

Climate Dysfunction: The Facts of Global Warming. Political Science or Science Fiction ?

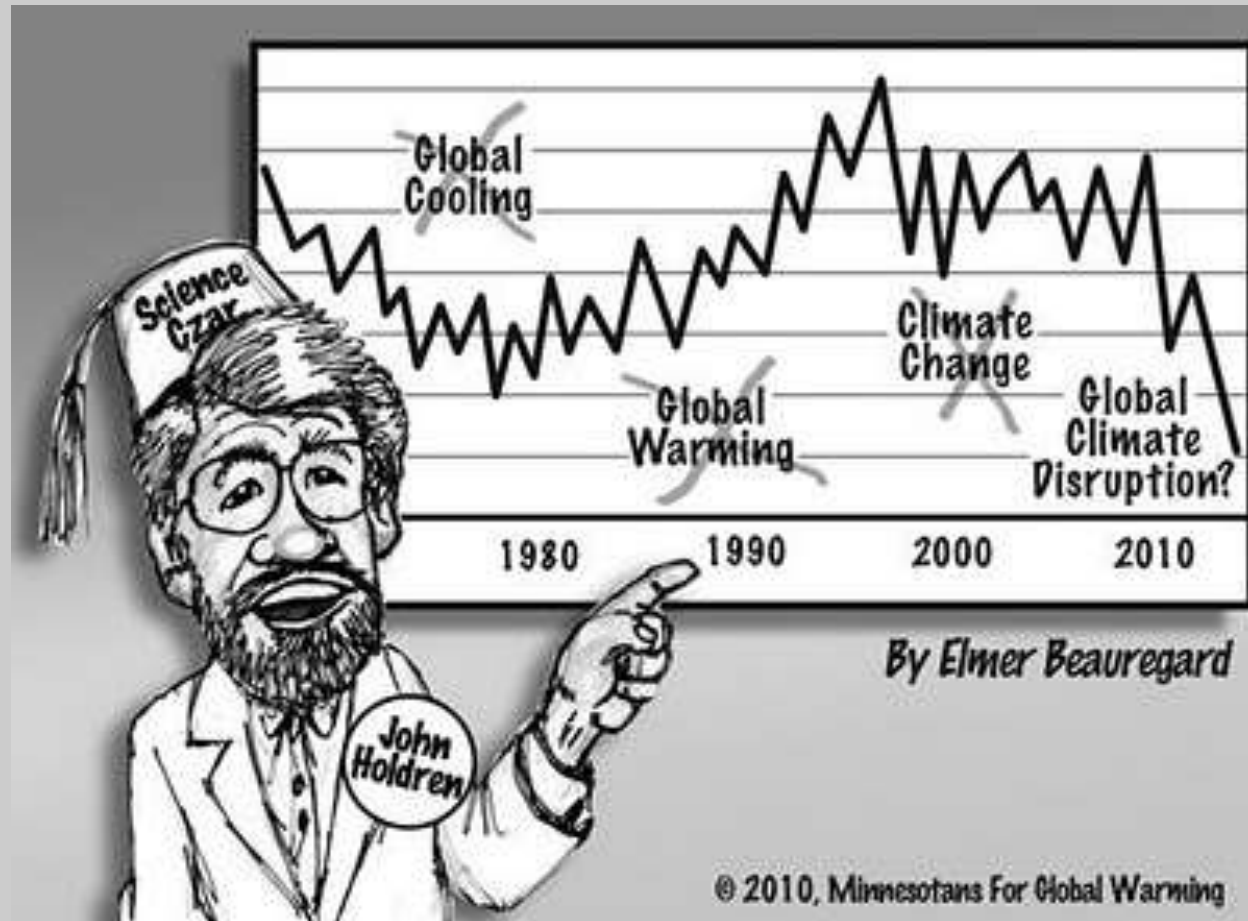
Dr. Richard A. Keen

**University of Colorado,
Boulder (Emeritus/Ret.)**

**Weather observer,
Coal Creek Canyon, CO**

richard2keen@gmail.com

**Good Neighbor Forum
Castle Rock, CO
September 2012**



**My thoughts on climate are tainted
by my background as a...**

Climate researcher

Astronomer

Reporter & Author

Photographer

Mountaineer & Glaciologist

Storm chaser

Army Met guy

Weather observer

Weather “historian”

