

# Three lessons in surface temperatures:

1) Is the US Surface Temperature Record Reliable?

2) Are surface temperatures being manipulated to achieve public deception?

3) Apparent (to me) fraud: Deliberate NASA surface temperatures manipulation... collusion by at least one professional society: American Meteorological Society

Is the U.S.  
Surface Temperature  
Record Reliable?

SURFACE TEMPERATURE RECORDS:  
POLICY-DRIVEN DECEPTION?

*by Joseph D'Aleo and Anthony Watts*

**Bob Endlich**

**[bendlich@msn.com](mailto:bendlich@msn.com)**

**10 Oct 2017**

**Weather, Climate, and Climate Change – What the Data Say**

**<http://casf.diskstation.me/wordpress/>**

## References:

<http://www.surfacestations.org/>

[https://wattsupwiththat.files.wordpress.com/2009/05/surfacestationsreport\\_spring09.pdf](https://wattsupwiththat.files.wordpress.com/2009/05/surfacestationsreport_spring09.pdf)

[http://scienceandpublicpolicy.org/images/stories/papers/originals/surface\\_temp.pdf](http://scienceandpublicpolicy.org/images/stories/papers/originals/surface_temp.pdf)

<http://people.oregonstate.edu/~schmita2/Teaching/ATS421-521/2015/papers/hansen81sci.pdf>

**This lesson is in three parts; below is Part 1**



Is the U.S.  
Surface Temperature  
Record Reliable?

**The answer is definitely NO.**

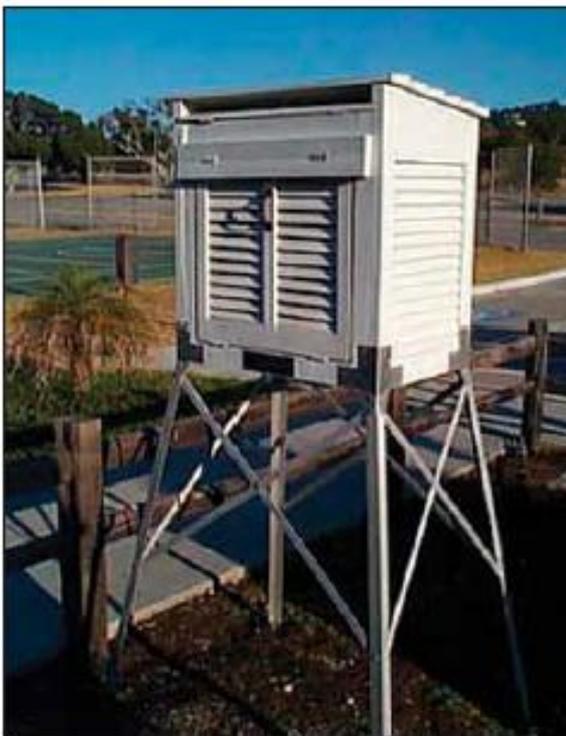


Figure 1. Stevenson Screen at the National Weather Service office in Monterey, California.



# Is the U.S. Surface Temperature Record Reliable?

How do we know global warming is a problem if we can't trust the U.S. temperature record?

BY ANTHONY WATTS

SurfaceStations.org

# Part One Outline

**Definitions**

**Surface Temperature Siting Standards**

**Condition of Stephenson Screens**

**Three California Stations and [WWW.SurfaceStations.ORG](http://WWW.SurfaceStations.ORG) genesis**

**Stephenson Screen Standards, Siting, Results, Station Classification,**

**Urban Heat Island and Las Cruces UHI**

**Photographic Audit of USHCN Stations, results**

**Data Adjustments: Dale Enterprise Virginia, FILEFIL, others**

**Questions and Issues**

**USCRN**

**Part ONE Summary**

# Definitions

**Stephenson Screen**: White louvered box housing and providing ventilated airflow to Meteorological Instruments, including thermometer, max/min thermometers, sling psychrometer. Invented 1864 by Scottish Civil Engineer Thomas Stephenson (father, author Robert Louis Stephenson)

## **United States Historical Climatology Network (USHCN)**

“high-quality data set” of daily and monthly records of basic meteorological variables from 1218 observing stations across the 48 contiguous United States.

<http://cdiac.ornl.gov/epubs/ndp/ushcn/background.html>

## **U.S. Climate Reference Network (USCRN)** 114 observing stations

in the conterminous U.S, developed, deployed, managed, and maintained by the National Oceanic and Atmospheric Administration (NOAA) for the express purpose of detecting the national signal of climate change. <http://www.ncdc.noaa.gov/crn/>



NOAA's National Weather Service

## Cooperative Observer Program

[OS Home](#)

[News](#)

[Organization](#)

[Standards](#)

[Recent Observations](#)

[Training, Reference, Documents](#)

[Local Data](#)

[Forms](#)

[OCWWS Home](#)

### Proper Siting

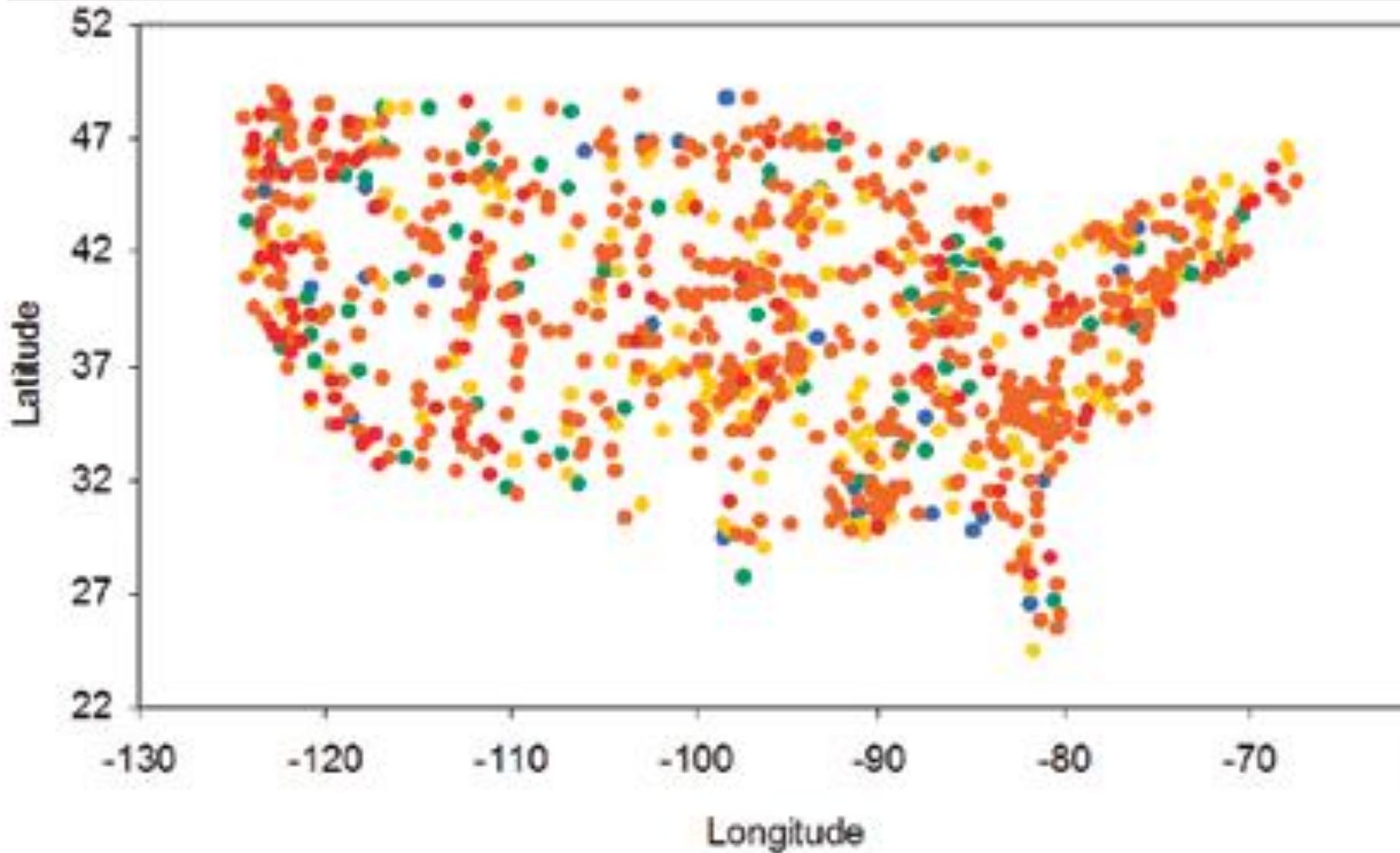
The COOP network has provided climate and weather data for over 100 years. Consistency of the measurements is an attribute of the network, and it has been maintained by rare and/or gradual change, and established standards for exposure, of instruments over the life of the network. In order to preserve the integrity of the network, NWS has [established standards for equipment, siting, and exposure](#).

**Temperature sensor siting:** The sensor should be mounted 5 feet +/- 1 foot above the **ground**. The ground over which the shelter [radiation] is located should be typical of the surrounding area. A level, open clearing is desirable so the thermometers are freely ventilated by air flow. Do not install the sensor on a steep slope or in a sheltered hollow unless it is typical of the area or unless data from that type of site are desired. When possible, the shelter should be no closer than four times the height of any obstruction (tree, fence, building, etc.). The sensor should be at least 100 feet from any paved or concrete surface.

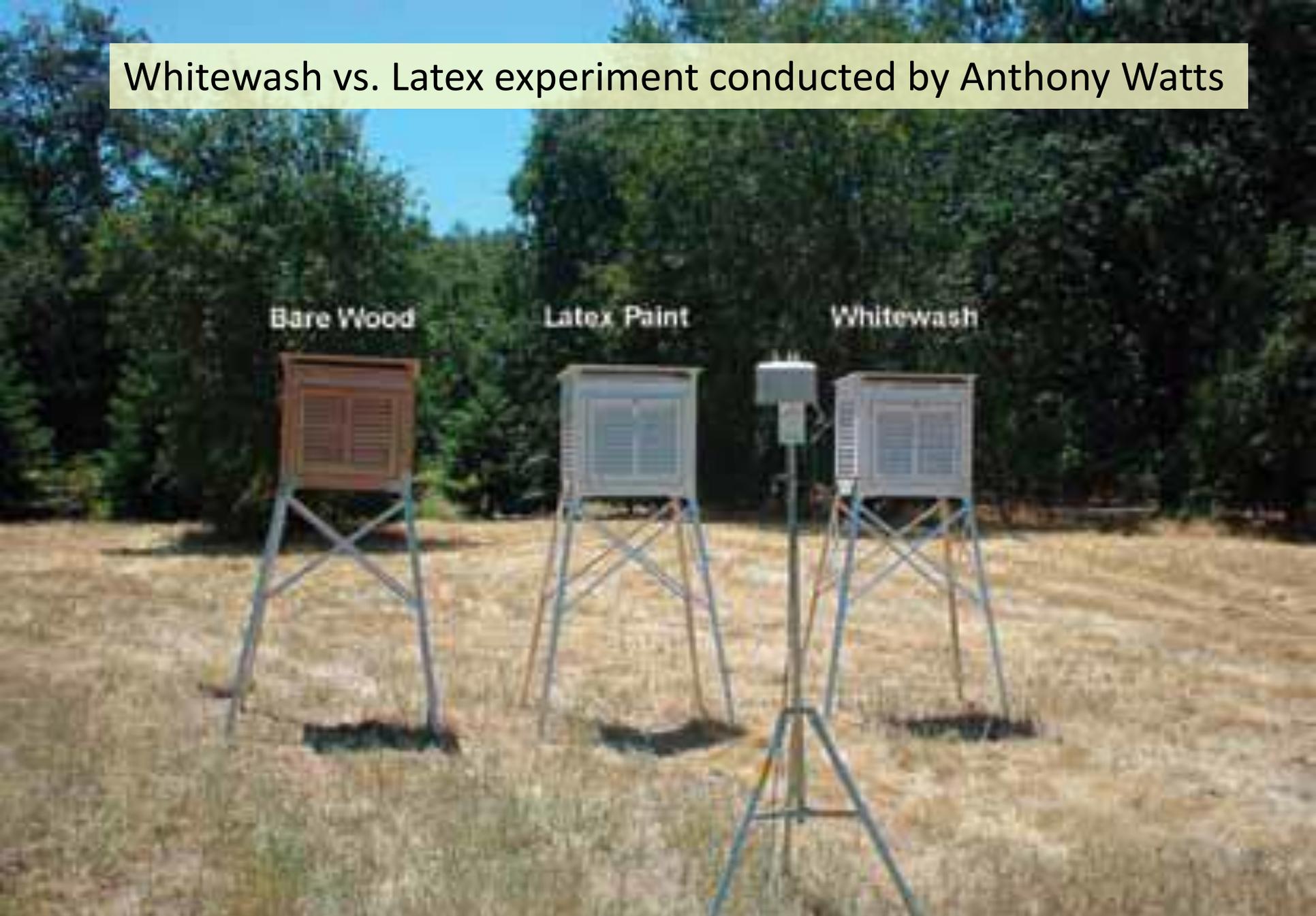
**Temperature sensor siting: 5 Ft Above ground...level open clearing...freely ventilated by air flow.**

**Do not install on a steep slope or in a sheltered hollow.  
Sensor should be at least 100 ft from any paved or concrete surface.**

# USHCN Station Map



# Whitewash vs. Latex experiment conducted by Anthony Watts



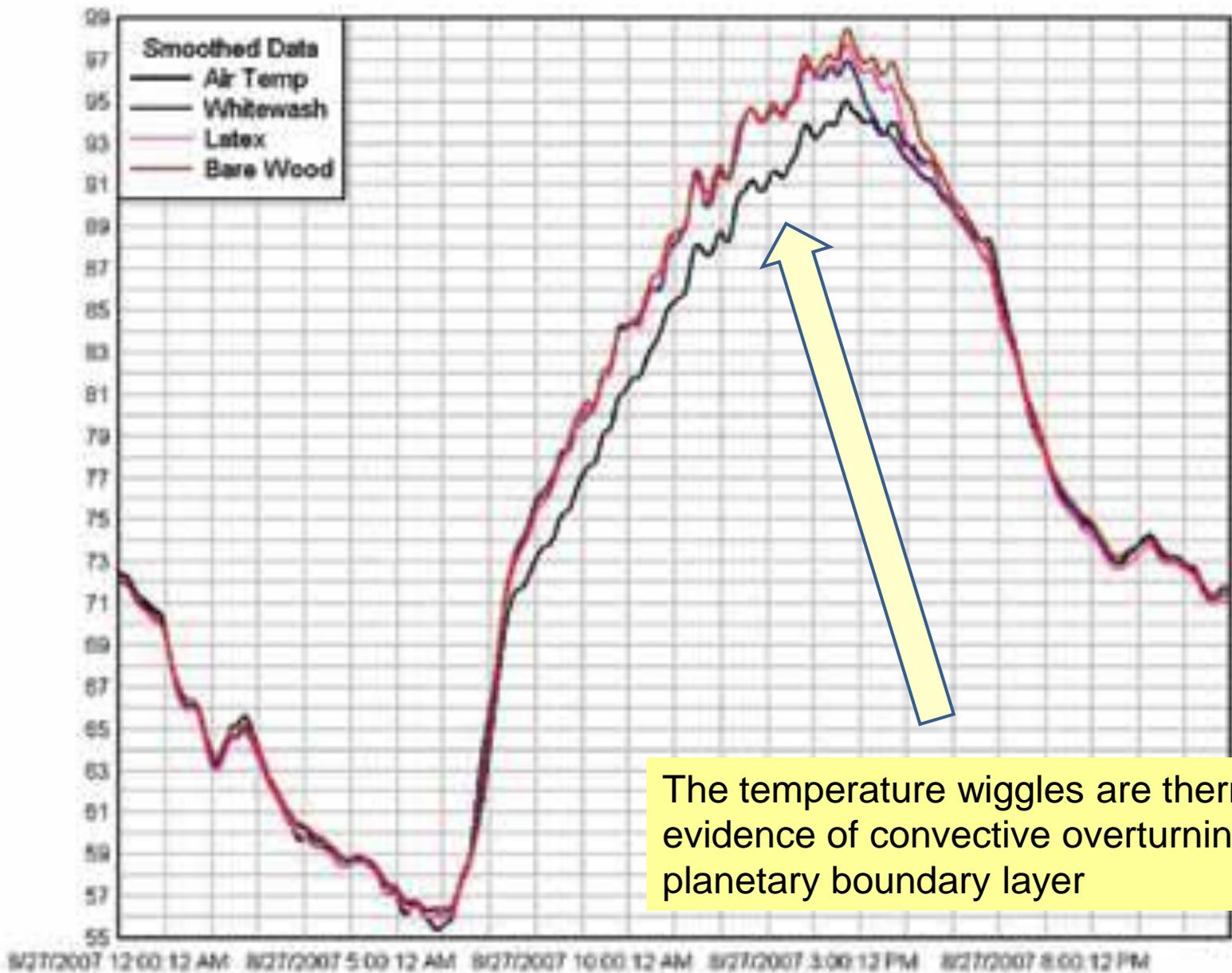
Bare Wood

Latex Paint

Whitewash

Three new Stephenson Screens as used by NOAA/NWS; stacked plate infrared thermometer

# Whitewash vs. Latex experiment conducted by Anthony Watts: Max Temperatures 0.3F Warmer with Latex; 20<sup>th</sup> Century Warming 1.2F



The temperature wiggles are thermals; evidence of convective overturning in the planetary boundary layer

Poor maintenance of the Stephenson Screens can cause spurious warming greater than the reported 1.2F “unprecedented” warming of the past 100 years.

New paper finds that aging weather stations record much higher daytime temperatures, 1.63°C higher than new stations



[http://wattsupwiththat.files.wordpress.com/2007/12/stevenson\\_screen\\_12-27-07.jpg](http://wattsupwiththat.files.wordpress.com/2007/12/stevenson_screen_12-27-07.jpg)

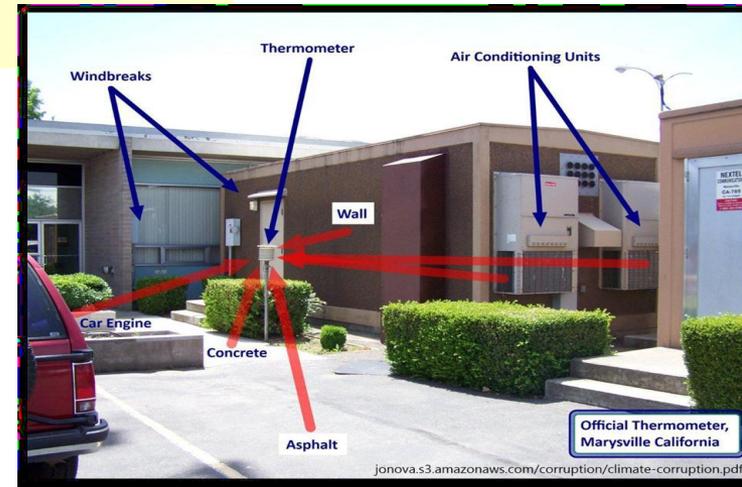
# Story of Three California Stations

Chico University Experiment Farm

Orland, California



Marysville, California



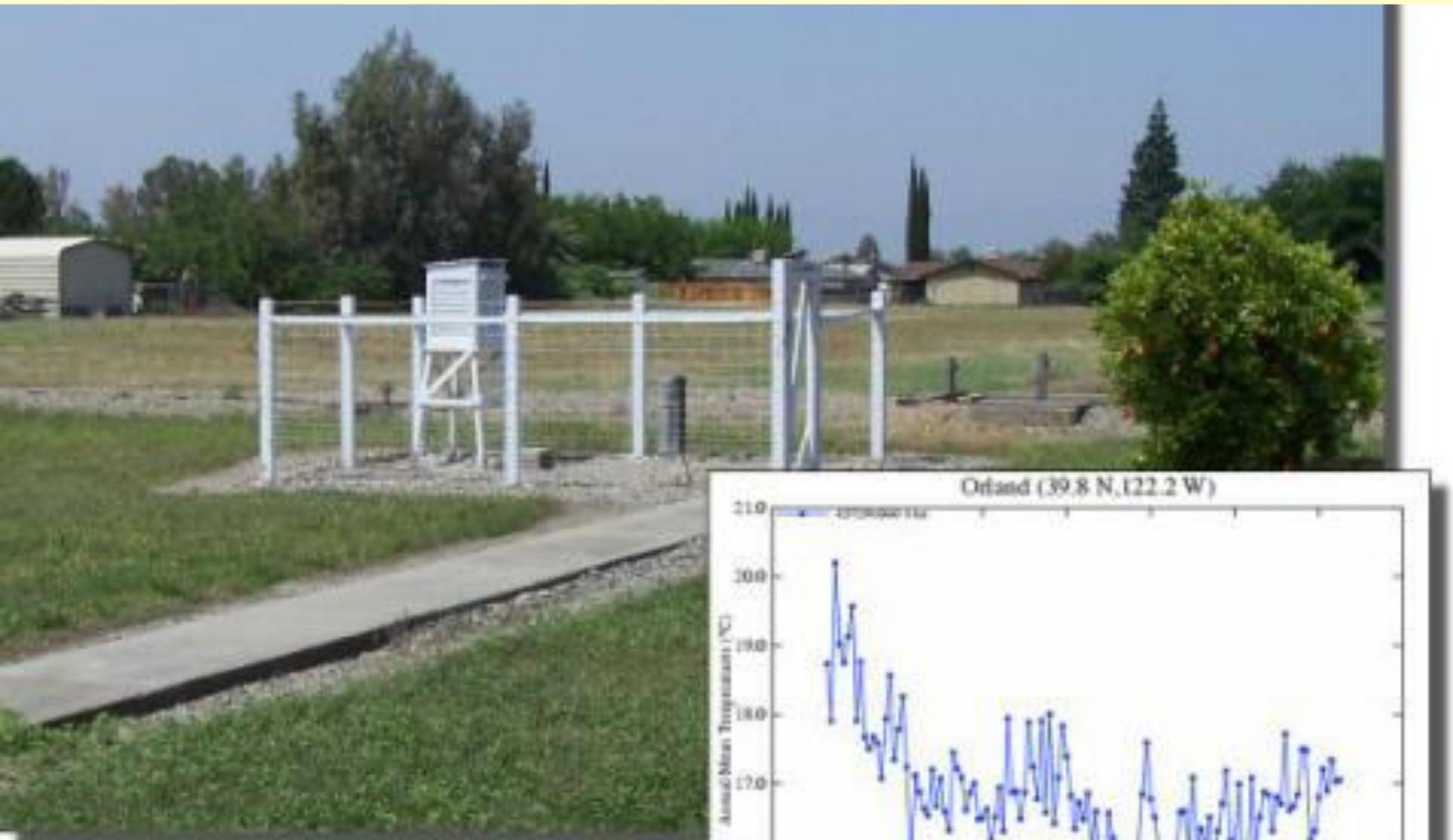
# Who puts heat-generating radio electronics next to the temperature sensor?



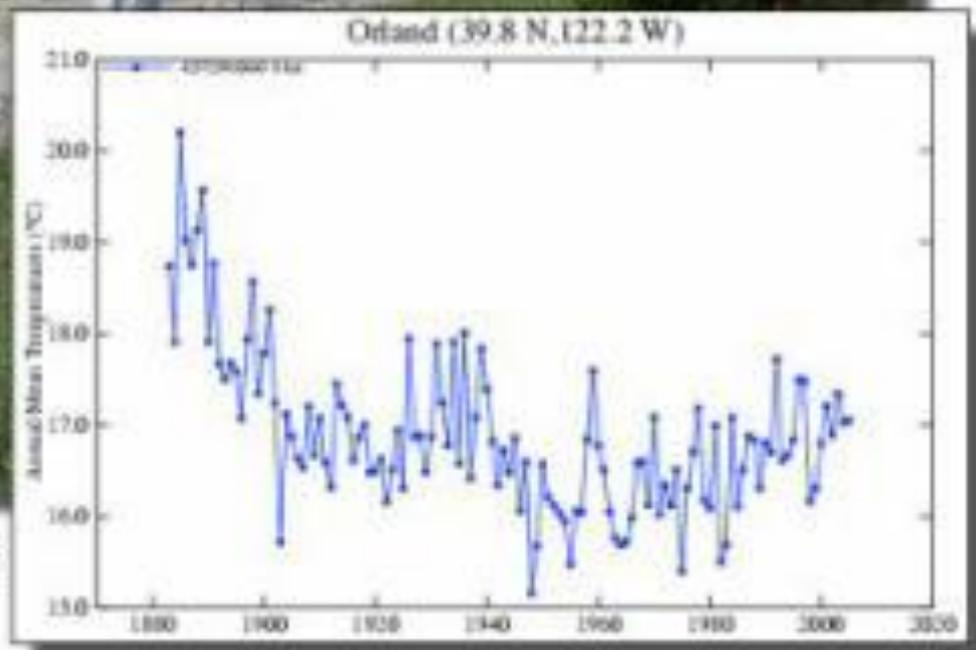
**Answer:**

**Chico, California,  
University Experiment  
Farm**

# Orland, California, Poster Child for a well-exposed station, data set posted June, 2007



**This USHCN Station in Orland, CA has been in the same location for over 100 years**

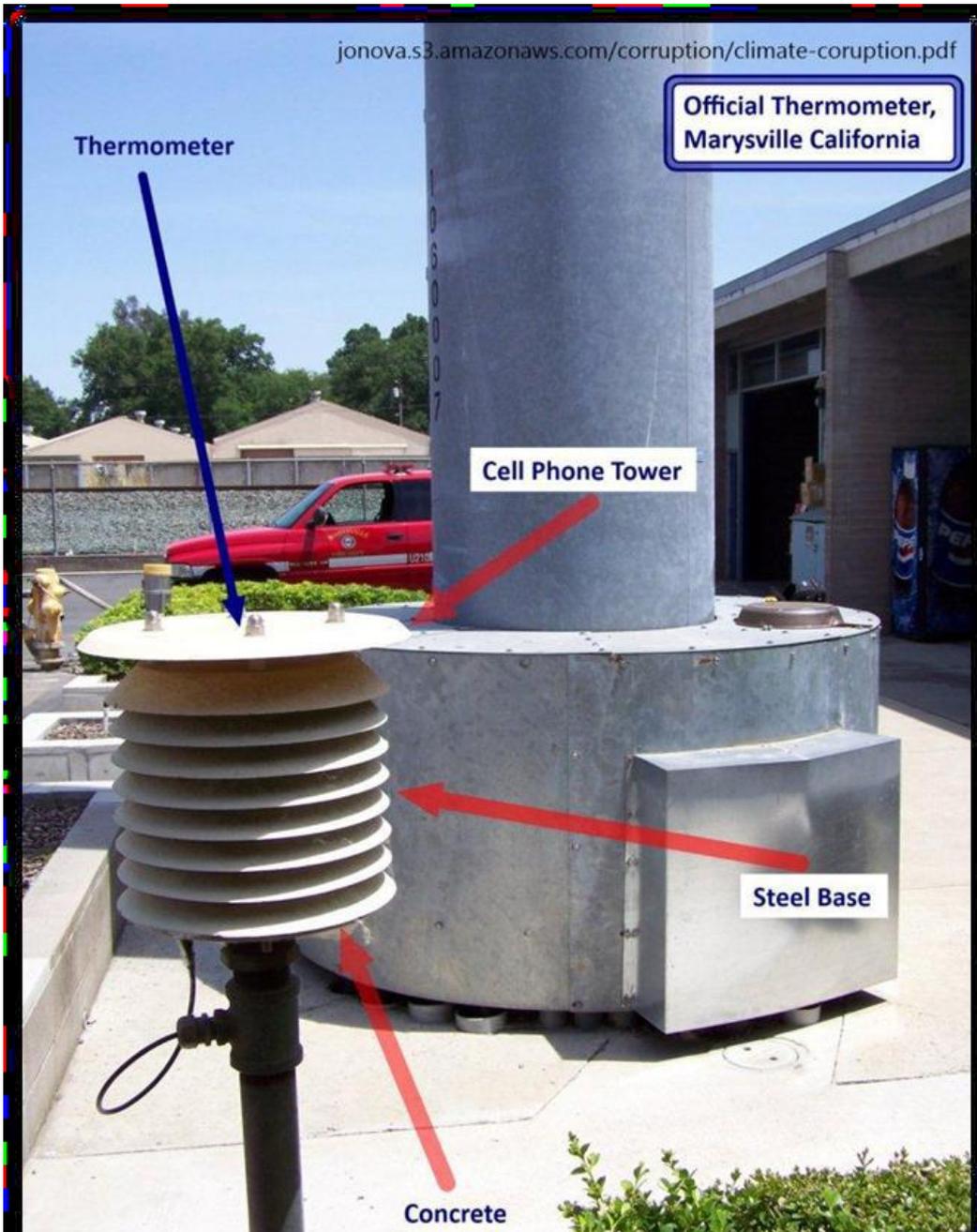


# Marysville, California, third California site examined by Anthony Watts

Thermometer, Marysville, California. Extra warming from car engines in the parking bays, air conditioner exhaust, asphalt, concrete, a wall, wind breaks, and reflections from a steel cell phone tower. Photo courtesy of Anthony Watts and [www.surfacestations.org](http://www.surfacestations.org)



# Marysville, California, third California site examined by Anthony Watts



Same thermometer viewed from near the air conditioners.

Extra warming reflected from a steel cell phone tower.

Photo courtesy of Anthony Watts, [www.surfacestations.org](http://www.surfacestations.org).

STATION (Climatological)(River Station, if different)  
**MARYSVILLE FIRE DEPARTMENT**

STATE **CALIFORNIA** COUNTY **YUBA**

TIME (local) OF OBSERVATION  
 RIVER TEMP.  
**0900 AM**

TYPE OF RIVER GAGE ELEVATION OF RIVER  
 ZERO

DATE	TEMPERATURE F.		24-HR AMOUNTS Rain, melted snow, etc., (Ins. and hundredths) Snow, ice pellets (Ins. And tenths)
	24 HRS ENDING AT OBSERVATION		
	MAX	MIN	
			(52) AT OBSN.)

1			
2			
3	91	54	72
4			
5			
6	87	51	62
7	89	52	63
8			
9			
10			
11	94	60	76
12	97	65	77
13	99	65	76
14			

10				
11	94	60	76	
12	97	65	77	
13	99	65	76	
14				
15				
16				
17	103	62	78	
18	99	65	75	
19				
20	96	57	72	
21	95	61	72	
22				
23				
24	97	56	70	
25	93	66	79	
26	98	59	74	
27				
28	94	61	74	
29				
30				
31				
sum				0

**B-91 Form for Marysville, California, July 2007**  
**Only 14 of 31 July days had data filled in.**

# Genesis of [www.SurfaceStations.Org](http://www.SurfaceStations.Org)

**“...here we had an official climate-monitoring station, dubbed part of the “high-quality” USHCN network that provides data for use in scientific studies, actually measuring the temperature of a parking lot with air conditioners blowing exhaust air on it, and missing more than half of its data for the month of July!”**

# Photographic Tour

Is the Stephenson Screen or the MMTS  
exposed correctly?

Official Thermometer,  
Urbana Ohio

Refrigeration Unit

Windbreaks

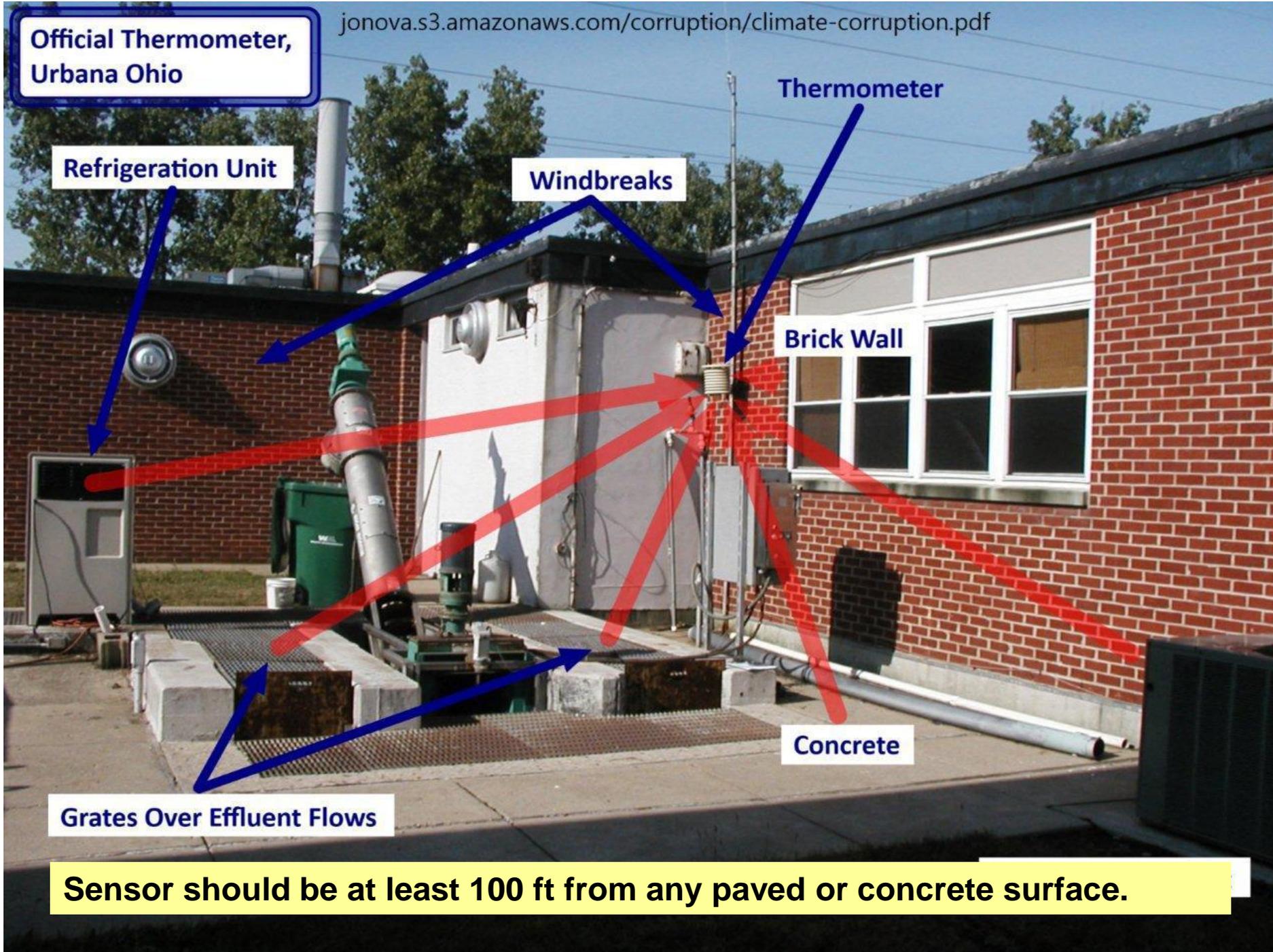
Thermometer

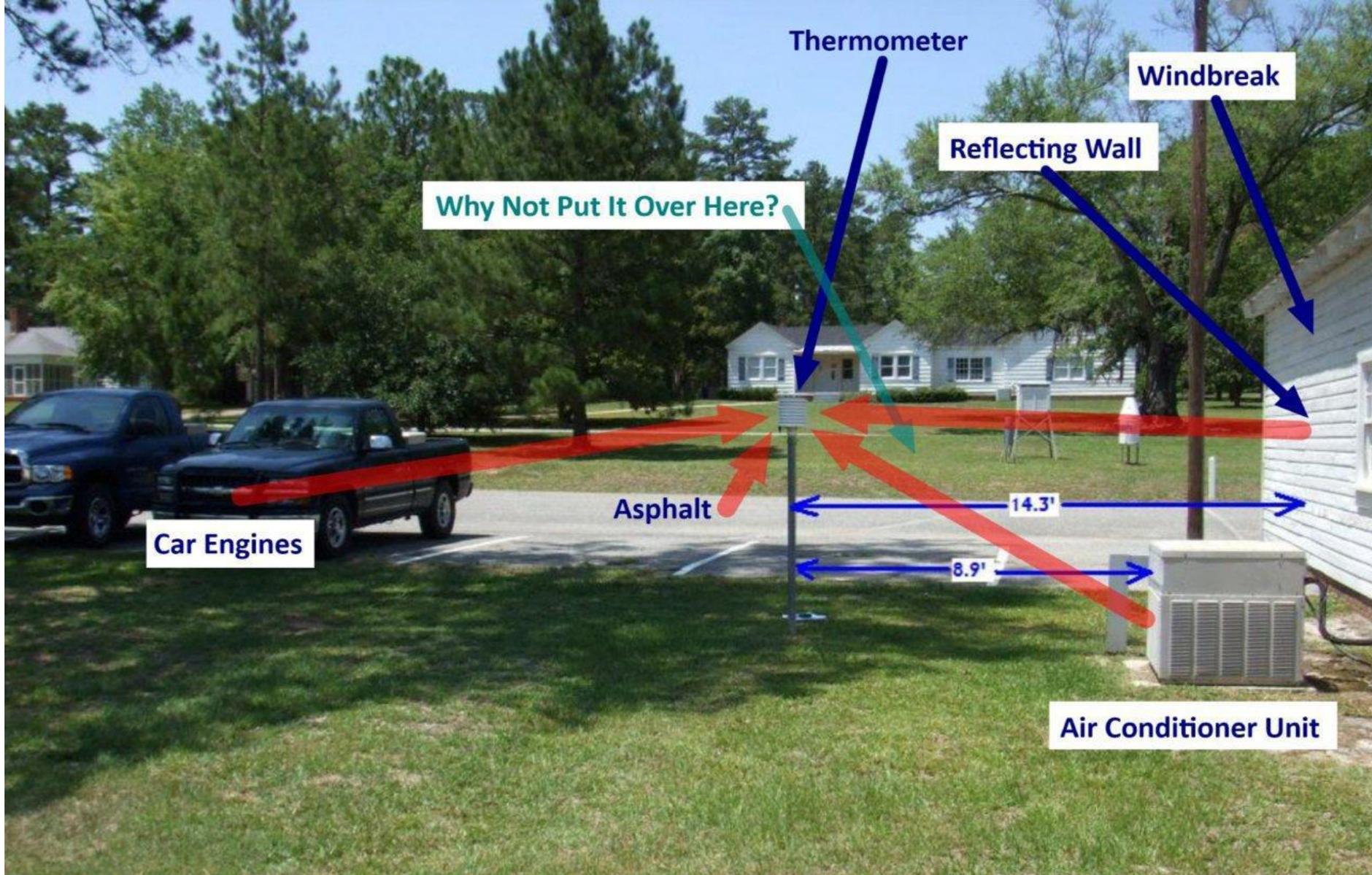
Brick Wall

Concrete

Grates Over Effluent Flows

Sensor should be at least 100 ft from any paved or concrete surface.





Thermometer

Windbreak

Reflecting Wall

Why Not Put It Over Here?

Asphalt

Car Engines

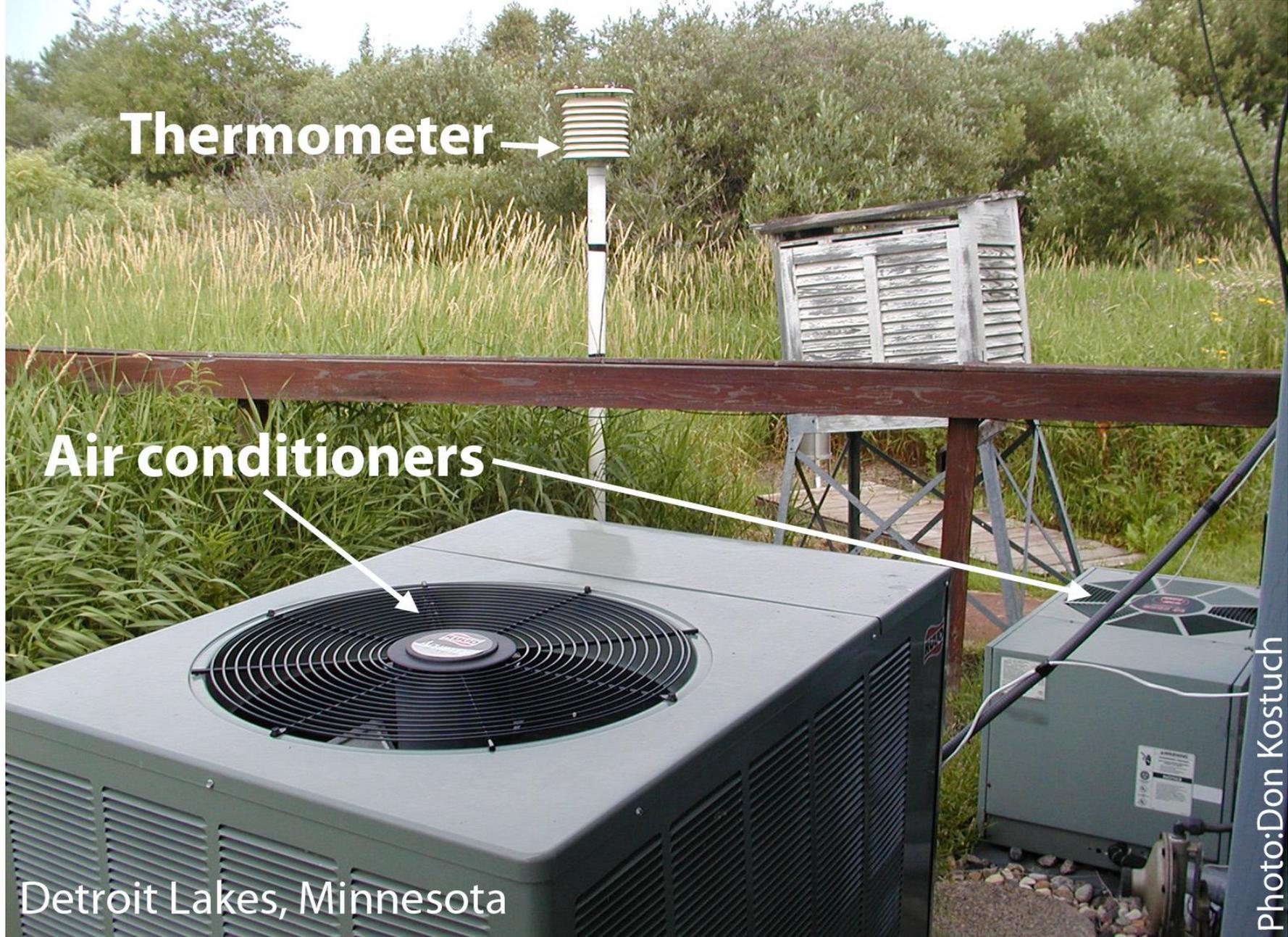
Air Conditioner Unit

14.3'

8.9'

Official Thermometer,  
Bainbridge Georgia

Sensor should be at least 100 ft from any paved or concrete surface.



