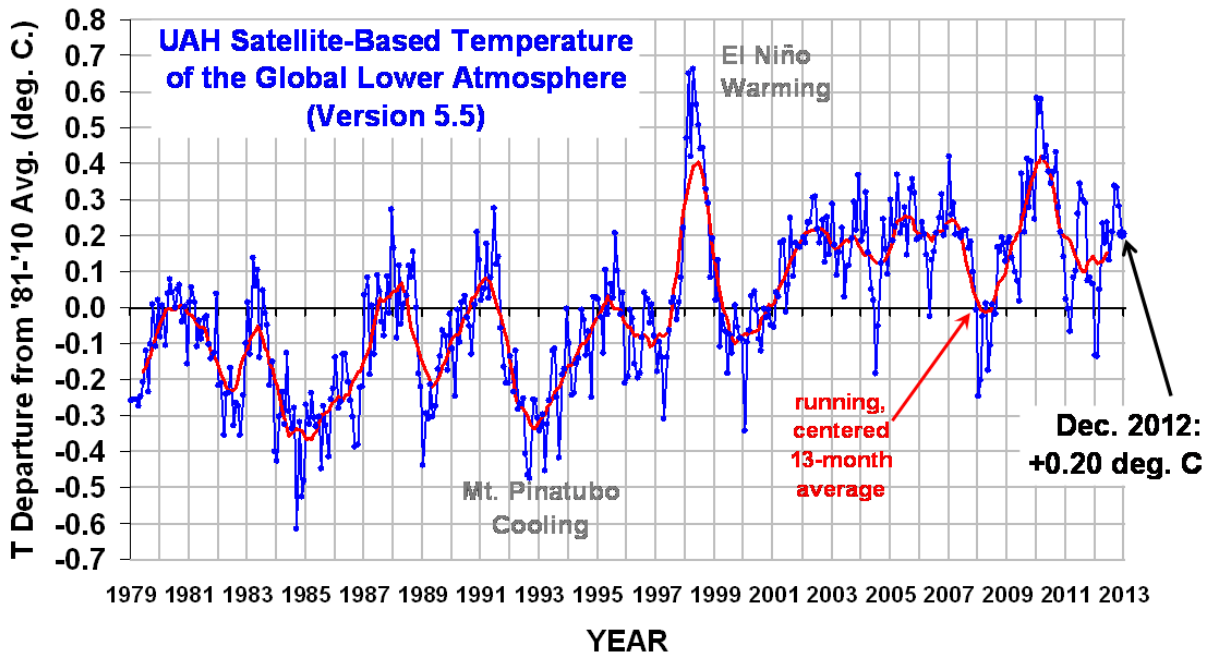
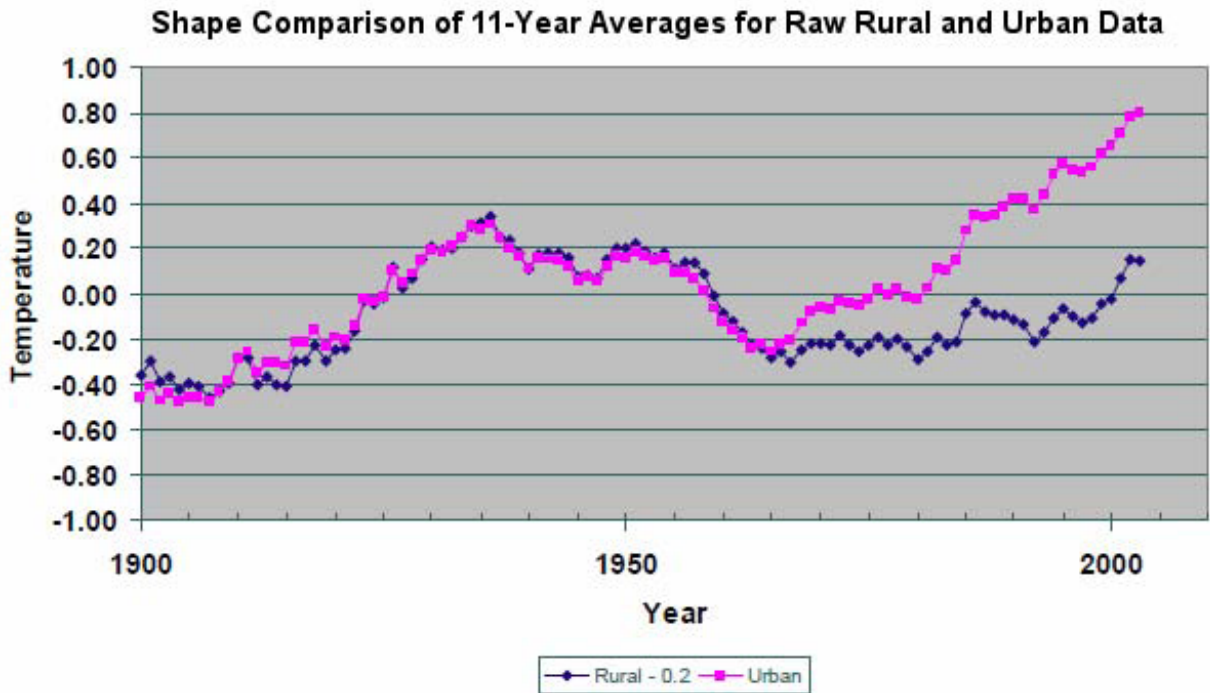
<http://c3headlines.typepad.com/.a/6a010536b58035970c0167647bf5a3970b-popup>