Talking Head

IPCC WG1 AR5 Expert Reviewer

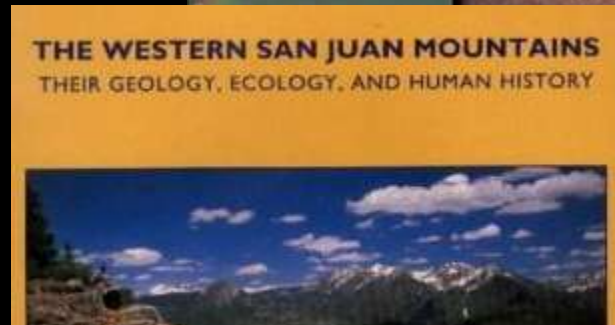
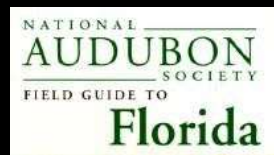
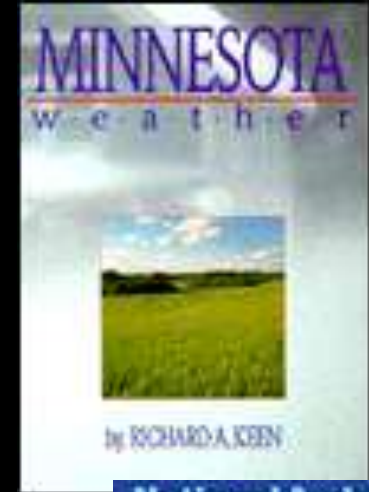
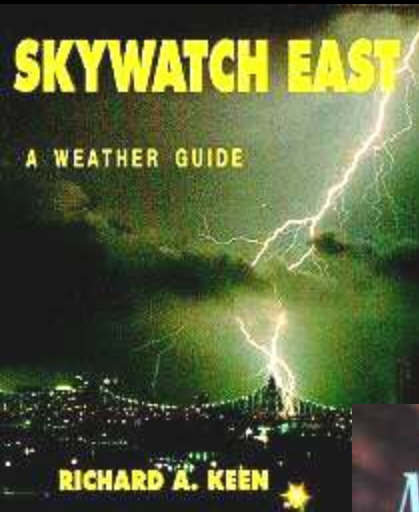
Taxpayer

**I’ve also done some climate modeling,
but that was in my reckless youth.**

I prefer working with data.



I write books, too. About weather.



Talking Head credit:
The boy who cried warming
<http://vimeo.com/47182591>



**And a PhD thesis about climate change in the Arctic.
Conclusion: jet stream winds and storm tracks are the major factors.**