Thermometer →

Air conditioners →

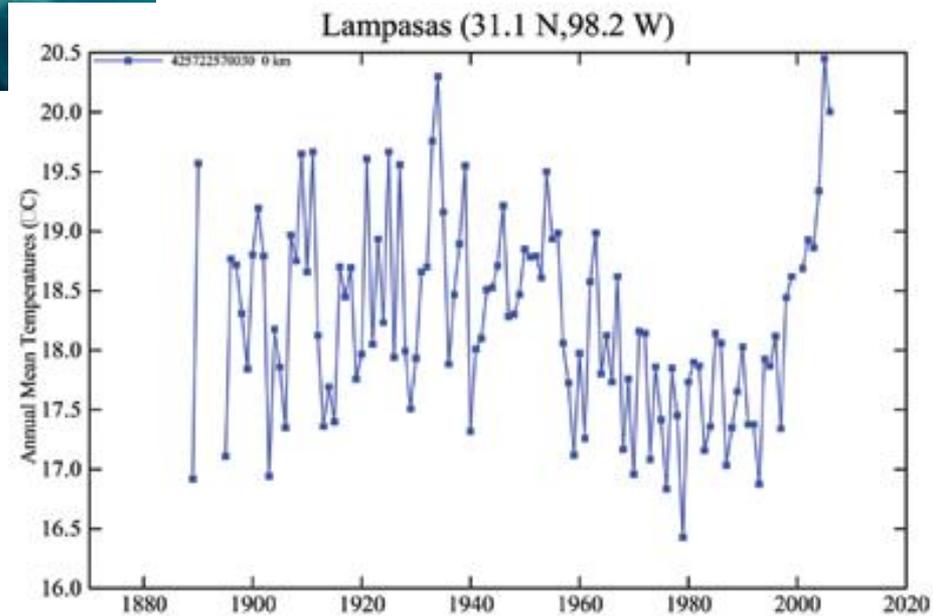
Detroit Lakes, Minnesota

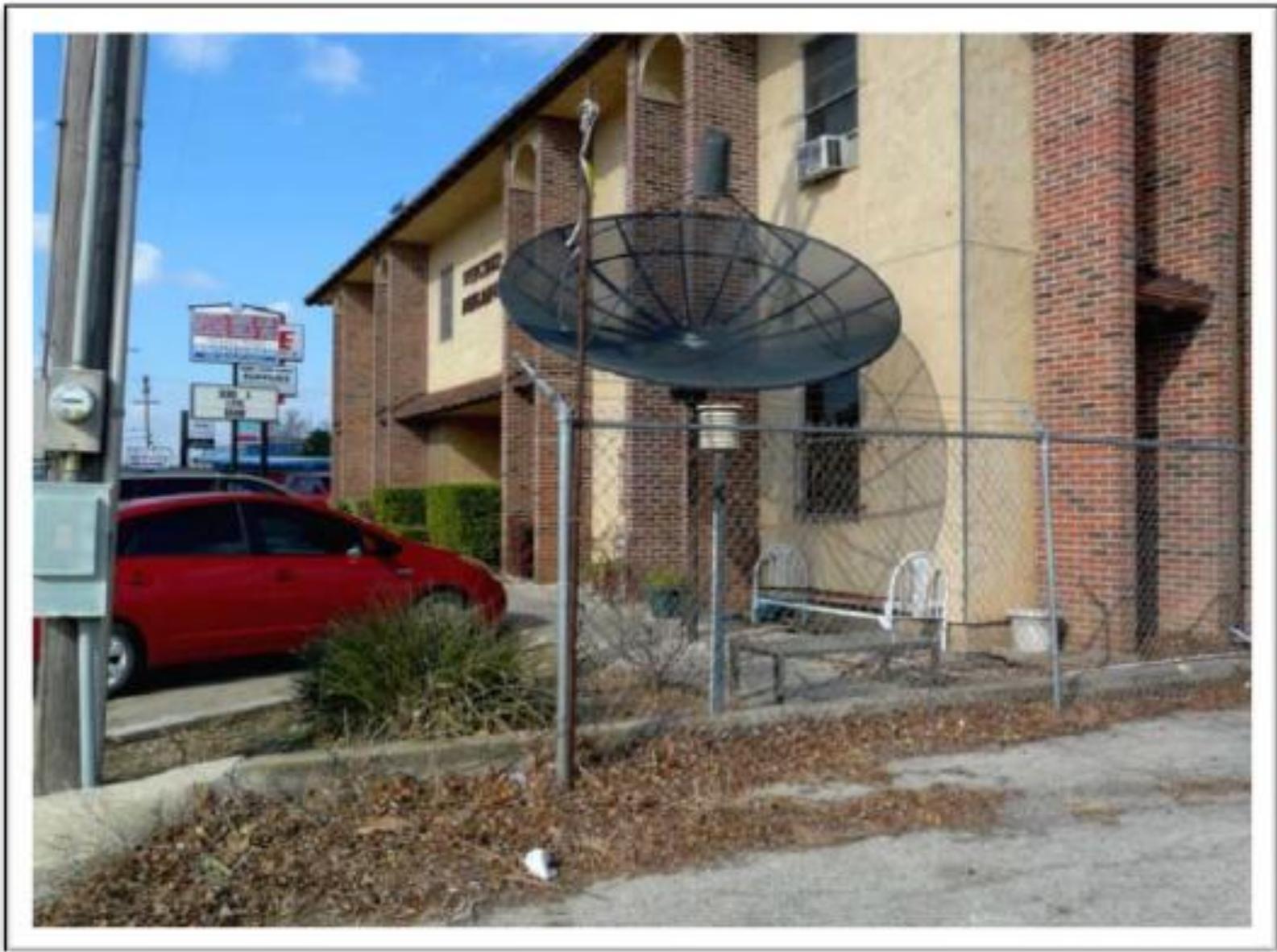
Photo: Don Kostuch

# Lampasas, Texas



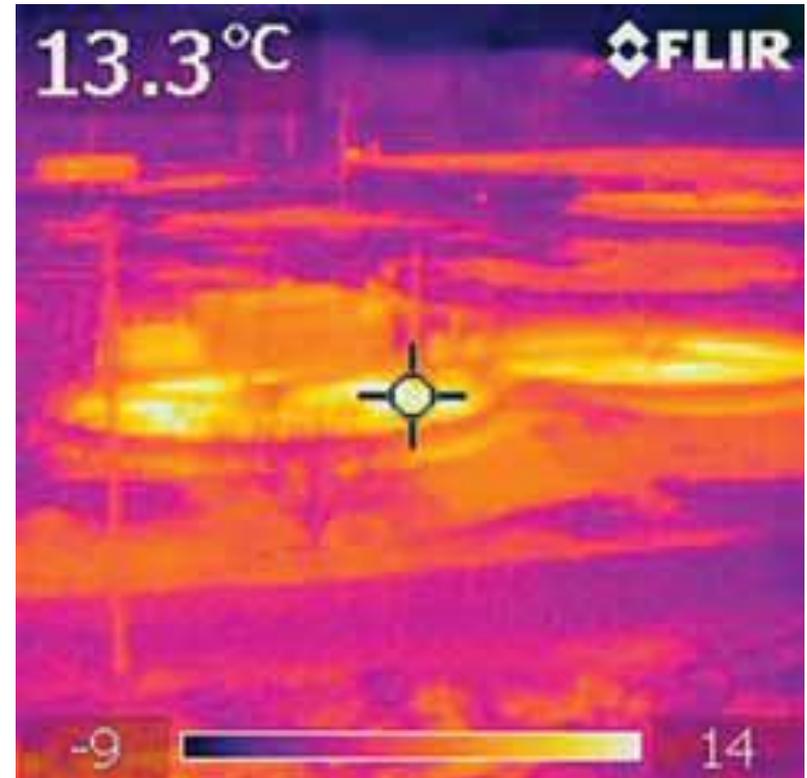
**Sensor should be at least 100 ft from any paved or concrete surface.**





*Photograph by Julie K. Stacy, courtesy of [surfacestations.org](http://surfacestations.org).*

**Waste Water Treatment Plants are not representative. Ontario, Oregon  
Visible, Left                      Infrared, below.**



**Left. MMTS at Waste Water  
Treatment Plant  
Tarboro, North Carolina.**

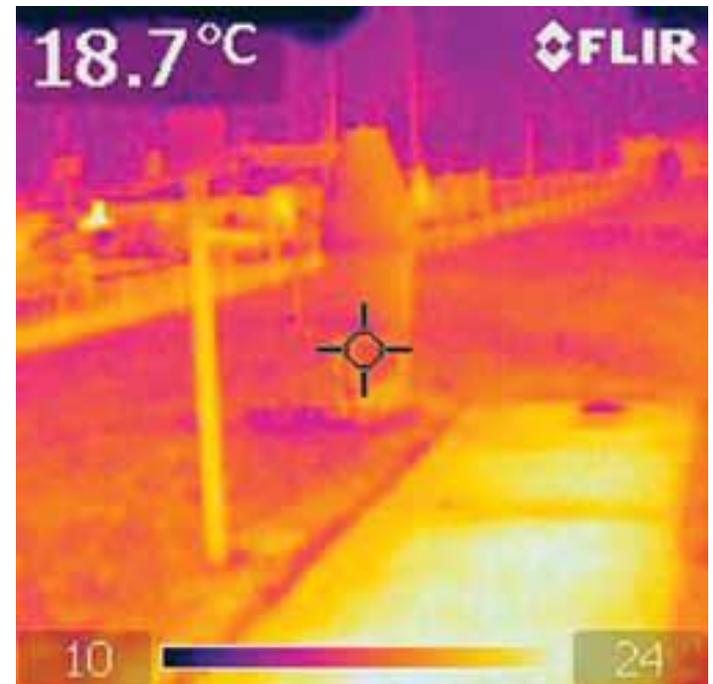


**Fayetteville, North Carolina**

**Maximum/Minimum Temperature  
Sensor, MMTS**

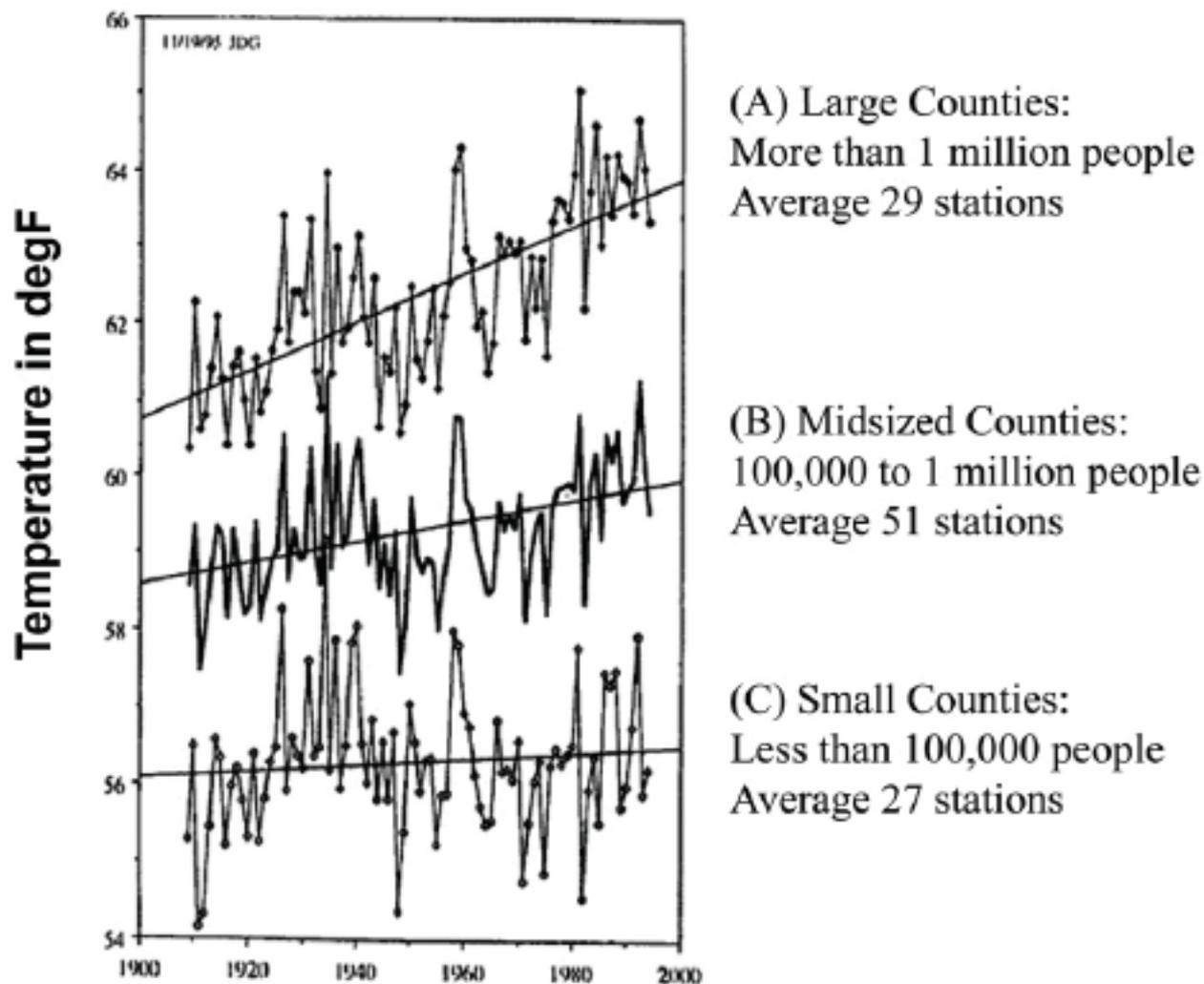
**Visible, Left Infrared, Below**

**Sensor should be at least 100 ft from  
any paved or concrete surface.**



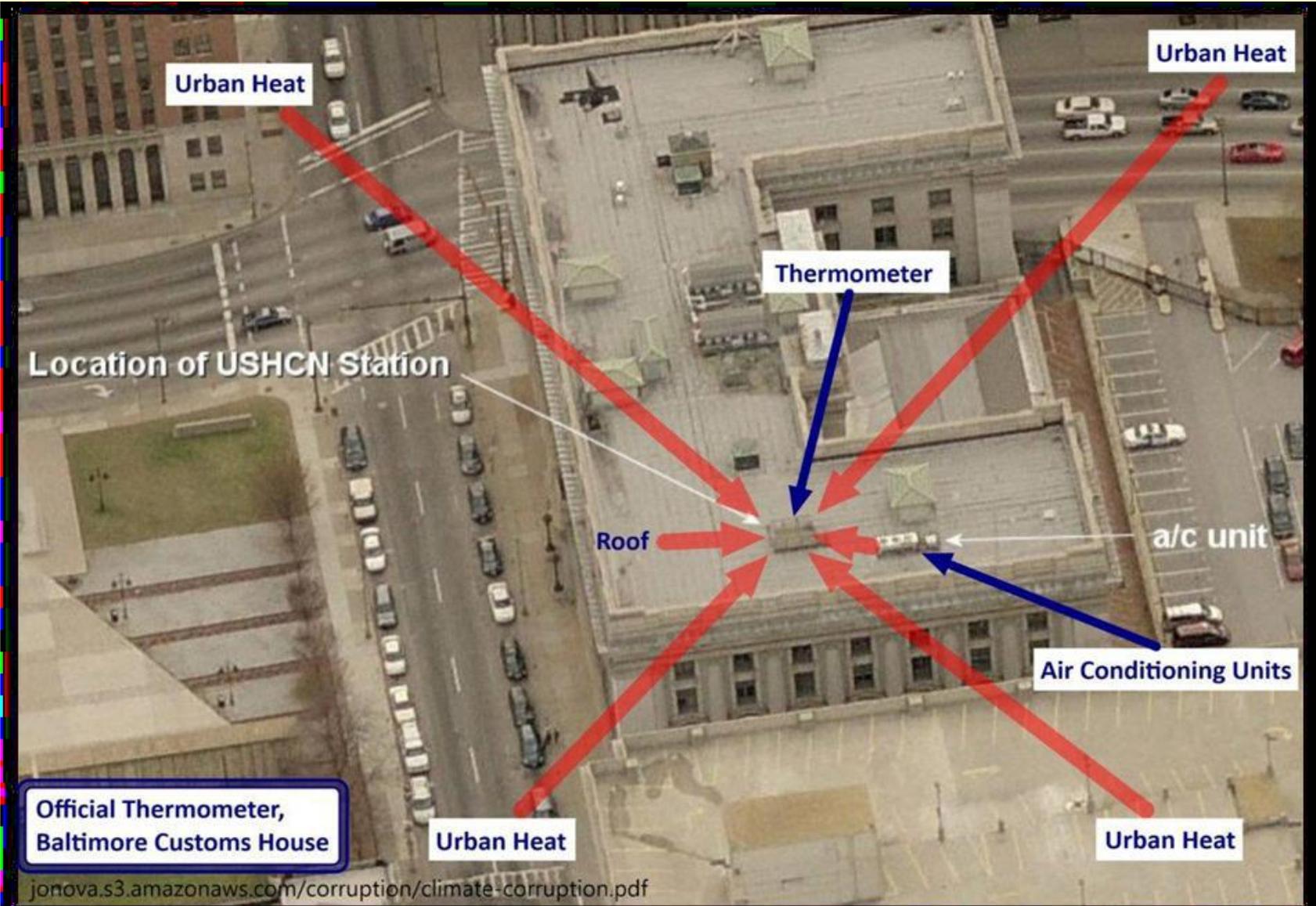
# Urban Heat Island Effect

Temperature Trends at 107 Californian Stations 1909 to 1994  
Stratified by 1990 population of the county where station is located



**Figure 11:** A demonstration of the 'urban heat island' effect: Observed (surface) temperature trends from California weather

This thermometer gets warming from the roof surface, which reflects and radiates heat, and from a nearby air conditioner outlet. Urban landscape, with its heat-emitting cars, offices, home, etc., and many radiating surfaces, provided increased heat as Baltimore grew. Photo courtesy of Anthony Watts and [www.surfacestations.org](http://www.surfacestations.org)



This thermometer gets warming from the roof surface, which reflects and radiates heat, and from a nearby air conditioner outlet. Urban landscape, with its heat-emitting cars, offices, home, etc., and many radiating surfaces, provided increased heat as Baltimore grew. *Baltimore USHCN station circa 1990's photo, courtesy NOAA.*



<http://wryheat.wordpress.com/tag/usncn/>



U of A Weather Station 1923

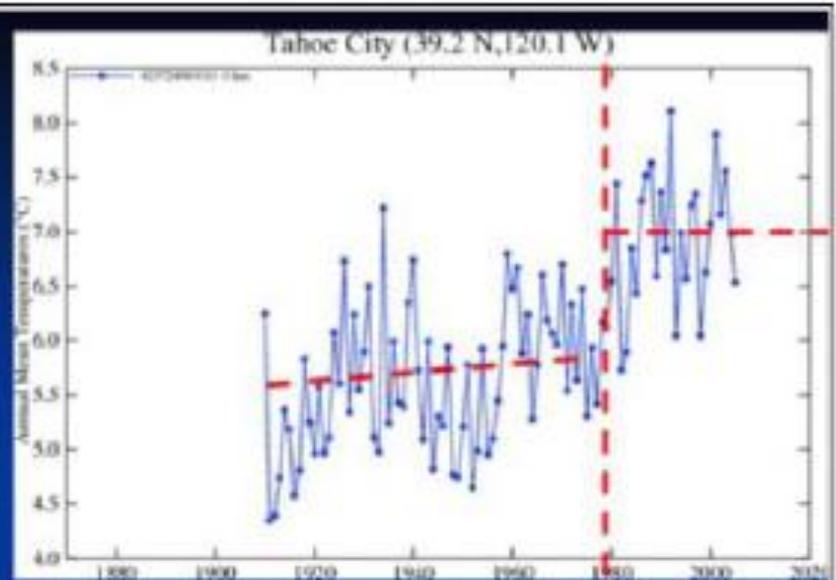


Urban Heat Island has affected many USHCN stations as population growth occurred.

University of Arizona, Tucson

**Stephenson Screen, Tucson, Arizona, located on a parking street on the University of Arizona. Textbook example - CRN Class 5 (error  $\geq 5^{\circ}\text{C}$ ) – Temperature sensor located next to / above artificial heating source ... building, roof top, parking lot, concrete surface.**

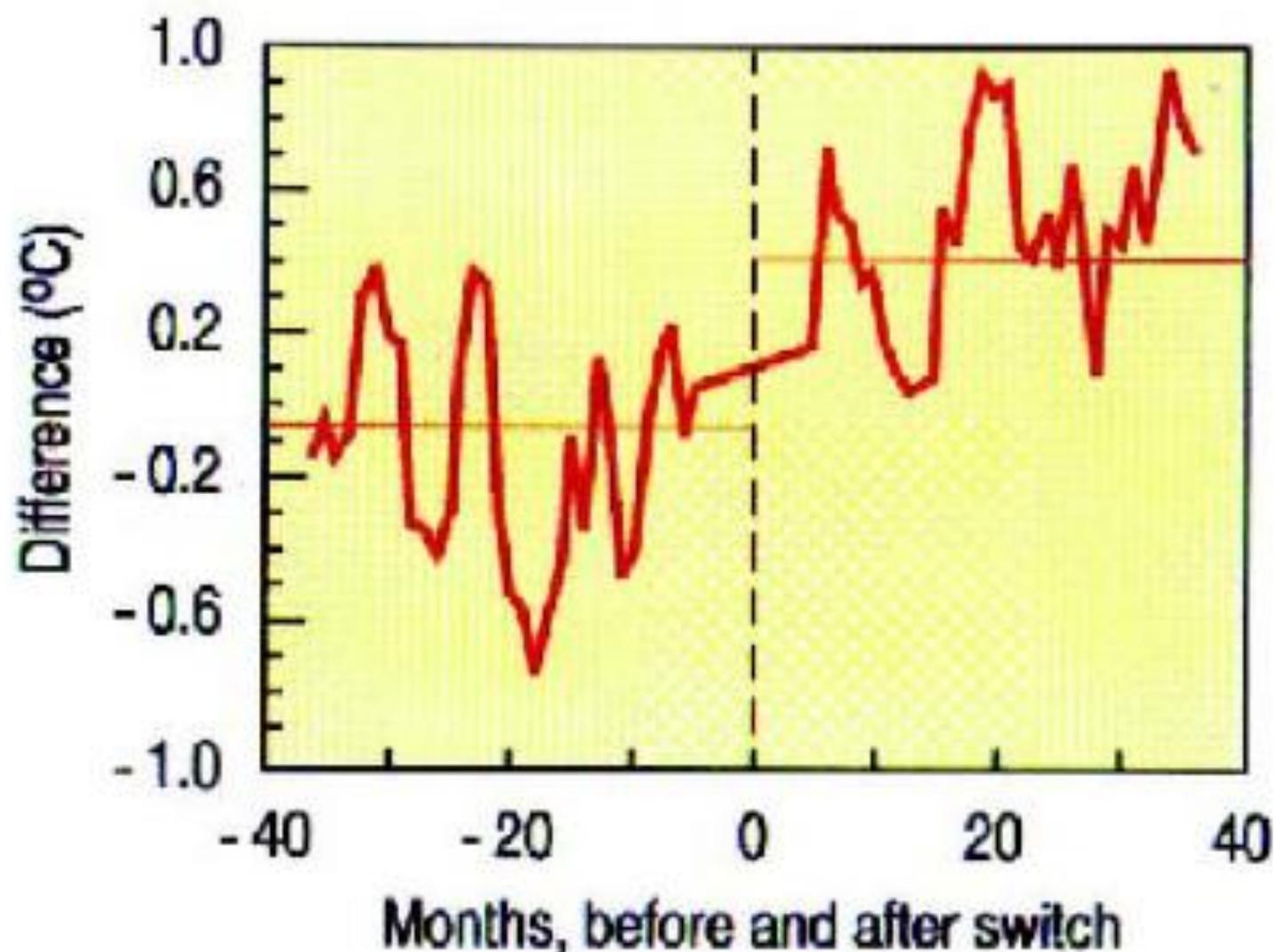




**Tahoe City, CA**  
**Tennis court added**  
**in early 1980s**



*(Photos by Anthony Watts, [surfacestations.org](http://surfacestations.org).)*



*Effects of changing from the HO-63 to the HO-83 thermometer series on maximum temperature in the United States. Source: Karl et al., 1995.*



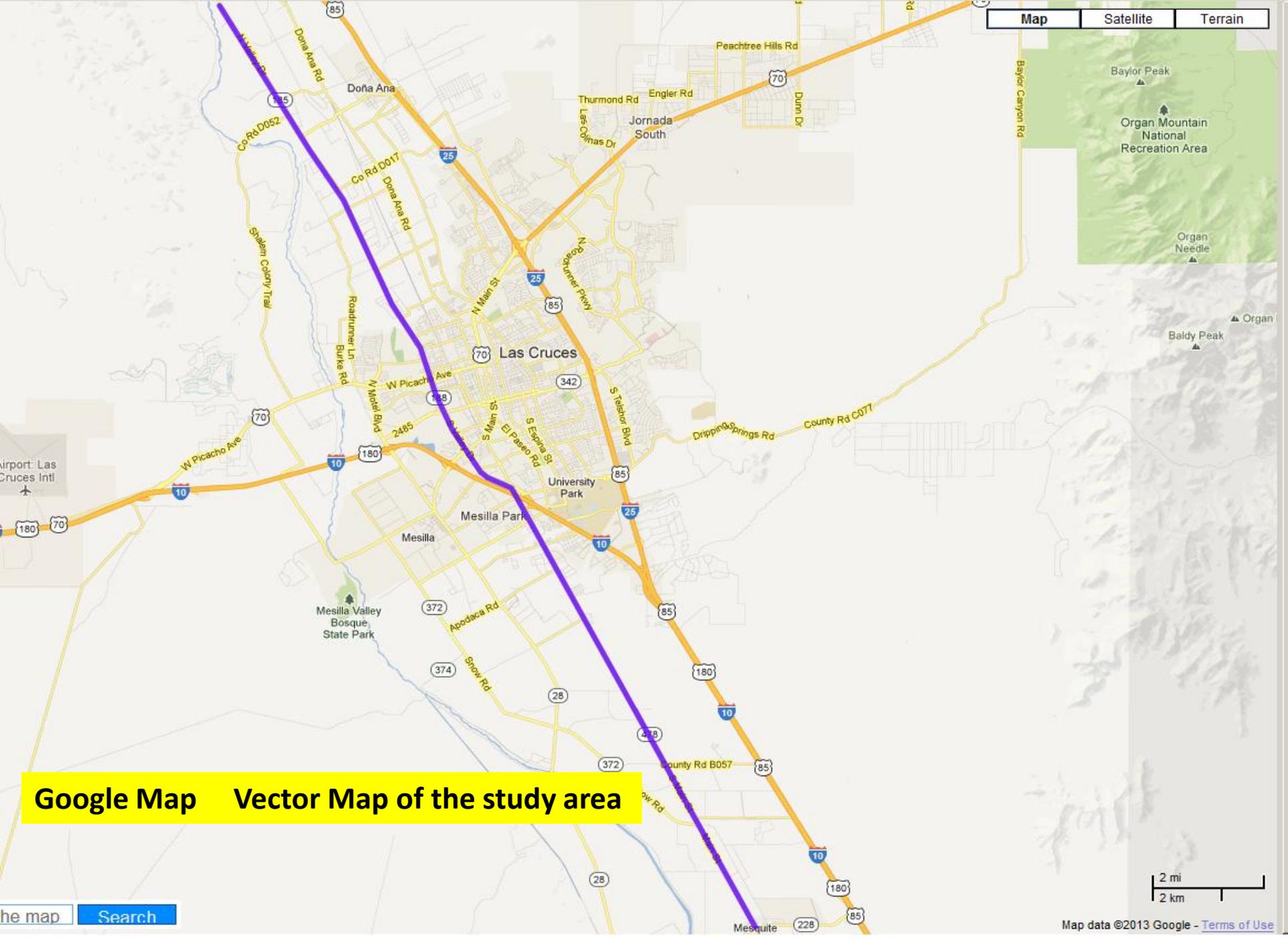
*USHCN weather station at Hopkinsville, KY (Pielke et al., 2006). The station is sited too close to a building, too close to a large area of tarmac, and directly above a barbecue.*



*Waterville, WA, over volcanic cinders, near parking.  
(Photo by Bob Meyer, courtesy of [surfacestations.org](http://surfacestations.org).)*



Measurements of the Urban Heat Island, Las Cruces



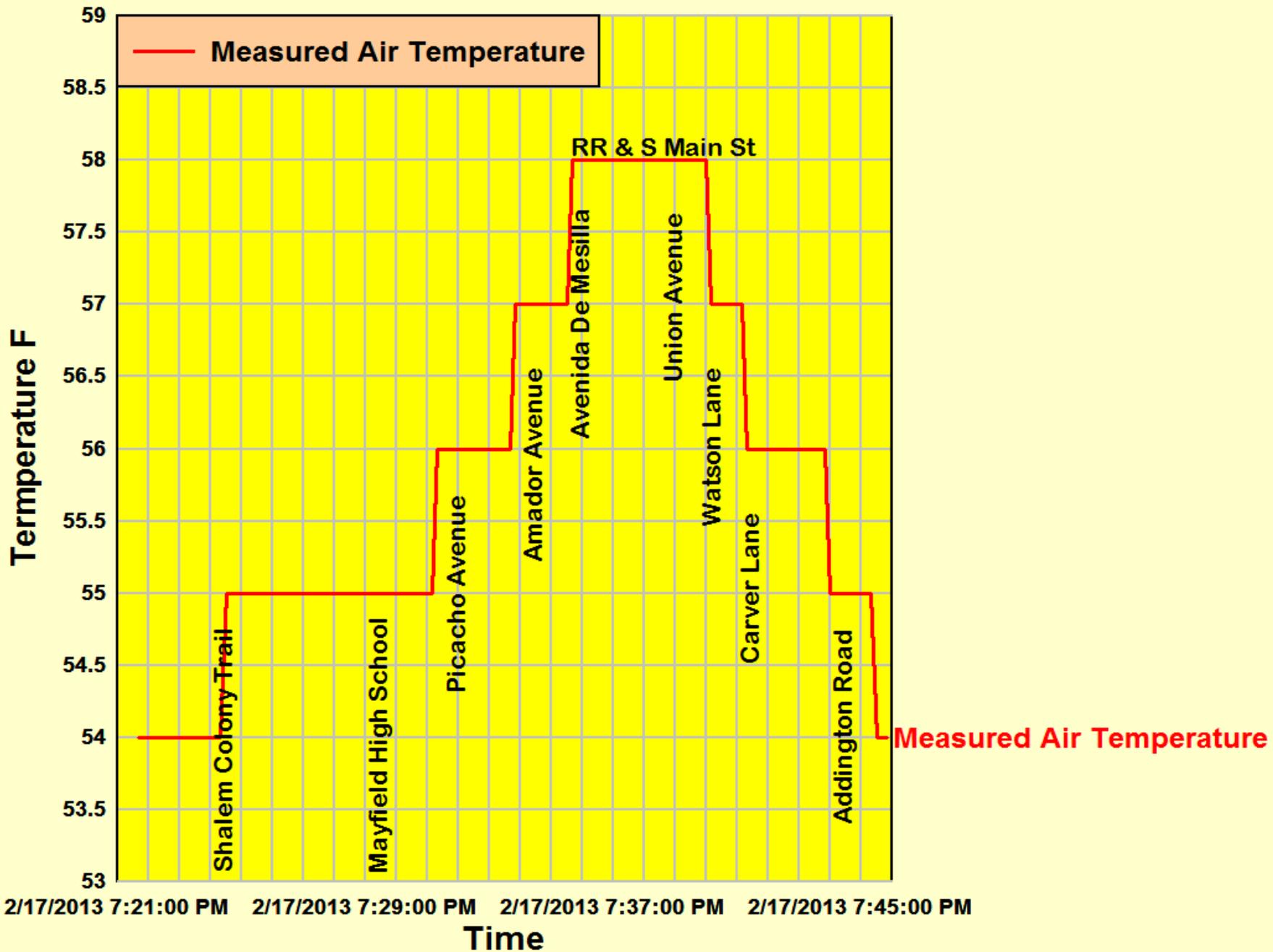
Airport: Las Cruces Intl

Google Map Vector Map of the study area



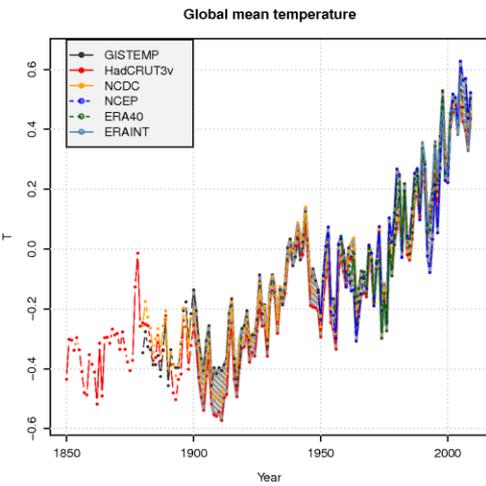
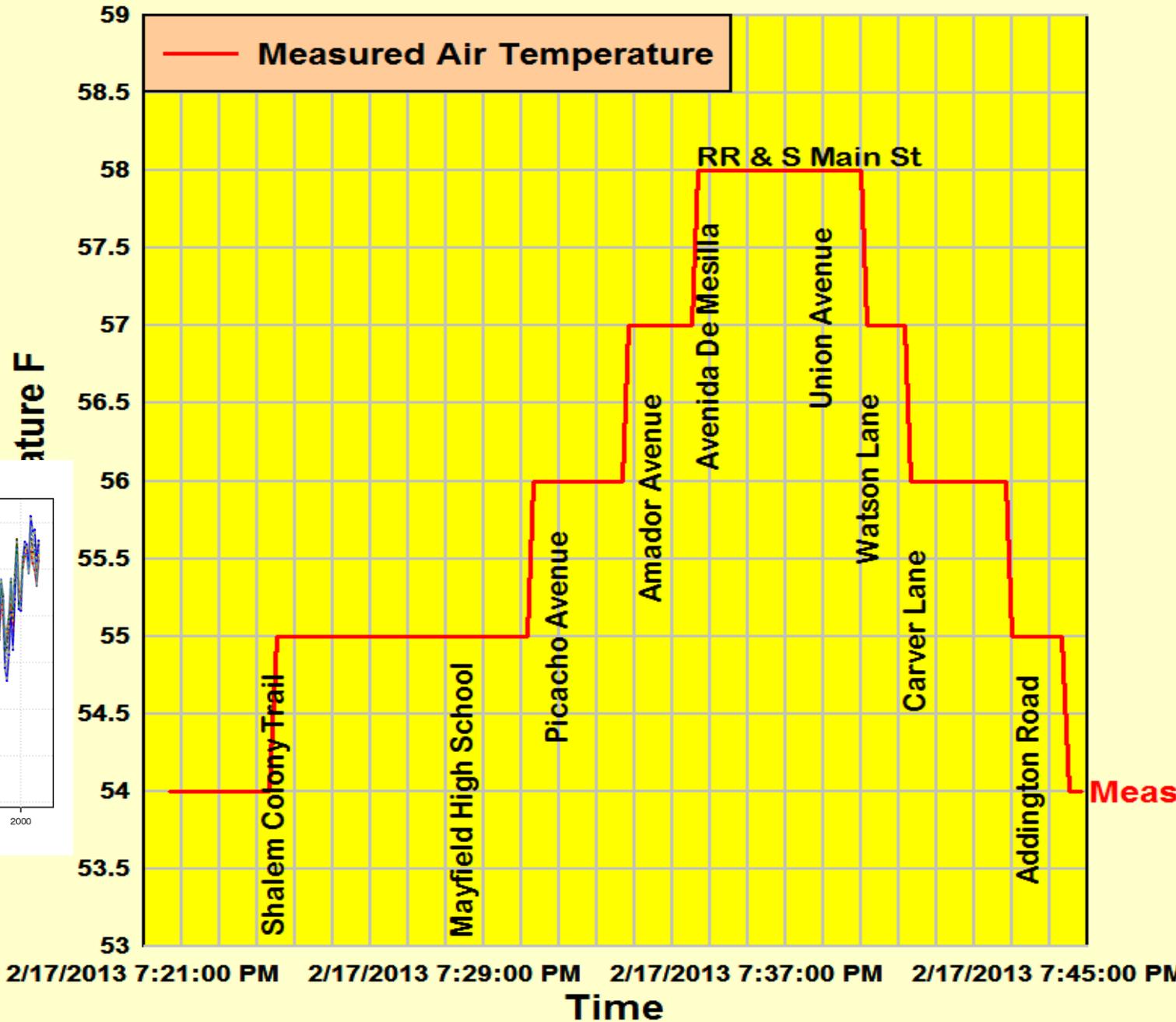
# Urban Heat Island Las Cruces, NM

17 Feb 2013

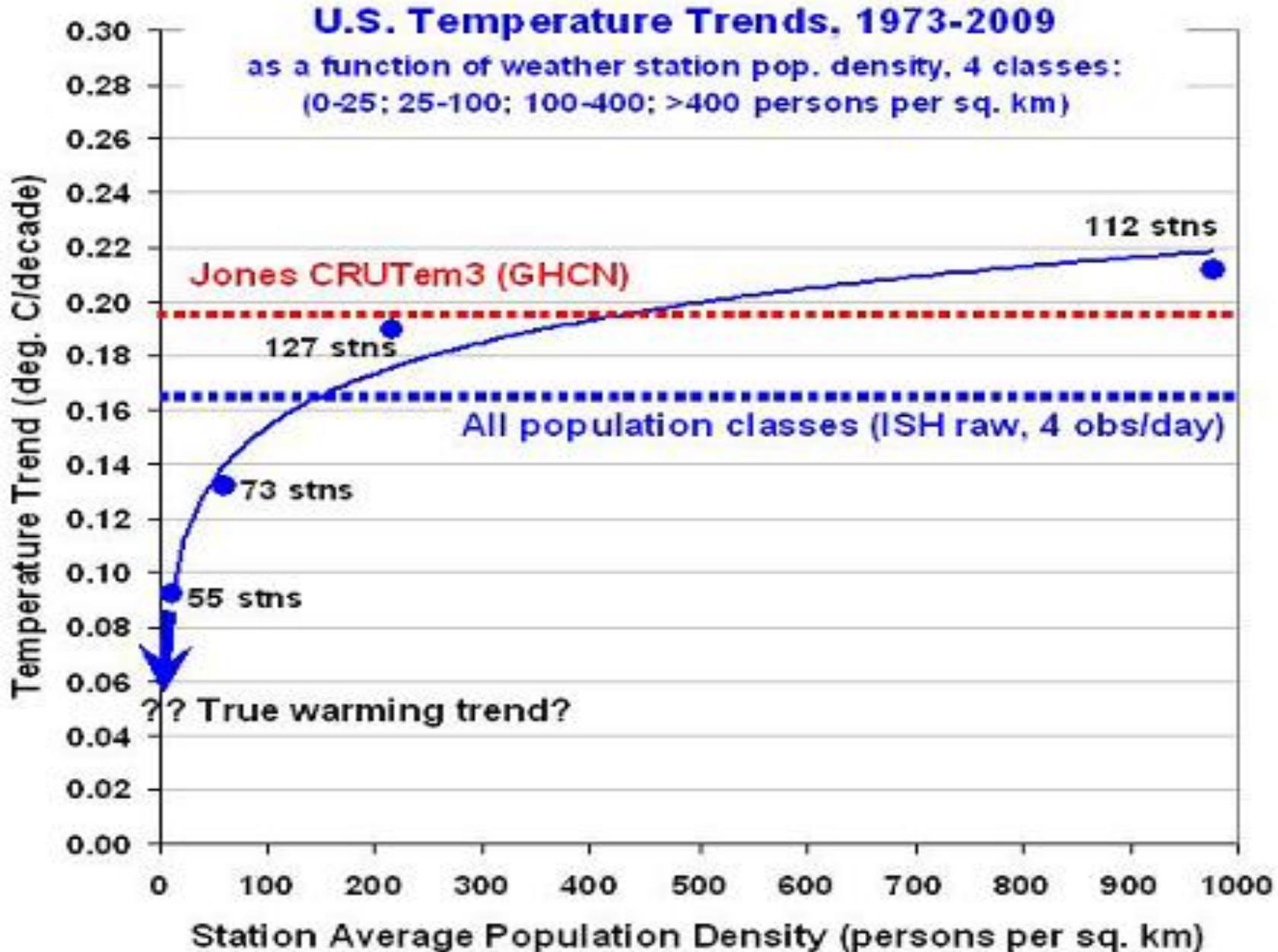


# Urban Heat Island Las Cruces, NM

17 Feb 2013



Direct evidence that most US Warming since 1973 could be spurious,  
Dr Roy Spencer, Case Study 16, SPPI Original Report, "Surface Based Temperature Records... "



# NOAA Temperature Classification Guide

## Climate Reference Network Site information Handbook

<http://www1.ncdc.noaa.gov/pub/data/uscrn/documentation/program/X030FullDocumentD0.pdf>

### 2.2.1 Classification for Temperature

**Class 1 – Flat and horizontal ground surrounded by a clear surface...  
Sensors located at least 100 meters from artificial heating or reflecting surfaces, such as buildings, concrete surfaces, and parking lots.**

**Class 2 – Same as Class 1 with the following differences. .. Artificial heating sources within 30m...**

**Class 3 (error  $\geq 1^{\circ}$  C) – Same as Class 2, except no artificial heating sources within 10 meters.**

**Class 4 (error  $\geq 2^{\circ}$ C) – Artificial heating sources within 10 meters.**

**Class 5 (error  $\geq 5^{\circ}$ C) – Temperature sensor located next to/above an artificial heating source, such a building, roof top, parking lot, or concrete surface.**

# Analysis of USHCN Station Visits

Most USHCN stations do not meet NOAA'S own established standards.