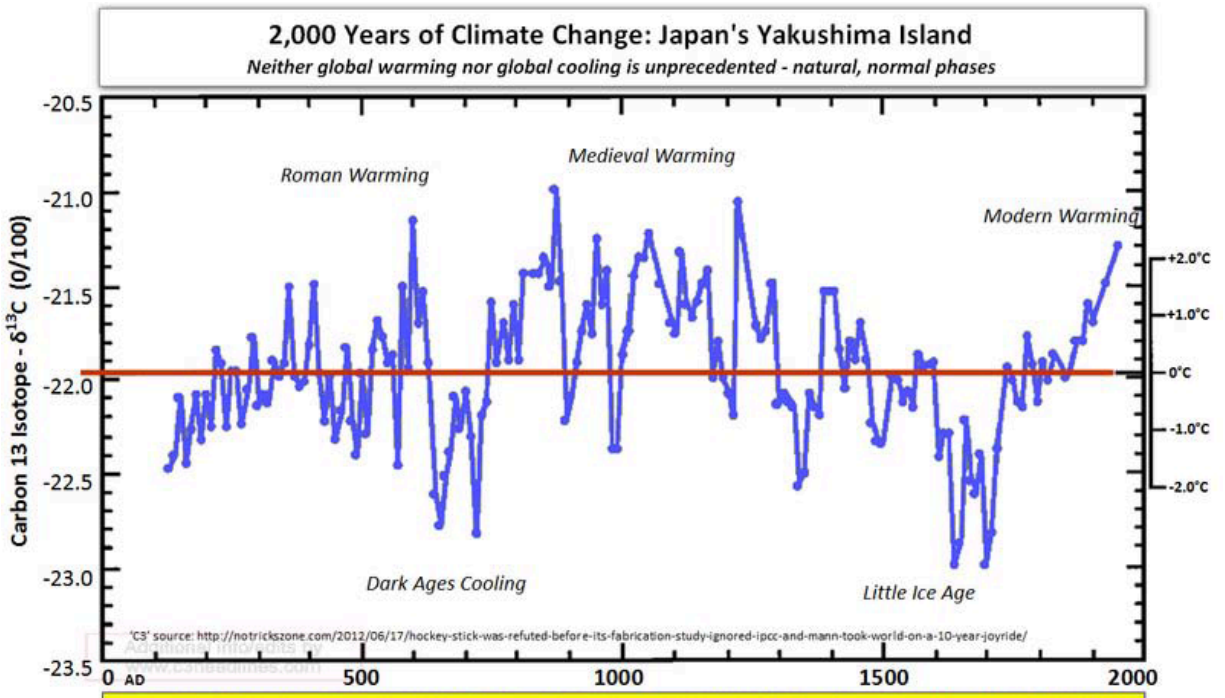
NINO3.4 Sea Surface Temperature Anomalies(Reynolds OI.v2)
Smoothed w/ 13-Month Running-Mean Filter
Nov 1981 to Sep 2012



PRELIMINARY NINO3.4 Sea Surface Temperature Anomalies
(Reynolds OI.v2)
Smoothed w/ 13-Month Running-Mean Filter
Nov 1981 to Nov 2012
Nov 2012 Minus Oct 2012 = +0.160 Deg C