**TEMPERATURE AND CIRCULATION ANOMALIES
IN THE EASTERN CANADIAN ARCTIC
SUMMER 1946-76**

Richard A. Keen



**Occasional Paper No. 34
1980**

INSTITUTE OF ARCTIC AND ALPINE RESEARCH • UNIVERSITY OF CALIFORNIA

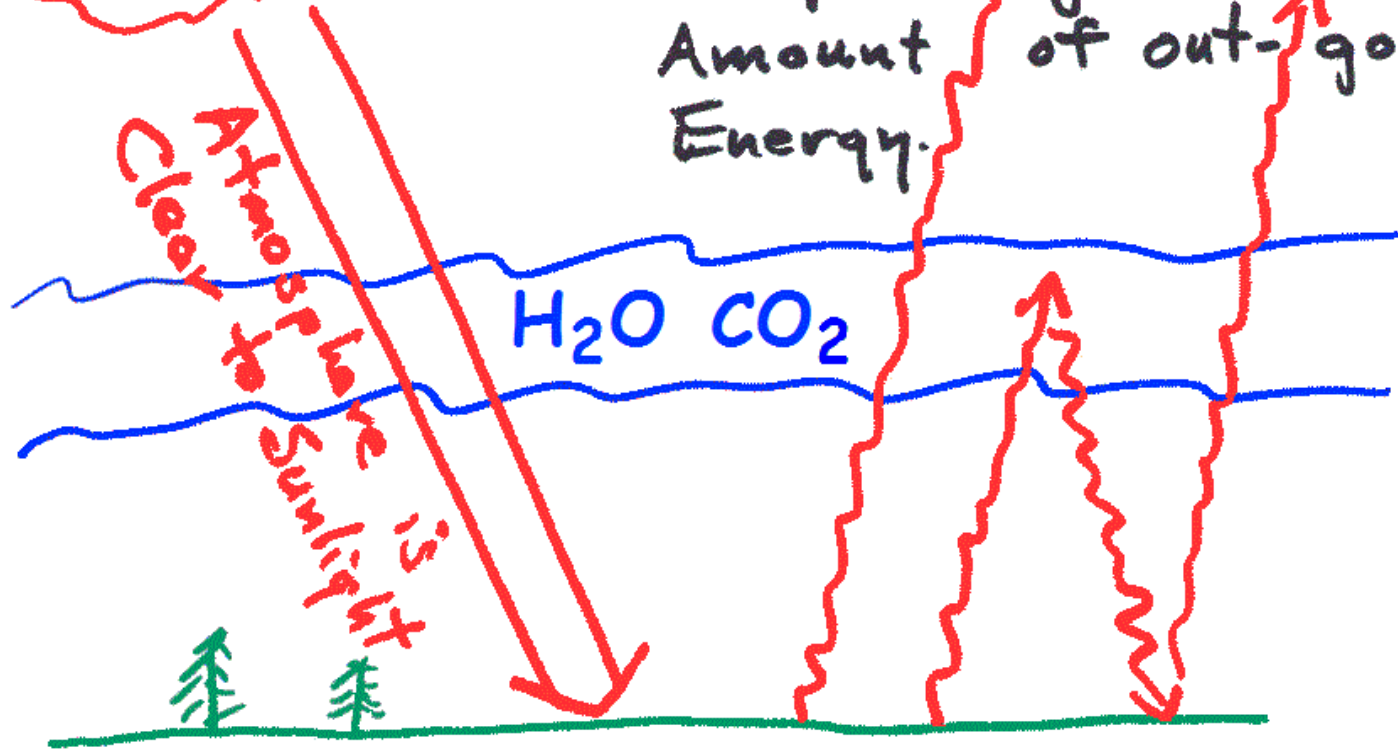


The Science

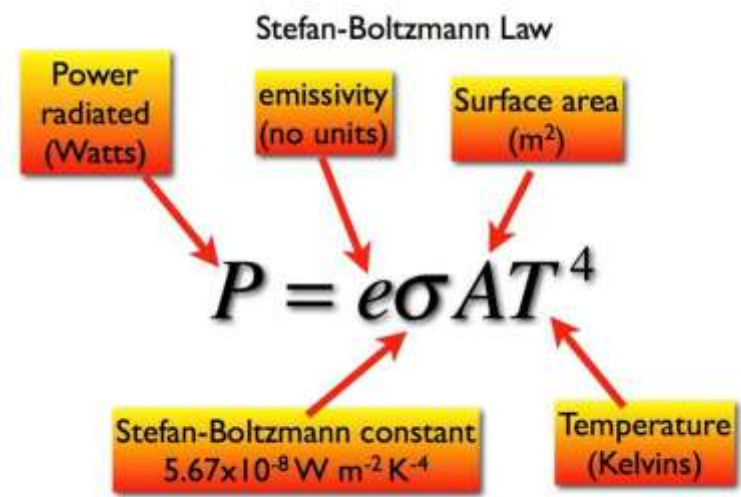
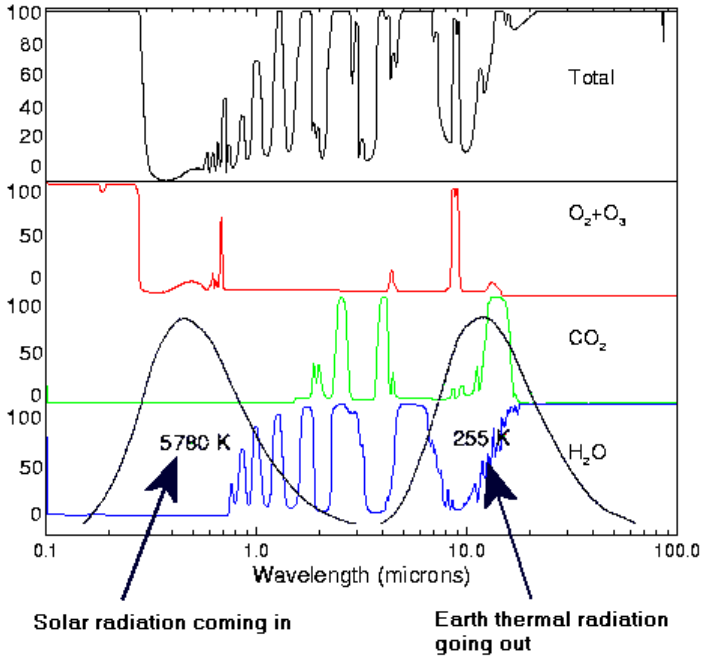
“It’s High-School Physics”