11%, of stations meet the standards, a SMALL minority

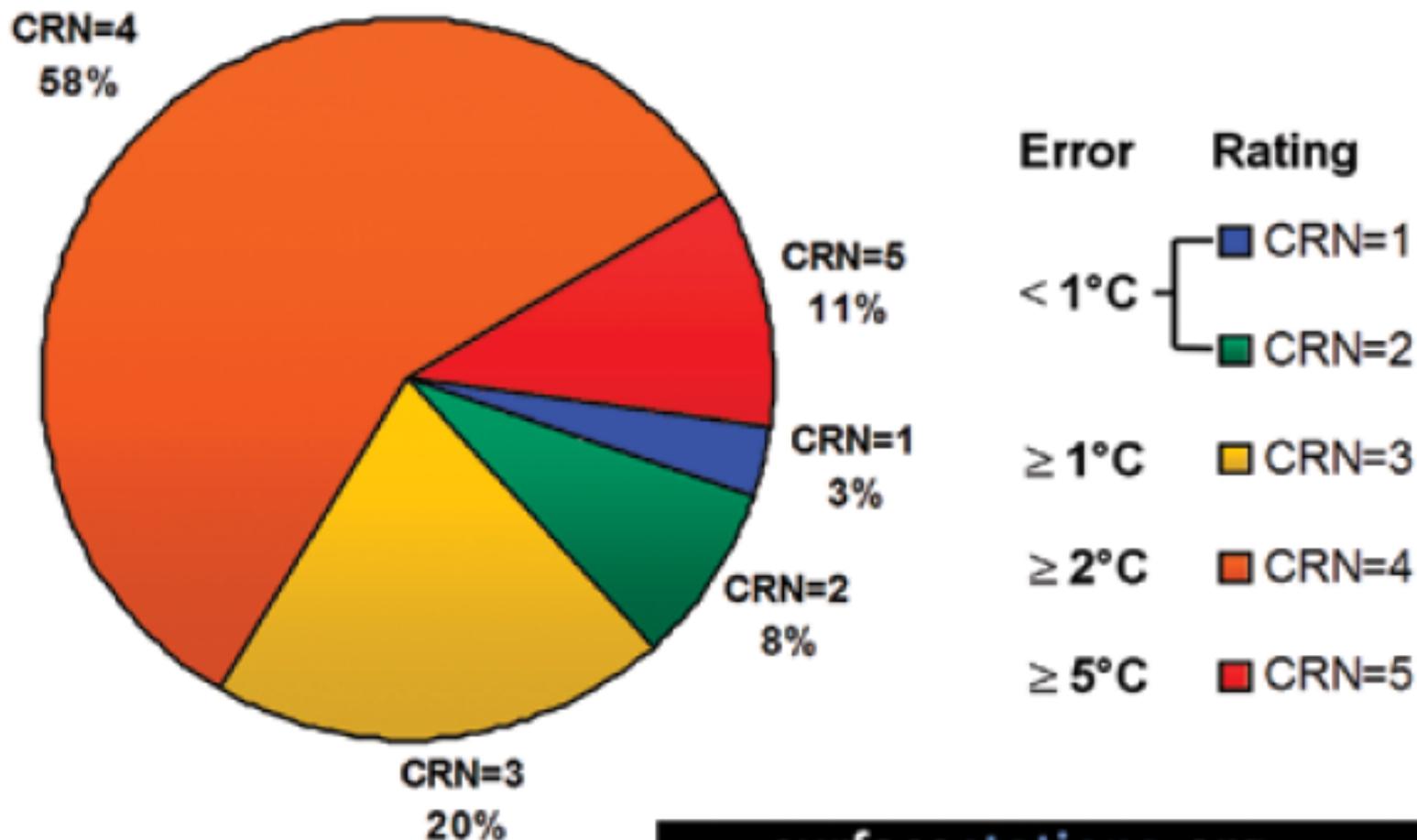
20% of USHCN stations have >1C error

58% of USHCN Stations have >2C error

11% of USHCH Stations have >5C error

**Is the US Surface Temperature record reliable when most stations have  $\geq 2C$  Error?**

# USHCN - Station Site Quality by Rating

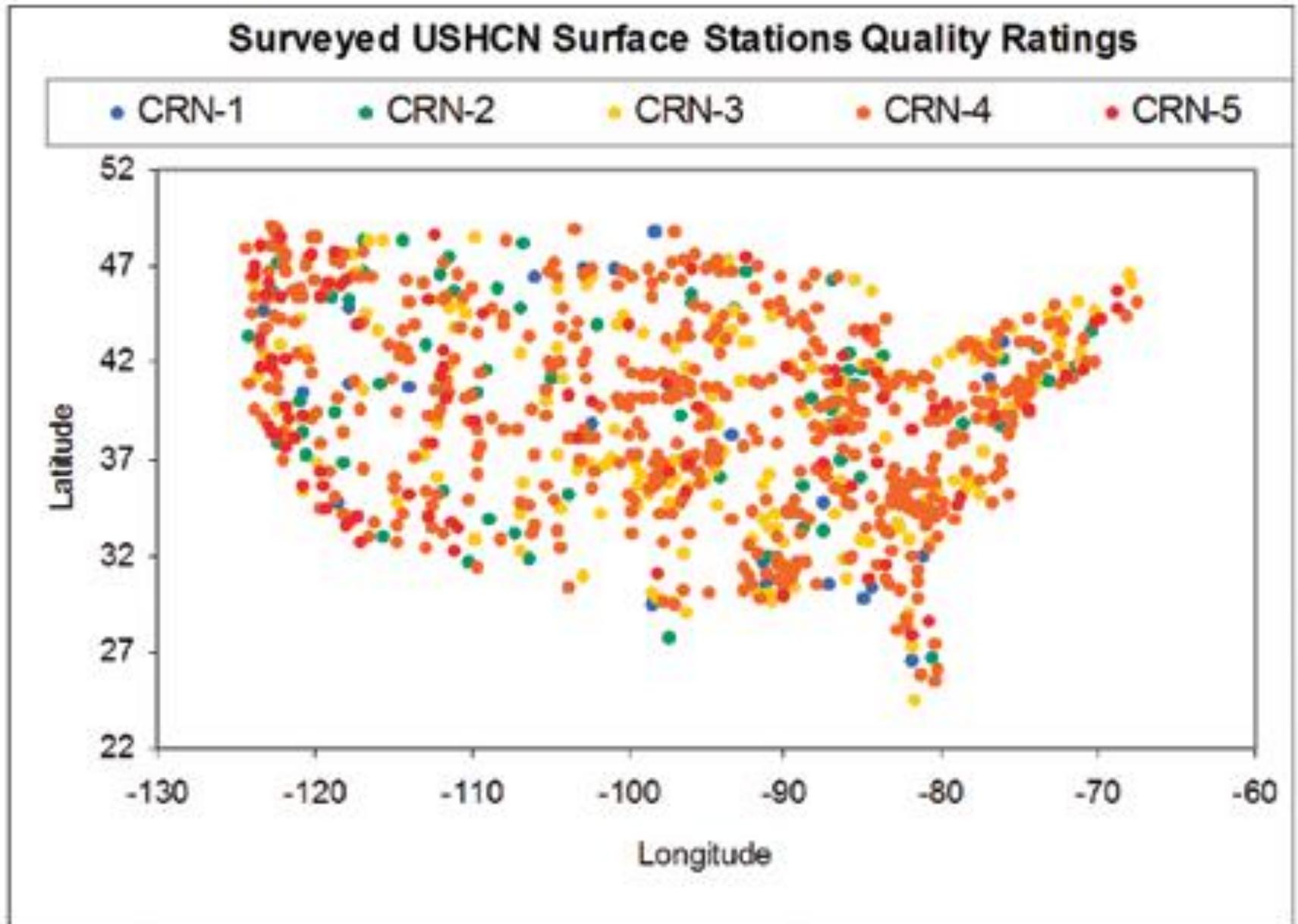


USHCN - 70% surveyed as of 2/11/09

**surfacestations.org**  
A resource for climate station records and surveys

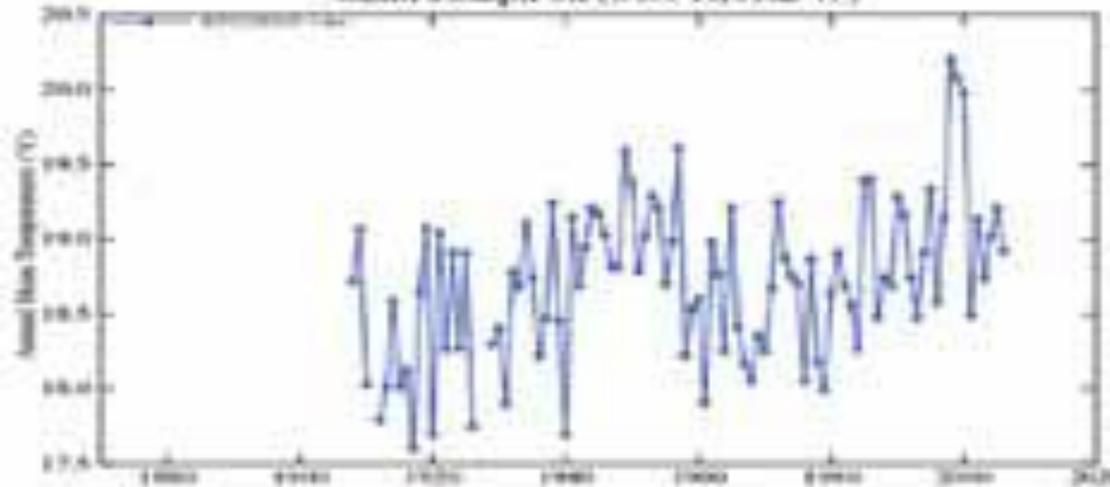
**Figure 27.** Most of the surveyed temperature stations in the U.S. fall into categories that mean they are unreliable. Only stations in CRN=1 and CRN=2 – 11 percent of all stations – are reliable.

# USHCN Station Location, Quality Rating





Saint Joseph 3m (31.9 N, 91.2 W)



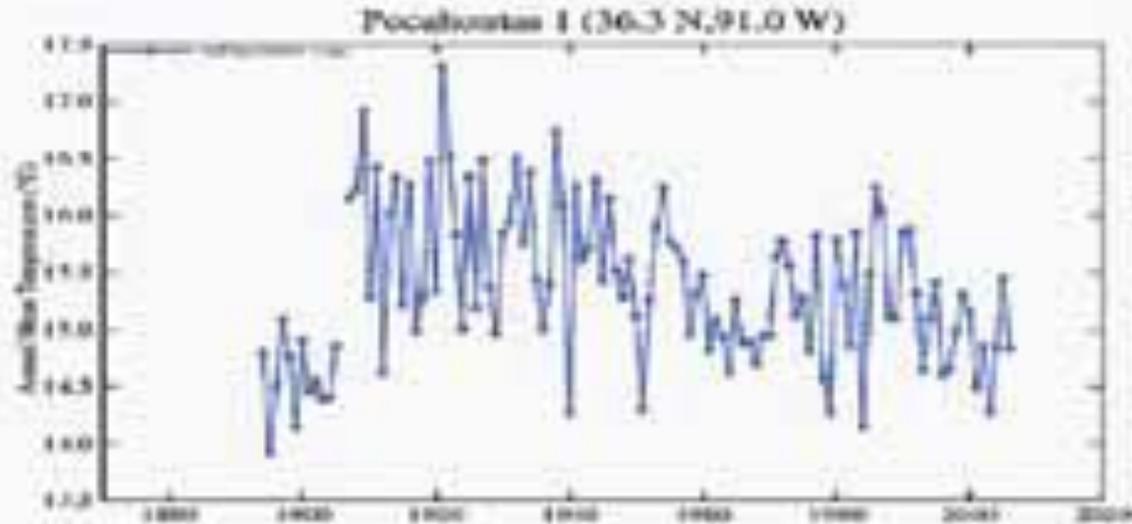
**St. Joseph, Louisiana**

**well-sited station.  
(Note temperature  
trend.)**



**Pocahontas, Arkansas**

**fairly well sited.  
(Note cooling trend.)**



**Wood Ranch, Loma, Montana. Rancher and Co-op Observer Jim Wood in front of Stephenson Screen where 103F change in 24 hours record, -54F to 49F, set 14-15 January 1972.**

**<http://www1.ncdc.noaa.gov/pub/data/cmb/extremes/ncec/lomamontana.pdf>**

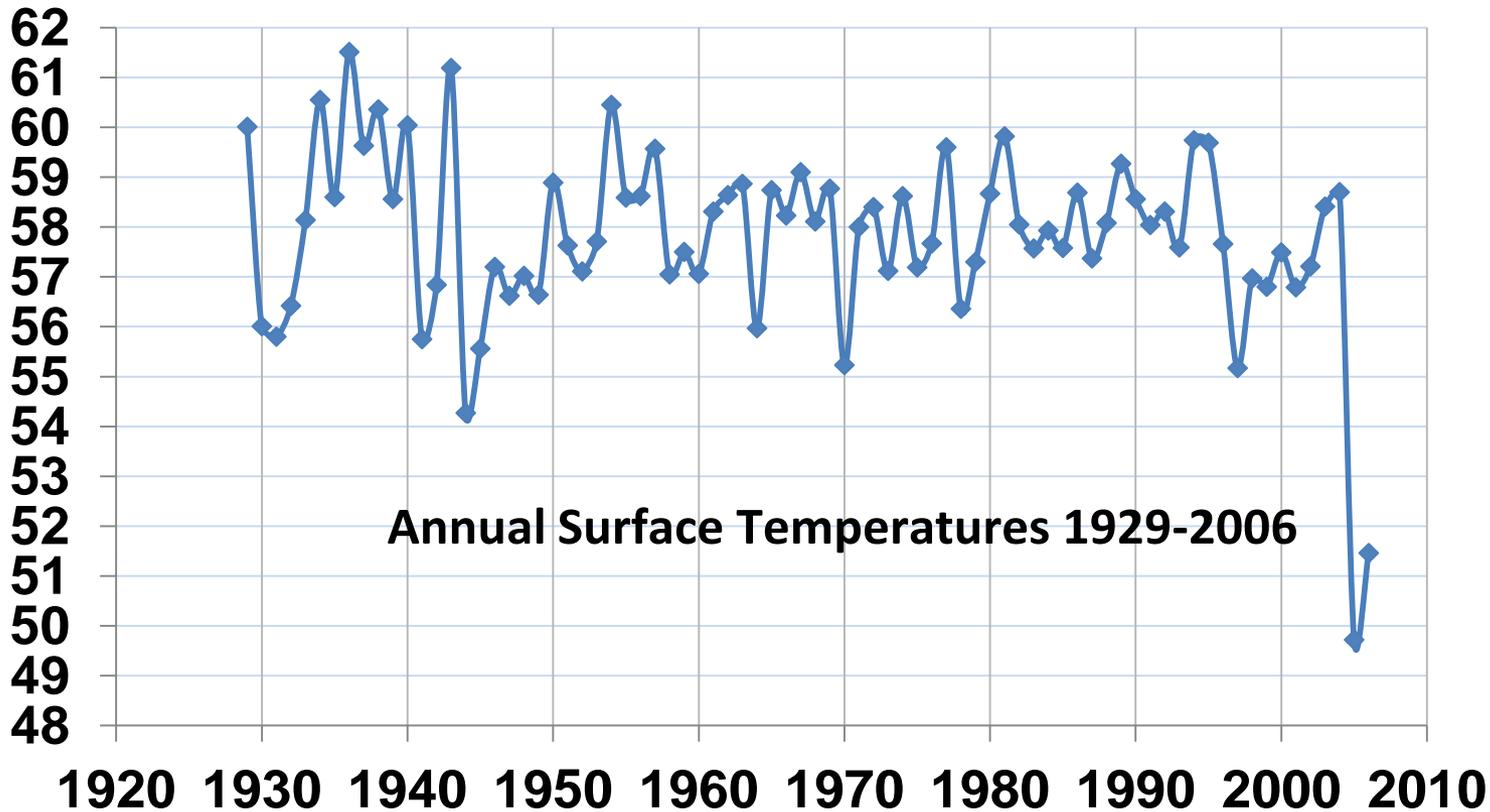
**Instrument exposure nearly ideal.**



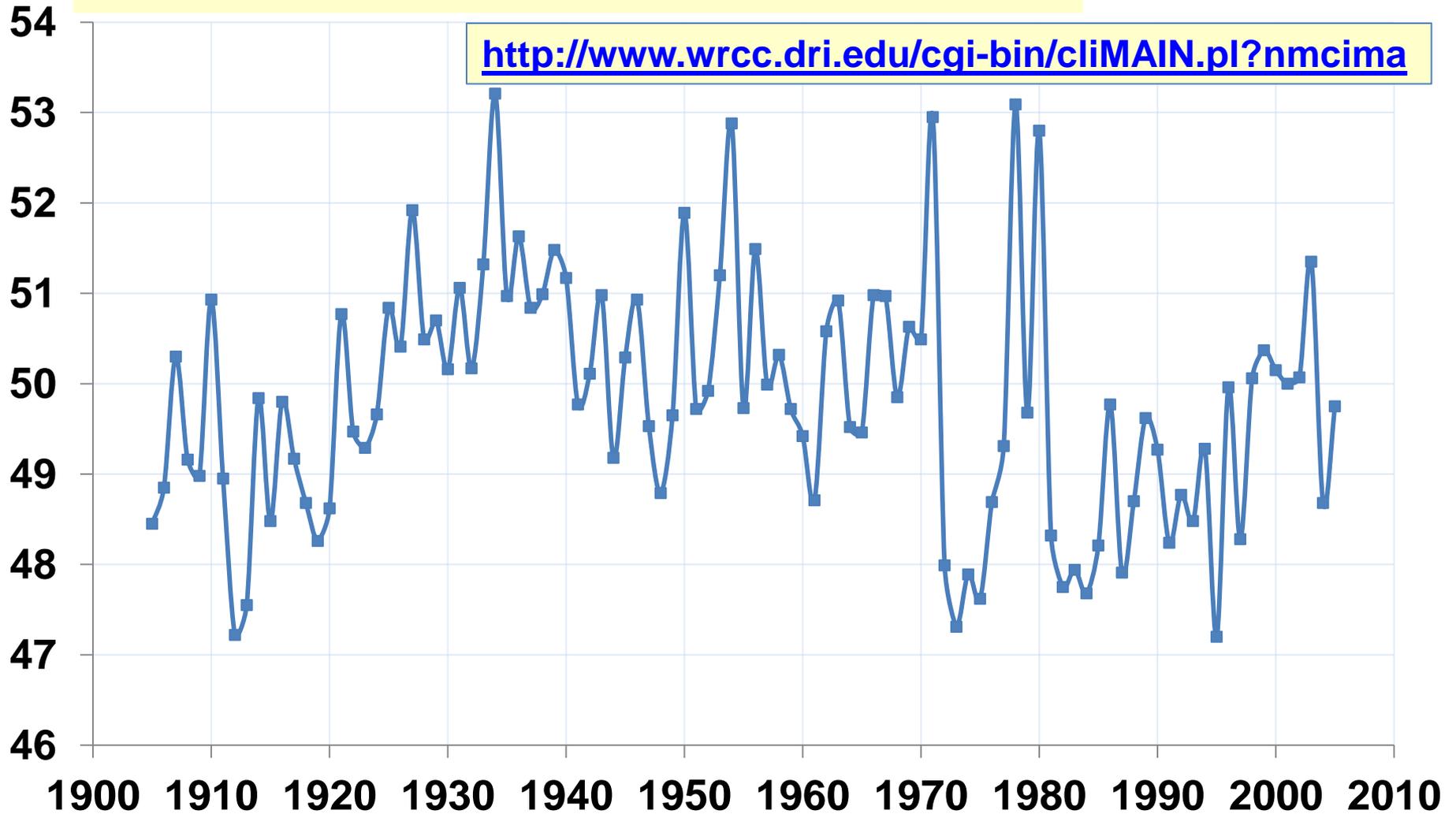


# Santa Rosa, New Mexico 1929-2006

<http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?nmsant>



# Cimarron, New Mexico, 1905-2005



# Adjustments to the Data

# Dale Enterprise, Virginia

[http://scienceandpublicpolicy.org/originals/policy\\_driven\\_deception.html](http://scienceandpublicpolicy.org/originals/policy_driven_deception.html) Case 14

**“Perfect” rural site, farm, near Harrisonburg, VA**

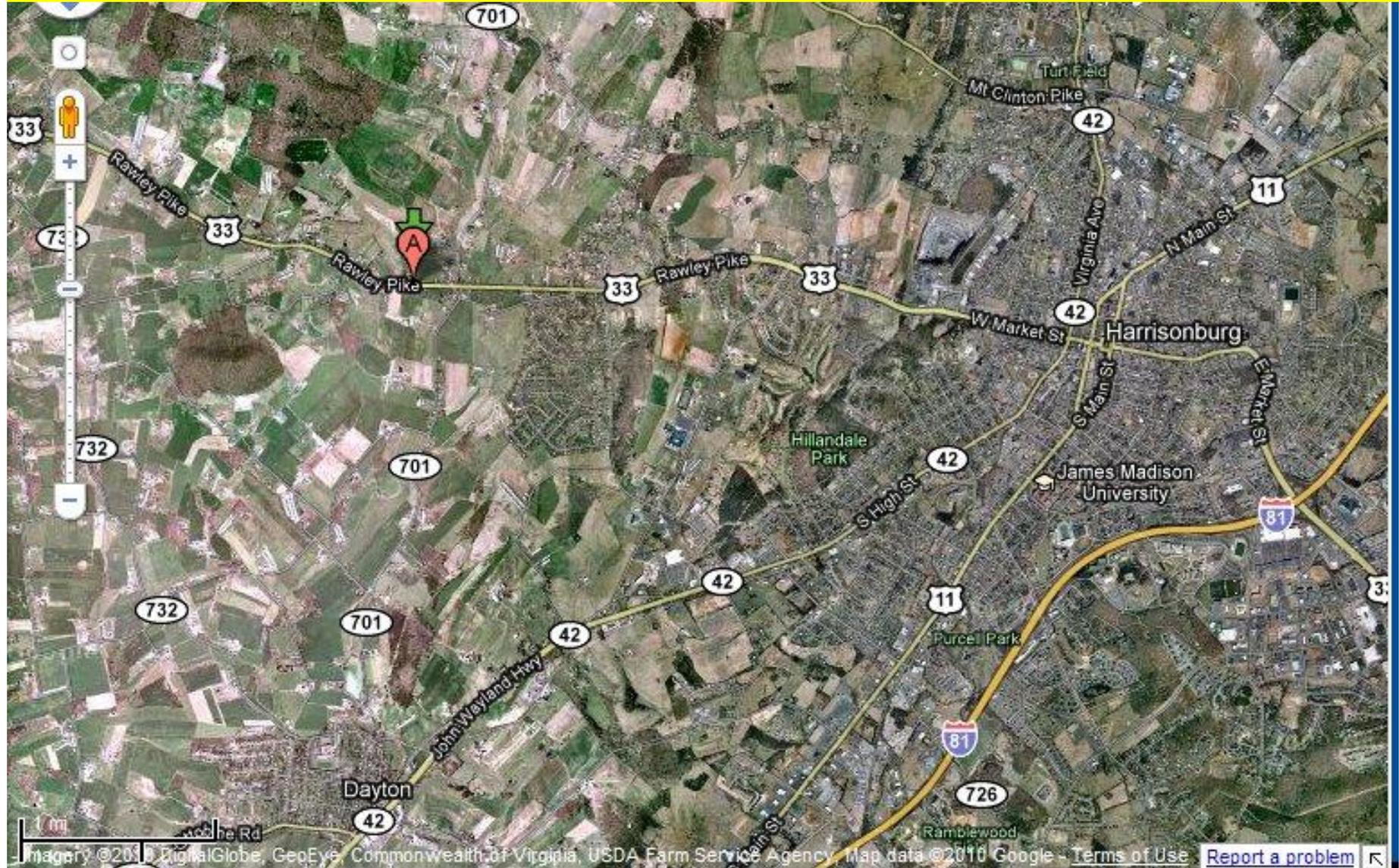
**Continuous data from 1892-2008 119 years in the same location.**

**Only 9 months data missing in 1404 months**

**Missing < 0.64% of original data.**

**No need to use adjacent stations to infill missing data  
—use own station 10-year average**

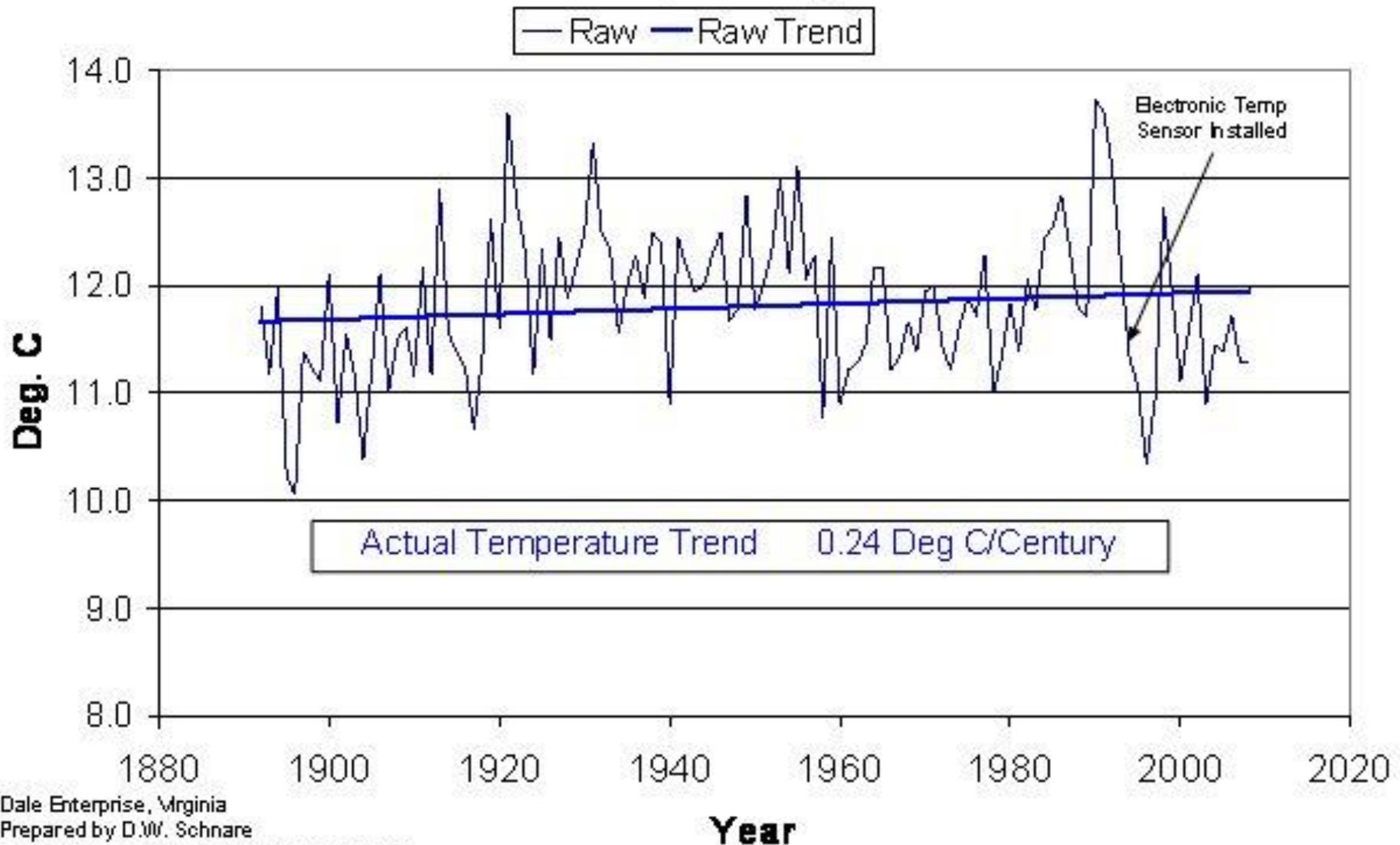
# Dale Enterprise, Virginia



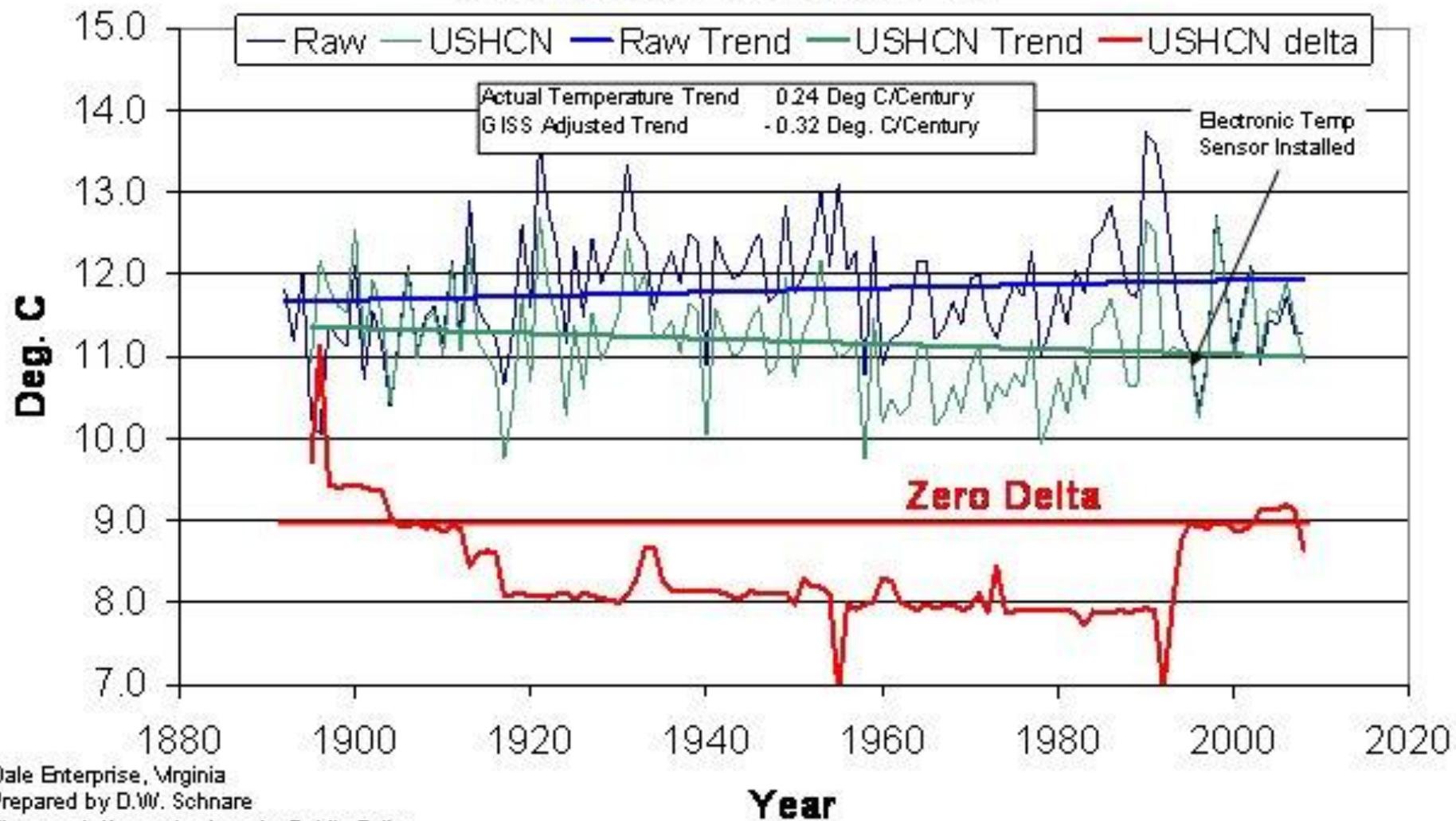
# Dale Enterprise, Virginia



## Dale Enterprise Virginia



## Dale Enterprise, Virginia Raw versus USHCN Adjustment



# Dale Enterprise, Virginia

[http://scienceandpublicpolicy.org/originals/policy\\_driven\\_deception.html](http://scienceandpublicpolicy.org/originals/policy_driven_deception.html) Case 14

A “perfect” rural site on a farm near Harrisonburg, VA

Continuous data from 1892-2008 119 years in the same location.

Only 9 months data missing in 1404 months

Missing < 0.64% of original data.

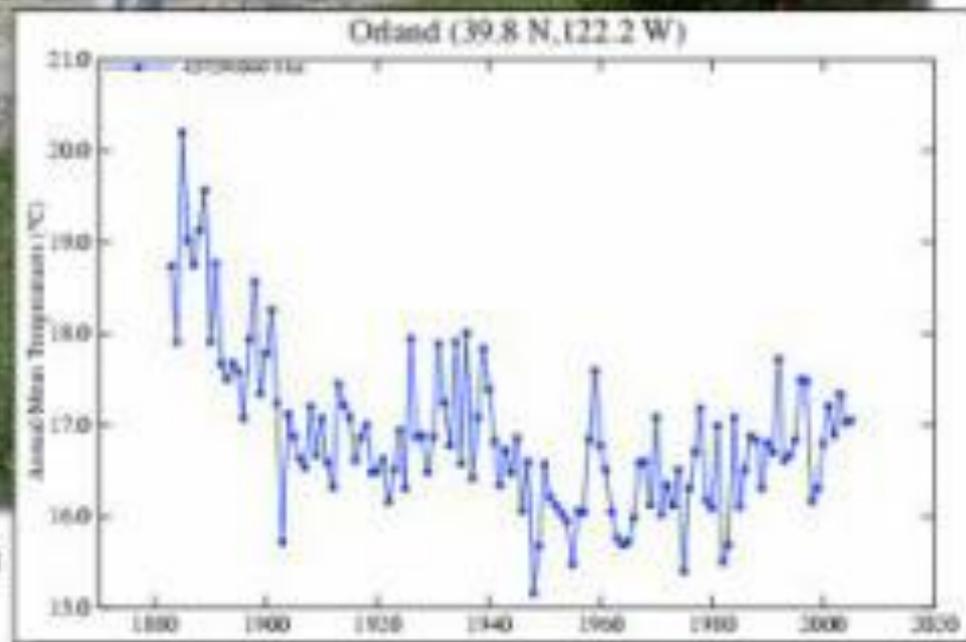
No need to use adjacent stations to infill missing data  
—use own station 10-year average

**WHY DOES NCDC FIND IT NECESSARY TO ADJUST TEMPERATURE  
OF DALE ENTERPRISE EVERY YEAR EXCEPT 1998 and 1999?**

**Orland California, Poster Child for a well-exposed station and data set, posted June, 2007**

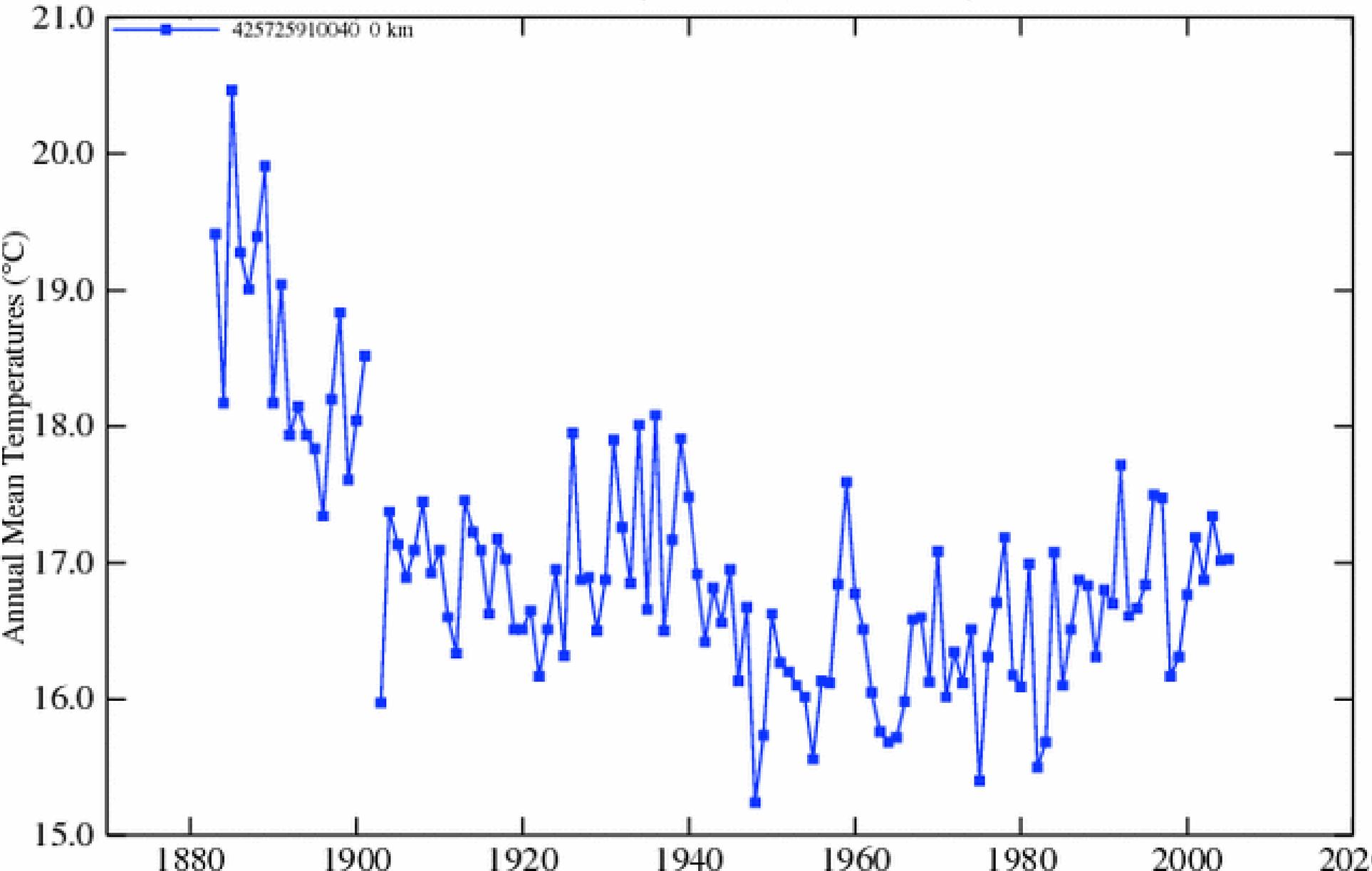


**This USHCN Station in Orland, CA has been in the same location for over 100 years**

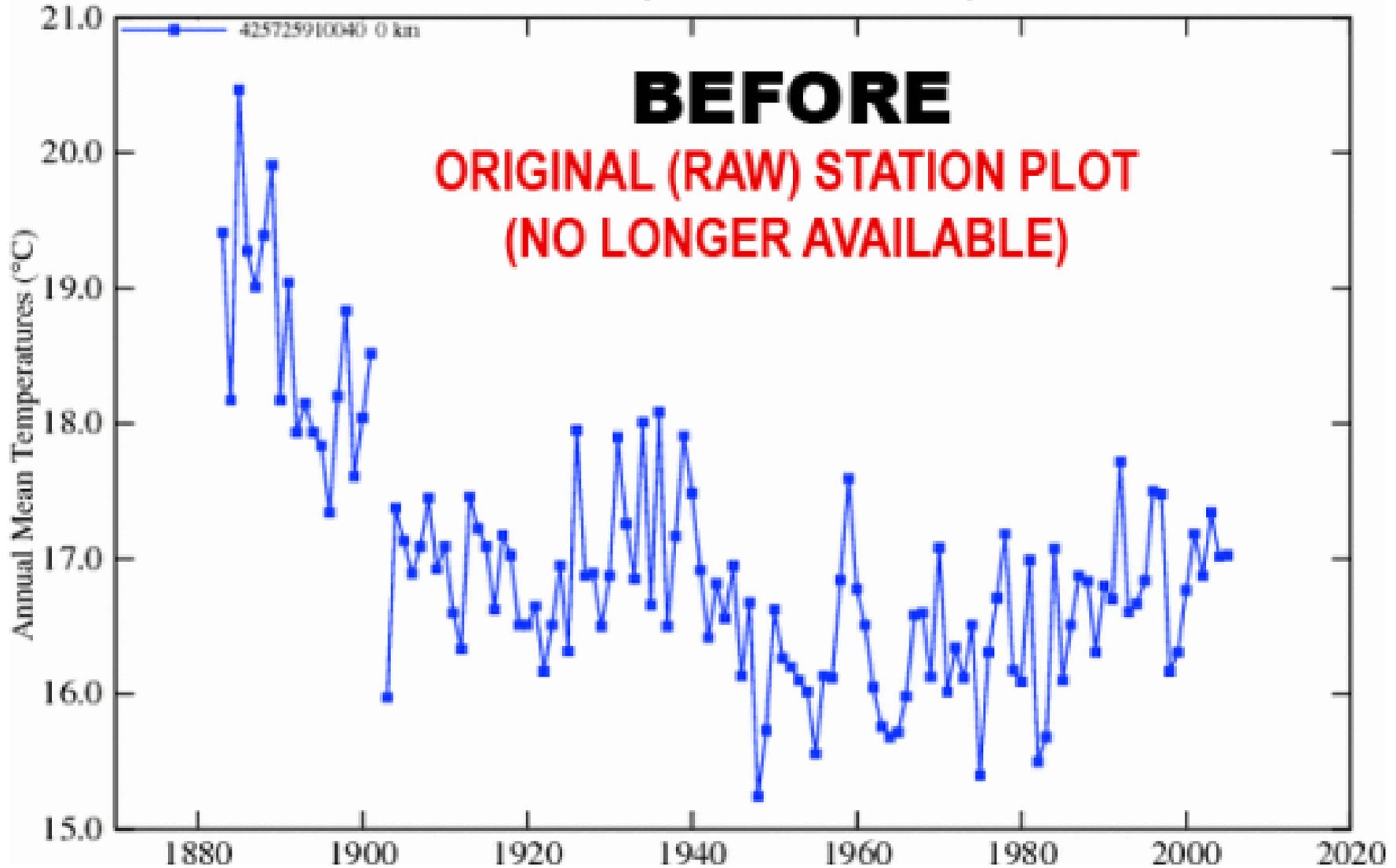


Orland California, Poster Child for a well-exposed station and data set,  
Posted June, 2007

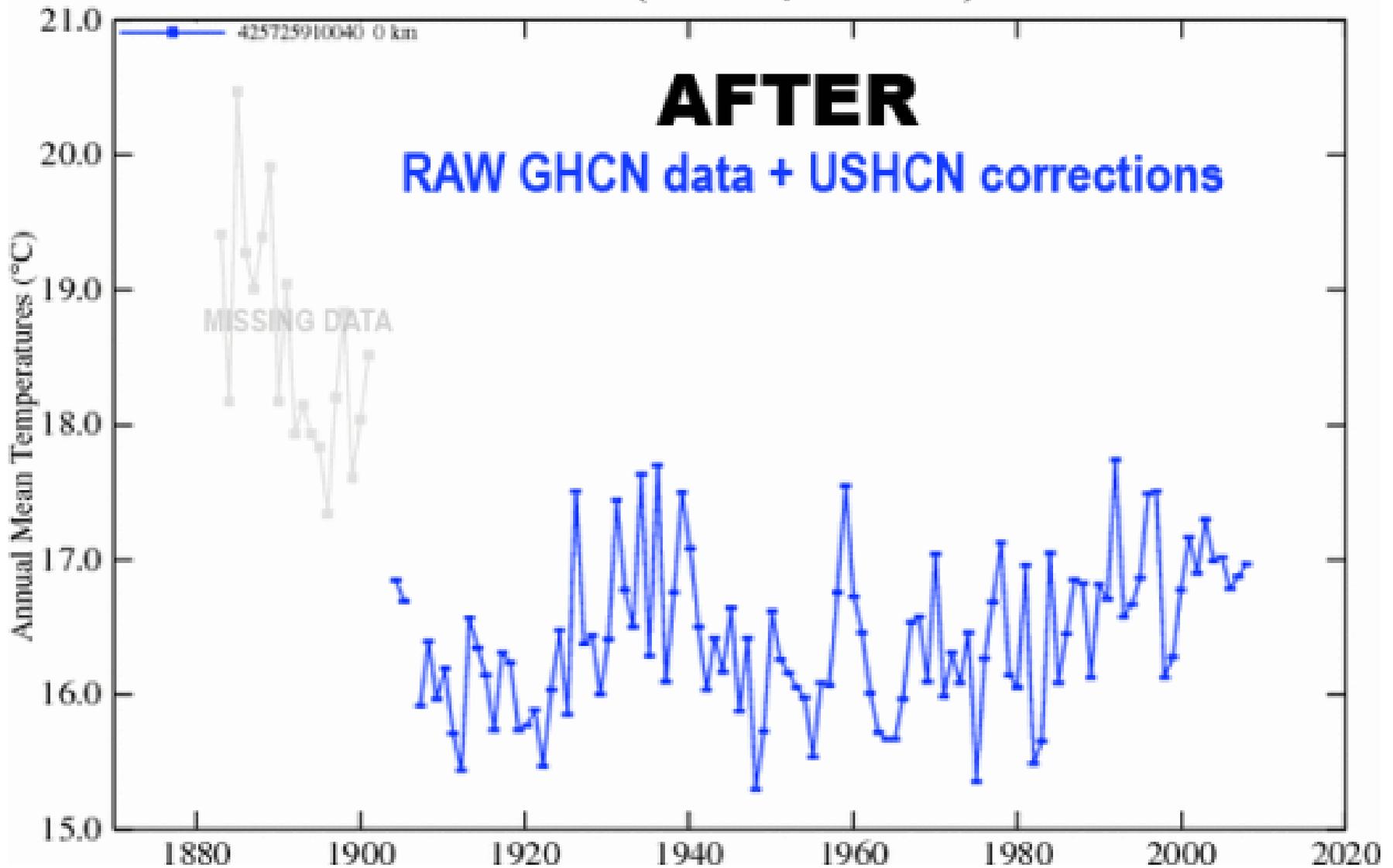
Orland (39.8 N, 122.2 W)



### Orland (39.8 N, 122.2 W)



Orland (39.8 N, 122.2 W)



The US General Accountability Office KNOWS that the USHCN data is full of errors  
<http://www.gao.gov/products/GAO-11-800>



**GAO**

U.S. Government Accountability Office

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& Bid Protests](#)

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CLIMATE MONITORING

## **NOAA Can Improve Management of the U.S. Historical Climatology Network**

GAO-11-800, Aug 31, 2011

**Highlights**



[View Report \(PDF, 47 pages\)](#)

# Missing Data? No Problem. We Use FILNET!

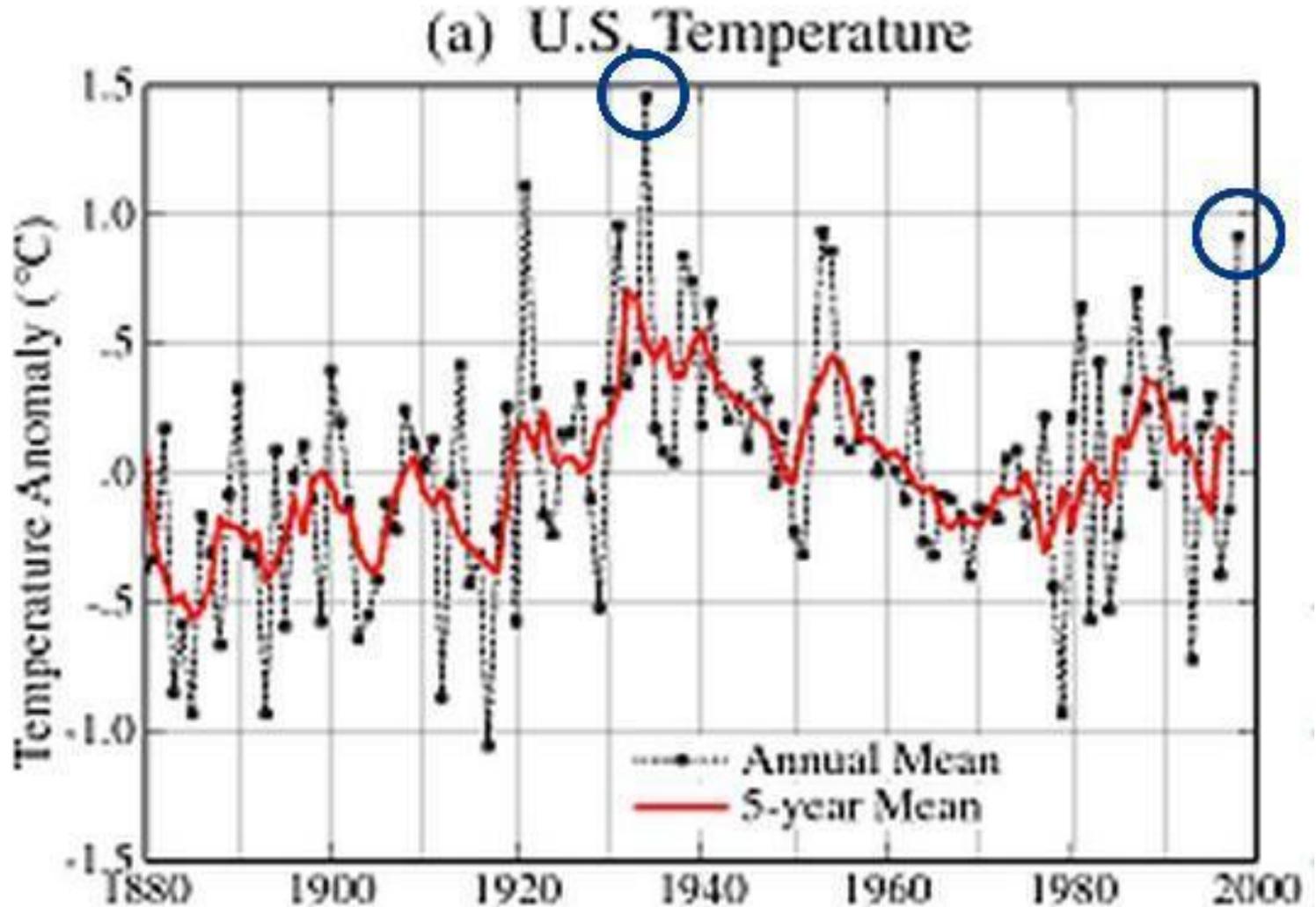
- **FILNET: “Fill Missing Original Data in the Network”**
- **“infills” missing data –**
- **interpolations of data from surrounding stations**
- **Data are “created.”**
- **Uses SHAP “Station History Adjustment Program”**
- **“de-biased” data obtained from SHAP**
- **Fills in missing data with estimates calculated from nearby stations**

B-91 Form for Marysville, California, July 2007

Only 14 of 31 July days had data filled in.