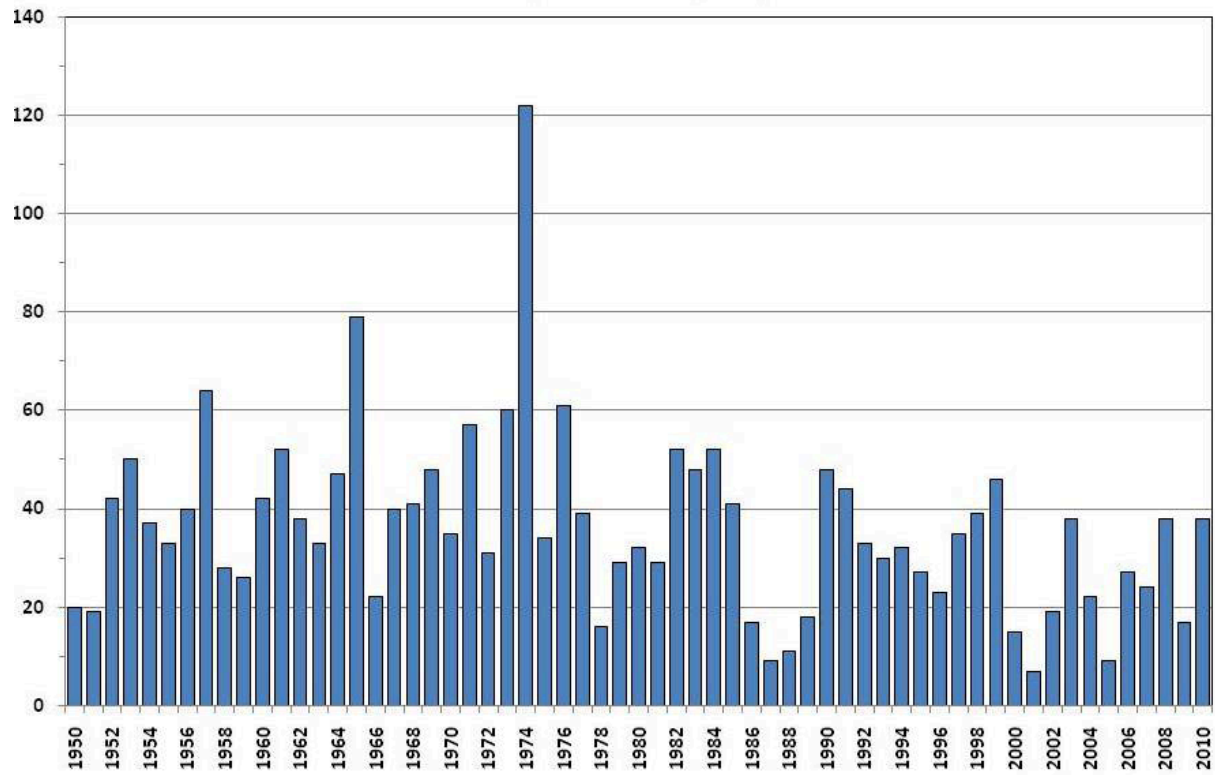




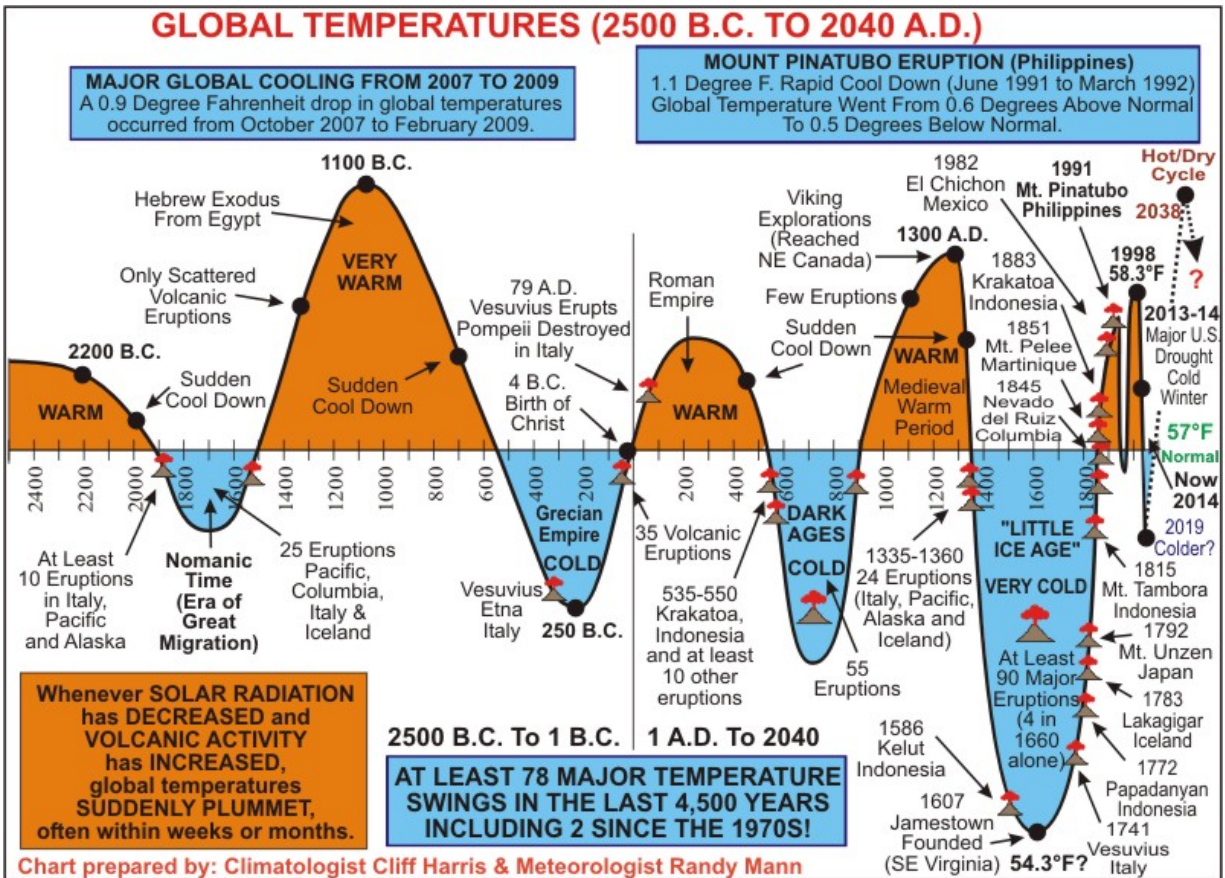
Temperature reconstruction from tree rings of cedar trees located on a Japanese island. The reconstruction plot is up to the 1990's. The climate cycle that occurred in the past for Japan is very similar to climate pattern of other Northern Hemisphere locations. Modern warming is not "unprecedented."