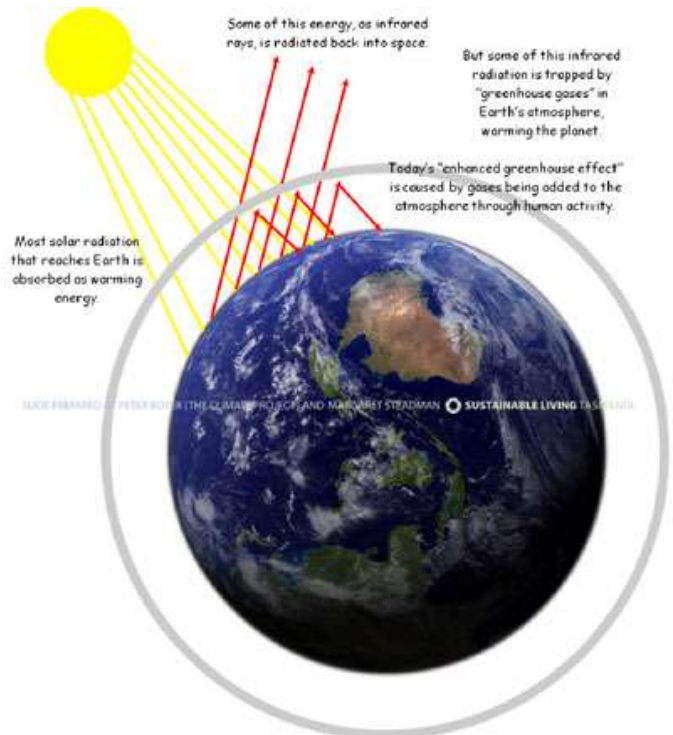
CO₂ absorbs some outgoing IR, re-emits some back to Earth, Raising Earth's surface Temp. to get same Amount of out-going Energy.



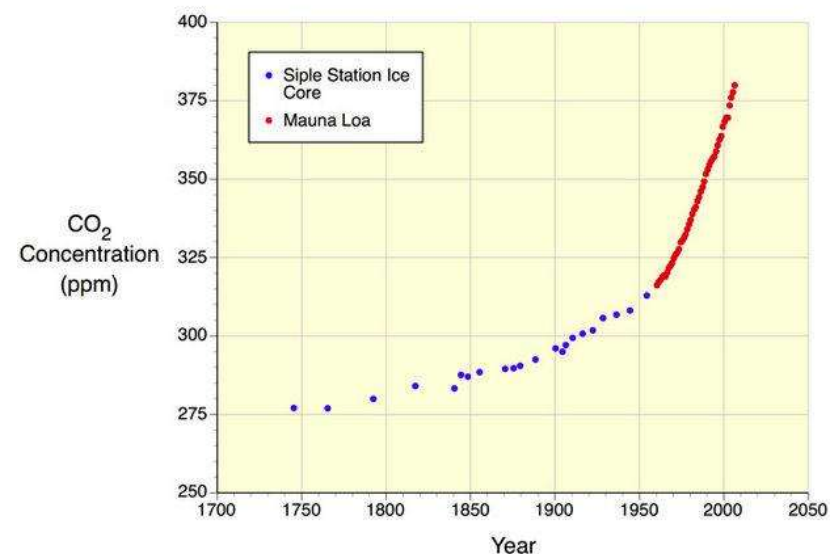
"Greenhouse" Effect



Theory, equations, charts, and numbers



Atmospheric Concentration of Carbon Dioxide (1744-2005)