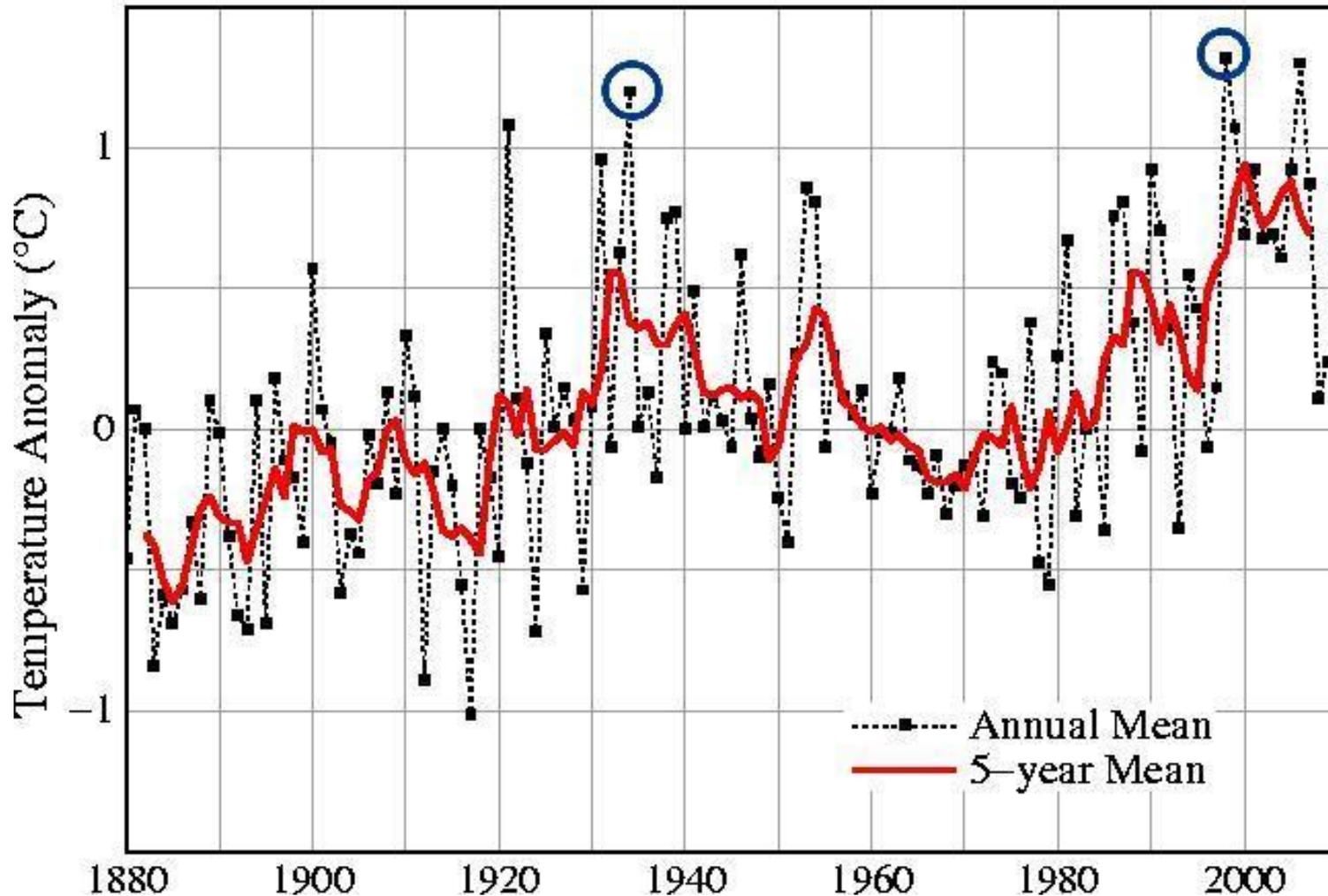
STATION (Climatological)(River Station, if different) MARYSVILLE FIRE DEPARTMENT					
STATE CALIFORNIA			COUNTY YUBA		
TIME (local) OF OBSERVATION RIVER			TEMP. 0900 AM		
TYPE OF RIVER GAGE			ELEVATION OF RIVER ZERO		
DATE	TEMPERATURE F.			24-HR AMOUNTS	
	24 HRS ENDING AT OBSERVATION		(52) AT OBSN.)	Rain, melted snow, etc., (Ins. and hundredths)	Snow, ice pellets (Ins. And hundredths)
	MAX	MIN			
1					
2					
3	91	54	72		
4					
5					
6	87	51	62		
7	89	52	63		
8					
9					
10					
11	94	60	76		
12	97	65	77		
13	99	65	76		
14					
15					
16					
17	103	62	78		
18	99	65	75		
19					
20	96	57	72		
21	95	61	72		
22					
23					
24	97	56	70		
25	93	66	79		
26	98	59	74		
27					
28	94	61	74		
29					
30					
31					
sum				0	

1936 was an extremely warm year. NASA GISS by year temperature plot from 1999. Note Well -- 1936 is the warmest year by far.



**In 2000, NASA GISS adjusted the temperatures. Poof! Magic! The warmest year is no longer 1936!**

U.S. Temperature



# Issues and Questions

## US Surface Temperature Measurements

**Condition of Stephenson Screens: Whitewash vs. Latex,  
Well-Maintained vs. Peeling**

**Is the Stephenson Screen exposed correctly?**

**Are the data correctly entered into the form?  
How are missing daily data entered, why?**

**Are the monthly data entered into the data base, or missing?**

**How are missing monthly data accounted for?**

**What do the raw data look like?**

**Why are the adjustments made?**

**How are the adjustments made?**

**Which stations are included in the data base?**

# Issues and Questions

## US Surface Temperature Measurements

Why are cooling years removed from the data bases?

Why do we use stations having  $>+2F$  and  $>+5F$  errors in our calculations?

Why do we use stations having  $>+2F$  and  $>+5F$  errors in Policy Decisions?

Why are the most perfect stations' temperatures continually adjusted?

--Next few slides--

State of Climate Report: Makes the News, but is incomplete, never corrected.

USCRN: Will this help make US Surface Temperature Record Reliable?

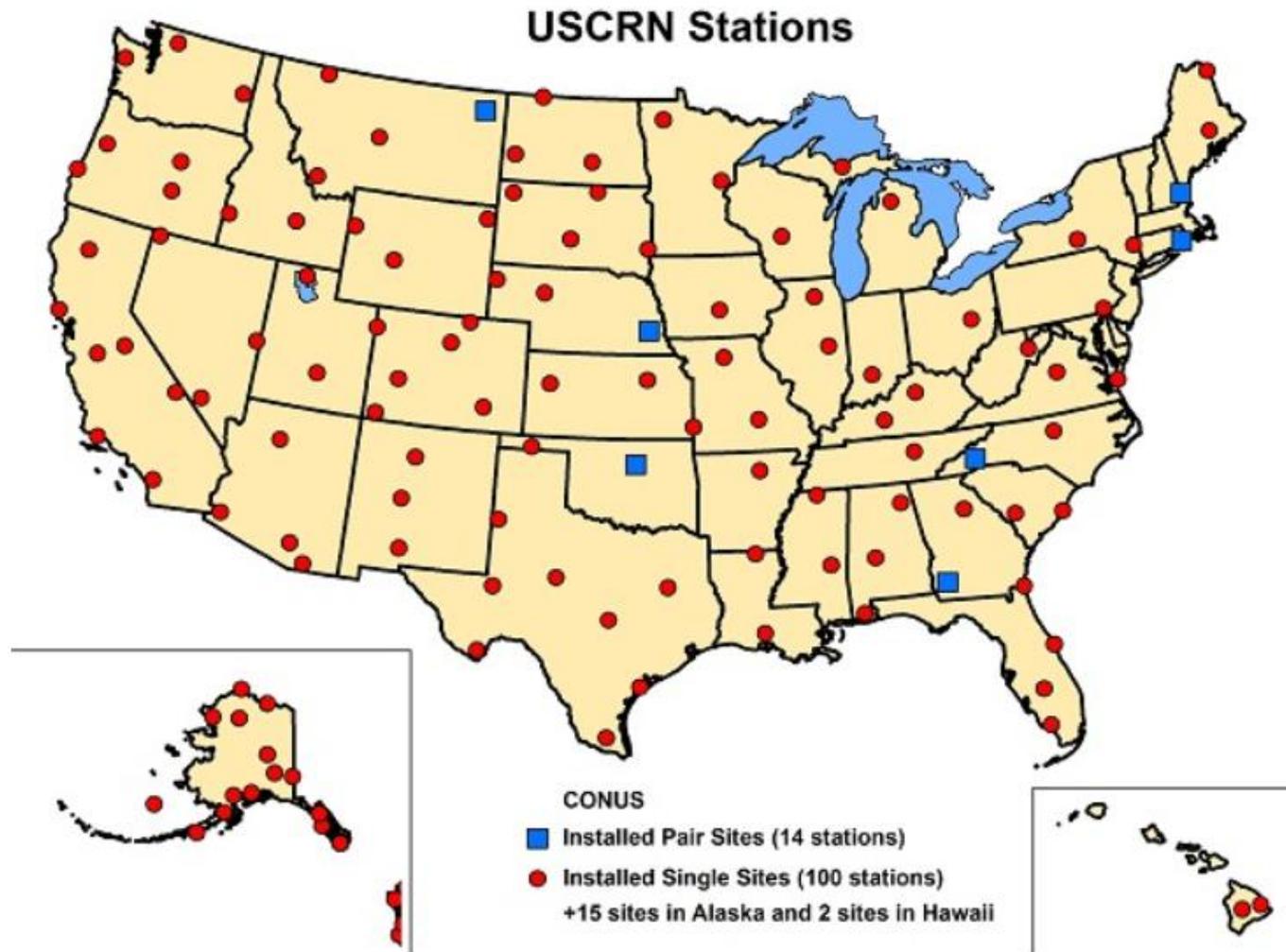
# US Climate Reference Network

To fix problems with USHCN noted by [www.surfacestations.org](http://www.surfacestations.org) NOAA's National Climatic Data Center (NCDC) commissioned a new [Climate Reference Network](#) (CRN) in 2002, completed 2008, stations in pristine locations, optimal measurement environments, state of the art, triple-redundant sensor systems.

Highest quality data perfect for scientific studies, unimpeachable climate data source next 50 years.



## Map of USCRN Stations



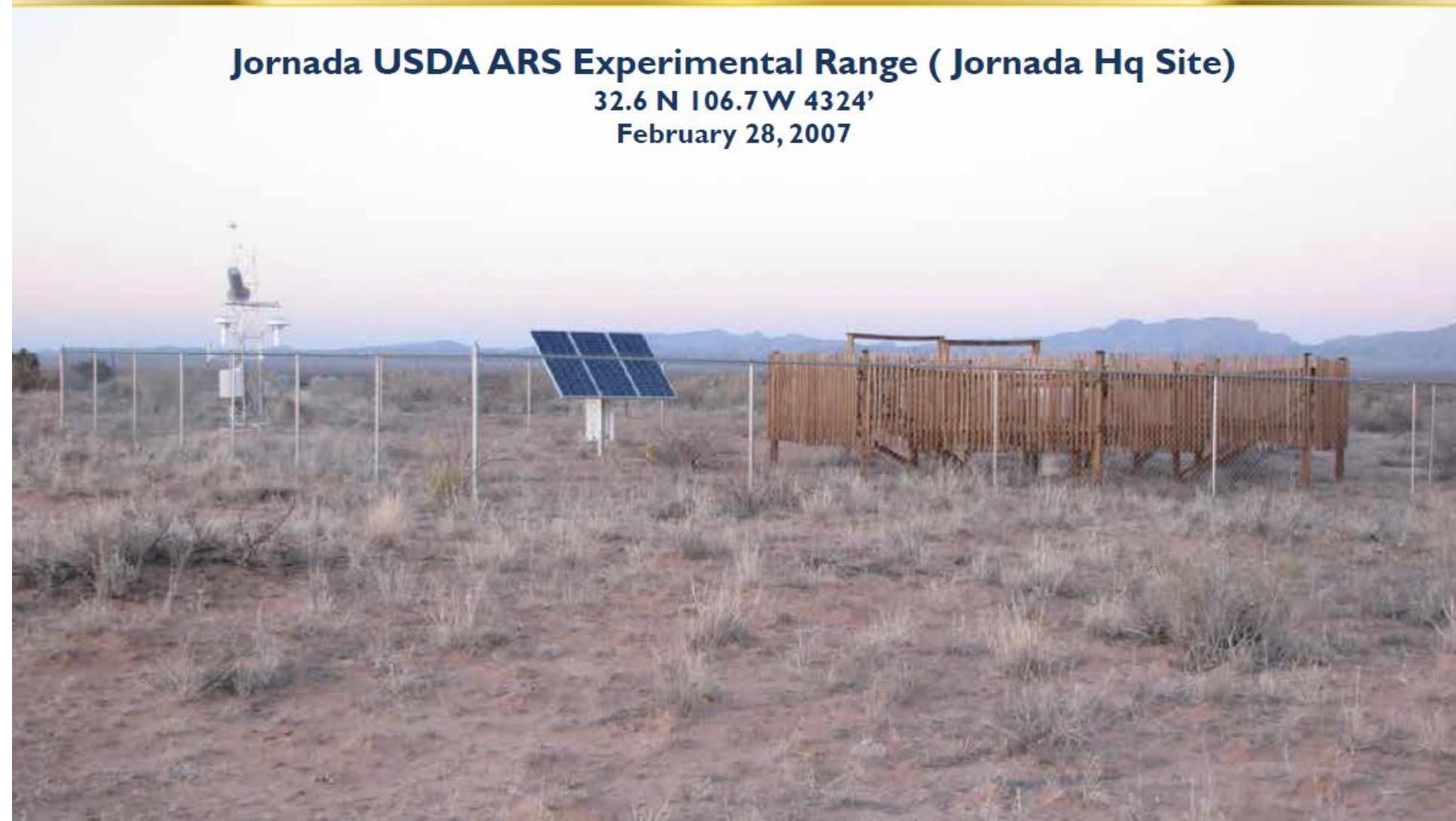
# US Climate Reference Network

NM Las Cruces 20 N

**Jornada USDA ARS Experimental Range ( Jornada Hq Site)**

32.6 N 106.7 W 4324'

February 28, 2007



# US Climate Reference Network

**TX Monahans 6 ENE**

**Sandhills State Park**

**31.6 N 102.8 W 2794'**

**May 21, 2003**



20 Sept 2014 / 0200Z

KLRU METAR 75.2F  
Jornada Range USCRN 72.1F

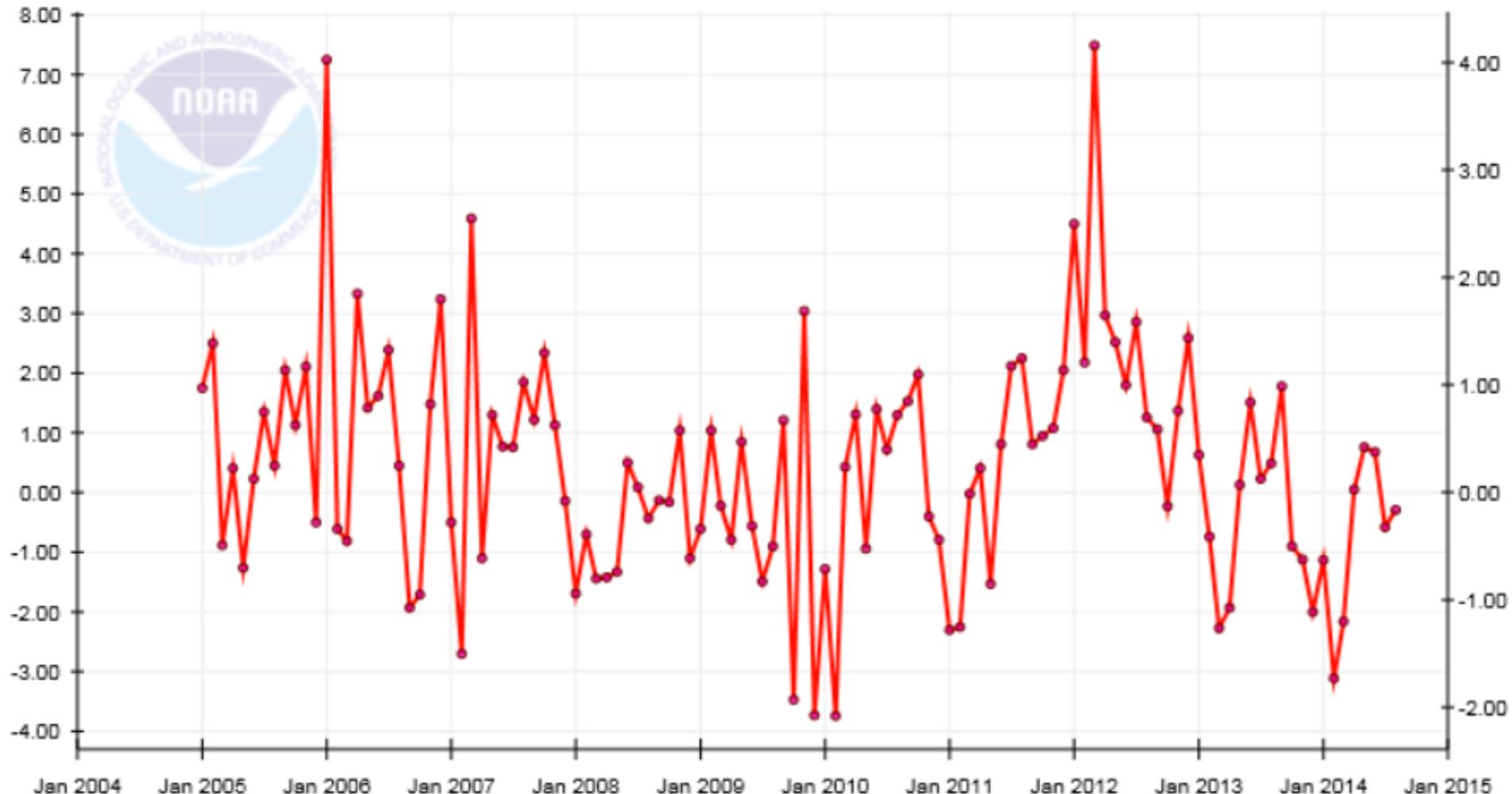


# USCRN shows US Temperatures falling the first decade.

[http://www.ncdc.noaa.gov/temp-and-precip/national-temperature-index/time-series?datasets%5B%5D=uscrn&parameter=anom-tavg&time\\_scale=p12&begyear=2004&endyear=2014&month=12](http://www.ncdc.noaa.gov/temp-and-precip/national-temperature-index/time-series?datasets%5B%5D=uscrn&parameter=anom-tavg&time_scale=p12&begyear=2004&endyear=2014&month=12)

## Contiguous U.S. Average Temperature Anomaly

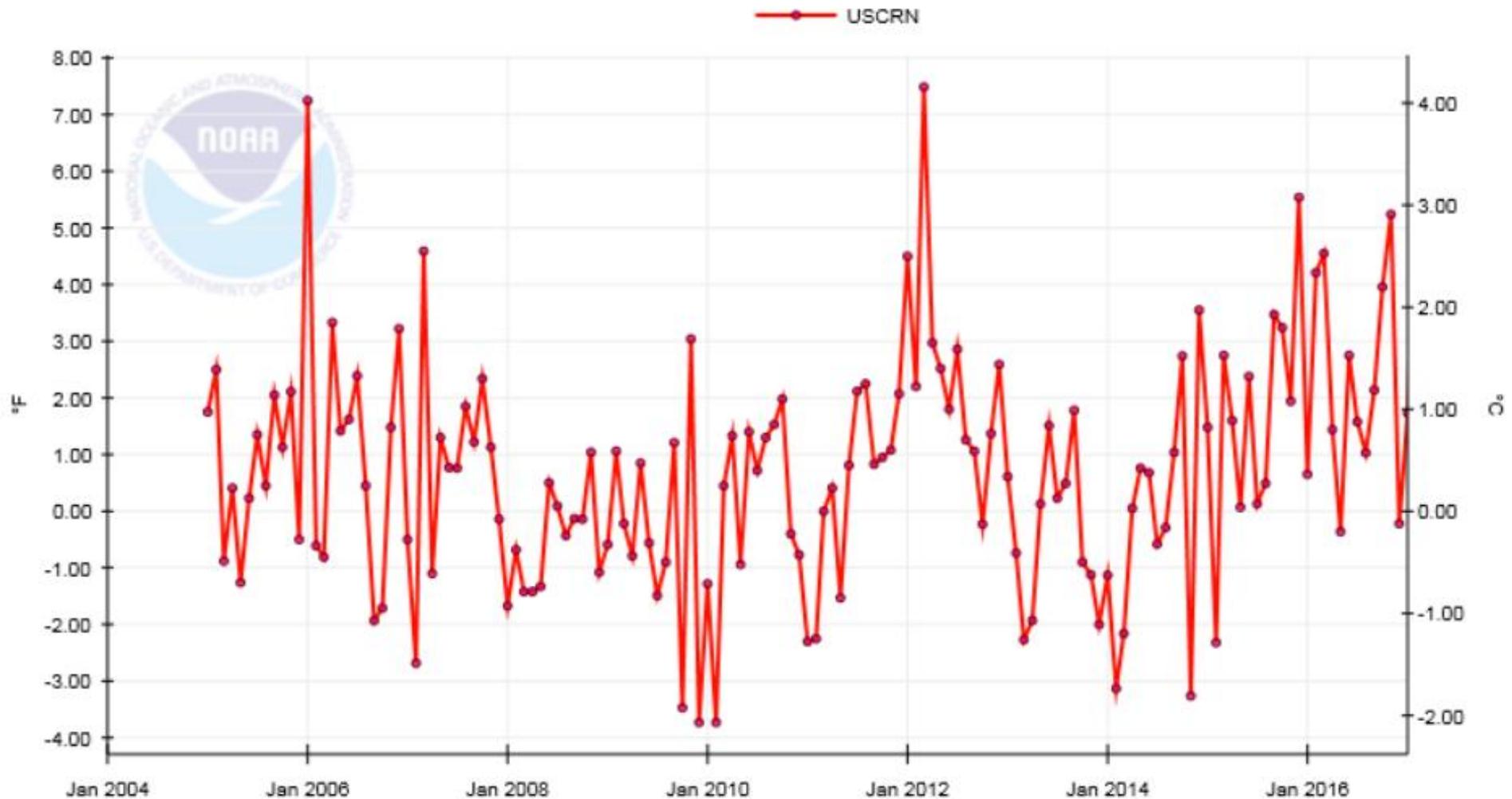
—●— USCRN



# USCRN shows US Temperature little changed the past decade plus.

[http://www.ncdc.noaa.gov/temp-and-precip/national-temperature-index/time-series?datasets%5B%5D=uscrn&parameter=anomavg&time\\_scale=p12&begyear=2004&endyear=2014&month=12](http://www.ncdc.noaa.gov/temp-and-precip/national-temperature-index/time-series?datasets%5B%5D=uscrn&parameter=anomavg&time_scale=p12&begyear=2004&endyear=2014&month=12)

Contiguous U.S. Average Temperature Anomaly



# July, 2012 reported hottest month on record by NOAA

## NOAA State of the Climate Report

Issued 2-3 days into the new month

Includes Internet data (airports)

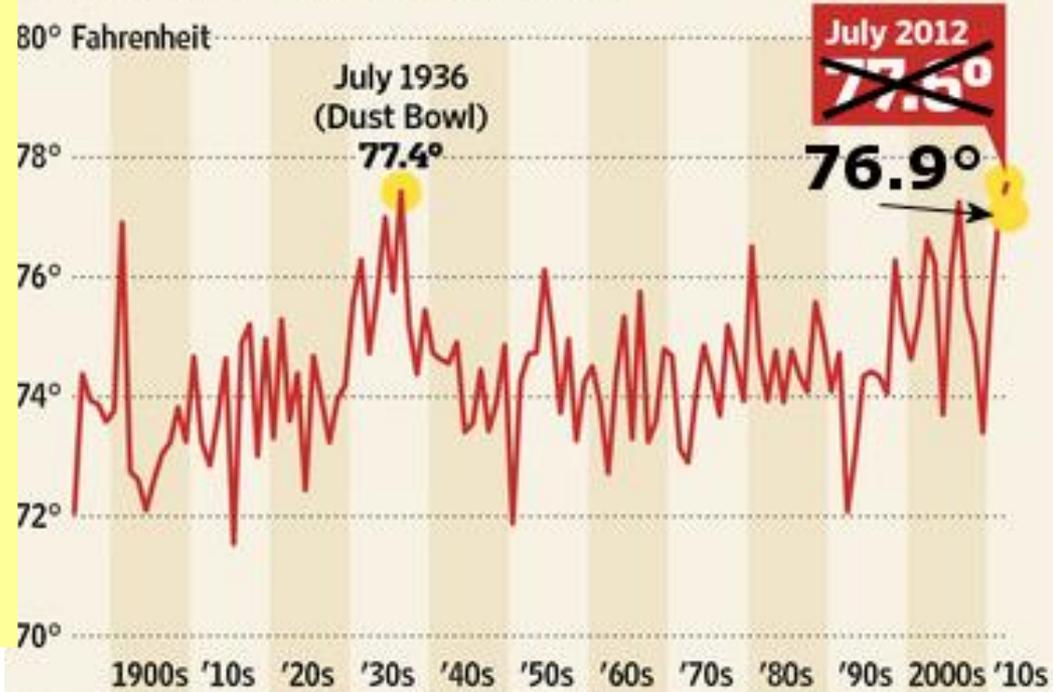
Doesn't include all B-91 (mail) forms

Makes TV, Newspaper, Radio News

Never dated or updated

## Summer Scorcher

Average temperature for all observation sites in the contiguous 48 states for the month of July since 1895



Source: National Oceanic and Atmospheric Administration

The Wall Street Journal

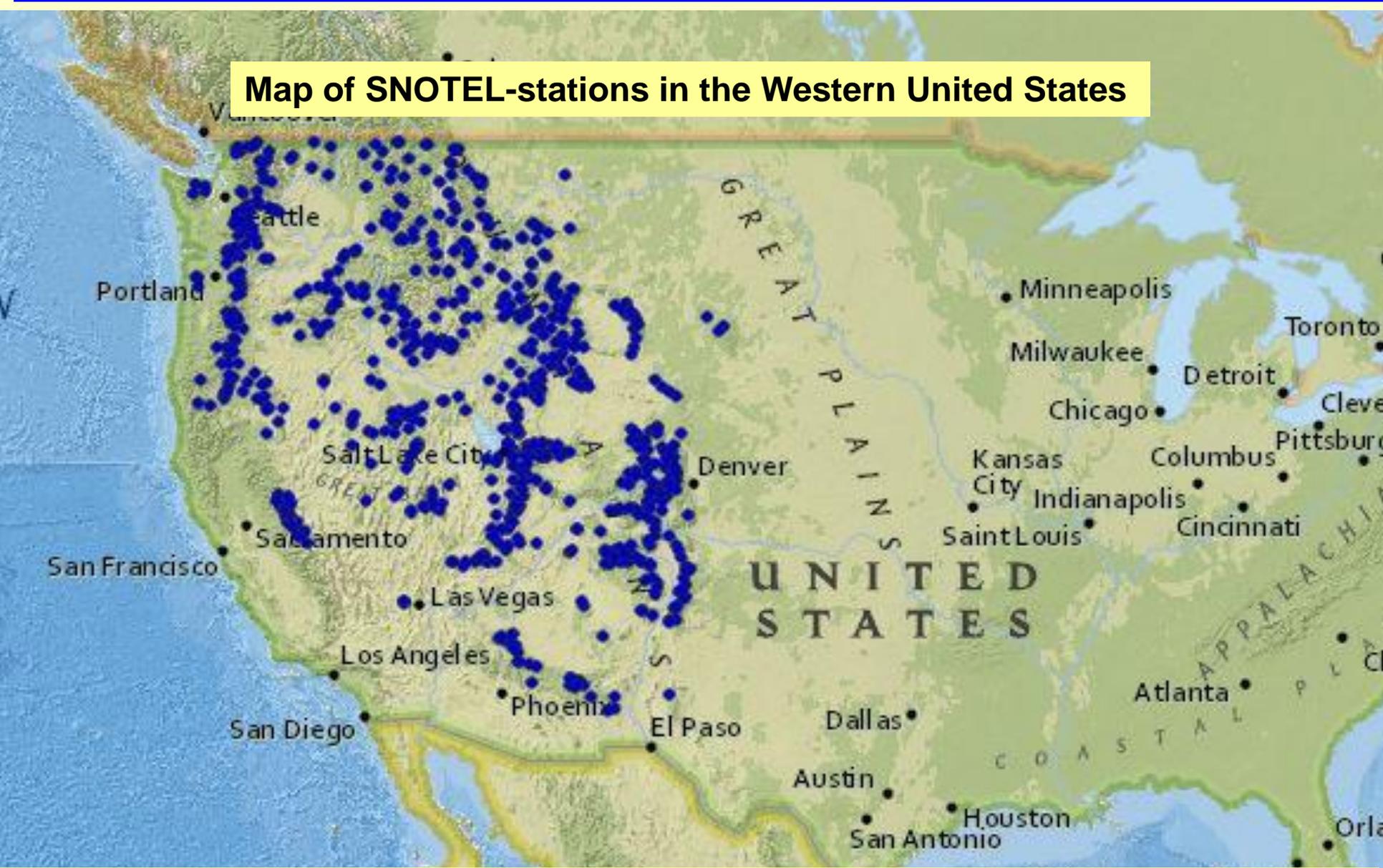
NCDC Database plotter contains “all” of the data which is gathered, available months later.

<http://wattsupwiththat.com/2013/01/06/does-noaas-national-climatic-data-center-ncdc-keep-two-separate-sets-of-climate-books-for-the-usa/>

....the value from the USCRN from July 2012, 75.6°F, far lower than what NCDC reported in the SOTC of 77.6°F and later in the database of 76.93°F

<http://wattsupwiththat.com/2013/01/07/announcing-the-first-ever-conus-yearly-average-from-the-climate-reference-network/>

**Map of SNOTEL-stations in the Western United States**



Results in the journal *Geophysical Research Letters*, show that sensor changes have significantly biased temperature observations from the Snowpack Telemetry (SNOTEL) station network.

Picture of a Montana SNOWTEL site in summer 2014



Research Letter

## Artificial amplification of warming trends across the mountains of the western United States

Jared W. Oyster , Solomon Z. Dobrowski, Ashley P. Ballantyne,

Anna E. Klene, Steven W. Running

With artifacts removed, network's 1991–2012 minimum temperature trend decreases from **+1.16 °C to +0.106 °C /decade** and is statistically indistinguishable from lower elevation trends.

**Warming was only 9% of previous estimates**

More than 700 SNOTEL sites monitor temperature and snowpack across the mountainous western U.S.

SNOTEL provides critical data for water supply forecasts.

Researchers use SNOTEL data to study mountain climate trends, mountain hydrology and ecology.

# Climate change affecting Rio Grande water supply

By John Fleck / Journal Staff Writer  
Thursday, December 12th, 2013 at 12:05am

Please remember this writer, John Fleck



The water level of the Rio Grande, as seen on July 5 looking north from Albuquerque's Alameda Bridge, has been greatly impacted by the Southwest's extended drought. (Dean Hanson/Albuquerque Journal file)

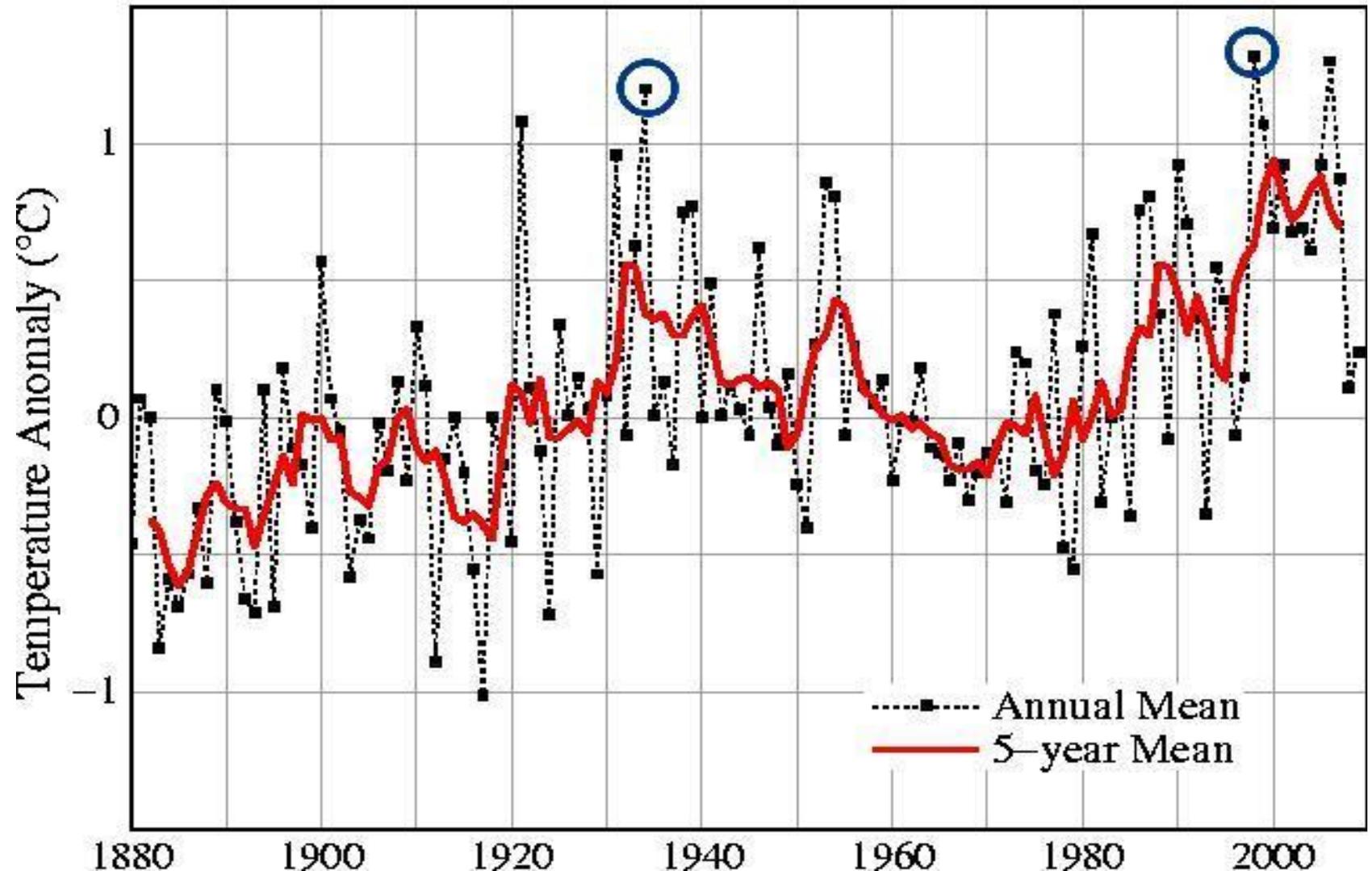
## **West-Wide Climate Risk Assessment: Upper Rio Grande Impact Assessment**

“...Over the period 1971 through 2011, average temperatures in the Upper Rio Grande Basin rose at a rate of just under 0.7 degrees Fahrenheit (°F) per decade, a rate approximately double the global rate of temperature rise (Rahmstorf et al. 2012).

Such rates of warming are unprecedented over the last 11,300 years (Marcott et al. 2013). This rate of warming has the potential to cause significant environmental harm and change the region’s hydrology.”

“...Over the period 1971 through 2011, average temperatures in the Upper Rio Grande Basin rise at a rate of just under 0.7 degrees Fahrenheit (°F) per decade, a rate approximately double the global rate of temperature rise .  
Such rates of warming are unprecedented over the last 11,300 years This rate of warming has the potential to cause significant environmental harm and change the region’s hydrology.”