Number of Strong to Violent (EF3-EF5*)Tornadoes U.S. (March-August)

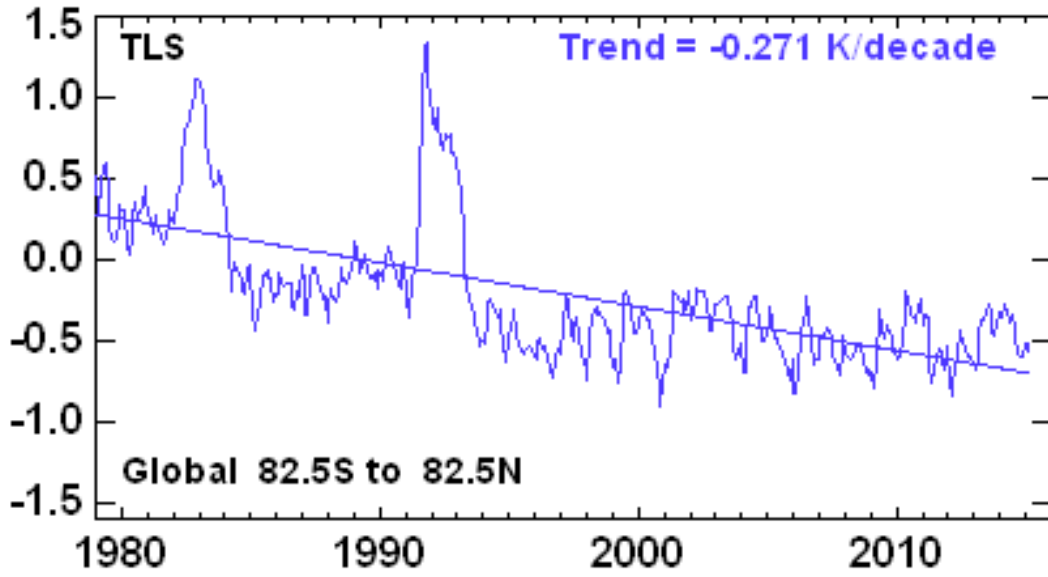


*Beginning in 2007, NOAA switched from the Fujita scale to the Enhance Fujita scale for rating tornado strength.



Global Temperature Trends From 2500 B.C. To 2040 A.D. *April 9, 2014*

Temperature Lower Stratosphere (TLS) – Brightness Temperature Anomaly – 1979 to Present



Remote Sensing Systems (RSS) – Microwave Sounding Units (MSU) – Base Period 1979-1998
 – Click the pic to view at source

SILSO Solar Cycle Sunspot Number Progression

Measured thru December 2014 (Updated: January 1, 2015)