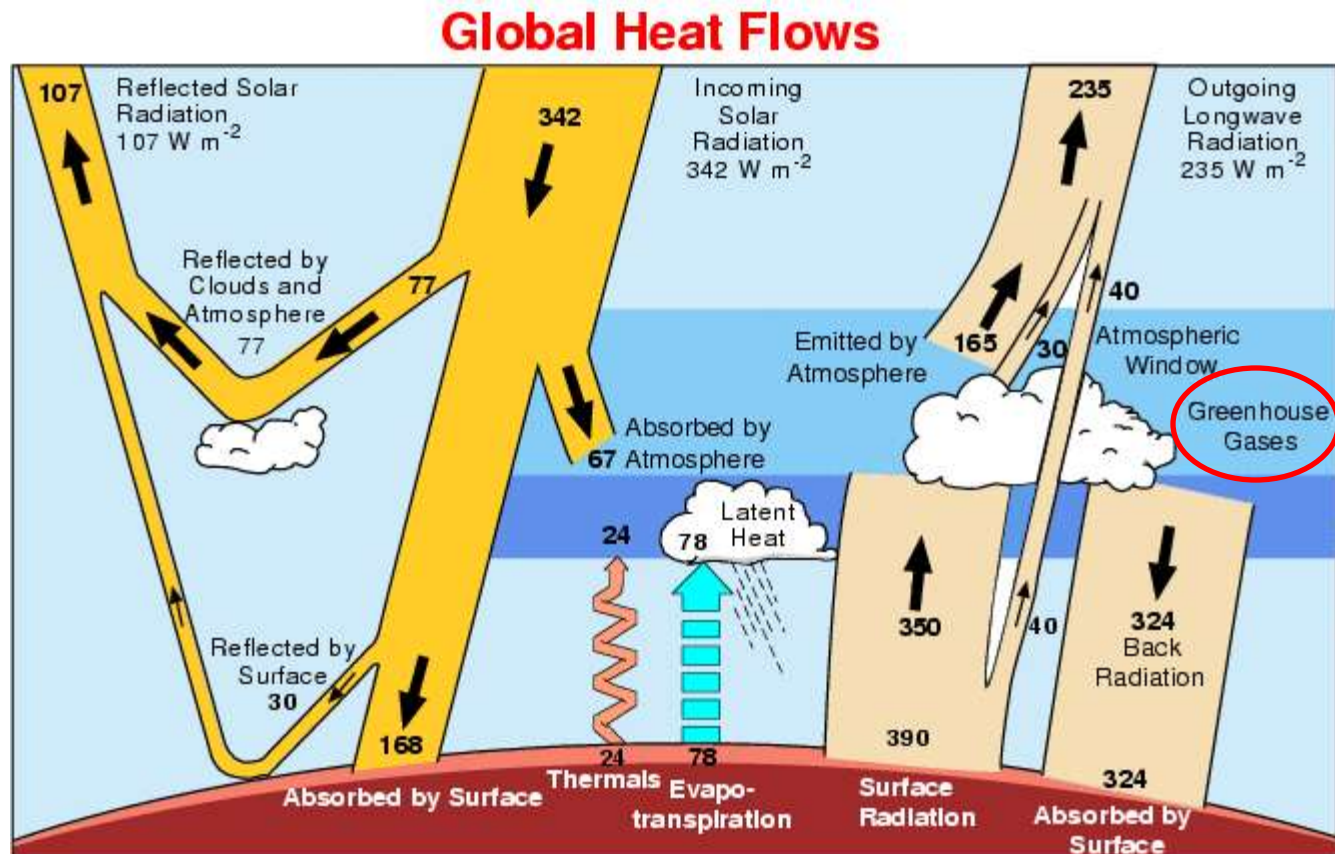
**Let's grab 10,000 air molecules.
Since 1800, humans have added
ONE CO₂ molecule.**

“High School” physics gives.....