## U.S. Temperature



## New Mexico is free of drought

By Olivier Uyttebrouck / Journal Staff Writer

Published: Thursday, August 24th, 2017 at 6:45pm

Updated: Thursday, August 24th, 2017 at 9:48pm

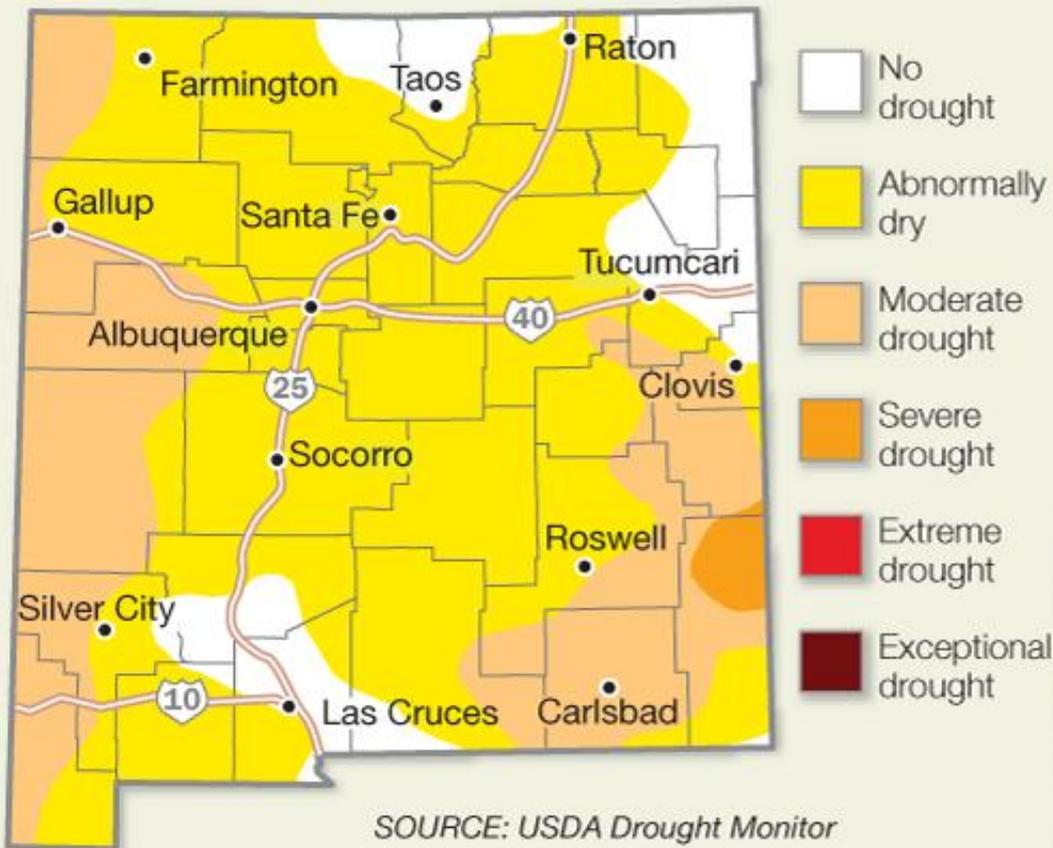


For the first time in 18 years, New Mexico is drought free – at least for the short term. The state's drought map shows no areas of drought or extreme dryness, courtesy of a cool, wet monsoon season, the National Weather Service said Thursday

<https://www.abqjournal.com/1053036/by-one-measure-new-mexico-is-drought-free.html>

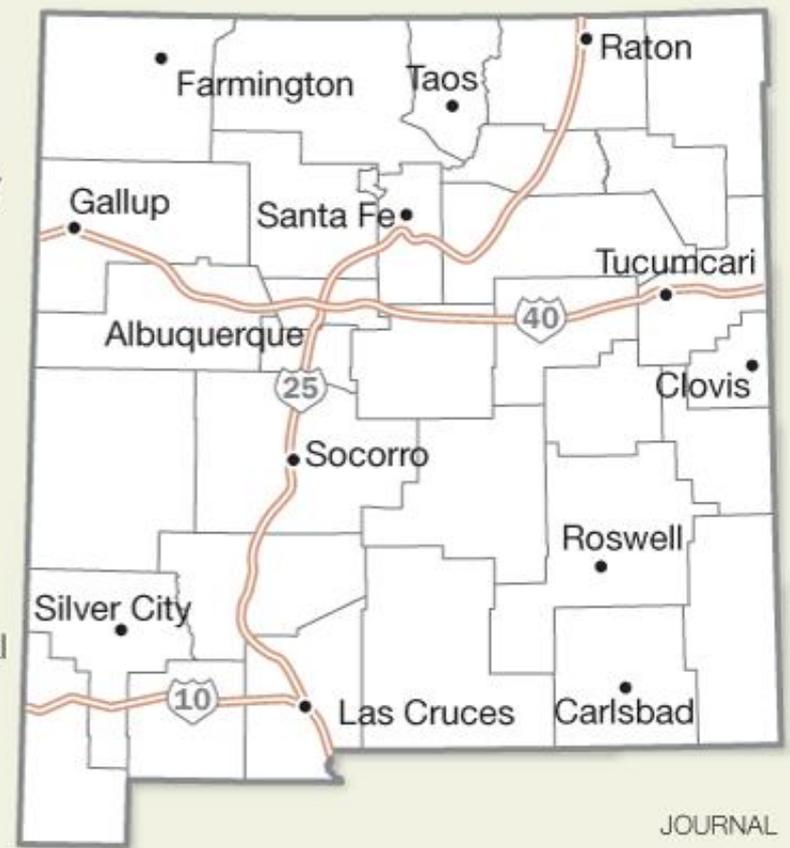
### Aug. 23, 2016

Moderate drought at 26.6%. Severe drought at 1.1%



### Aug. 23, 2017

Drought at 0%.



# Part 1 - Bob's Analysis

How did we get here?

Up until mid-20<sup>th</sup> Century, computers were expensive, humans were inexpensive

Stations were co-op and mixture of governments as additional duty, sometimes neglected, Wastewater treatment plants – staffed on 24 hour basis.

Late 1970s Latex Paint seemed good idea, never baselined in a study, but added 0.3F

Change mid 1980s-when PCs became available; Sensor lead lines length became driving force, not exposure standards

No one (except Military?) quality controlled the sensors, screens, exposure standards

Airport stations installed to support aircraft operations and flight safety, not climatology

Code change from Airways to METAR was driven by UN CODING concerns, not meteorological climatological considerations “METAR causes Global Warming.”

Urban growth of 20<sup>th</sup> Century drove Urban Heat Island contamination

When (Human-caused, CO<sub>2</sub> fueled) Climate Change became an issue, USHCN created, using poor (in climatological representativeness) station choices.

Tucson, Baltimore, Orchard Airport (ORD) These stations remain in the data base.

Ignorance of 60-year and El Nino-La Nina cycles drives sensational claims, some by PhDs

# Part 1- Bob's Analysis

How did we get here?

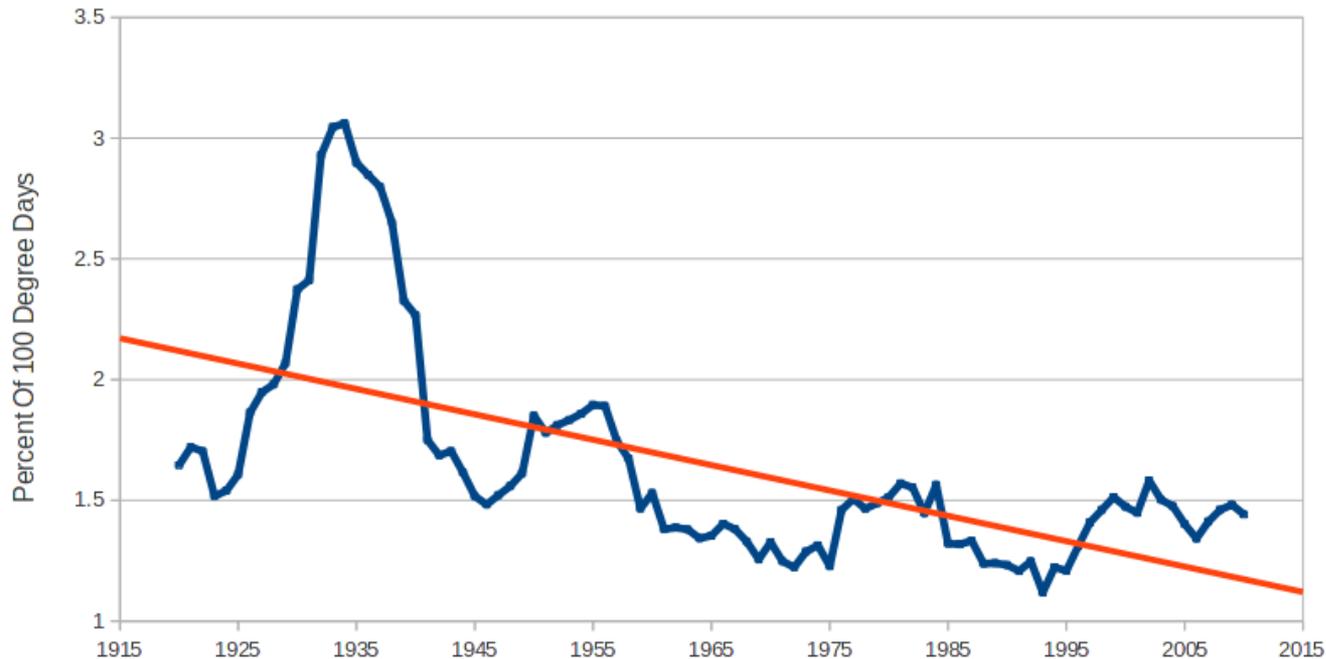
Adjustments to data have become pervasive, pernicious and politically driven

The USCRN seems to be the lifeboat of scientific data collection analysis and sanity.

When will the US have the courage to realize that there is no catastrophic warming as seen through the lens of uncontaminated surface data?

Frequency Of 100 Degree Days At All US HCN Stations Through August 24

Nine Year Mean



[http://scienceandpublicpolicy.org/  
images/stories/papers/originals/  
surface\\_temp.pdf](http://scienceandpublicpolicy.org/images/stories/papers/originals/surface_temp.pdf)

# SURFACE TEMPERATURE RECORDS: POLICY-DRIVEN DECEPTION?

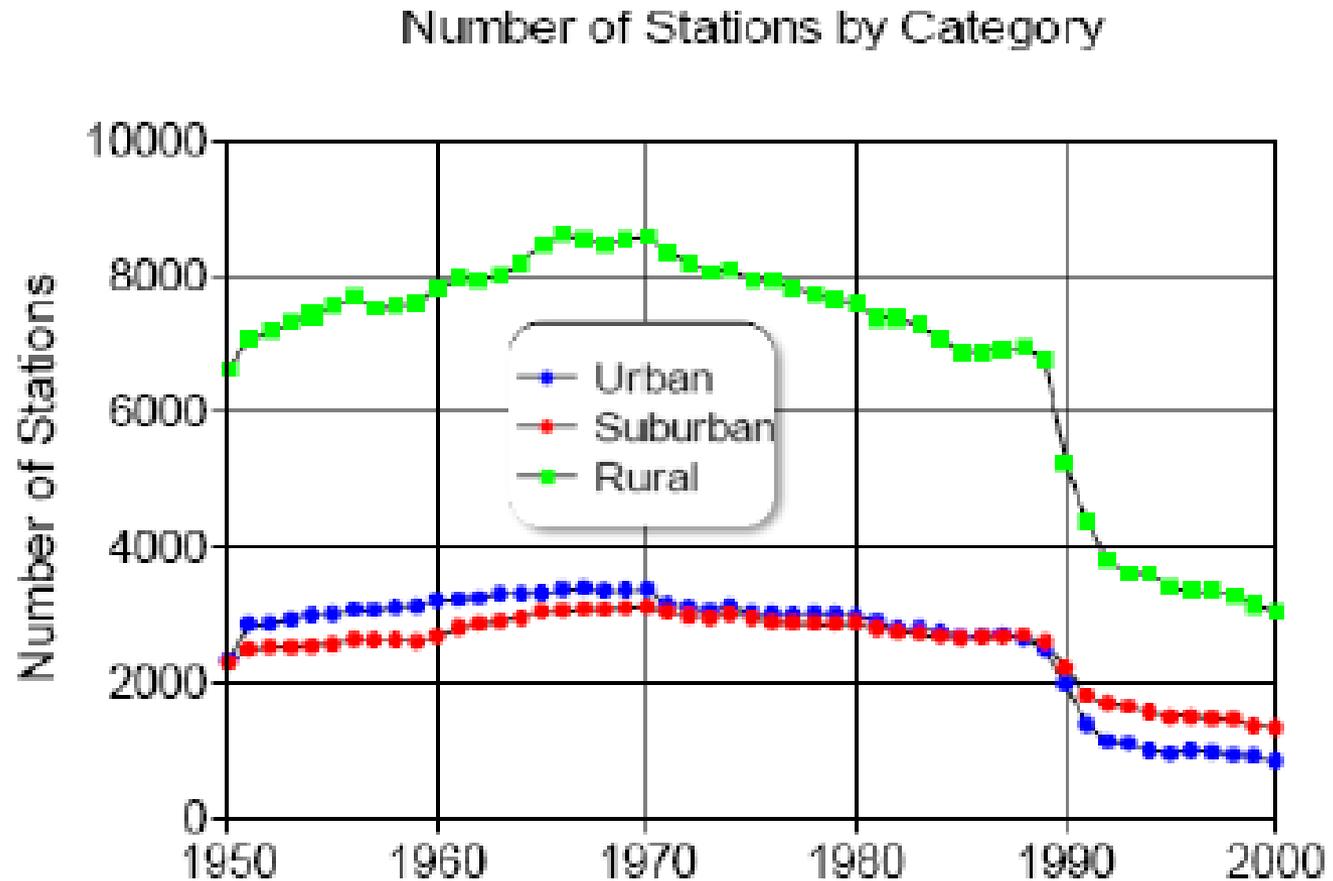
*by Joseph D'Aleo and Anthony Watts*



## Summary for Policymakers

1. Instrumental temperature data for the pre-satellite era (1850-1980) have been so widely, systematically, and uni-directionally tampered with that it cannot be credibly asserted there has been any significant “global warming” in the 20<sup>th</sup> century.
2. All terrestrial surface-temperature databases exhibit signs of urban heat pollution and post measurement adjustments that render them unreliable for determining accurate long-term temperature trends.
3. All of the problems have skewed the data so as greatly to overstate observed warming both regionally and globally.
4. Global terrestrial temperature data are compromised because more than three-quarters of the 6,000 stations that once reported are no longer being used in data trend analyses.
5. There has been a significant increase in the number of missing months with 40% of the GHCN stations reporting at least one missing month. This requires infilling which adds to the uncertainty and possible error.
6. Contamination by urbanization, changes in land use, improper siting, and inadequately-calibrated instrument upgrades further increases uncertainty.
7. Numerous peer-reviewed papers in recent years have shown the overstatement of observed longer term warming is 30-50% from heat-island and land use change contamination.

The number of stations that dropped out tended to be disproportionately rural –

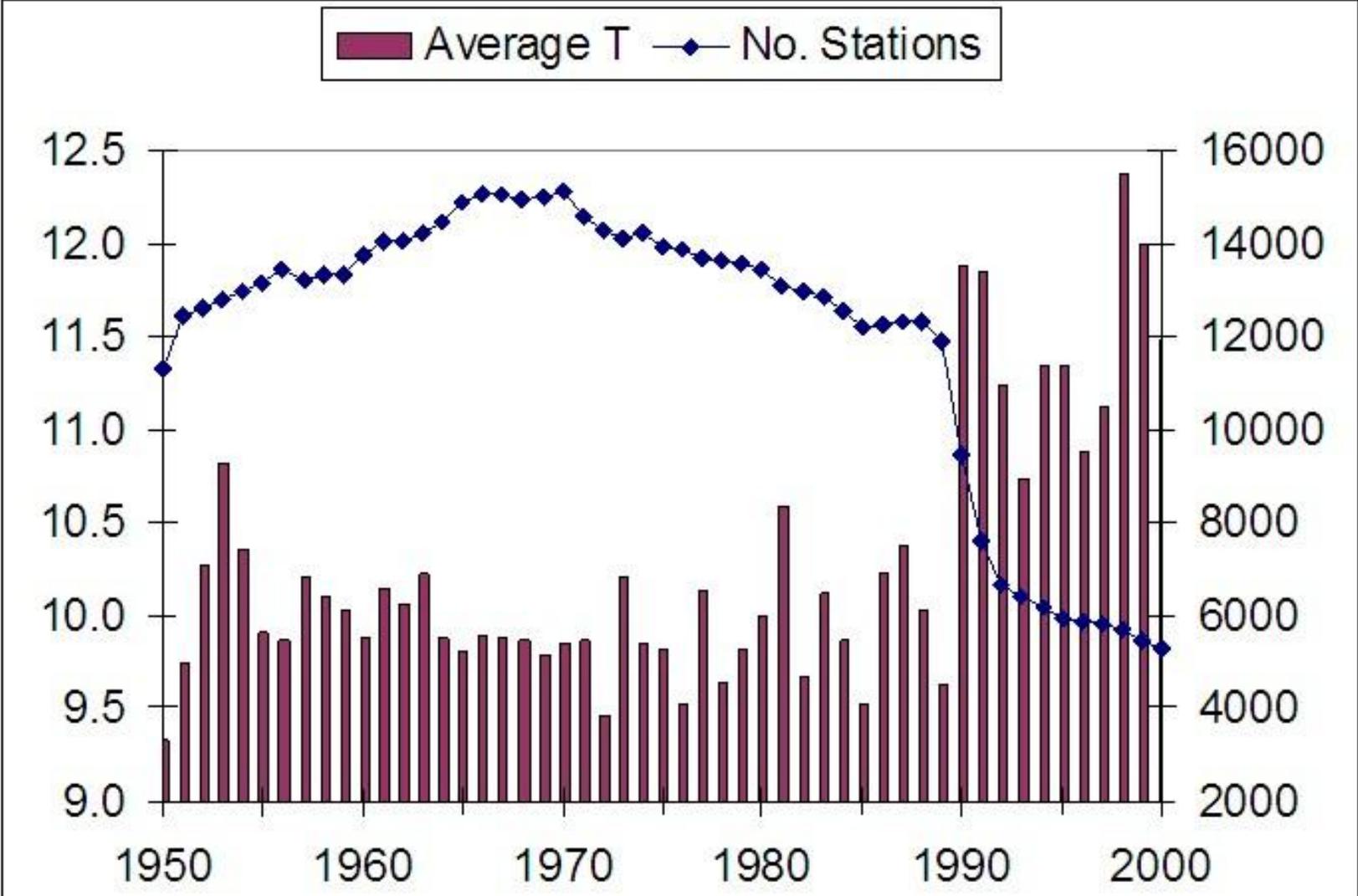


*(Station count represent every station reported by GHCN - analyses above from Jonathan Drake.)*

What happens to Global Surface Temperature when mountain, rural, and poleward stations are removed from the global data base?

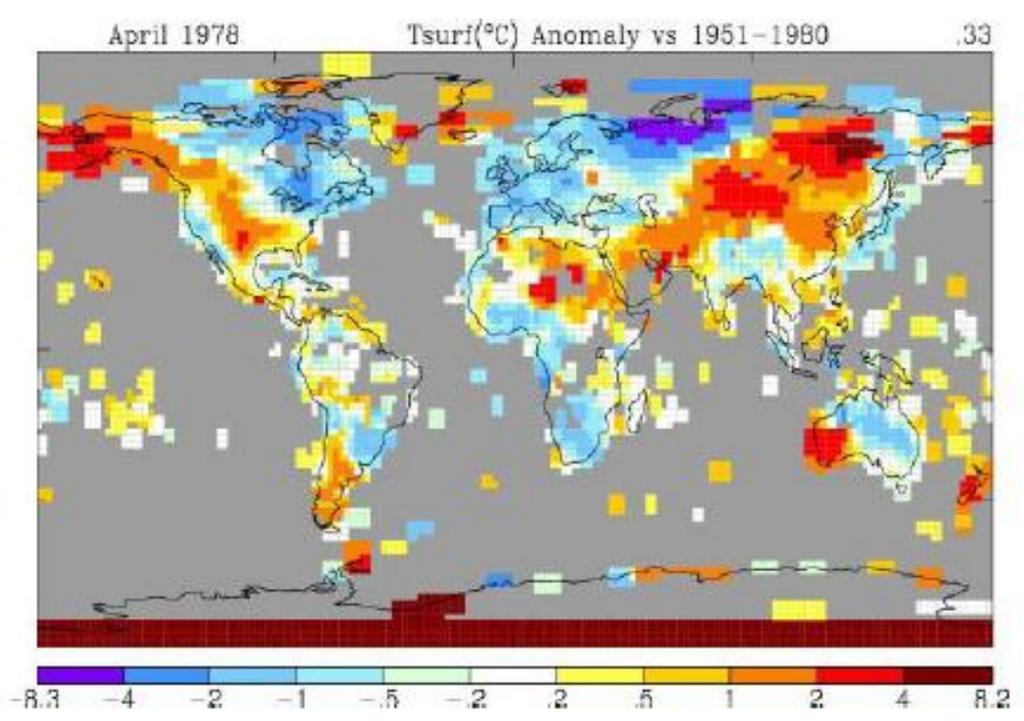
**Is this a simple mistake, or is it politically driven?**

<http://www.uoguelph.ca/~rmckitri/research/nvst.html>

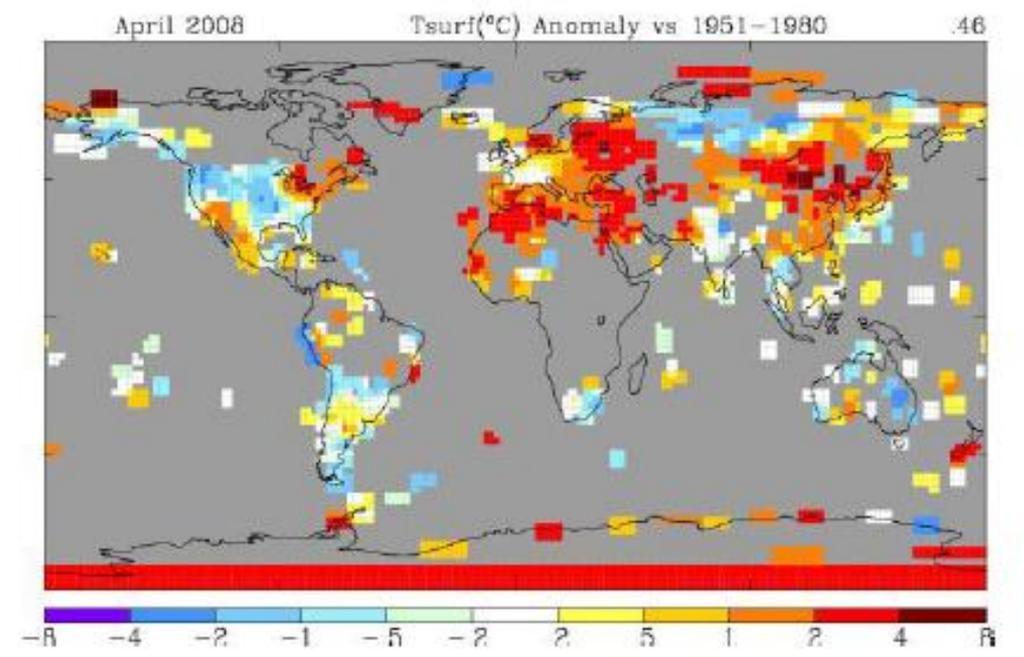


[http://scienceandpublicpolicy.org/images/stories/papers/originals/surface\\_temp.pdf](http://scienceandpublicpolicy.org/images/stories/papers/originals/surface_temp.pdf)

Top: April, 1978

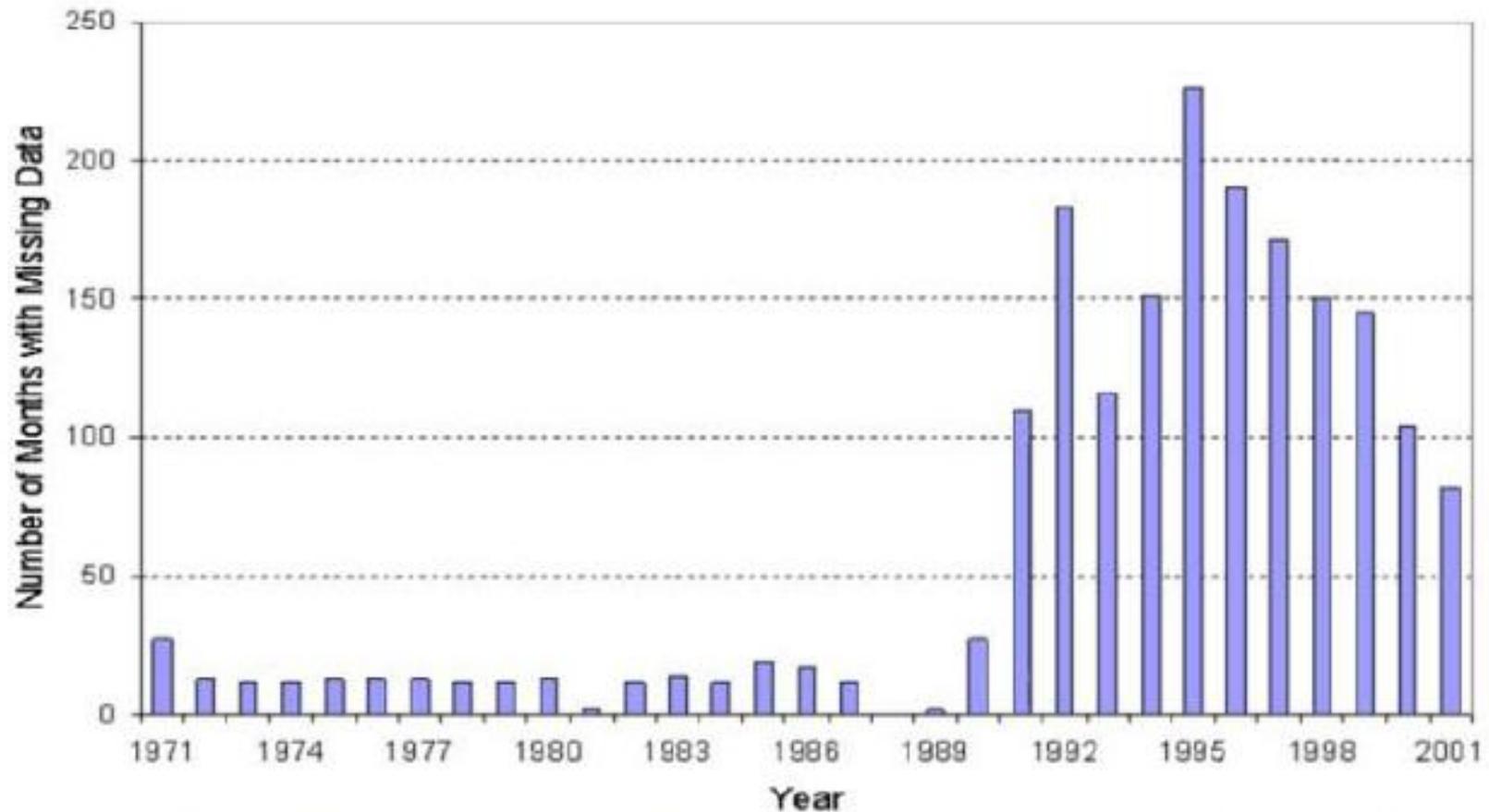


Bottom: April, 2008



Huge dropout of data in Africa, Canada and Siberia in the two maps from NASA GISS with 250 kilometer smoothing .

# Number of Missing Months



**For the 110 Russian weather stations reporting weather data continuously from 1971 to 2001, the total number of missing monthly observations each year (McKittrick and Michaels)**

# CANADA

In Canada, number of stations dropped from 600 to fewer than 50.

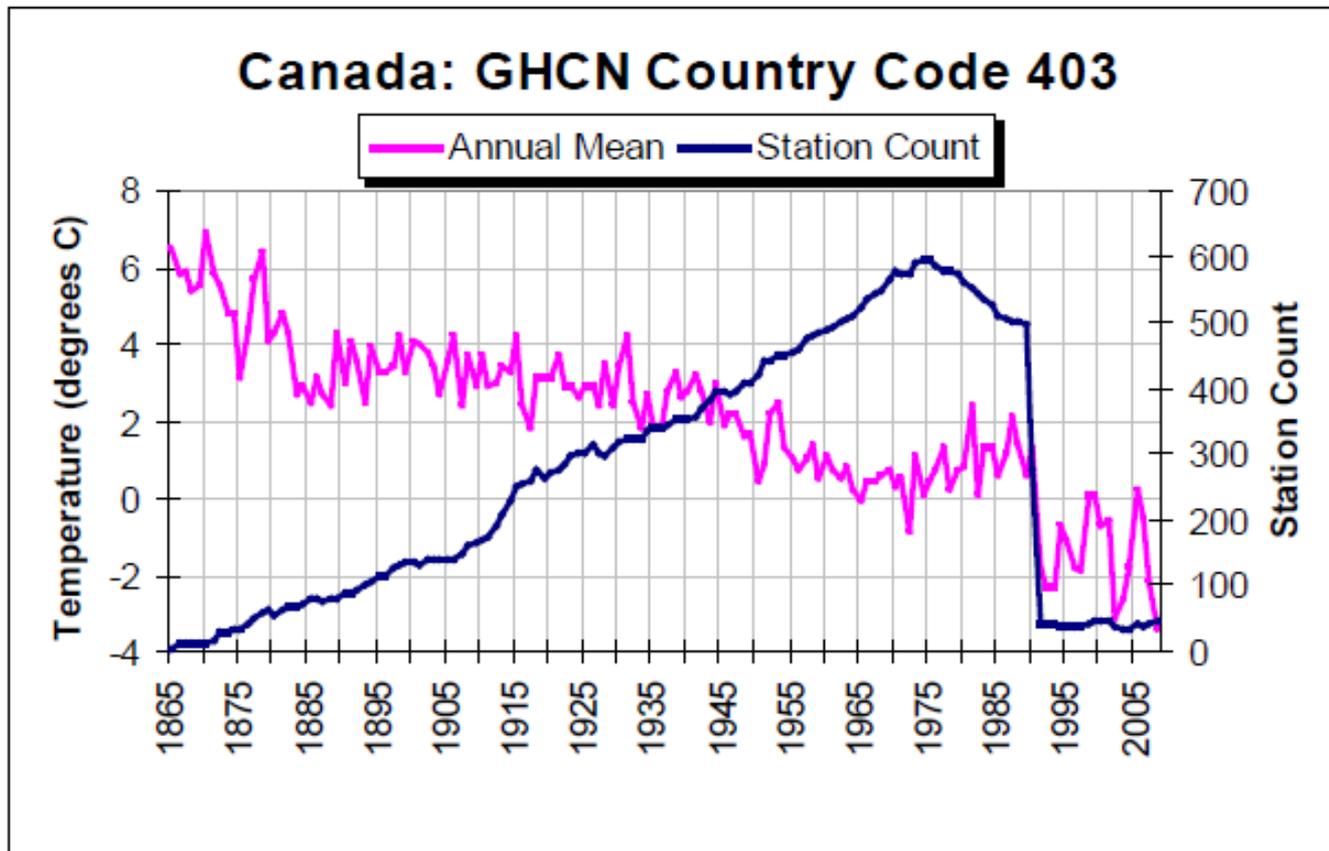
Percentage of stations below 300 feet tripled.

Percentage of Stations above 3000 feet reduced by half.

Canada's depicted warmth, from interpolating from more southerly locations to fill northerly vacant grid boxes.

Simple average of available stations shows cooling.

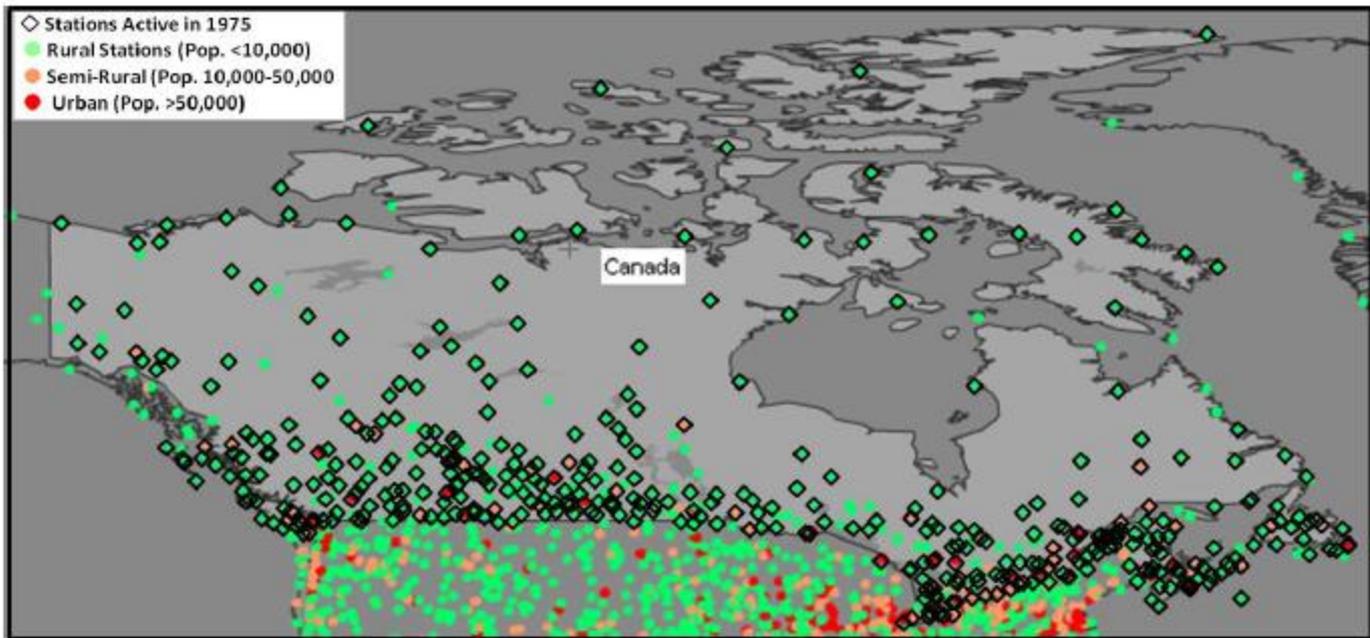
Just one thermometer remains for everything north of the 65th parallel.



# Canada's stations

## Top: 1975

Look at all of the stations along  
Gulf of Alaska,  
Vancouver Island  
US Border  
St Lawrence River

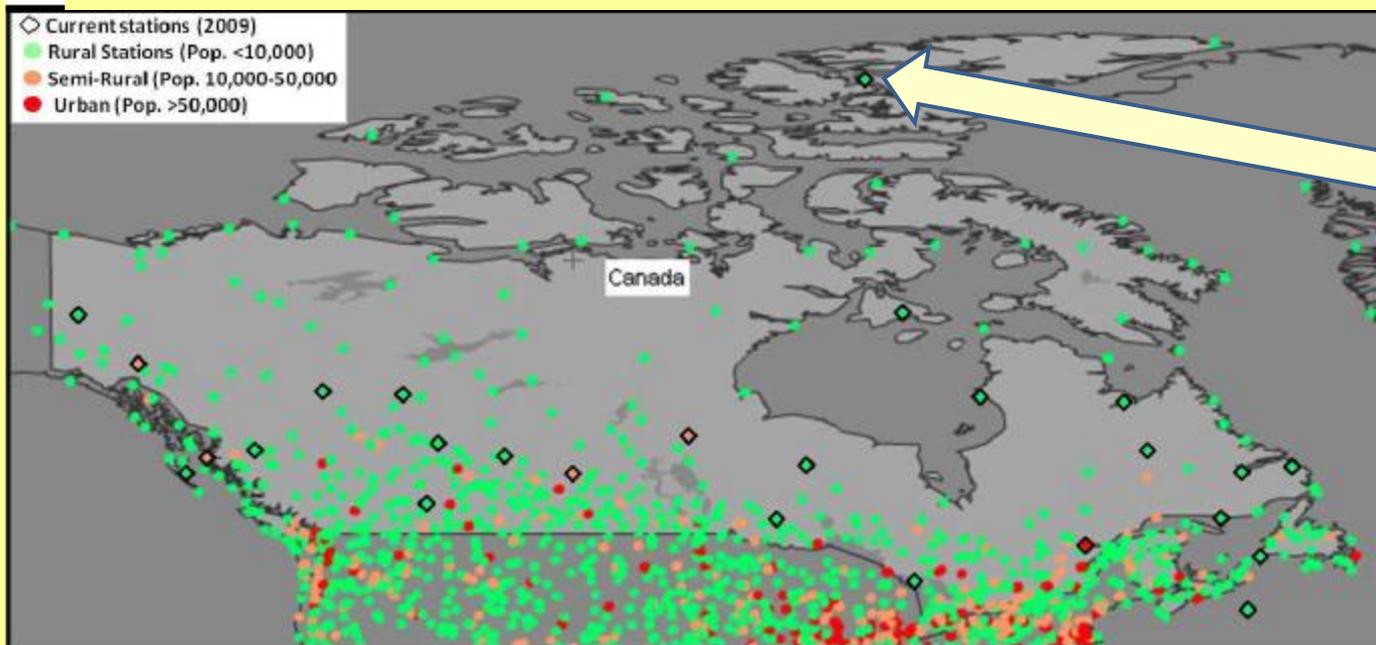


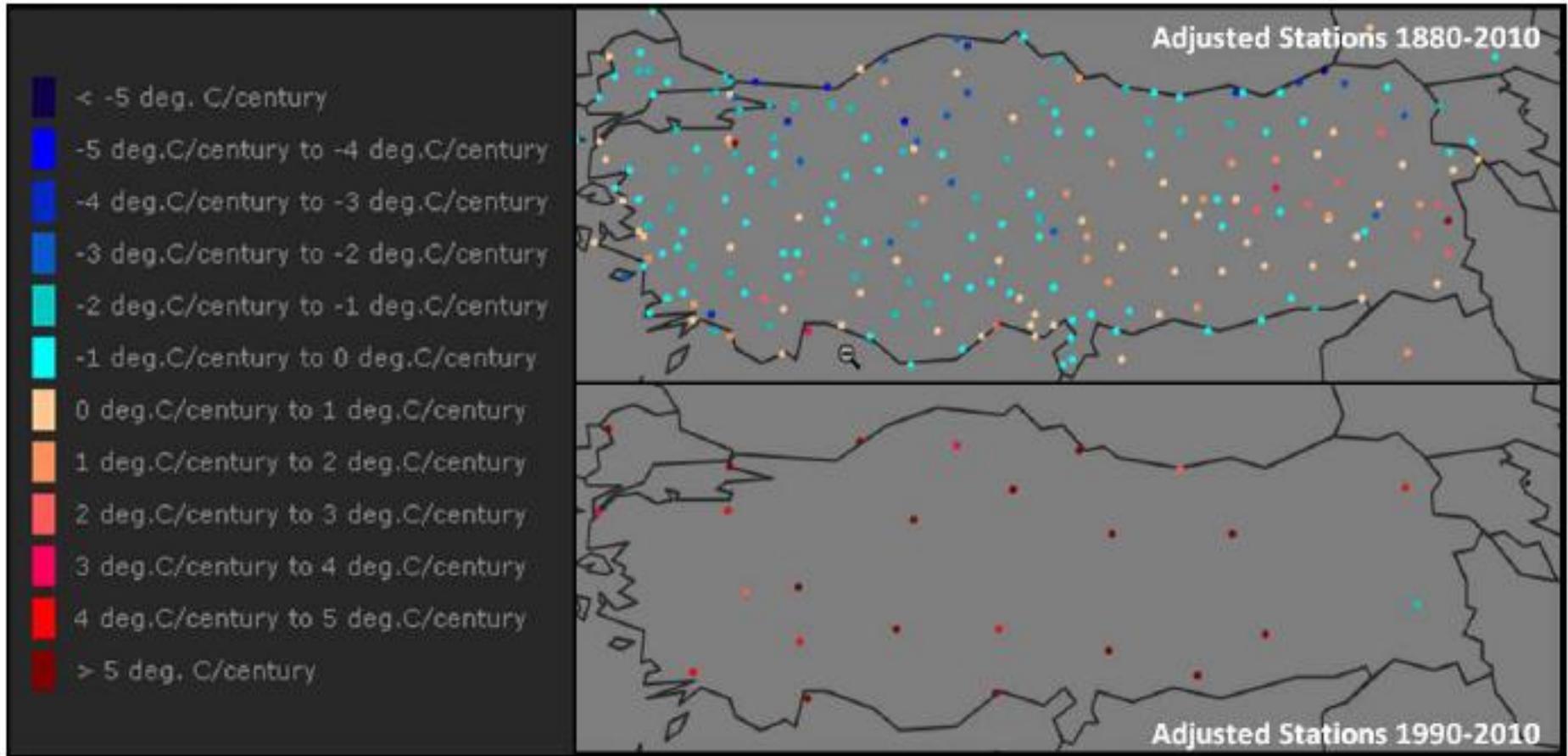
Now, Just one thermometer remains for everything north of 65th parallel.

## Black diamonds: active stations

## Bottom: 2009

Most of those stations  
are now missing.

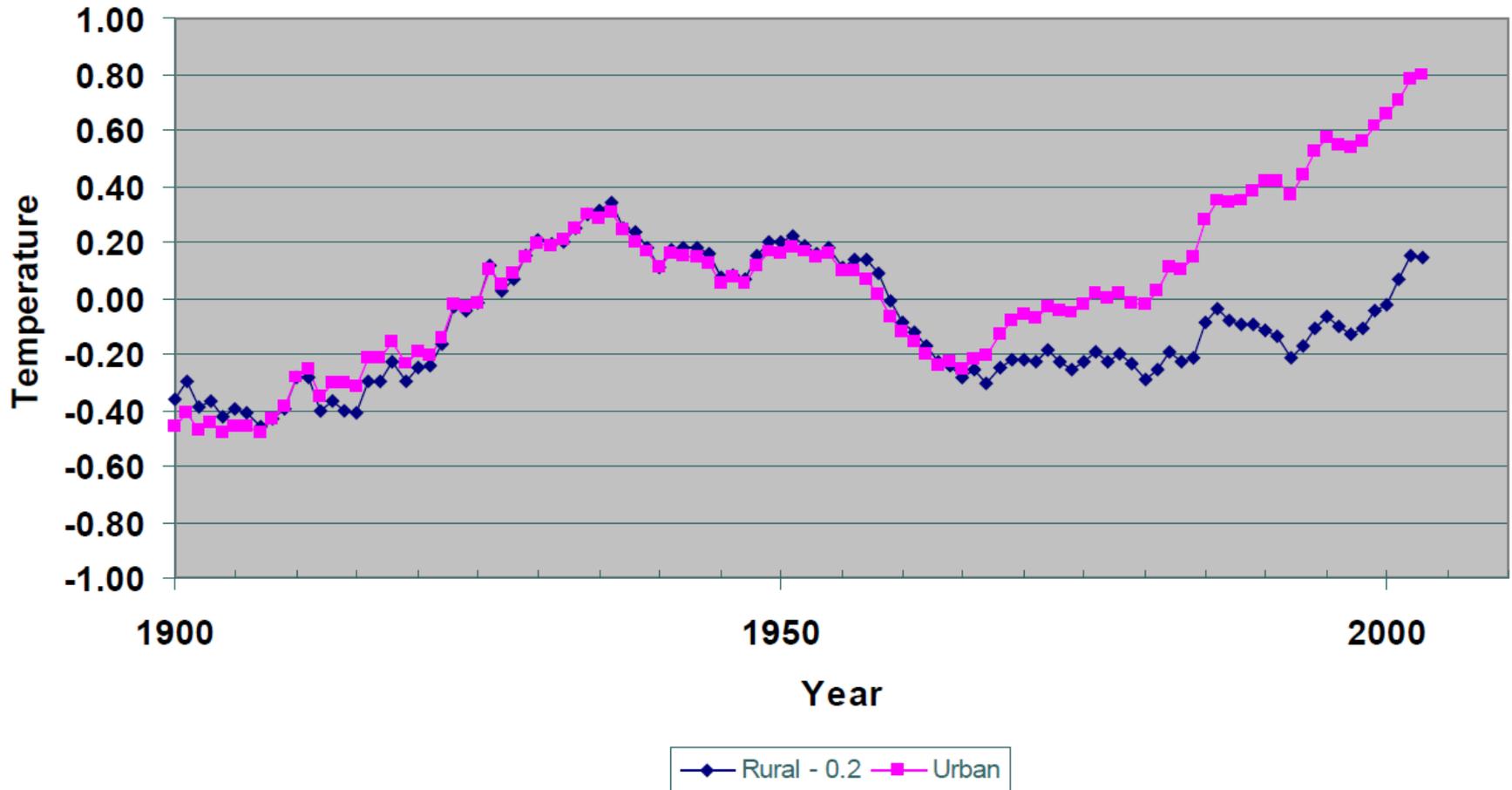




Page 35 Maps showing station temperature trends for (top) all stations active during 1880 to 2010 and (bottom) for stations active after 1990.