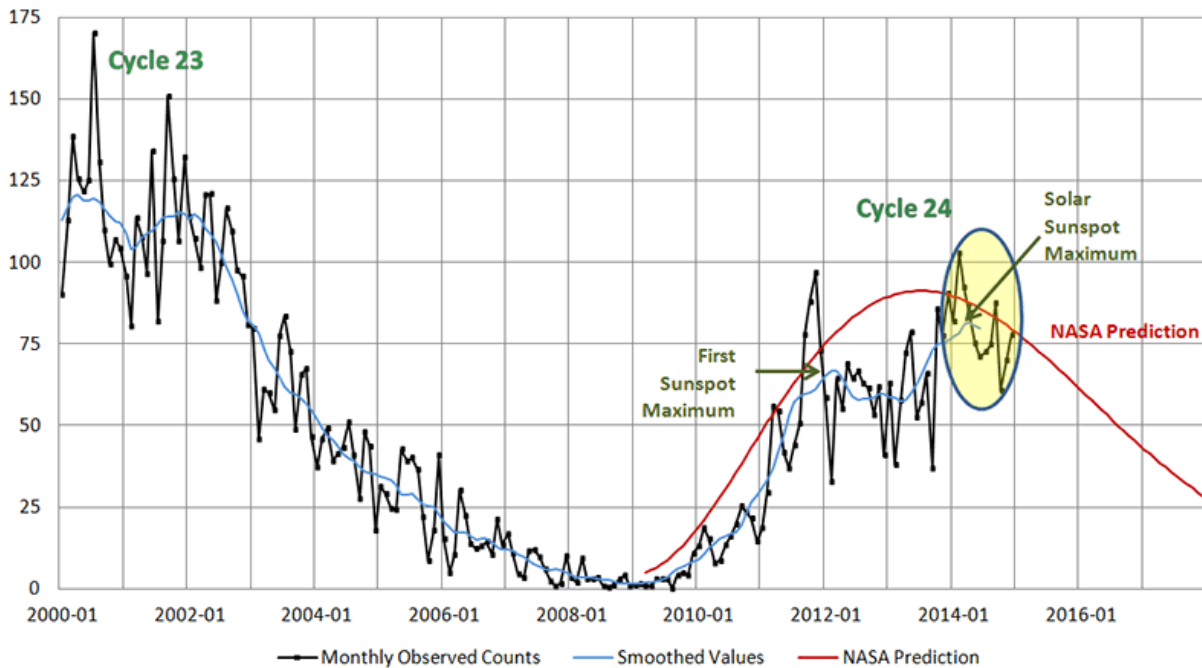
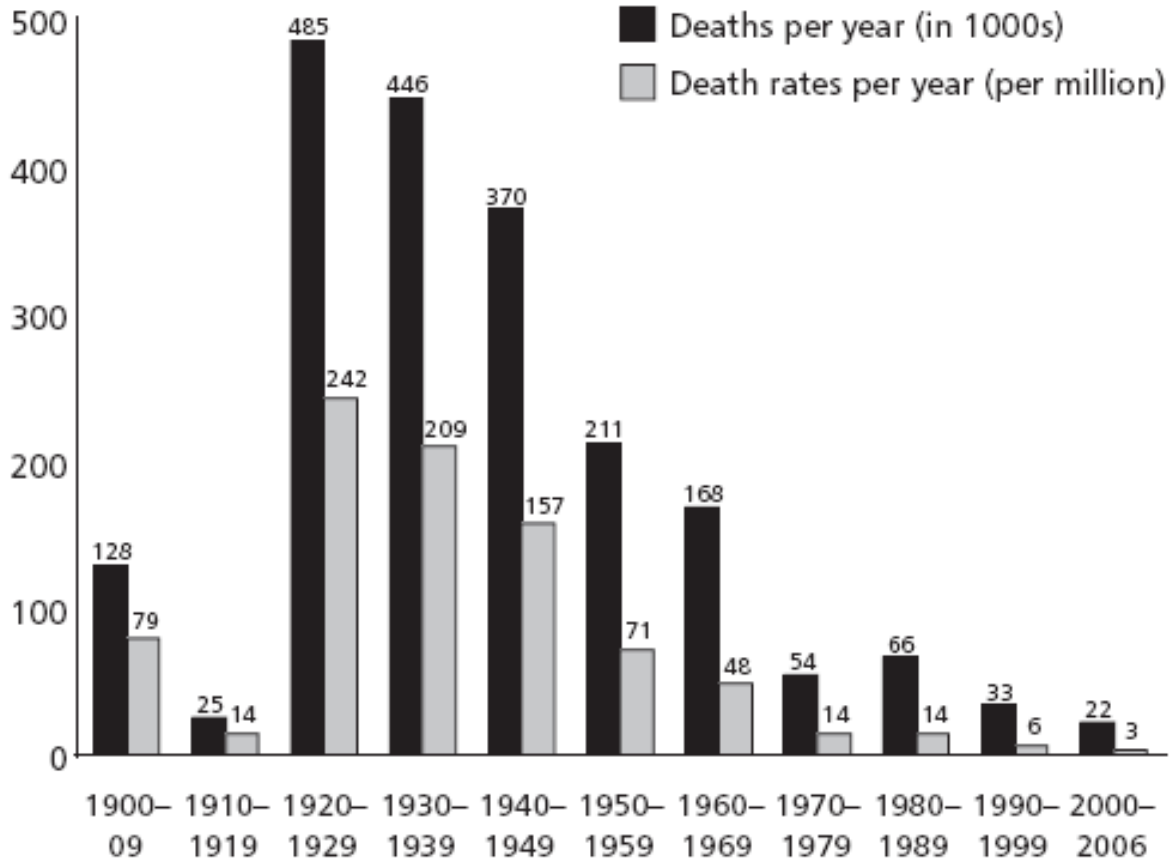


Figure 1 Global death and death rates due to extreme events, 1900–2006



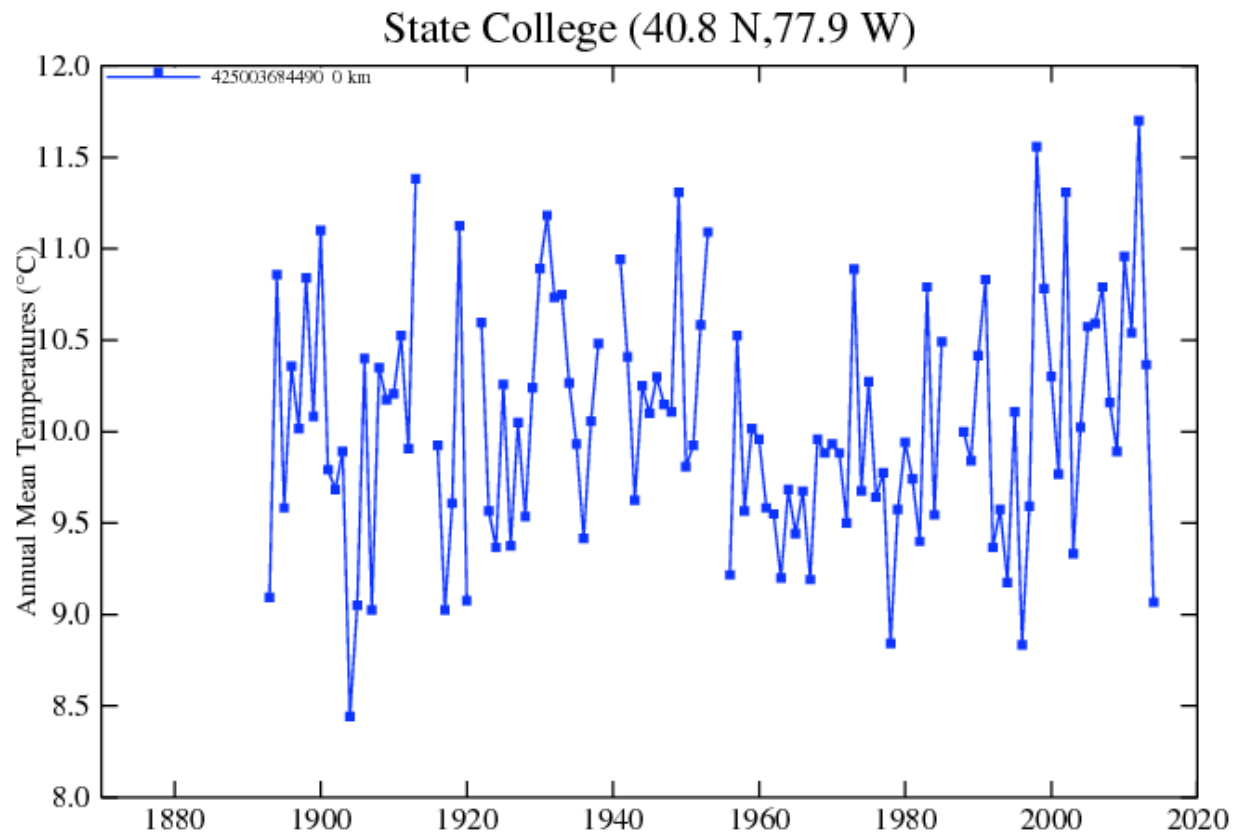
Going Down: Death Rates Due to Extreme Weather Events [Anthony Watts / July 5, 20](#)

State College - University Park Airport (KUNV)

Lat: 40.85°N Lon: 77.84°W Elev: 1188ft. National weather service

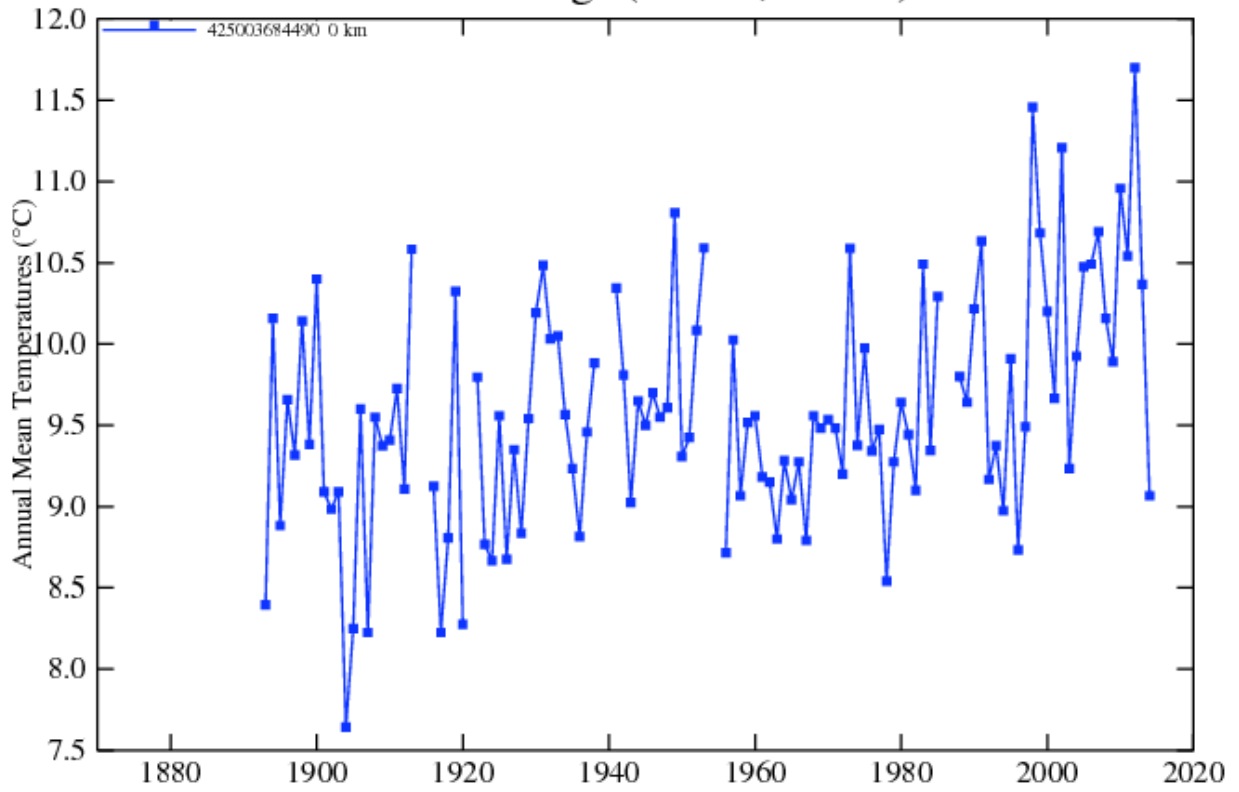
March 2015 the station 1434 Park Ln State College