The result is that Turkey is shown to be warming when the data shows cooling.

Shape Comparison of 11-Year Averages for Raw Rural and Urban Data



**Figure 6** – Comparison of 11- yr averages of raw rural and urban temperatures. Rural data are offset by a factor of ‘-0.2’, due to the smaller value of the average, compared to the urban, for the 1961-1990 period.

Page 65:

“...Comparison of adjusted rural data to that of the raw rural data shows **systematically the rural adjusted temperature rate of increase is 5-times more than that of the raw data.**

The adjusted urban data set's and raw urban data set's rates of temperature increase are the same.

**NCDC's protocol for adjusting the data causes historical rural data to take on the time-line characteristics of urban data.**

**This reports a false rate of temperature increase for the U.S.**

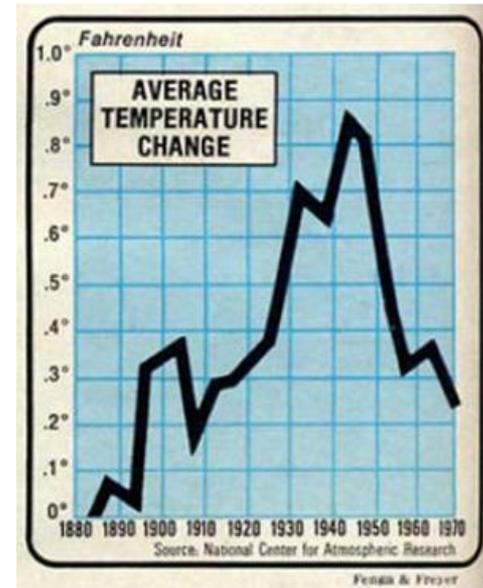
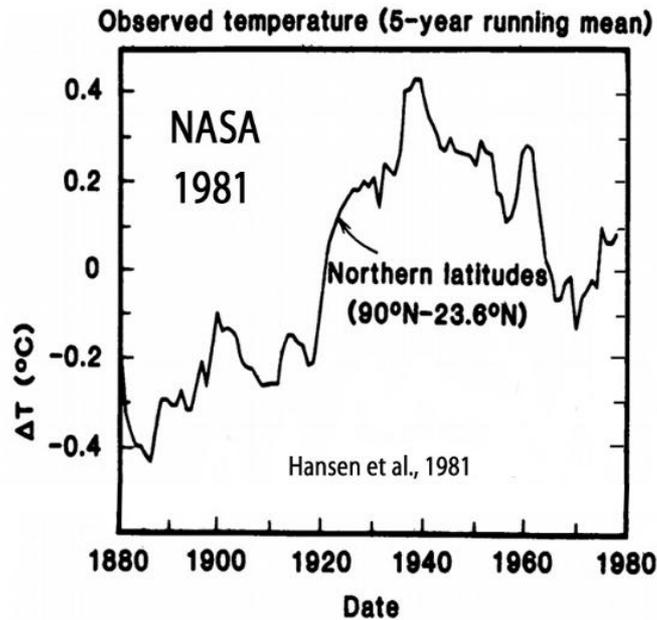
Bold, paragraphing, edits, added

**Bob's Editorial Comment : NCDC is engaging in fraud.**

## Part 3

Temperature Adjustment Fraud at NASA, in  
Wikipedia, and at the American Meteorological  
Society

# Revisionist History before our very eyes! How Climate Alarmists have changed what was observed to fit the Warmist Agenda.



NCAR, 1975.

**Bob Endlich**

[bendlich@msn.com](mailto:bendlich@msn.com)

**Weather, Climate, and Climate Change – What the Data Say**

<http://casf.diskstation.me/wordpress/>

adapted in part from the blog posts by Kenneth Richard

**“Massive Data Tempering uncovered at NASA  
Warmth and Cooling Disappear due to  
Incompatability with Models”**

<http://notrickszone.com/2017/01/16/massive-data-tampering-uncovered-at-nasa-warmth-cooling-disappears-due-to-incompatibility-with-models/>

**Massive Cover-up Exposed: 285 Papers From 1960s-  
'80s Reveal Robust Global Cooling Scientific  
'Consensus'**

<http://notrickszone.com/2016/09/13/massive-cover-up-exposed-285-papers-from-1960s-80s-reveal-robust-global-cooling-scientific-consensus/>

...and, this deceptive article from the September, 2008, edition of the Bulletin of the American Meteorological Society

<http://journals.ametsoc.org/doi/abs/10.1175/2008BAMS2370.1>

## **“The Myth of the 1970s Global Cooling Scientific Consensus”**

[Thomas C. Peterson](#)

NOAA/National Climatic Data Center, Asheville, North Carolina

[William M. Connolley](#)

British Antarctic Survey, National Environment Research Council, Cambridge, United Kingdom

[John Fleck](#)

*Albuquerque Journal*, Albuquerque, New Mexico

## **Part 3 Outline**

**The popular and technical literature show serious and widespread concern for global cooling which occurred from the 1940s to the 1970s**

**Revisionist “climate scientists” attempt to show that this never happened**

**Kenneth Richard audits the literature and uncovers the attempted fraud**

**Why the revision is necessary: change history, change the data, cool the past.**

**Support the false narratives: CO2 controls temperature; catastrophe is near.**

**Only World Government Control can save the Planet**

TIME

THE BIG FREEZE

1973





Monday, 24 June 1974

TIME  
Magazine

Magazine | Video | LIFE | Earth From Space

Home | NewsFeed | U.S. | Politics | World | Business | Tech | Health | Science

Current Issue | Archive | Covers | 10 Questions | Subscribe

## Another Ice Age?

Areas of Baffin Island in the Canadian Arctic, for example, were once totally free of any snow in summer; now they are covered year round....Scientists have found other indications of global cooling.

The collision of air masses of widely differing temperatures and humidity can create violent storms—the Midwest's recent rash of disastrous tornadoes, for example.

Sunspot Cycle. The changing weather is apparently connected with differences in the amount of energy that the earth's surface receives from the sun.

Whatever the cause of the cooling trend, its effects could be extremely serious, if not catastrophic.

Scientists figure that only a 1% decrease in the amount of sunlight hitting the earth's surface could tip the climatic balance, and cool the planet enough to send it sliding down the road to another ice age within only a few hundred years.



Monday, 24 June 1974

TIME  
Magazine

Magazine | Video | LIFE | Earth From Space

Home | NewsFeed | U.S. | Politics | World | Business | Tech | Health | Science

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## Another Ice Age?

Monday, June 24, 1974

<http://www.freerepublic.com/focus/f-news/1663607/posts>

In Canada's wheat belt, a particularly chilly and rainy spring has delayed planting and may well bring a disappointingly small harvest...

A series of unusually cold winters has gripped the American Far West...

Climatological Cassandras are becoming increasingly apprehensive, for the weather aberrations they are studying may be the harbinger of another ice age.

Telltale signs are everywhere —from the unexpected persistence and thickness of pack ice in the waters around Iceland to the southward migration of a warmth-loving creature like the armadillo from the Midwest.

**Since the 1940s the mean global temperature has dropped about 2.7° F.**



Monday, 24 June 1974

TIME  
Magazine

Magazine | Video | LIFE | Earth From Space

Home | NewsFeed | U.S. | Politics | World | Business | Tech | Health | Science

Current Issue | Archive | Covers | 10 Questions | Subscribe

## Another Ice Age?

Monday, June 24, 1974

Temperatures have been as high as they are now only about 5% of the time. But there is a peril more immediate than the prospect of another ice age.

Even if temperature and rainfall patterns change only slightly in the near future in one or more of the three major grain-exporting **countries—the U.S., Canada and Australia** —**global food stores would be sharply reduced.**

University of Toronto Climatologist Kenneth Hare, a former president of the Royal Meteorological Society, believes that the continuing drought and the recent failure of the Russian harvest gave the world a grim premonition of what might happen.

### The Cooling World

There are ominous signs that the earth's weather patterns have begun to change dramatically and that these changes may portend a drastic decline in food production—with serious political implications for just about every nation on earth. The drop in food output could begin quite soon, perhaps only ten years from now. The regions destined to feel its impact are the great wheat-producing lands of Canada and the U.S.S.R. in the north, along with a number of marginally self-sufficient tropical areas—parts of India, Pakistan, Bangladesh, Indochina and Indonesia—where the growing season is dependent upon the rains brought

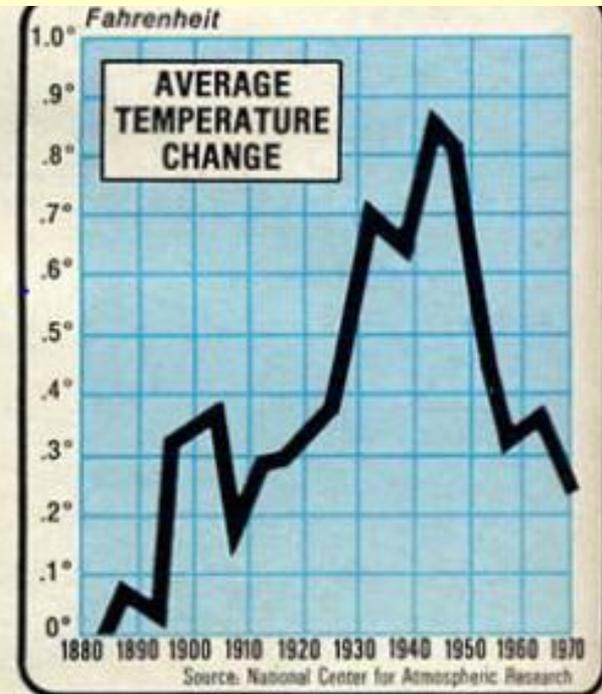
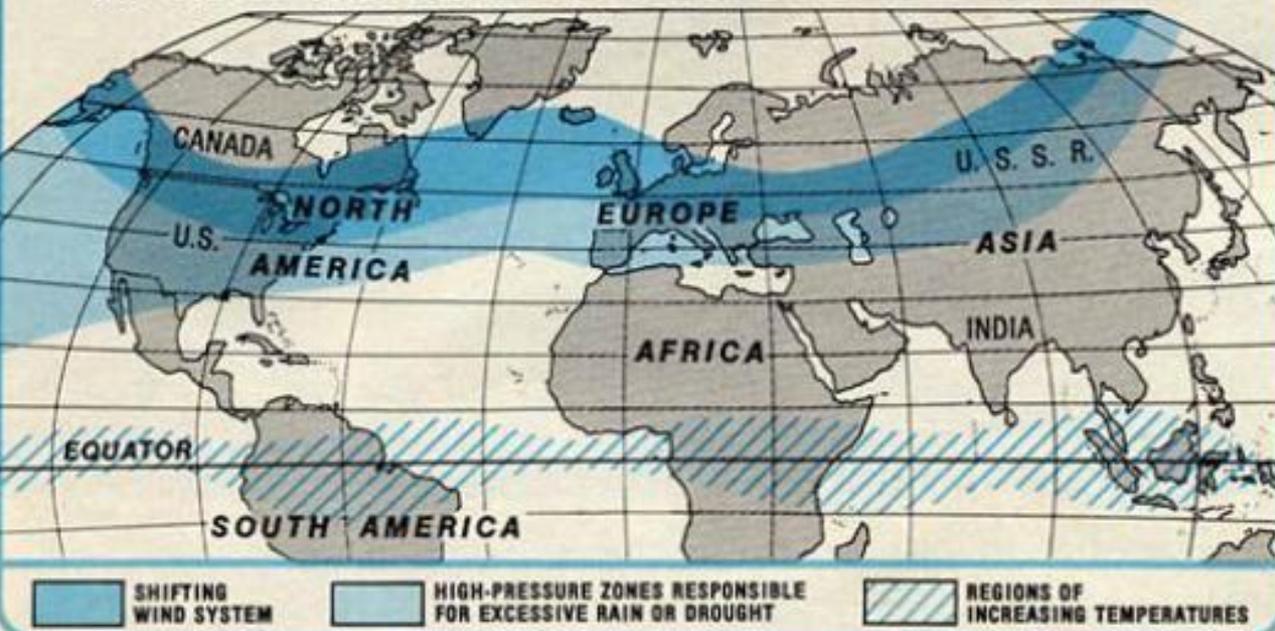
reduce agricultural productivity for the rest of the century. If the climatic change is as profound as some of the pessimists fear, the resulting famines could be catastrophic. "A major climatic change would force economic and social adjustments on a worldwide scale," warns a recent report by the National Academy of Sciences, "because the global patterns of food production and population that have evolved are implicitly dependent on the climate of the present century."

A survey completed last year by Dr. Murray Mitchell of the National Oceanic and Atmospheric Administration reveals a drop of half a degree in average ground temperatures in the Northern Hemisphere between 1945 and 1968. Accord-

**Drop in food production... wheat-producing areas of Canada and USSR..."**

**"A drop of half a degree in average ground temperatures in Northern Hemisphere between 1945 and 1968."**

**AREAS OF THE EARTH AFFECTED BY CLIMATIC CHANGE**

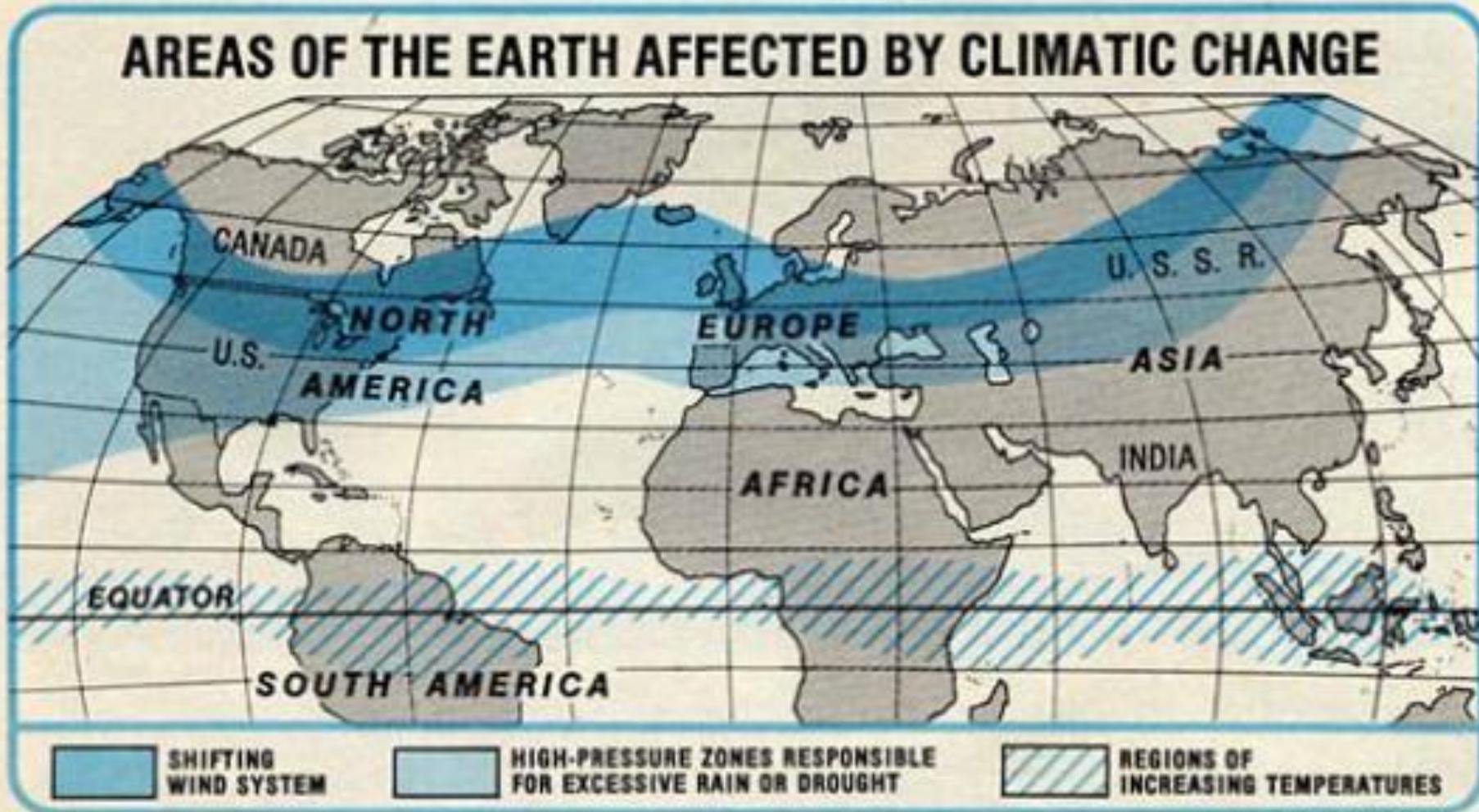


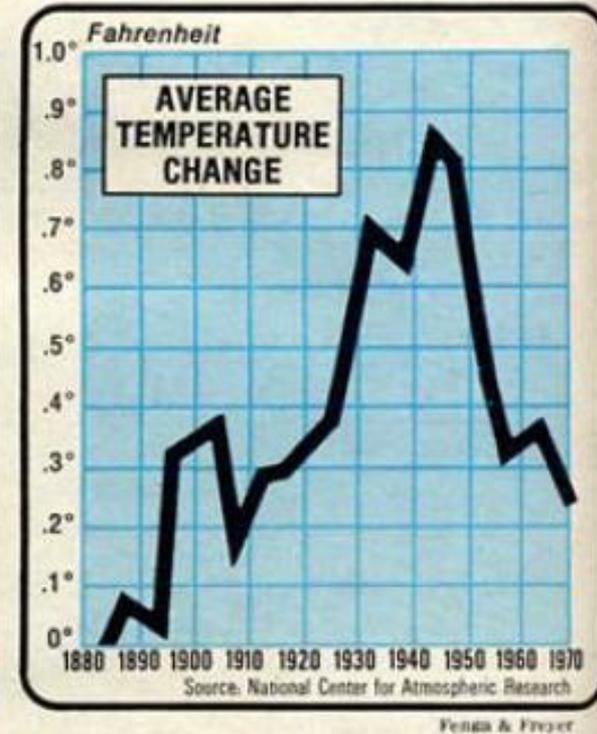
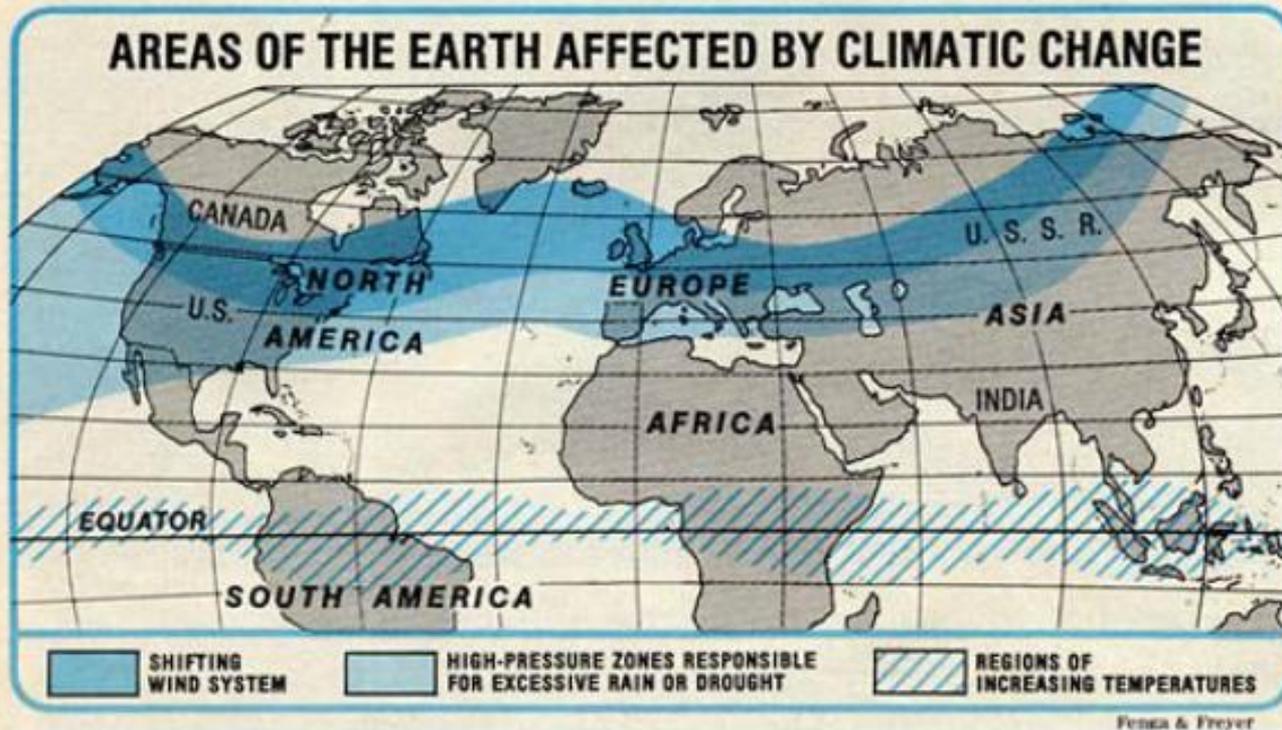
“The resulting famines could be catastrophic”

“Economic and social adjustments on a worldwide scale”

“A drop of half a degree in average ground temperatures in Northern Hemisphere between 1945 and 1968.”

Newsweek, 28 April 1975





“The Cooling World” in the Science Section of the **28 April 1975 NEWSWEEK.**

In this article, NEWSWEEK quotes from:

**National Academy of Sciences (twice), Columbia University, NOAA (twice), Reid Bryson of the University of Wisconsin, Graphic from the National Center for Atmospheric Research, NCAR.**

NEWSWEEK’s article shows the concern reached the National Academy of Sciences.

# Climate Changes Endanger World's Food Output

By HAROLD M. SCHMECK Jr.

Bad weather this summer and the threat of more of it to come hang ominously over every estimate of the world food situation.

It is a threat the world may have to face more often in the years ahead. Many weather scientists expect greater variability in the earth's weather and, consequently, greater risk of local disasters in places where conditions of recent years have become accepted as the norm.

Some experts believe that mankind is on the threshold

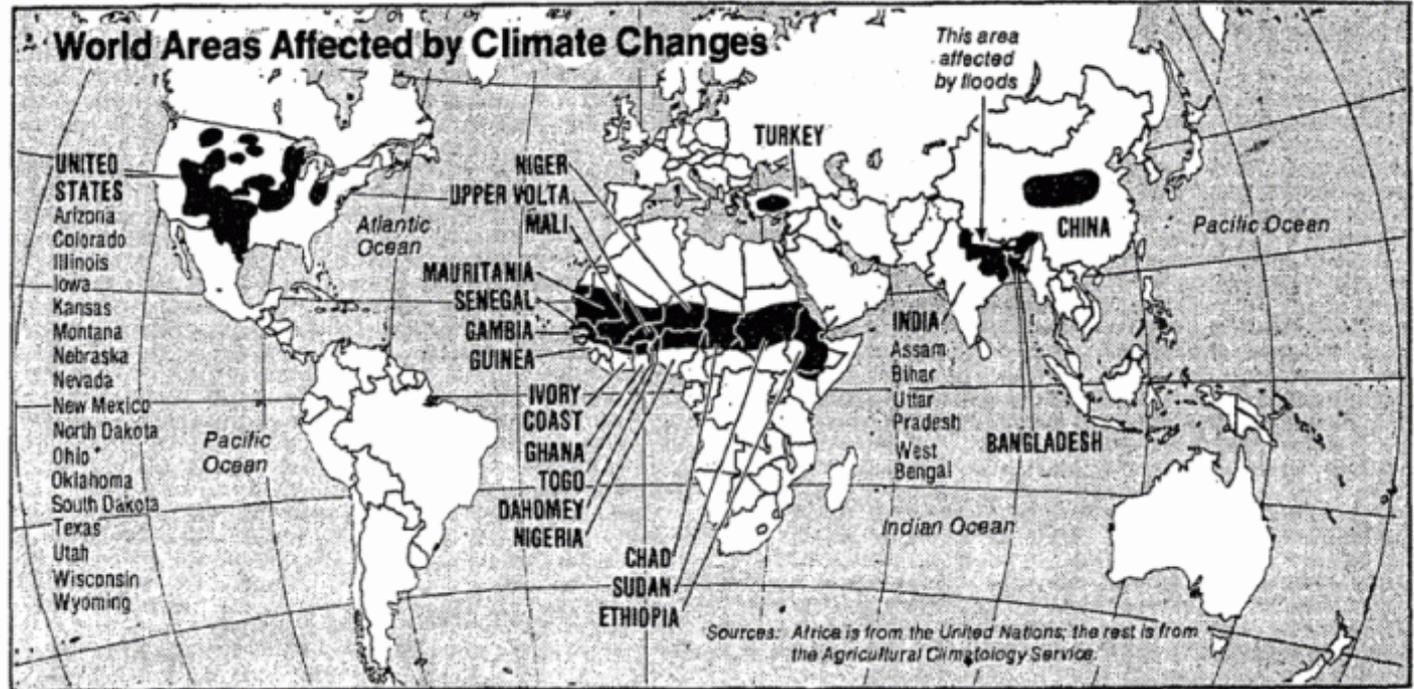
*This is another in a series of articles, which will appear from time to time, examining the world food situation.*

of a new pattern of adverse global climate for which it is ill-prepared.

A recent meeting of climate experts in Bonn, West Germany, produced the unanimous conclusion that the change in global weather patterns poses a severe threat to agriculture that could lead to major crop failures and mass starvation.

Others disagree, but are still concerned over the impact of weather on man's ability to feed the ever-increasing number of human beings.

Whether or not this year's events are harbingers of a major global trend, some of



Severe weather changes, ranging from floods to drought, have struck many of the world's major agricultural areas so far this year. Climate experts say that even

those events are, of themselves, causing concern.

The monsoon rains have been late and scant over agriculturally important regions of India, while Bangladesh has been having floods.

Parts of Europe and the Soviet Union have had problems at both ends of the weather spectrum this year—

too hot and dry at some times and places, too wet and cold at others.

There have been similar problems in North America. An American weather expert recently received reports that ice was lingering abnormally on the coasts of Newfoundland and that new evidence showed that the Gulf Stream was fluctuating toward a more southerly course.

greater variability of weather can be expected in years to come, bringing changes to arable areas that have adjusted to past patterns, thus threatening future output.

tuating toward a more southerly course.

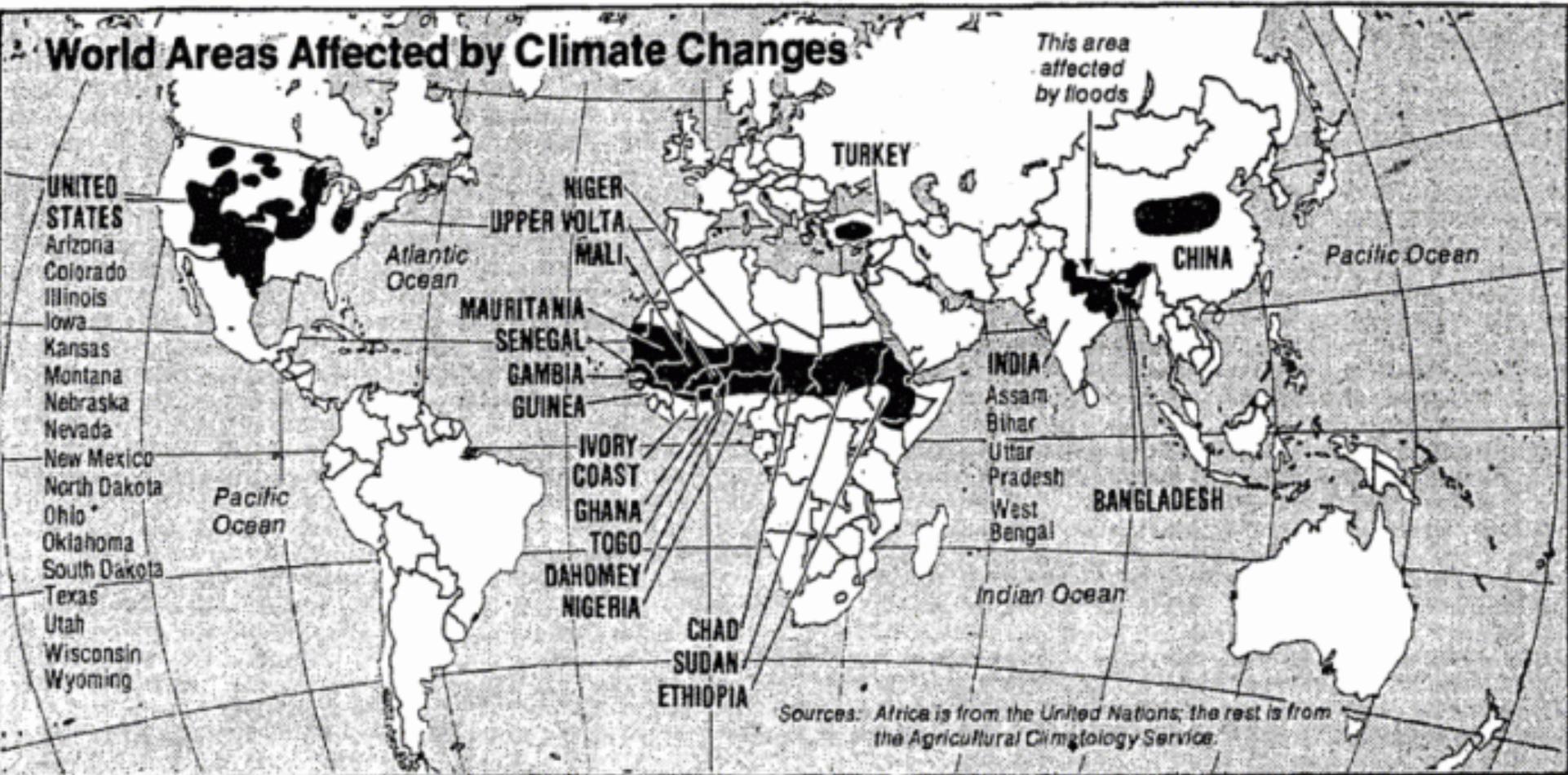
In the United States, the world's most important food producer, a severe drought that began last fall in the Southwest has spread northward and eastward, and may have potentially serious effects in the Corn Belt. There have also been reports that spring wheat

in the United States has been badly hurt by hot, dry weather.

Earlier this year, there had been hopes of bumper crops in North America and elsewhere. But the weather's adverse impact has trimmed back some of these hopes.

The situation is not all bad, Continued on Page 66, Column 1

# Changes Endanger World's Food Output



The New York Times/Aug. 8, 1974

Severe weather changes, ranging from floods to drought, have struck many of the world's major agricultural areas so far this year. Climate experts say that even

greater variability of weather can be expected in years to come, bringing changes to arable areas that have adjusted to past patterns, thus threatening future output.

**The New York Times**

THURSDAY, AUGUST 8, 1974

The mean temperature of the northern hemisphere increased steadily from the early nineteen-hundreds through the early nineteen-forties. Since then, it has been on its way downward toward the colder circumstances of the last century. The drop since the nineteen-forties has only been about half a degree, but some scientists believe this is enough to trigger changes that could have important effects on the world's weather and agriculture.

## Der Spiegel 1974 – New Ice Age Approaching. Odds Of A Warm Future “At Best 1 in 10,000”

*By P Gosselin on 17. December 2010*

**An increased frequency in extreme weather events, a cooling North Atlantic, and growing Arctic sea ice were viewed as signs of climate change. The odds of a warmer climate in the future, according to one scientist, were “at best 1 in 10,000” (see below). That’s what *Der Spiegel* wrote in a 3700-word article back in 1974, [warning the world of a coming ice age.](#)**

Hat tip: [oekowatch.org](http://oekowatch.org).

In that issue *Der Spiegel* described a series of “weather extremes” occurring all over the world, claiming they were unmistakable signs of a climate change to cooling: deluges of rain in West Germany, severe thunderstorms that uprooted trees and blew off roofs in Berlin, the worst storm in 100 years devastating much of Lower Saxony, hurricane Agnes inflicting 3 billion dollars in damage, floods in Japan and Peru, temperatures in Argentina, India and South Africa dropping to their lowest levels in 300 years.

12.08.1974

PDF drucken

DER SPIEGEL 33/1974

12 August 1974

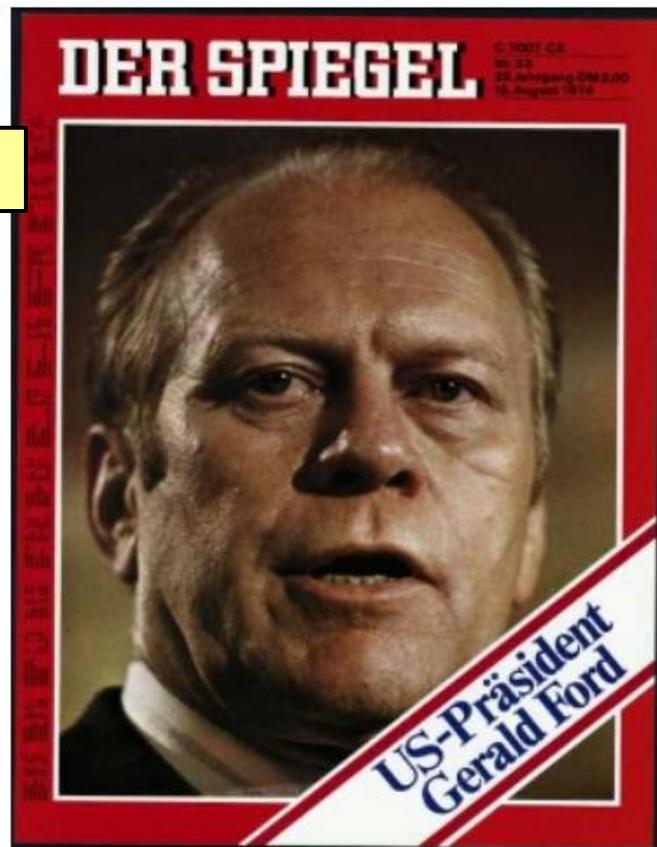
WETTER

## Katastrophe auf Raten *Catastrophe in Installments*

Kommt eine neue Eiszeit? Nicht gleich, aber der verregnete Sommer in Nordeuropa, so befürchten die Klimaforscher, war nur ein Teil eines weltweiten Wetterumschwungs -- ein Vorgeschmack auf kühlere und nassere Zeiten.

**Is a new ice age coming? Not right away, but the rainy summer in Northern Europe, climate researchers fear, was only part of a worldwide change in weather - a preview of cooler and wetter times to come.**

In kurzen Hosen, den Strohhut auf dem Kopf -- so stiegen noch am 20. Juni, dem Auftakt zu den großen Schulferien, Familienväter aus dem Saarland und aus Rheinland-Pfalz hinters Steuer. Auf der Autobahn, schon umtost von Sturmböen, vernahmen sie aus dem Radio den Wetterbericht: "Wechselnd "bewölkt, einzelne Schauer, Temperaturen bis zu vier Grad unter den sommerlichen Mittelwerten."



Heft lesen >

Abo-Angebote

“ THE ICE AGE COMETH? ” Science News, 1 March 1975

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BY SCIENCE NEWS MARCH 01, 1975

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Toxic Fumes from Fire-Retarded Foam  
BY SCIENCE NEWS MARCH 01, 1975

FEATURE  
Front Matter  
BY SCIENCE NEWS MARCH 01, 1975



New York Times, 21 May 1975

# Scientists Ask Why World Climate Is Changing; Major Cooling May Be Ahead; Scientists Ponder Why World's Climate Is Changing; a Major Cooling Widely Considered to Be Inevitable

By WALTER SULLIVAN ();  
May 21, 1975,  
, Section , Page 45, Column , words

 PERMISSIC

[ DISPLAYING ABSTRACT ]

The world's climate is changing. Of that scientists are firmly convinced. But in what direction and why are subjects of deepening debate.

31 Jan 1977      TIME

The Inauguration was for  
Jimmy Carter, 20 Jan 1977

The Big Freeze describes the  
depth of the cold waves that  
encompassed the Eastern USA  
during the winter of

1976-1977

The next two winters also  
had severe cold impacts  
in the USA.



<https://www.youtube.com/watch?v=1kGB5MMIAVA>

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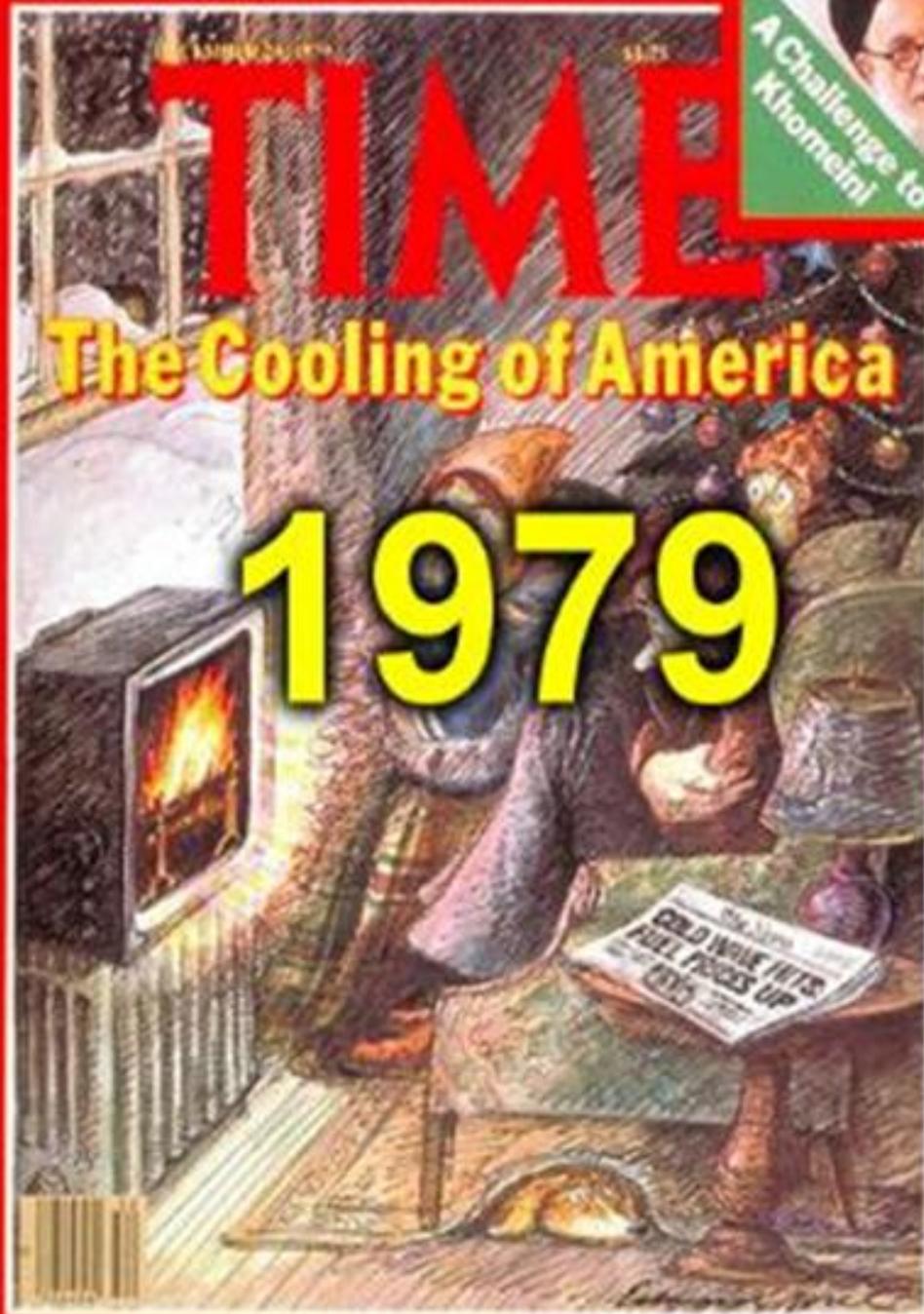
The Coming Ice Age - 1978



Popular Technology.net

355

58,866 views



Technical Literature:

Monthly Weather Review

from the June 1978 Issue...

“...The global temperature within the surface to 100 mb was lower in 1976 than any year since commencement of the record in 1958...the 1976 surface temperature equaled the global record for the lowest temperature set in 1964...”

**Global Temperature Variation, Surface–100 mb :  
An Update into 1977**

J. K. ANGELL AND J. KORSHOVER

*Air Resources Laboratories, ERL, NOAA, Silver Spring, Md. 20910*

(Manuscript received 27 December 1977, in final form 7 March 1978)

100 mb is about 53,000 ft MSL

ABSTRACT

Based on a network of 63 well-spaced radiosonde stations around the world, the global temperature within the surface to 100 mb layer was lower in 1976 than in any year since commencement of the record in 1958, and the 1976 surface temperature equaled the global record for the lowest temperature set in 1964; but even so the trend in global temperature since 1965 has been small compared to the 0.5°C decrease during 1960–65. Between 1958 and 1976 the surface to 100 mb temperature in north extratropics decreased by about 1°C, with the decrease twice as great in winter as in summer, and in 1976 this region was 0.2°C lower than in any previous year of record. During the northern winter of 1976–77, both temperate zones

Between 1958 and 1976 the surface to 100 mb temperature in the north extratropics decreased by ~1C...decrease twice as great in winter as in summer....0.2C lower than in any previous year of record.

related to the Southern Oscillation (and recently not so pronounced), extend in obvious fashion also into north extratropics, and should be taken into account for diagnoses and prognoses in northern latitudes.

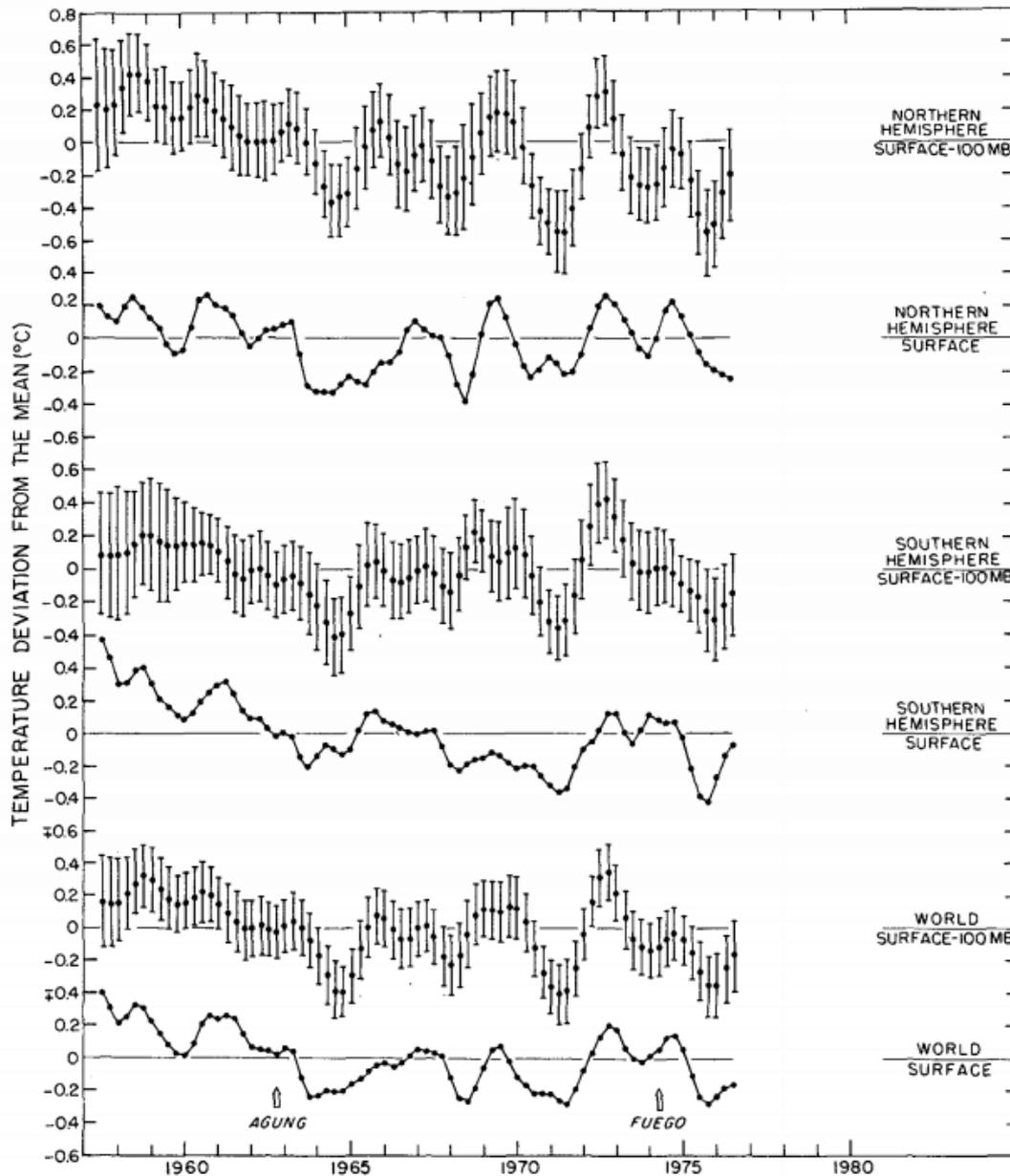


FIG. 4. Temperature variation for the Northern and Southern Hemispheres, and for the world as a whole. The eruptions of Mt. Agung and volcano Fuego (Guatemala) are indicated at bottom. Otherwise, see Fig. 1 legend.

<https://stevengoddard.wordpress.com/2015/09/10/smoking-gun-of-nasanoaa-temperature-fraud/>

In 2008, Peterson, Connolley and Fleck tried to tell us that what you just saw just did not happen.

It's a myth...

You never saw anything of the sort...

Following Show the Political Nature of this subject

# THE MYTH OF THE 1970s GLOBAL COOLING SCIENTIFIC CONSENSUS

BY THOMAS C. PETERSON, WILLIAM M. CONNOLLEY, AND JOHN FLECK

There was no scientific consensus in the 1970s that the Earth was headed into an imminent ice age. Indeed, the possibility of anthropogenic warming dominated the peer-reviewed literature even then.

**T HE MYTH.** When climate researcher Reid Bryson stood before the members of the American Association for the Advancement of Science in December 1972, his description of the state of scientists' understanding of climate change sounded very much like the old story about the group of blind men trying to describe an elephant. The integrated enterprise of climate science as we know it today was in its infancy, with different groups of scientists feeling blindly around their

piece of the lumbering climate beast. Rigorous measurements of increasing atmospheric carbon dioxide were available for the first time, along with modeling results suggesting that global warming would be a clear consequence. Meanwhile, newly created global temperature series showed cooling since the 1940s, and other scientists were looking to aerosols to explain the change. The mystery of waxing and waning ice ages had long entranced geologists, and a cohesive explanation in terms of orbital solar forcing was beginning to emerge.

**I have presented selections from the authors of this article**

**Does this strike you as science or dirty politics?**



# Watts Up With That?

The world's most viewed site on global warming and climate change

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## NCDC's Dr. Thomas Peterson: "It's a knife fight"

Anthony Watts / January 16, 2011

This is a row screencap from this Twitter page: <http://twitter.com/scio11>



 **Allochthonous** 'It's a knife fight', says Tom Peterson. I'd argue that we're considering picking up a knife while other side researching nukes. #scio11

about 19 hours ago via Echofon  
Retweeted by [scio11](#) and 3 others

It comes from the January 13-16th, 2011 Science Online conference held in the Research Triangle Park in Durham. Details at these URL's

“ <http://scienceonline2011.com/>

<http://scio11.wikispaces.com/>

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## “LESSONS FROM CLIMATEGATE”

“You guys have got to start fighting back” is the message many climatologists are hearing in the wake the slanderous attack on their integrity that has been called Swifthack, or Climategate. But for many scientists, fighting back means publishing a really good paper in a reputable journal. That doesn’t cut it anymore. How should scientists and their communicator allies go about planning a strategy?

Panel:

Tom Peterson, Chief Scientist, NCDC

James Hrynyshyn, journalist, Class M — or Chris Mooney (he’s been invited)

Josh Rosenau, NCSE

(James Hrynyshyn)

– One thing to think about for this panel would be getting someone who has experience organizing successful campaigns. With the GOP promoting the idea of Congressional hearings on the “fraud” of global warming this discussion should involve strategies for countering their smear of climate scientists for political purposes.

This post gives a new meaning to the term, “Political Science.”

Bishop Hill [points out](#) that:

“ *The talk of ninjas and knife fights is interesting in the current atmosphere. (Tom Peterson is a scientist at NCDC. Some may know him for his work on urban heat island effect).*”

Students are invited to read the two posts on

## **Wikipedia's Climate Doctor**

**William Connolley**

in the Climate Shorts section of the Class Web Page:

[http://casf.diskstation.me/wordpress/wp-content/uploads/2017/09/PDF\\_Climate-Short-Wikipedias-Climate-Doctor\\_15-Sep\\_2017.pdf](http://casf.diskstation.me/wordpress/wp-content/uploads/2017/09/PDF_Climate-Short-Wikipedias-Climate-Doctor_15-Sep_2017.pdf)

<http://casf.diskstation.me/wordpress/wp-content/uploads/2017/04/Wikipedias-Climate-Doctor-by-Lawrence-Soloman.pdf>

<http://www.nationalpost.com/opinion/columnists/story.html?id=62e1c98e-01ed-4c55-bf3d-5078af9cb409>

By Lawrence Solomon

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OPINION

## Wikipedia's climate doctor

**How Wikipedia's green doctor, William Connolley, rewrote 5,428 climate articles**

Climategate Emails describe how a small band of climatologists cooked the books to make the last century seem dangerously warm.

The emails also describe how the band plotted to rewrite history as well as science, particularly by eliminating the Medieval Warm Period, a 400 year period that began around 1000 AD.

The Climategate Emails reveal something else, too: the enlistment of the most widely read source of information in the world — Wikipedia — in the wholesale rewriting of this history.

## **Wikipedia's Climate Doctor -- William Connolley**

the UN's official verdict that the Medieval Warm Period had not existed did not erase countless schoolbooks, encyclopedias, and other scholarly sources that claimed it had.

One person in the nine-member Realclimate.org team -- U.K. scientist / Green Party activist William Connolley -- took on particularly crucial duties.

Connolley took control of all things climate in the most used information source the world has ever known -Wikipedia.

**Richard Lindzen** and **Fred Singer**, two of the world's most distinguished climate scientists were among his early targets, followed by others that the band especially hated, such as **Willie Soon** and **Sallie Baliunas** of the Harvard-Smithsonian Center for Astrophysics, authorities on the Medieval Warm Period.

**....Connolley created or rewrote 5,428 unique Wikipedia articles.**

control over Wikipedia **website administrator**... allowed him to act with virtual impunity. When Connolley didn't like the subject of a certain article, he removed it...

-- more than 500 articles of various descriptions disappeared at his hand.

The Medieval Warm Period disappeared, as did criticism of the global warming orthodoxy...with release of Climategate's Emails, the disappearing trick was exposed.

## Massive Cover-up Exposed: 285 Papers From 1960s-'80s Reveal Robust Global Cooling Scientific 'Consensus'

By Kenneth Richard on 13. September 2016

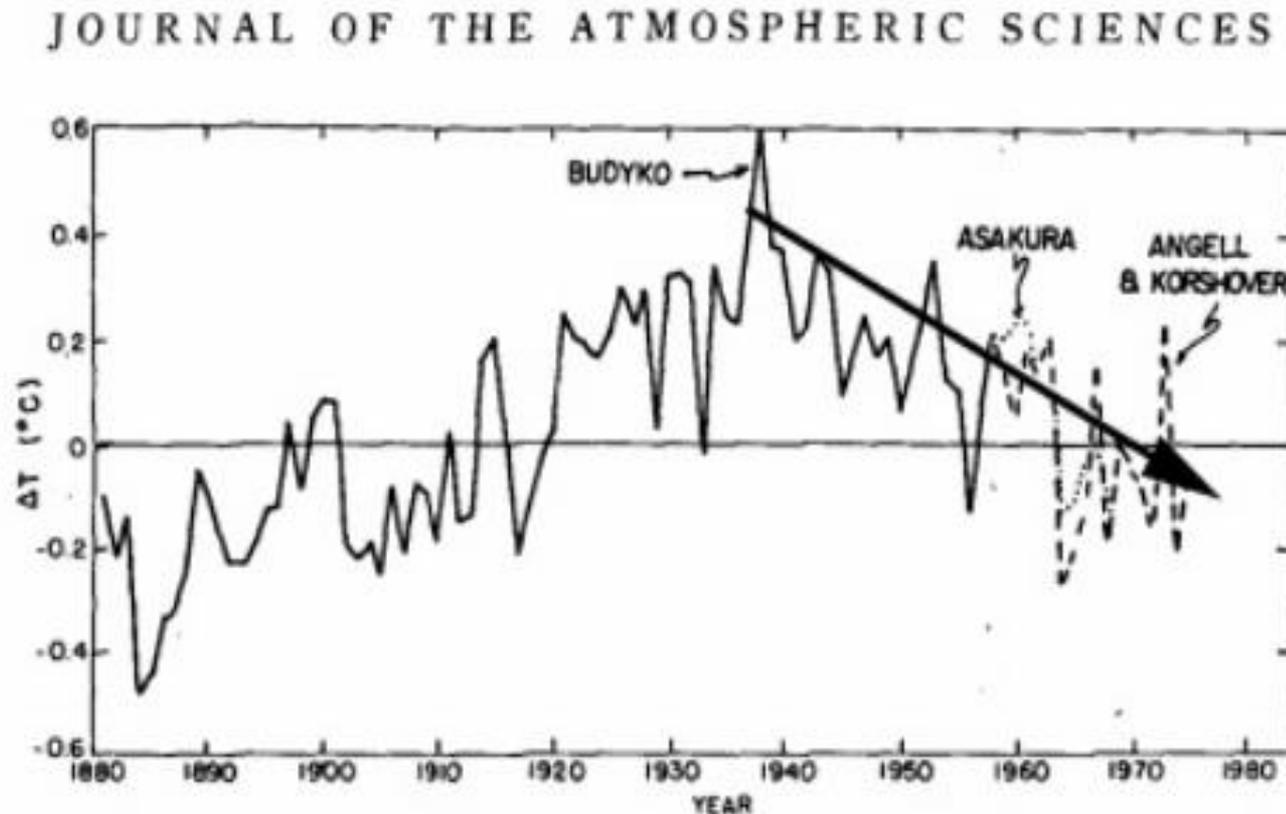
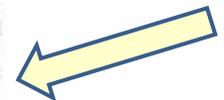


FIG. 2. Annual mean temperature of the Northern Hemisphere for 1881–1975, from Budyko (1969), Asakura (Gates and Mintz, 1975) and Angell and Korshover (1977).



<http://notrickszone.com/2016/09/13/massive-cover-up-exposed-285-papers-from-1960s-80s-reveal-robust-global-cooling-scientific-consensus/>

Connolley eviscerated Wikipedia's references to 1970s global cooling scare

Connolley rewrote Wikipedia greenhouse effect articles, imputing a central, dominant role for CO<sub>2</sub>

Connolley and two other authors published a "consensus" manifesto in 2008 that described the 1970s global cooling scare as a myth, as something that never really happened.

[Peterson, Connolley, and Fleck](#) (2008, hereafter **PCF08**) published "The Myth of the 1970s Global Cooling Scientific Consensus" in *Bulletin of the American Meteorological Society*... to quash the notion scientists in the 1960s and 1970s agreed Earth was cooling (and may continue to do so), or CO<sub>2</sub> did NOT play a dominant role in climate change.

# The Concoction Of 'Consensus' Achieved Via Exclusion

The primary theme of PCF08 can be summarized in 4 succinctly quoted sentences from the paper:

“[T]he following pervasive myth arose [among skeptics]: there was a consensus among climate scientists of the 1970s that **either global cooling or a full-fledged ice age was imminent.**

A review of the climate science literature from 1965 to 1979 shows this myth to be false. ...

**During the period from 1965 through 1979, our literature survey found 7 cooling, 20 neutral, and 44 warming papers. ...**

**There was no scientific consensus in the 1970s that the Earth was headed into an imminent ice age.**

Indeed, the possibility of **anthropogenic warming dominated the peer-reviewed literature even then.**”

Of course, the global cooling scare during the 1970s was **not** narrowly or exclusively focused upon what the temperatures might look like in the future, or whether or not an ice age was “imminent”.

It was primarily about the *ongoing* cooling that had been taking place for decades, the negative impacts this cooling had already exerted (on extreme weather patterns, on food production, etc.), and uncertainties associated with the causes of climatic changes.

## What Kenneth Richards found:

**An 83% Global Cooling / Weak CO2 Influence Scientific ‘Consensus’ Existed During 1960s, 1970s!**

**“... claim... only 7 publications from that era disagreeing with CO2-warming “consensus” is preposterous.**

“...Papers from 1965-1979 ... indicated the globe had cooled -0.3C between 1940s and '70s).

ooling was a concern (extreme weather, drought, depressed crop yields...)

CO2's climate influence was questionable to negligible.

Number of scientific publications that did *not* agree with the alleged CO2-warming “consensus” was **220** papers, not 7.

Including 1960-1989 papers, the “non-consensus” / “cooling” is **285**.

## Climate Impact of Increasing Atmospheric Carbon Dioxide

J. Hansen, D. Johnson, A. Lacis, S. Lebedeff  
P. Lee, D. Rind, G. Russell

Atmospheric CO<sub>2</sub> increased from 280 to 300 parts per million in 1880 to 335 to 340 ppm in 1980 (1, 2), mainly due to burning of fossil fuels. Deforestation and changes in biosphere growth may also

The major difficulty in accepting this theory has been the absence of observed warming coincident with the historic CO<sub>2</sub> increase. In fact, the temperature in the Northern Hemisphere decreased by

### Greenhouse Effect

The effective radiating temperature of the earth,  $T_e$ , is determined by the need for infrared emission from the planet to balance absorbed solar radiation:

$$\pi R^2(1 - A)S_0 = 4\pi R^2\sigma T_e \quad (1)$$

or

$$T_e = [S_0(1 - A)/4\sigma]^{1/4} \quad (2)$$

where  $R$  is the radius of the earth,  $A$  the albedo of the earth,  $S_0$  the flux of solar radiation, and  $\sigma$  the Stefan-Boltzmann constant. For  $A \sim 0.3$  and  $S_0 = 1367$  watts per square meter, this yields  $T_e \sim 255$  K.

The mean surface temperature is  $T_s \sim 288$  K. The excess,  $T_s - T_e$ , is the greenhouse effect of gases and clouds, which cause the mean radiating level to be above the surface. An estimate of the greenhouse warming is

1981 James Hansen: Director, NASA Goddard Institute for Space Studies.

Lead author, *Science* paper:

[“Climate Impact of Increasing Atmospheric Carbon Dioxide”](#).

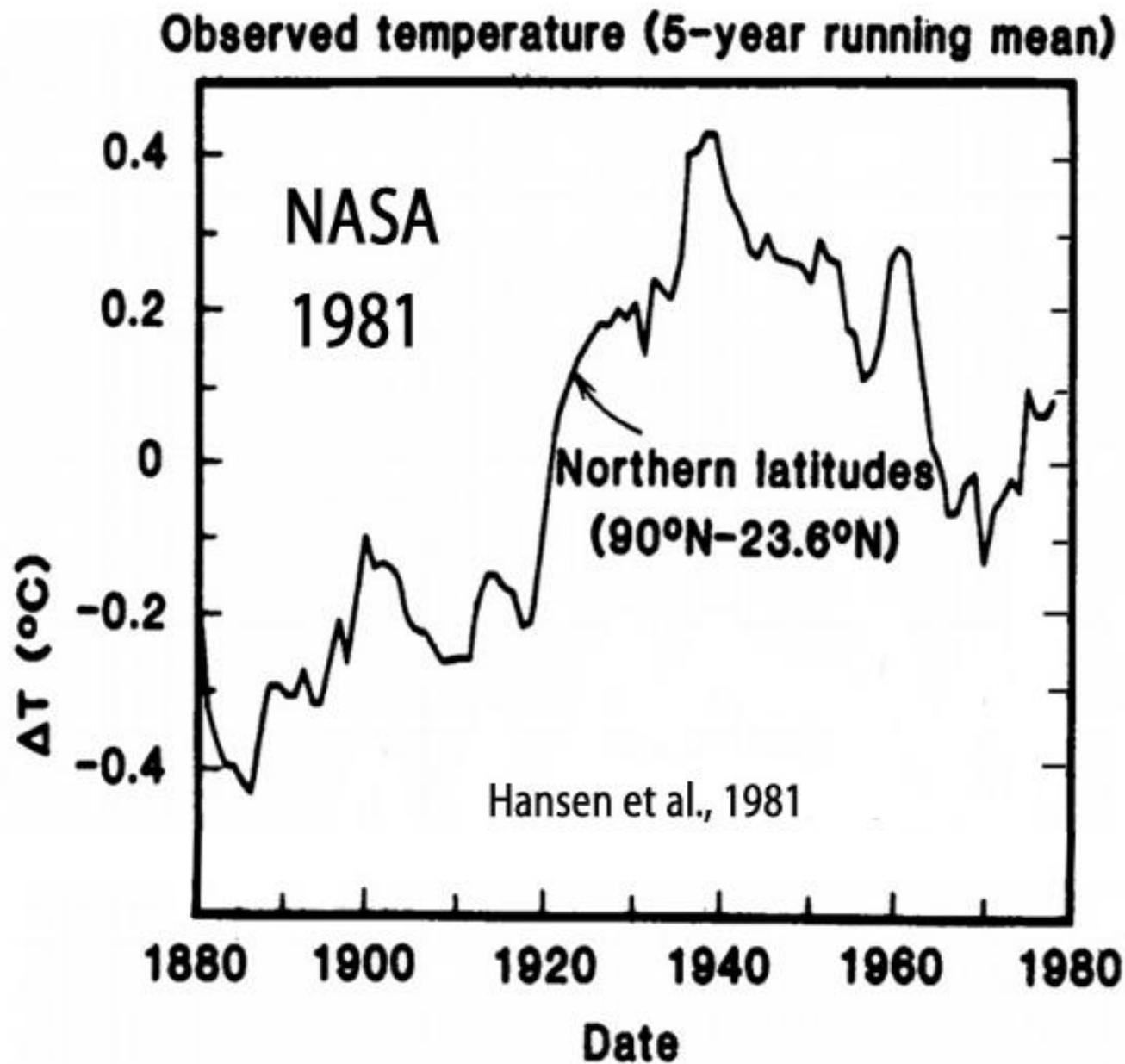
Hansen reported and graphed the 100-year (~1880-1980) record of hemispheric and global temperature changes.

At the time, most climate scientists were reporting that the Northern Hemisphere's (NH) temperatures had a rapid warming, +0.8 - +1.0°C between the 1880s and 1940.

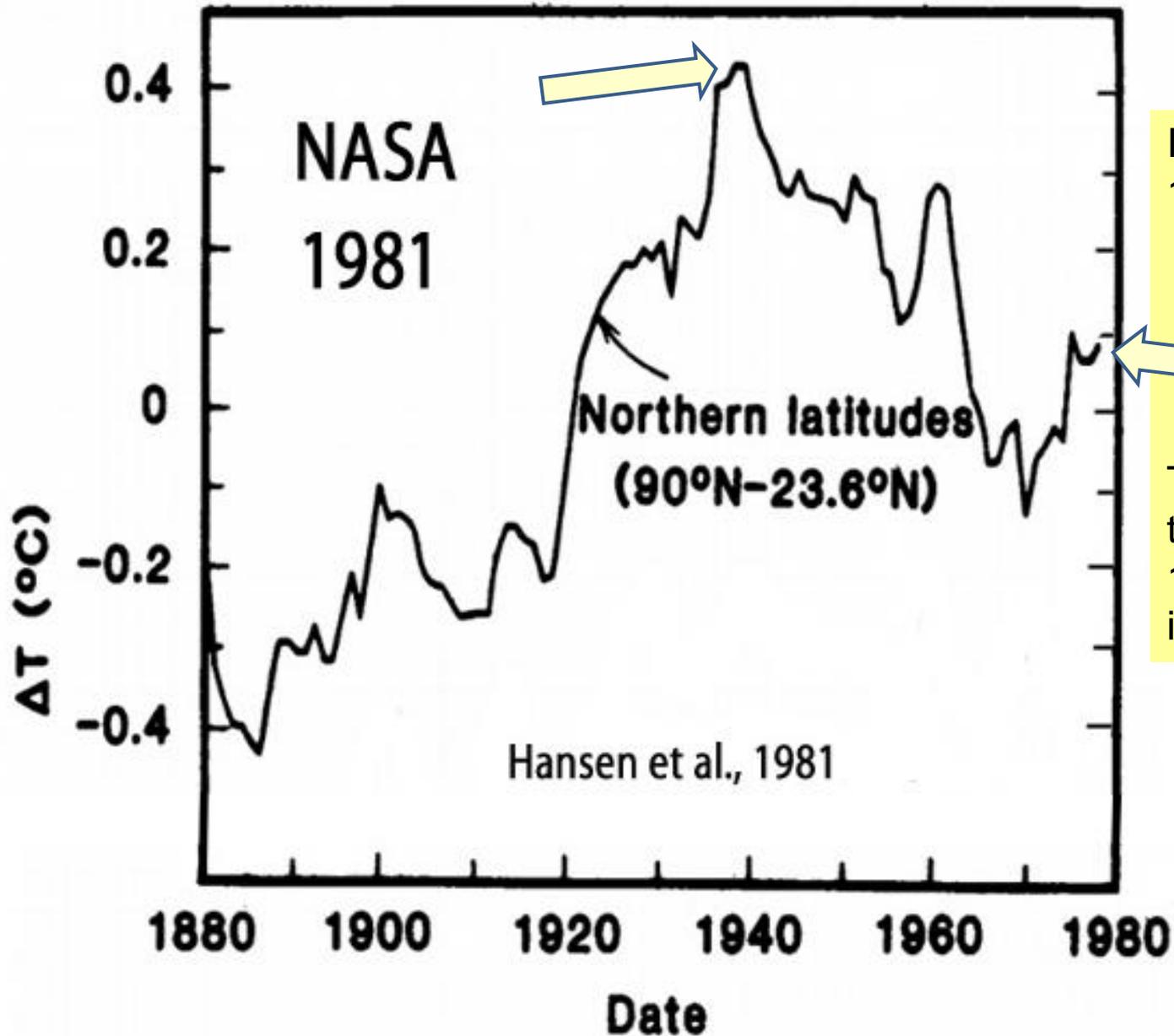
1940 -1970, NH temperatures dropped -0.5 to -0.6°C, a decades-long cooling trend which at the time had fomented

[widespread debate about global cooling in the scientific community.](#)

A graph of "observed temperature" for the Northern Hemisphere was included in the paper to illustrate these climatic trends.



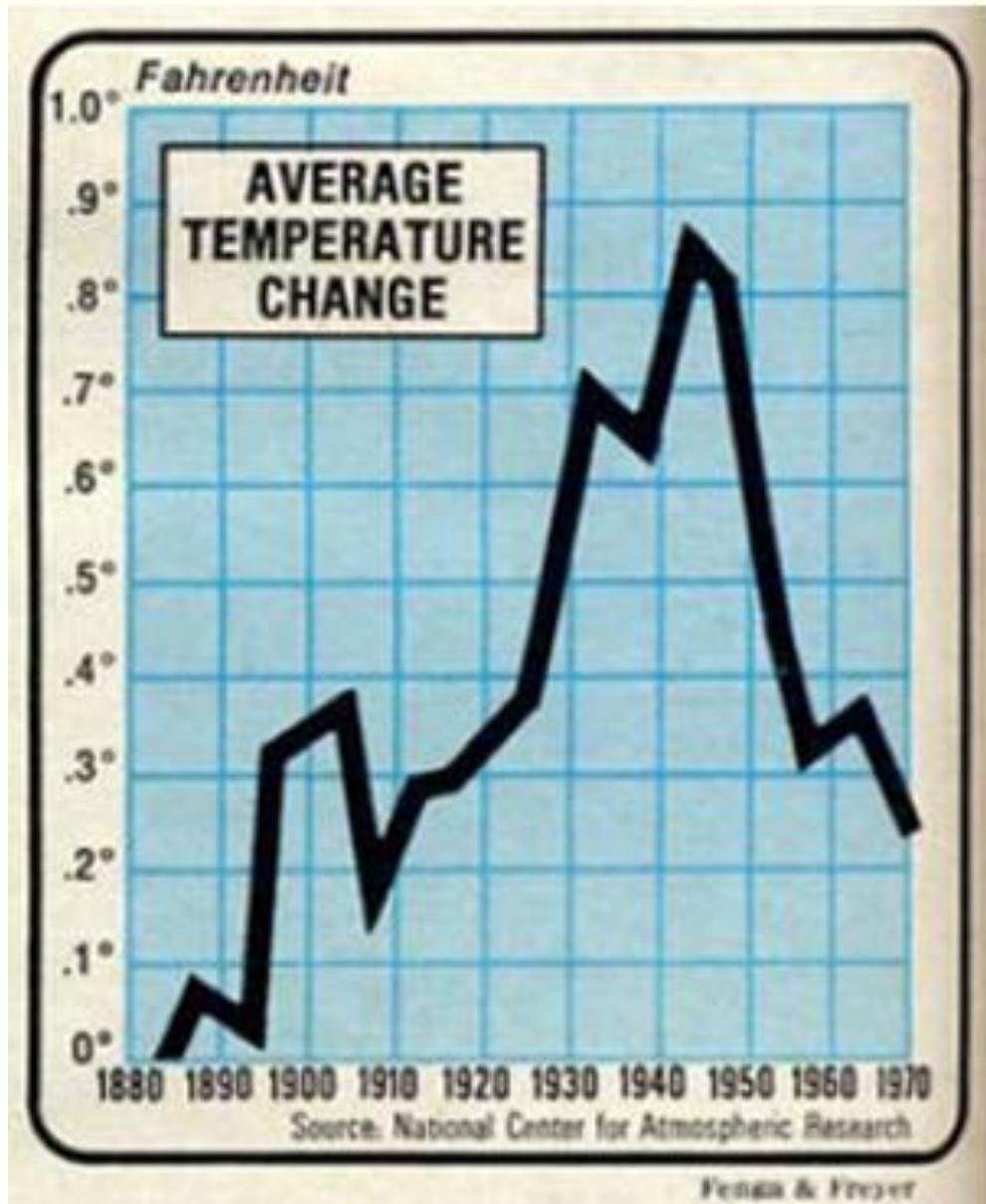
# Observed temperature (5-year running mean)



In Hansen's paper, 1940 is ~0.3C warmer than 1980.

The temperature trace from 1920 to 1970 is "tooth shaped."

The National Center for Atmospheric Research, NCAR, reported much the same result.



This graphic from NCAR was part of the SCIENCE Section in the 28 April 1975 edition of NEWSWEEK. ...article's headline was , "The Cooling World."

Today, NASA's Goddard Institute for Space Studies is directed by mathematician Dr. Gavin Schmidt.

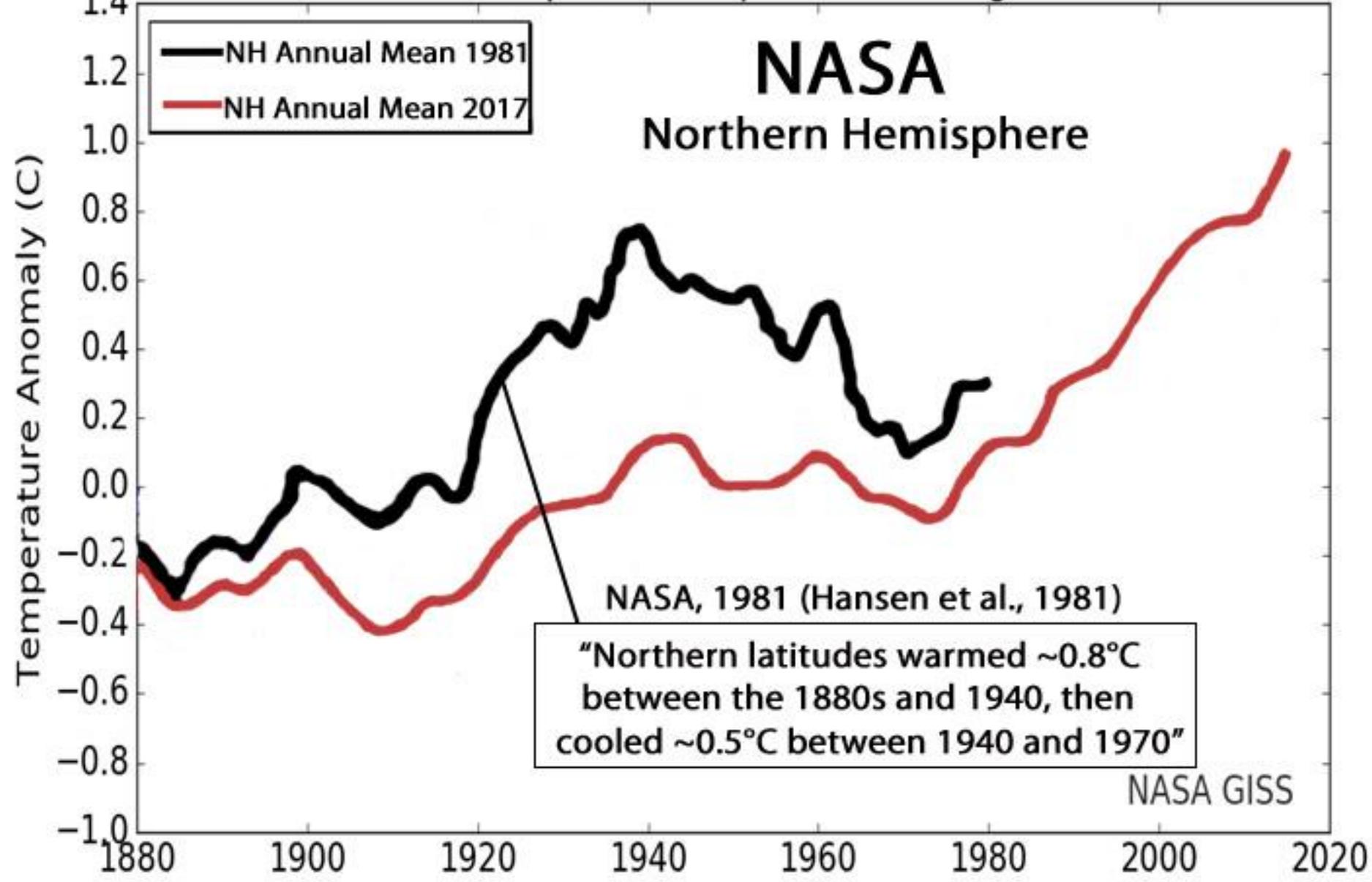
(James Hansen retired from the position in 2013.)

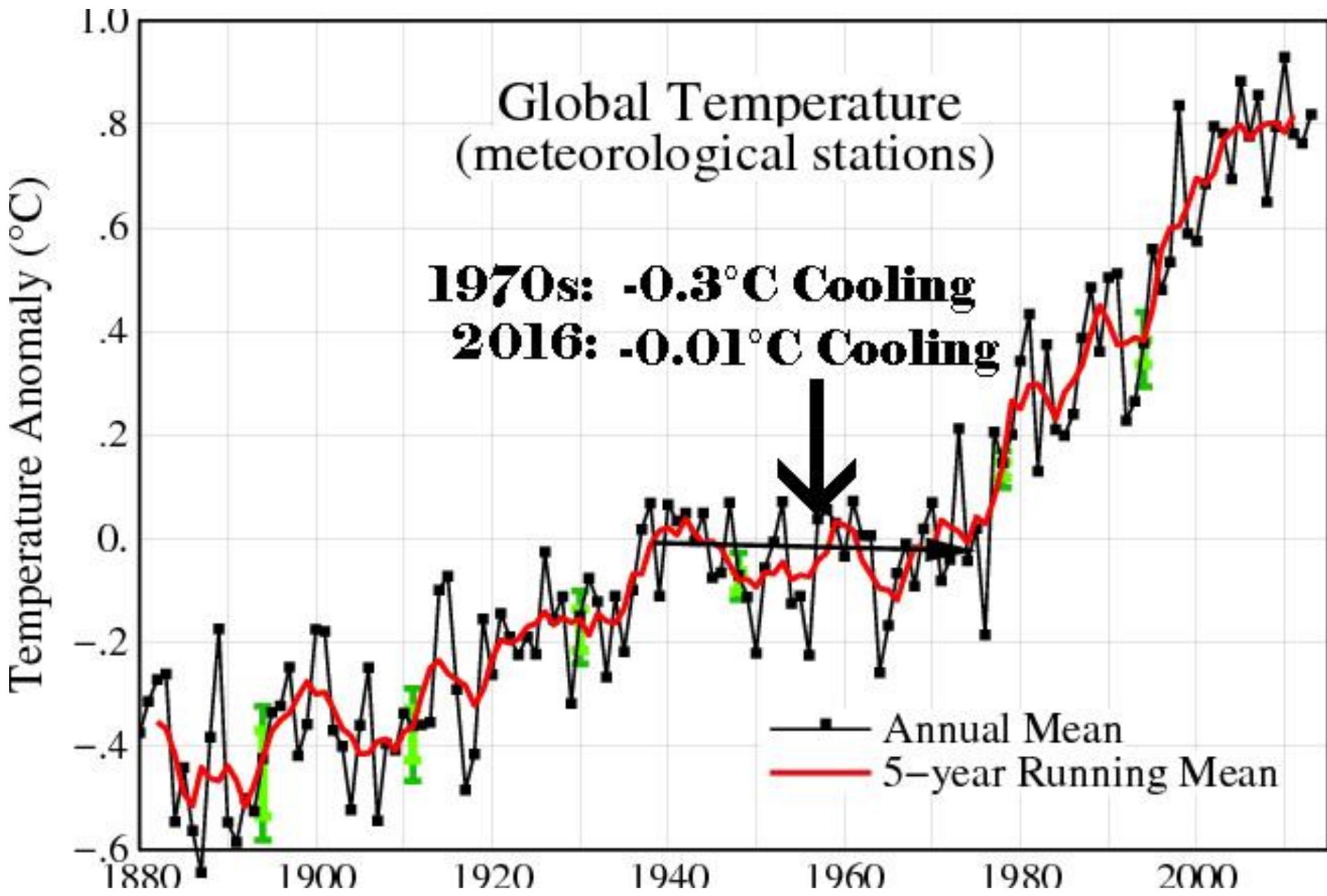
Schmidt's version of the Northern Hemisphere's temperature record for 1880-1980 looks vastly different from Hansen, 1981.

Instead of leaving the historically observed temperatures alone, NASA has invented new ways to portray the pre-1981 temperature history of the Northern Hemisphere.

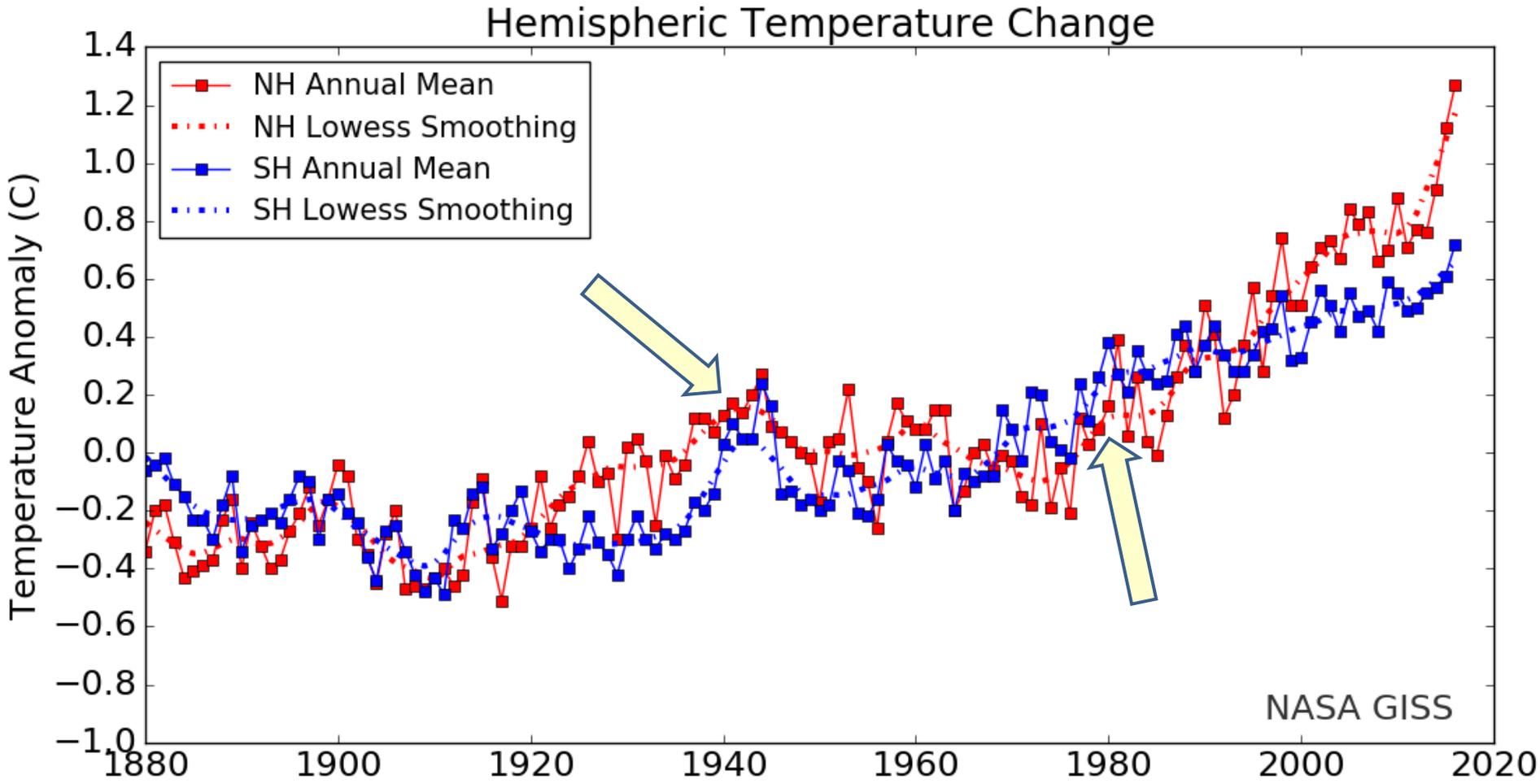
Following graphics show how temperature history has been changed

# Hemispheric Temperature Change



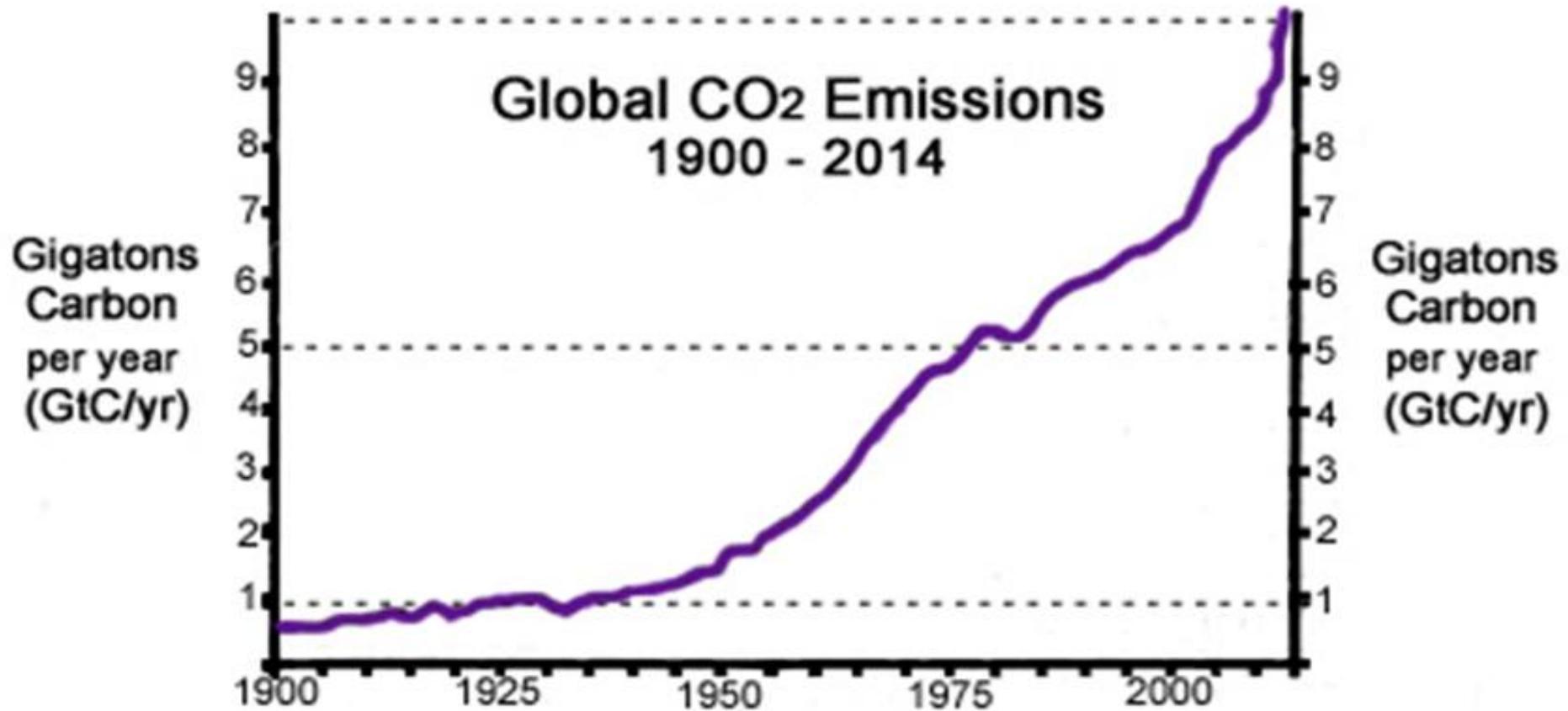


[https://data.giss.nasa.gov/gistemp/graphs/graph\\_data/Hemispheric\\_Temperature\\_Change/graph.png](https://data.giss.nasa.gov/gistemp/graphs/graph_data/Hemispheric_Temperature_Change/graph.png)



Why they did it:

Why the deliberate deception was started and why,  
even today, the deception continues.