Here is the temperature in State College before the adjustments by GISS:



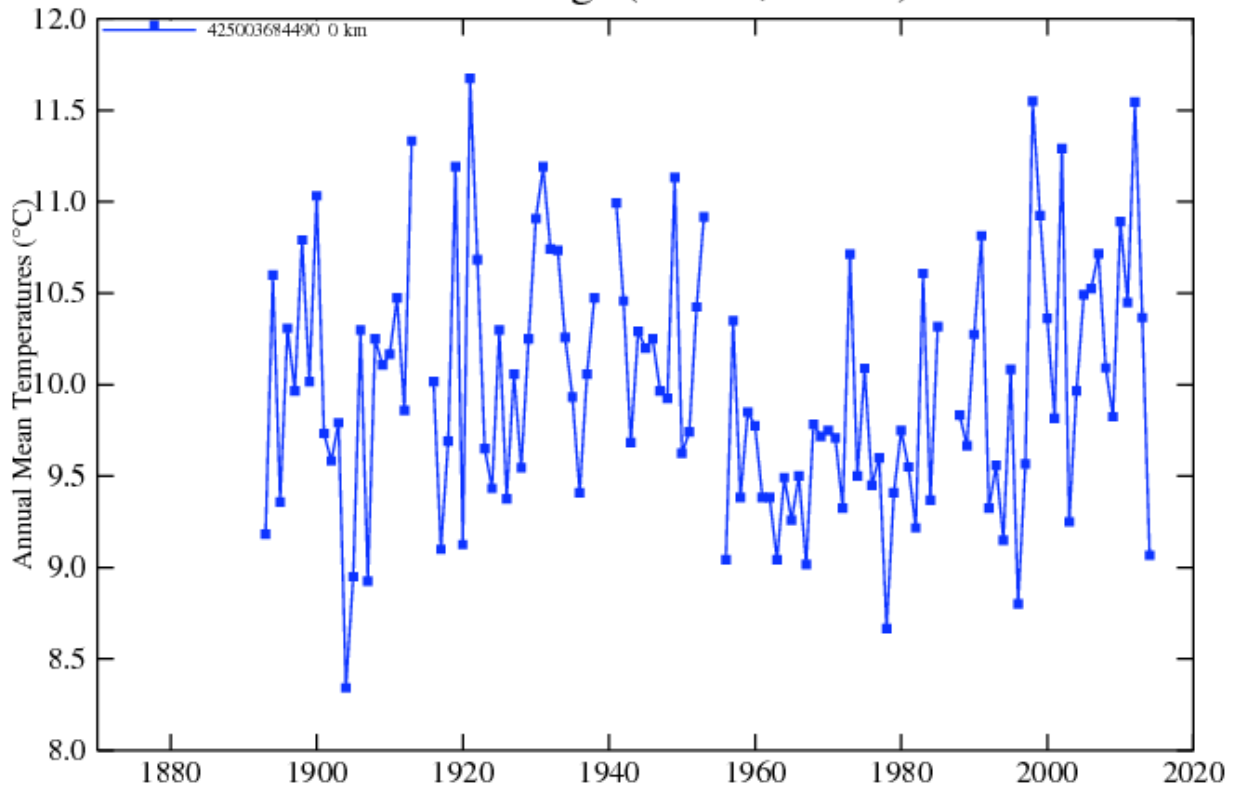
Here is the temperature in State College after the adjustments by GISS:

State College (40.8 N,77.9 W)



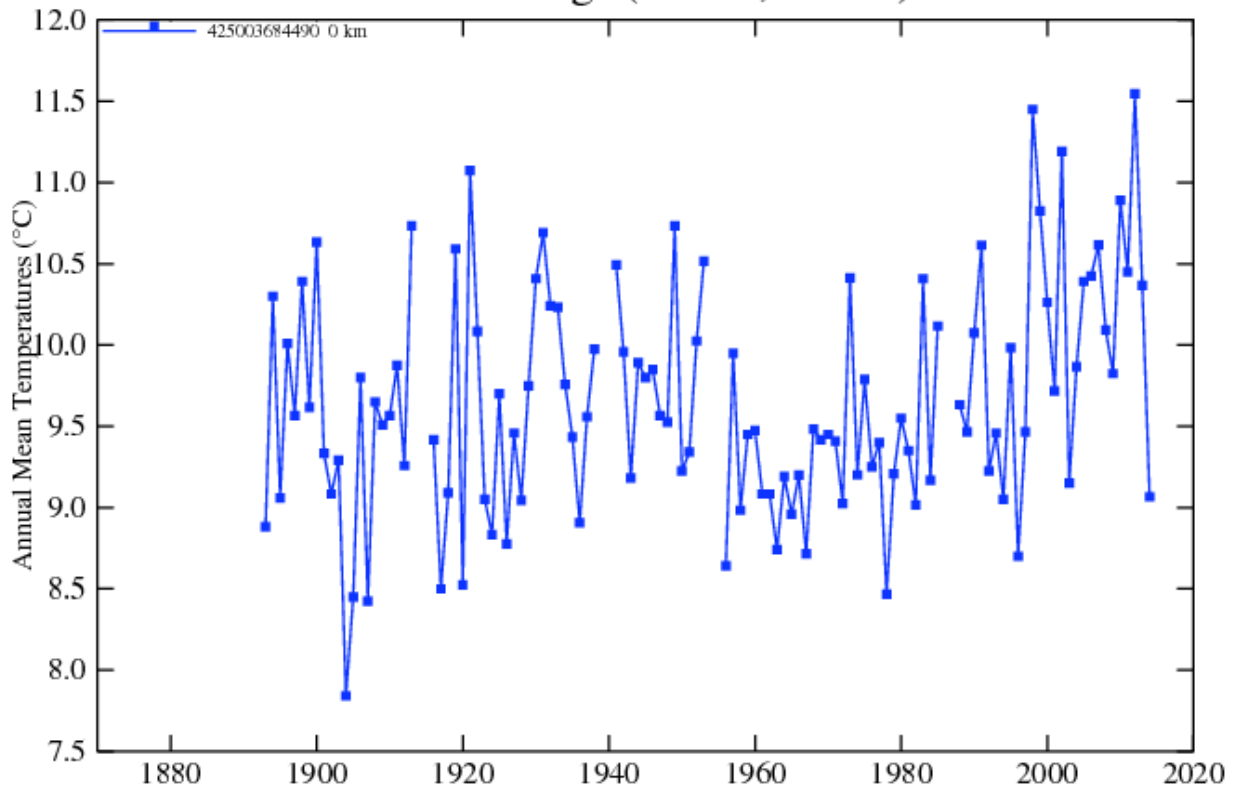
Sept 2015 before adjustment
0

State College (40.8 N,77.9 W)



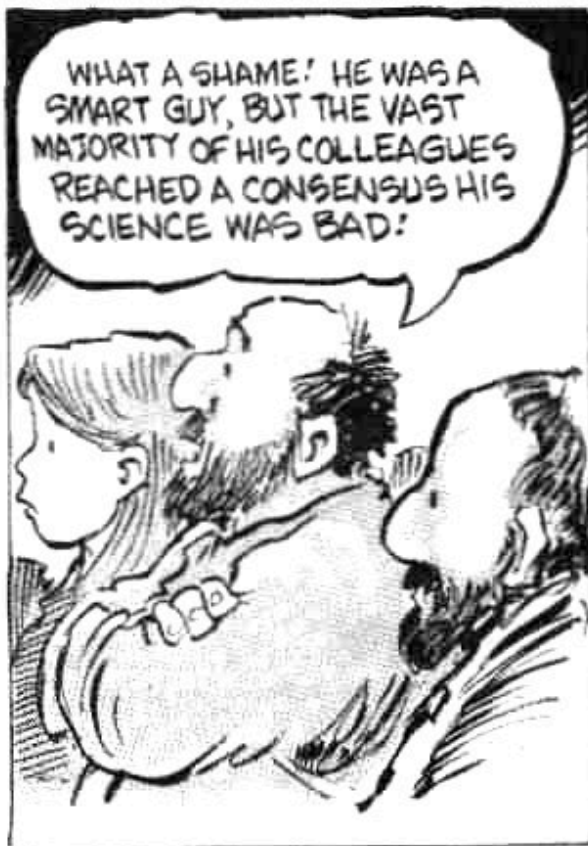
Sep 2015 after adjustment

State College (40.8 N,77.9 W)





NEWS ITEM: WORLD'S SCIENTISTS ARE MORE THAN 90% CONFIDENT WARMING IS HUMAN DRIVEN!



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