Anthropogenic CO<sub>2</sub> emissions plodded along steadily at about 1 GtC/year (gigatons of carbon per year) during the 1900 to 1945 period.

After 1945, human emissions exploded. They reached 4 GtC/year by the 1970s, 6 GtC/year by the 1990s, and 10 GtC/year by 2014.

<http://notrickszone.com/wp-content/uploads/2016/11/CO2-Emissions-1900-2014-GtC-per-year-ps-.jpg>

NASA recognized that

(a) anthropogenic CO<sub>2</sub> emissions were not rising much at all while the surface temperatures *were* rising dramatically (1880s-1940s),

and that

(b) surface temperatures were *cooling* (1940s to 1970s) while anthropogenic CO<sub>2</sub> emissions were surging upwards.

These observed trends undermined the models.

To counteract this, NASA has undergone a decades-long effort to change past temperature data that do not adhere to modeled expectations.

In other words, NASA has sought to suppress the 1880s to 1940 warming amplitude and rate, and they have warmed up the 3 decades of NH cooling by about +0.3°C.

## **Why Did NASA Eliminate The Early 20th Century Warming And Mid-20th Century Cooling?**

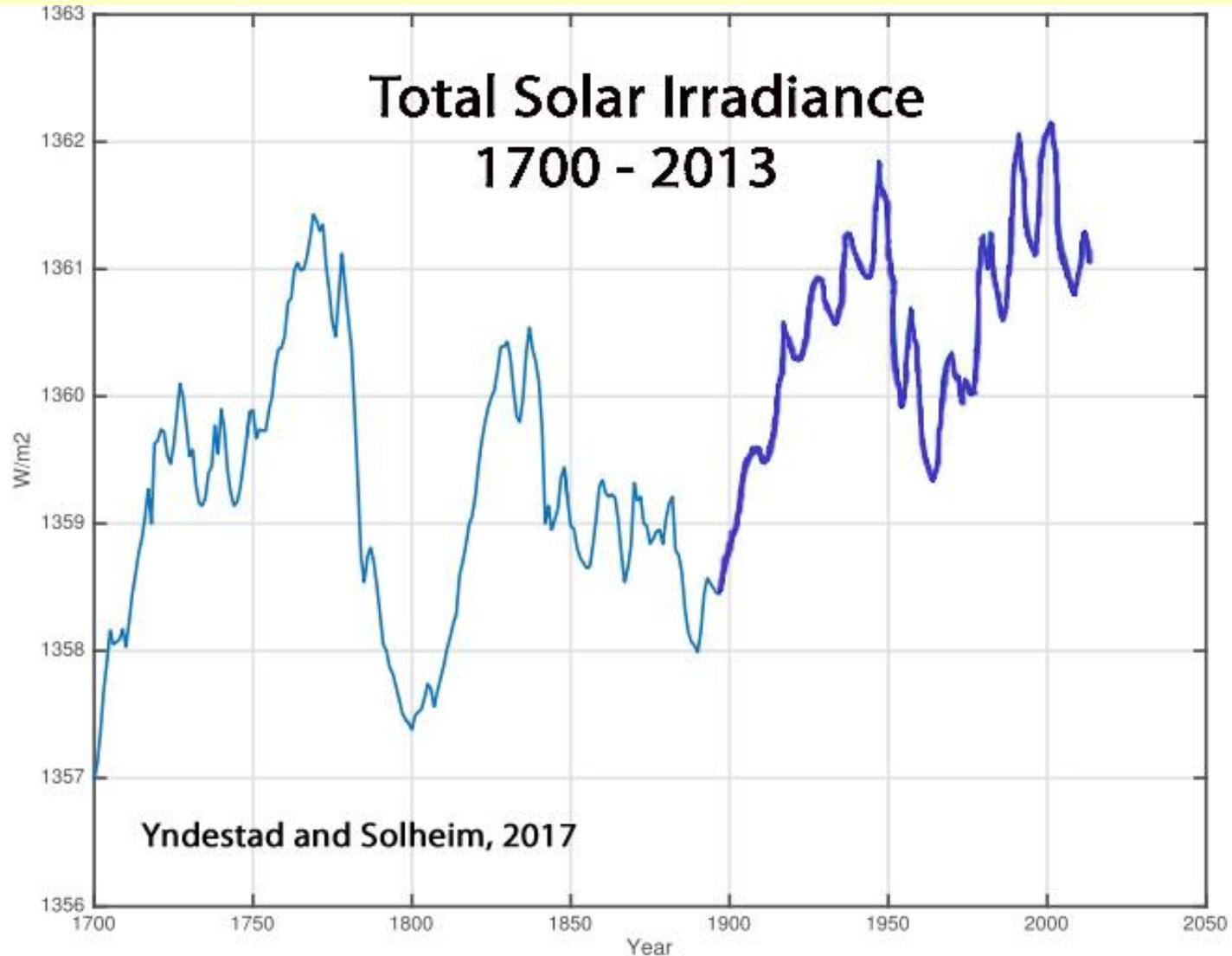
The fundamental reason why NASA has manipulated past temperature data is

*so the historical climate record conforms to the IPCC's modeled variations in surface temperatures:*

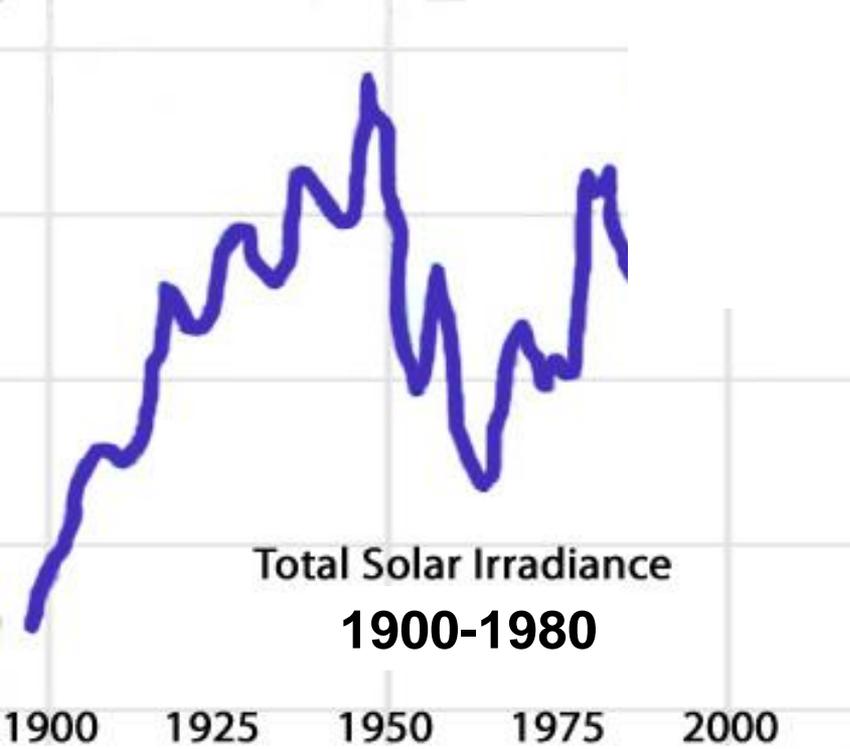
*determined by anthropogenic CO2 emissions.*

# Non-Adjusted Temperature Data Appear To Correlate With 20th Century Solar Forcing

[Yndestad and Solheim \(2017\)](#) have released a reconstruction of solar activity (Total Solar Irradiance, or TSI) for 1700-2013.



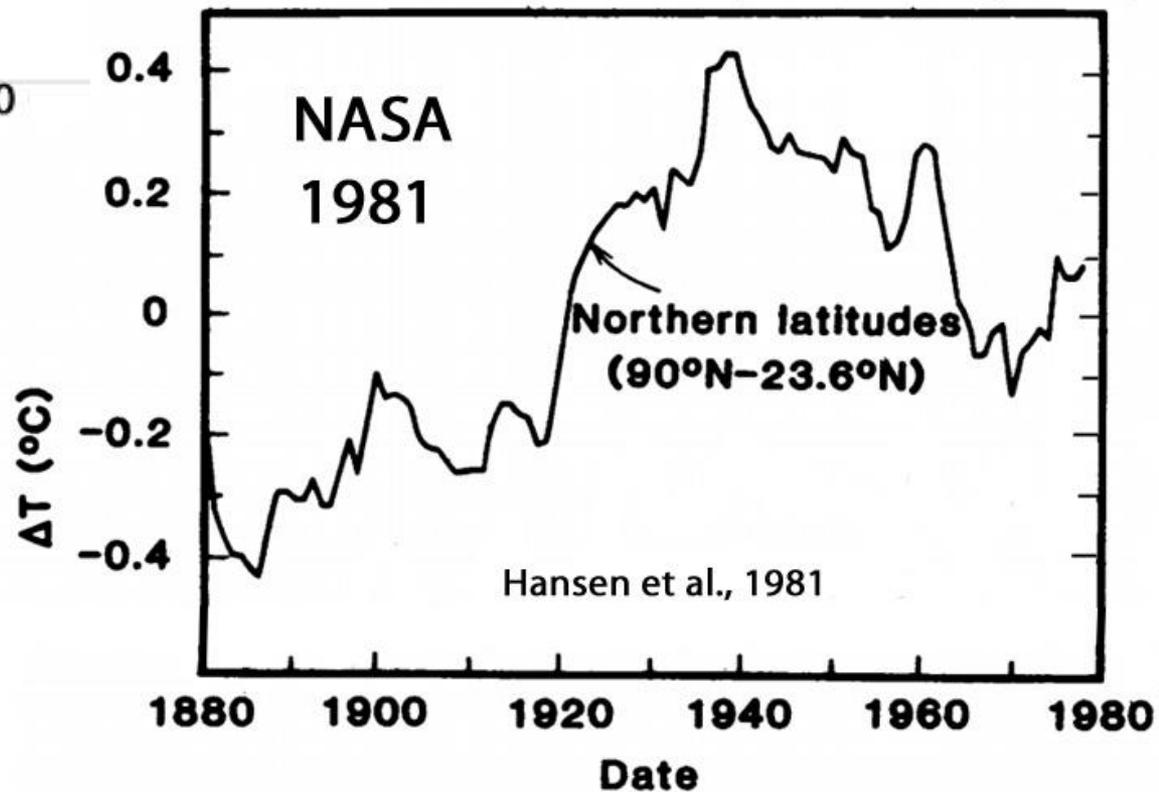
**Fig. 3.** TSI-HS total solar irradiance from 1700 to 2013 A.D. ([Scafetta and Willson, 2014](#)).



Total Solar Irradiance  
1900-1980

1900 1925 1950 1975 2000

Observed temperature (5-year running mean)



NASA  
1981

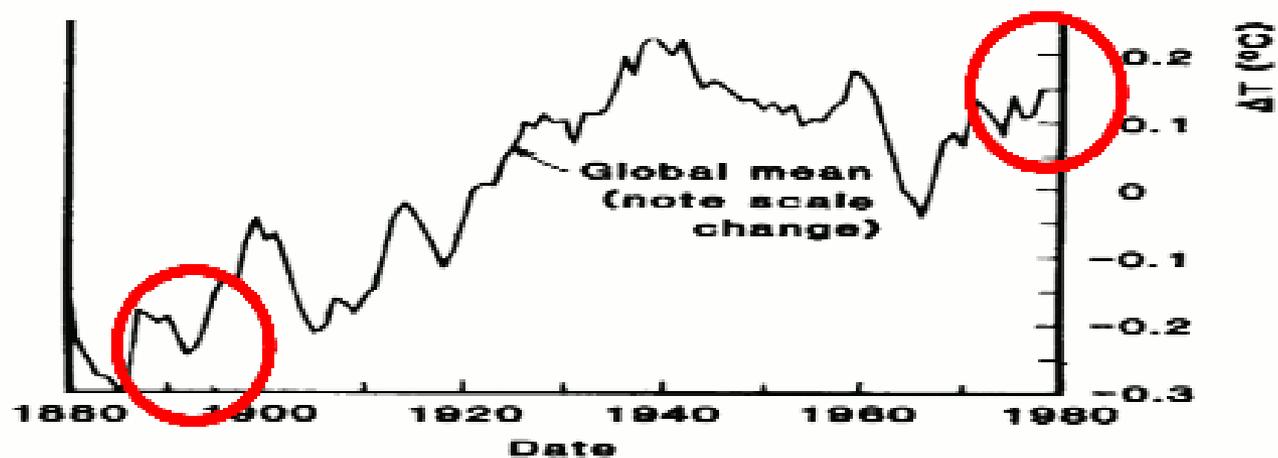
Northern latitudes  
(90 $^{\circ}$ N-23.6 $^{\circ}$ N)

Hansen et al., 1981

1880 1900 1920 1940 1960 1980

Date

## Hansen 1981

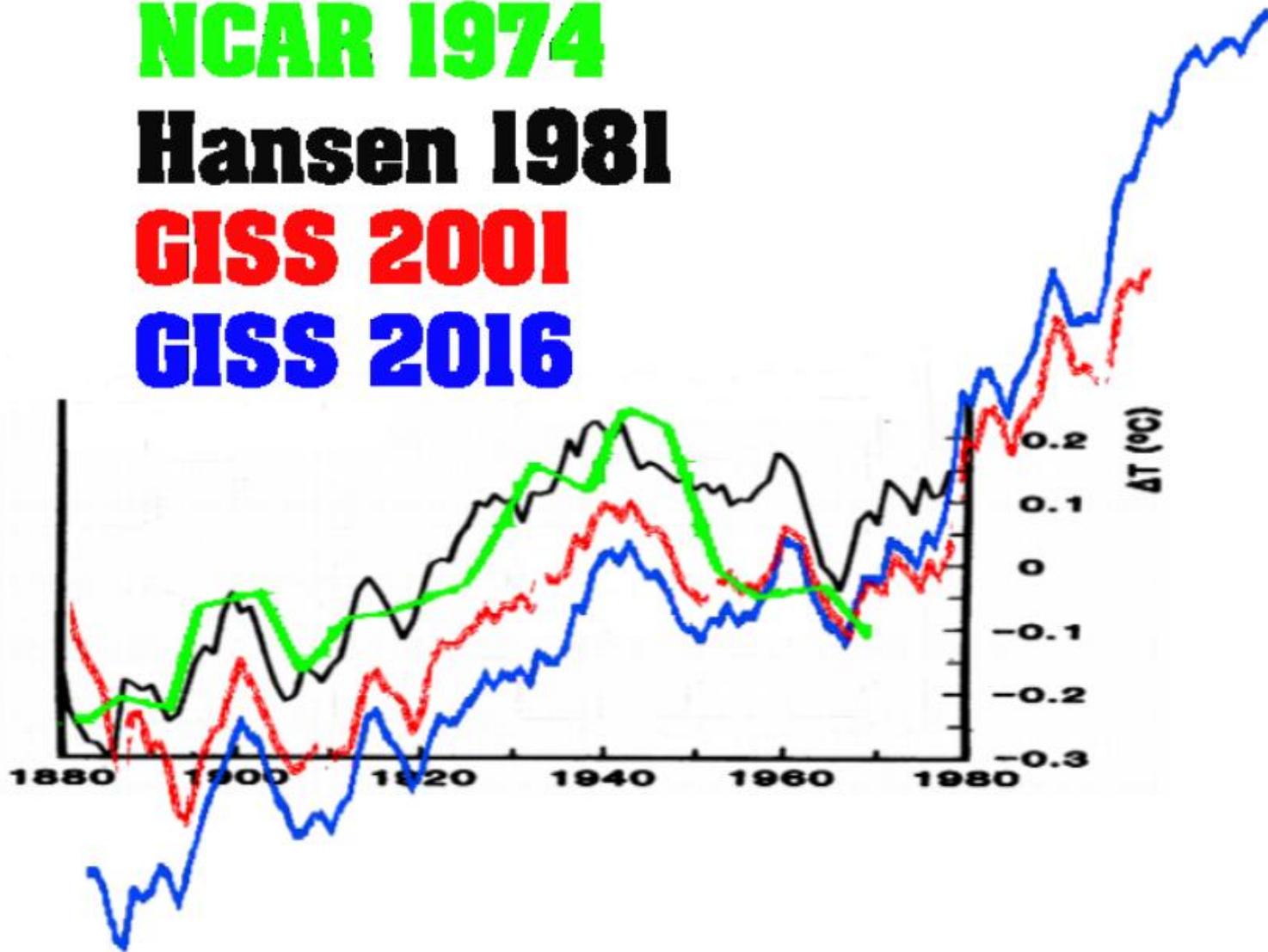


**NCAR 1974**

**Hansen 1981**

**GISS 2001**

**GISS 2016**



There's no scientific justification for NASA's temperature data tampering.

Adjustments are "tendentious" acts to change data to fit climate models

"It's all our fault"

NASA's manipulation of data endangers the reputation of science.

tendentious means promoting a specific, and controversial, point of view.

## What have we learned?

There was widespread concern in the 1970s that the cooling which had prevailed since the 1940s would continue.

Paleoclimate data revealed that interglacials, maybe 12,000 years in duration, were not nearly as common as the glacials which predominated the past 3 ½ million years.

Concerns were that the Holocene had run its course--next glacial was possibly upon us.

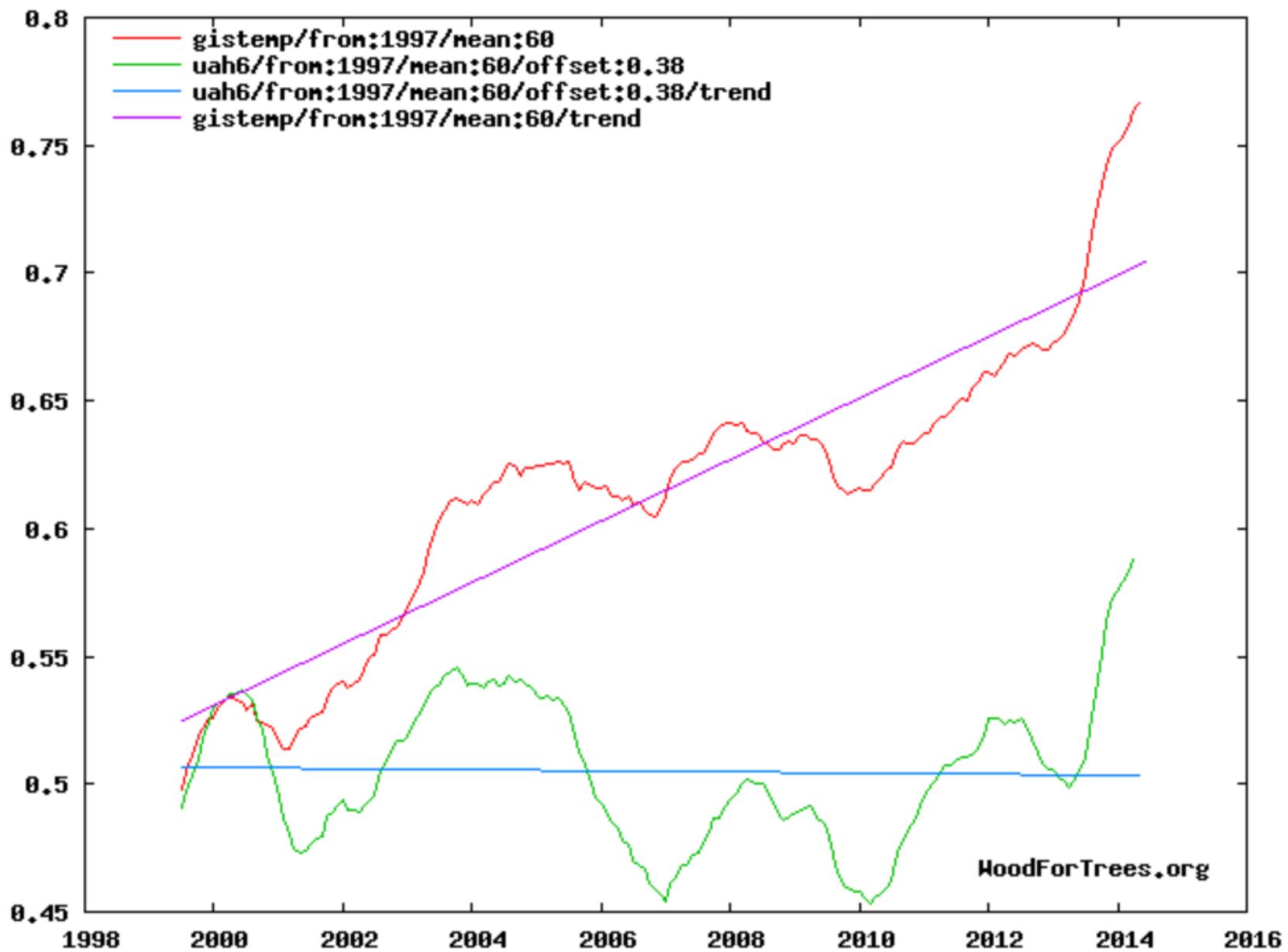
In 1988 James Hansen gave his pitch to the US Senate that human-caused CO<sub>2</sub>- fueled global warming was here.

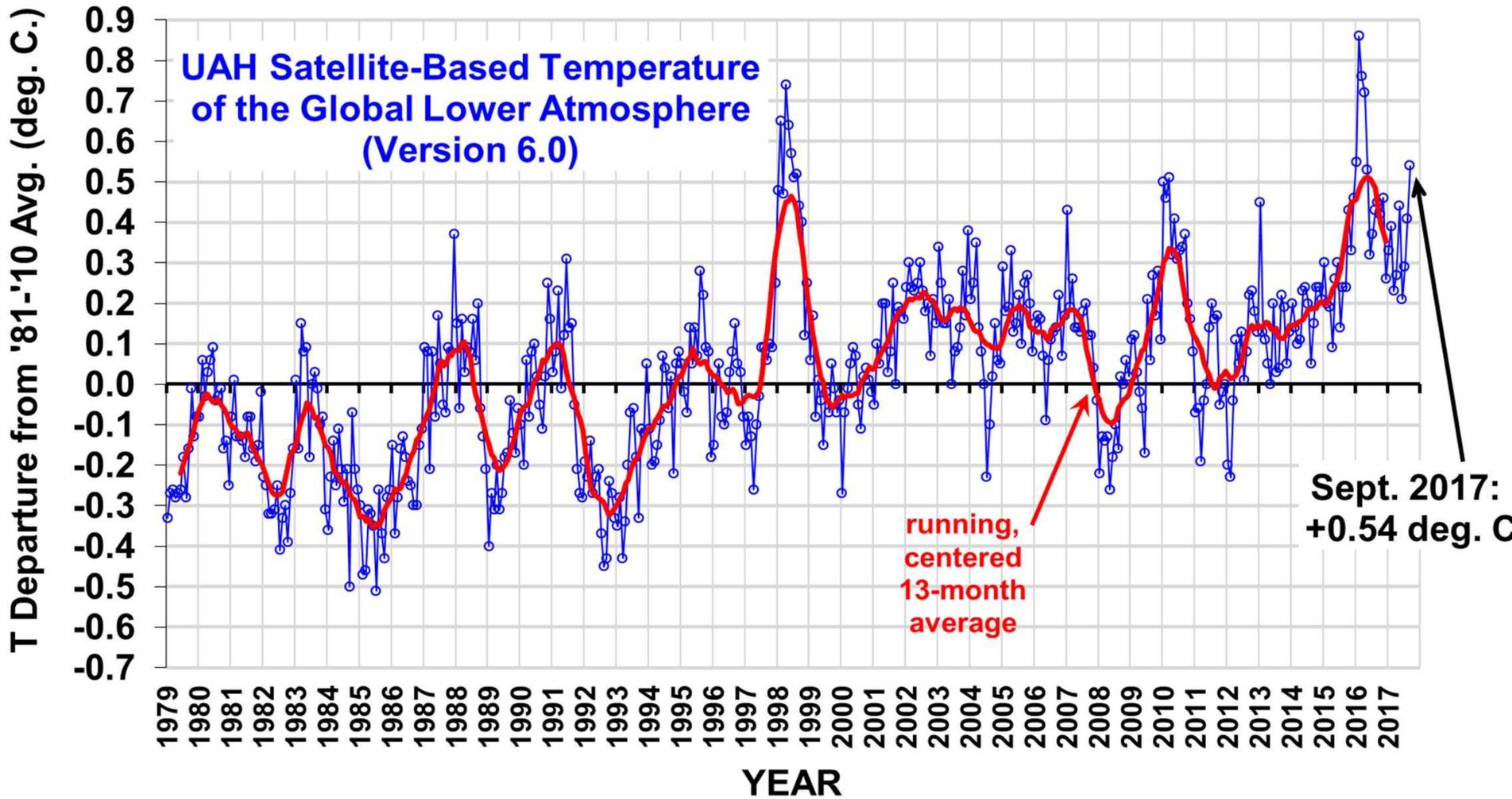
When examining the data, the fossil fuel consumption rate was less than a Gigaton up to WW2, and accelerated in the Post WW2 Economic Boom.

The rise in temperatures from 1880-1940 and cooling from 1940-1976 put the lie to the notion of Human-Caused CO<sub>2</sub>- fueled catastrophe.

The Warmists decided to change data which showed prominent warming 1880-1940, and prominent cooling existed from 1940-1976.

Inconvenient truths, indeed, so they changed the data.



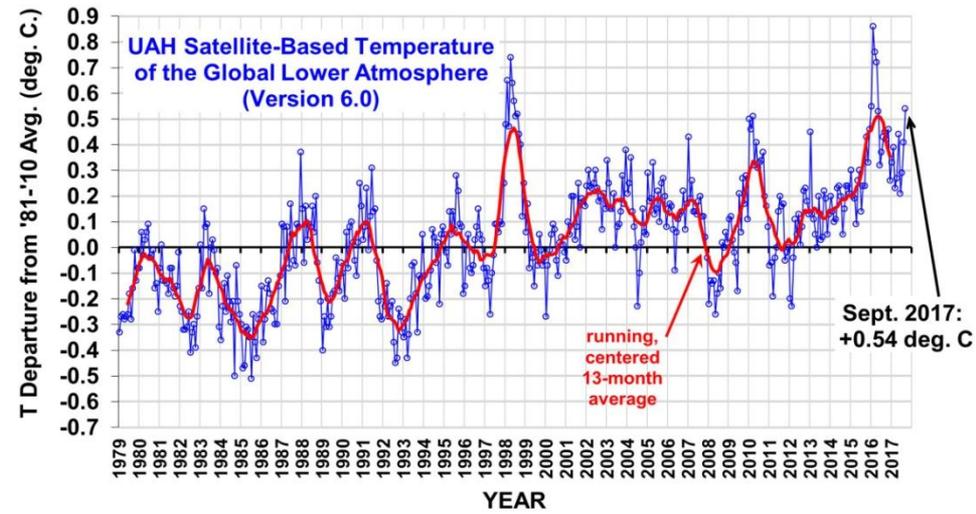
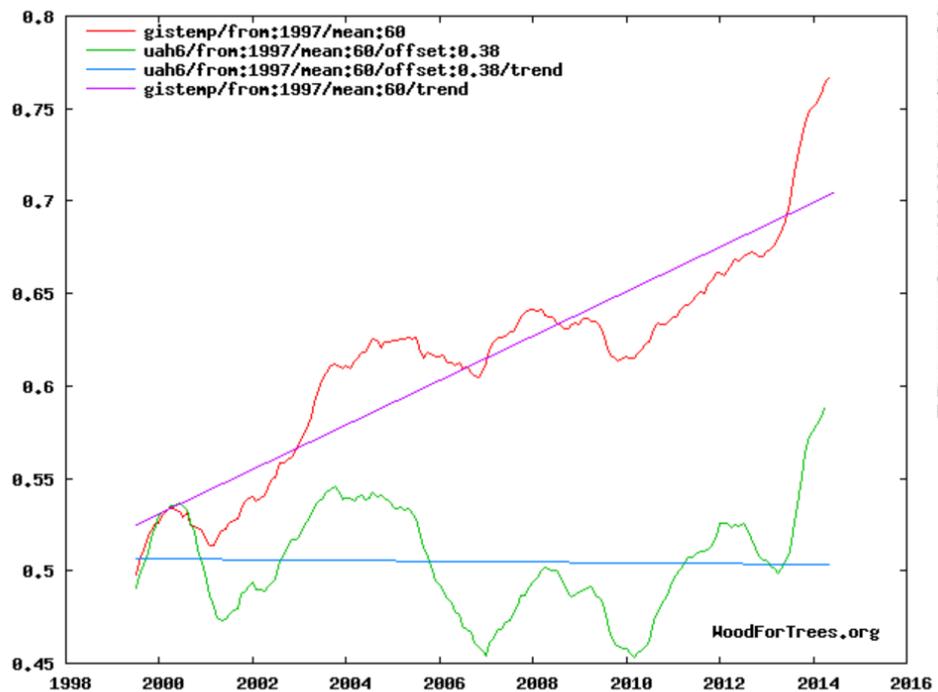


# A real issue results from comparing Surface Temperatures with Satellite-based Temperatures

Surface temperatures are sensed with Liquid-in-glass thermometers in Stephenson Screens. (Red line, below.)

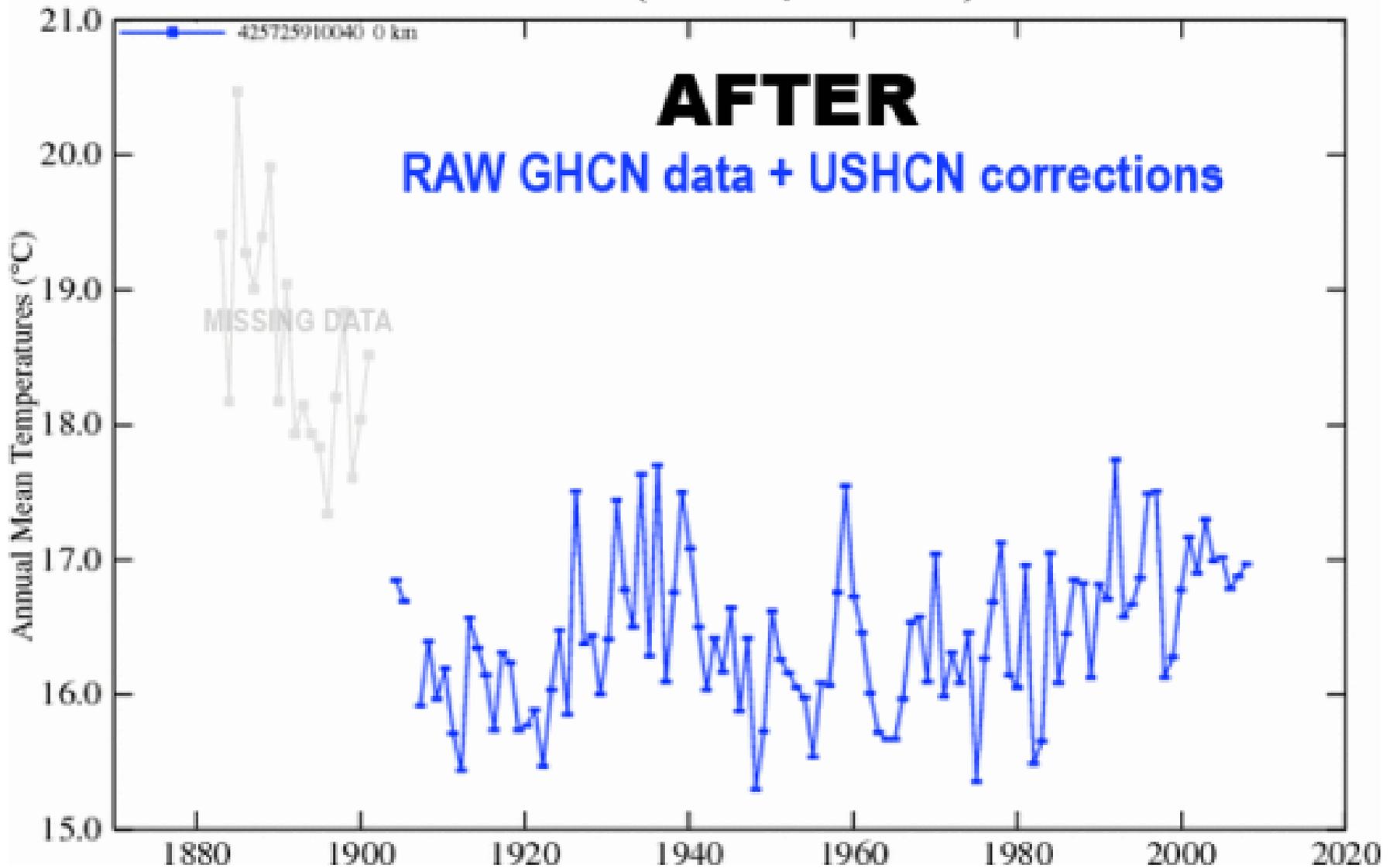
Satellite –sensed temperatures come from Microwave Sensing Units, MSUs, measuring emission of O2 in the microwave spectrum, in the Lower Troposphere, the atmosphere’s greenhouse (Green line, below)

The issue is, the Surface Warming is responding to a phenomenon different from the greenhouse gases in the greenhouse, the Lower Troposphere.

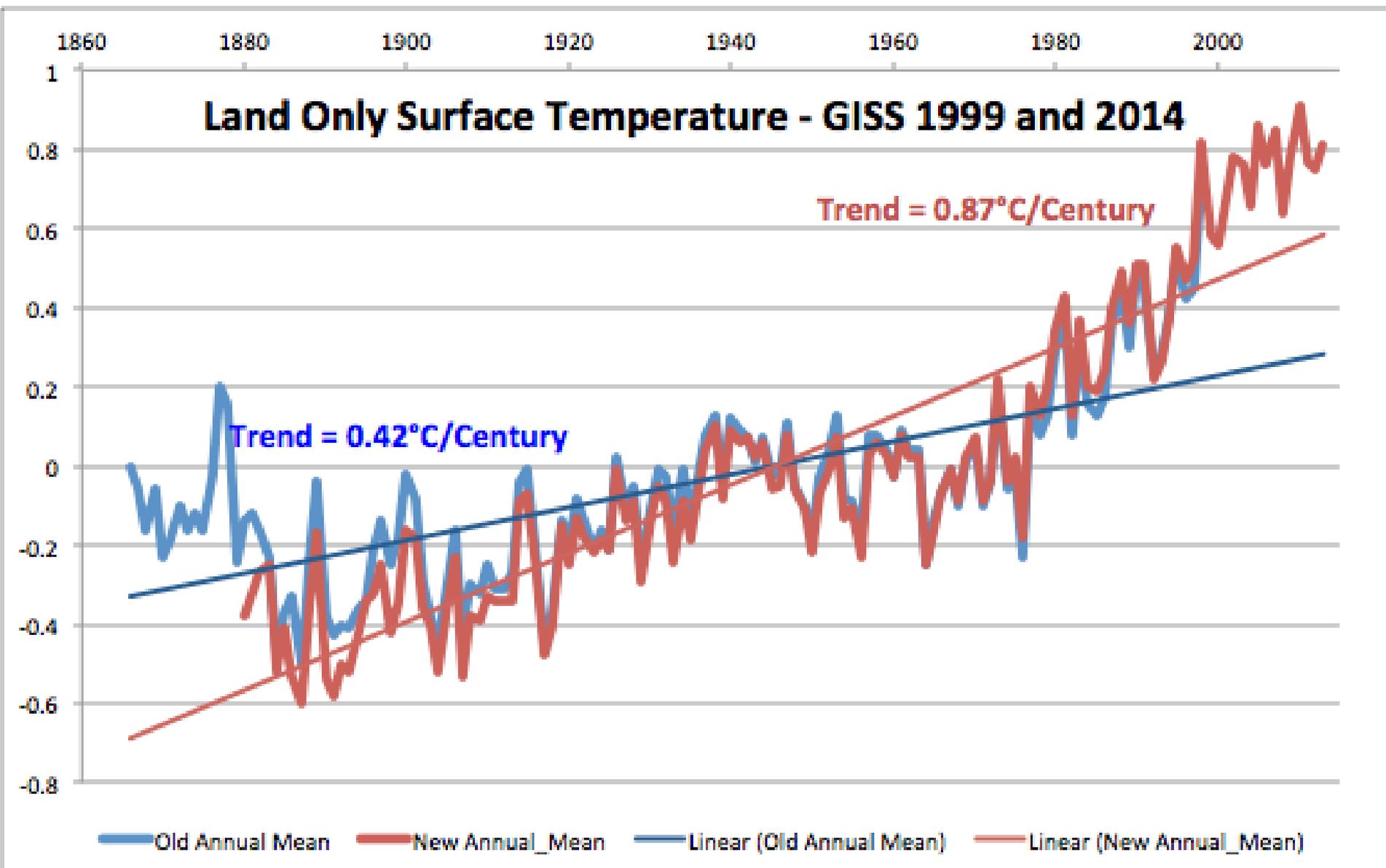


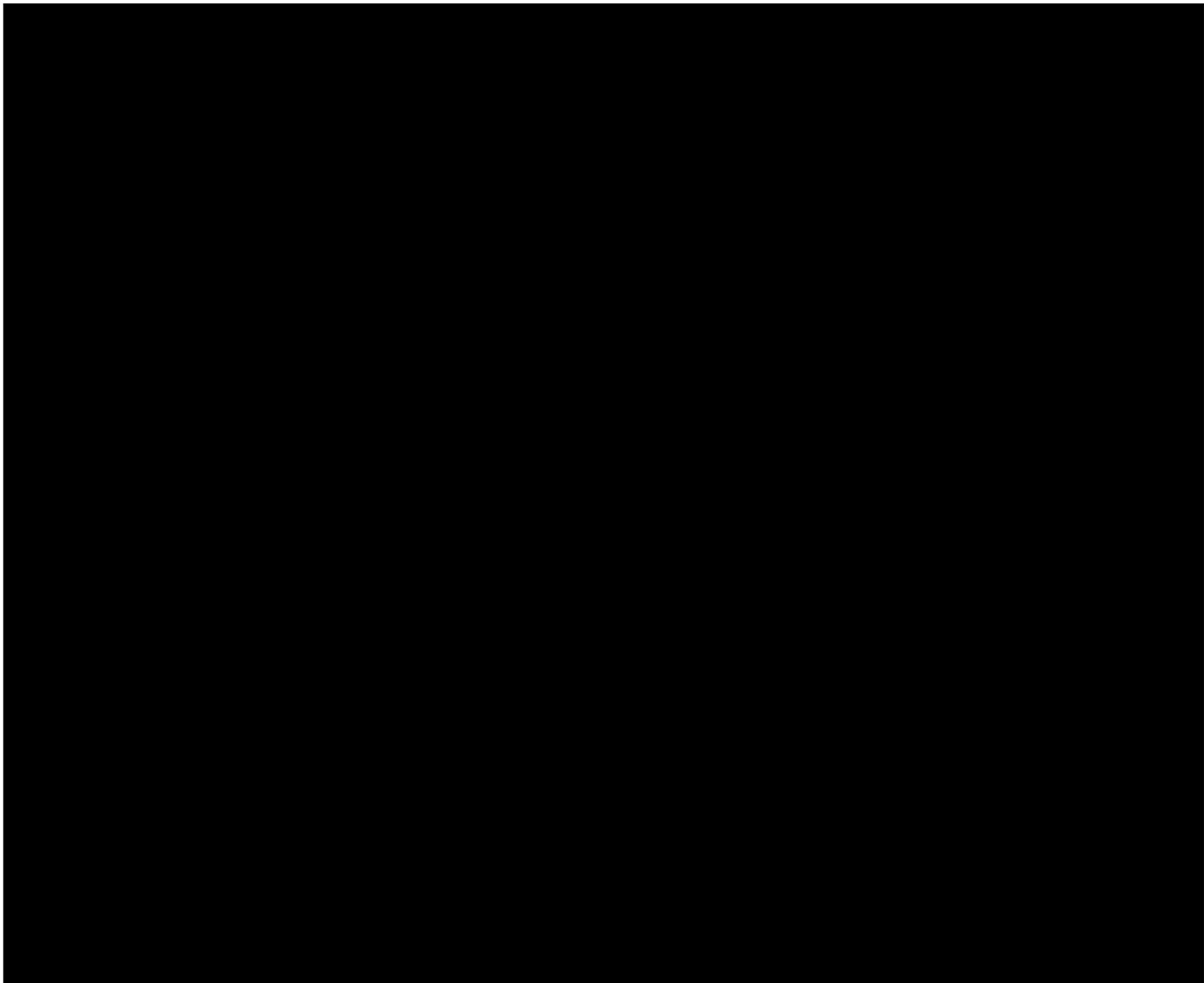
The truncation that we saw with Orland, California has extended beyond the USA  
And into the Global Data Set managed by NASA GISS.

Orland (39.8 N, 122.2 W)



<http://notrickszone.com/wp-content/uploads/2014/10/01010.png>  
<http://notrickszone.com/2014/10/15/giss-targeted-data-truncation-and-tricks-alone-produce-half-of-the-warming-trend-since-1880/>





## Summary for Policymakers

8. An increase in the percentage of compromised stations with interpolation to vacant data grids may make the warming bias greater than 50% of 20<sup>th</sup>-century warming.
9. In the oceans, data are missing and uncertainties are substantial. Changes in data sets introduced a step warming in 2009.
10. Satellite temperature monitoring has provided an alternative to terrestrial stations in compiling the global lower-troposphere temperature record. Their findings are increasingly diverging from the station-based constructions in a manner consistent with evidence of a warm bias in the surface temperature record.
11. Additional adjustments are made to the data which result in an increasing apparent trend. In many cases, adjustments do this by cooling off the early record.
12. Changes have been made to alter the historical record to mask cyclical changes that could be readily explained by natural factors like multi-decadal ocean and solar changes.
13. Due to recently increasing frequency of eschewing rural stations and favoring urban airports as the primary temperature data sources, global terrestrial temperature data bases are thus seriously flawed and can no longer be representative of both urban and rural environments. The resulting data is therefore problematic when used to assess climate trends or VALIDATE model forecasts.
14. An inclusive external assessment is essential of the surface temperature record of CRU, GISS and NCDC “chaired and paneled by mutually agreed to climate scientists who do not have a vested interest in the outcome of the evaluations.”
15. Reliance on the global data by both the UNIPCC and the US GCRP/CCSP should trigger a review of these documents assessing the base uncertainty of forecasts and policy language.