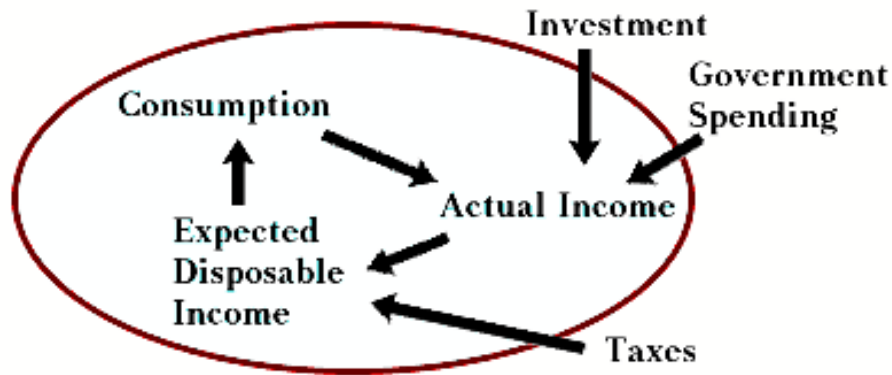
0.2°C warming

**compared to the 33°C natural
greenhouse effect
(due mostly to a hundred H₂O
molecules)**

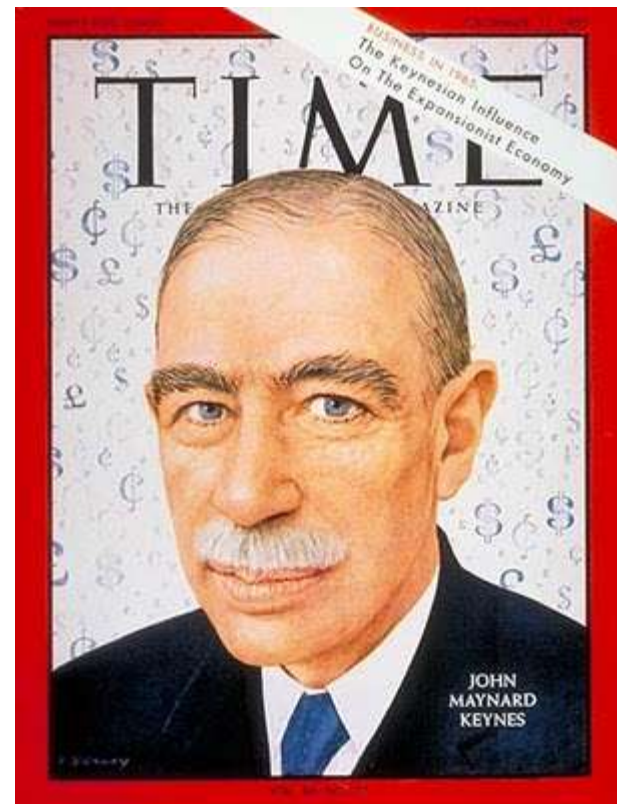
**Fortunately, the atmosphere is complex enough to give modelers excuses to raise the warming effect.
Just throw in some Feedbacks.**



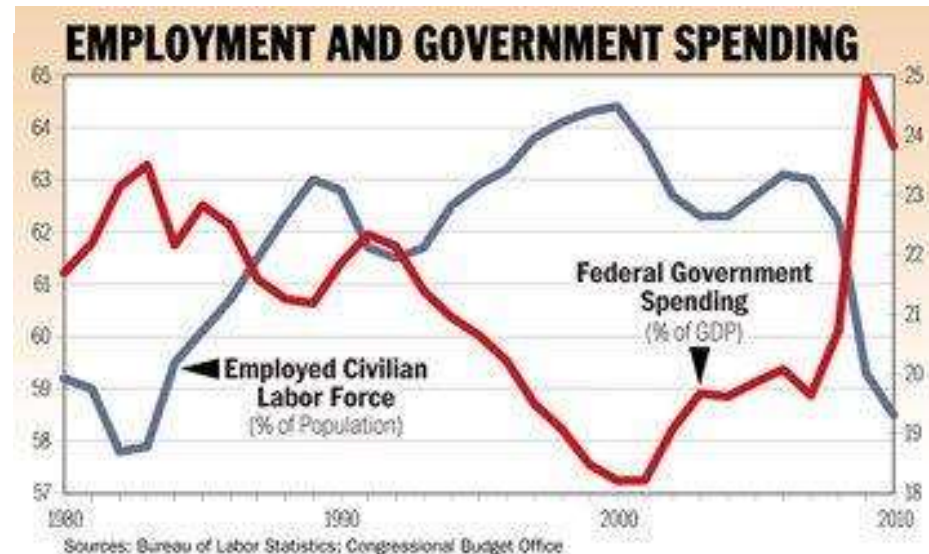
Feedback = Keynesian Multiplier effect ...



Cause and effect in the simple income-expenditure model.



... data may not verify theory

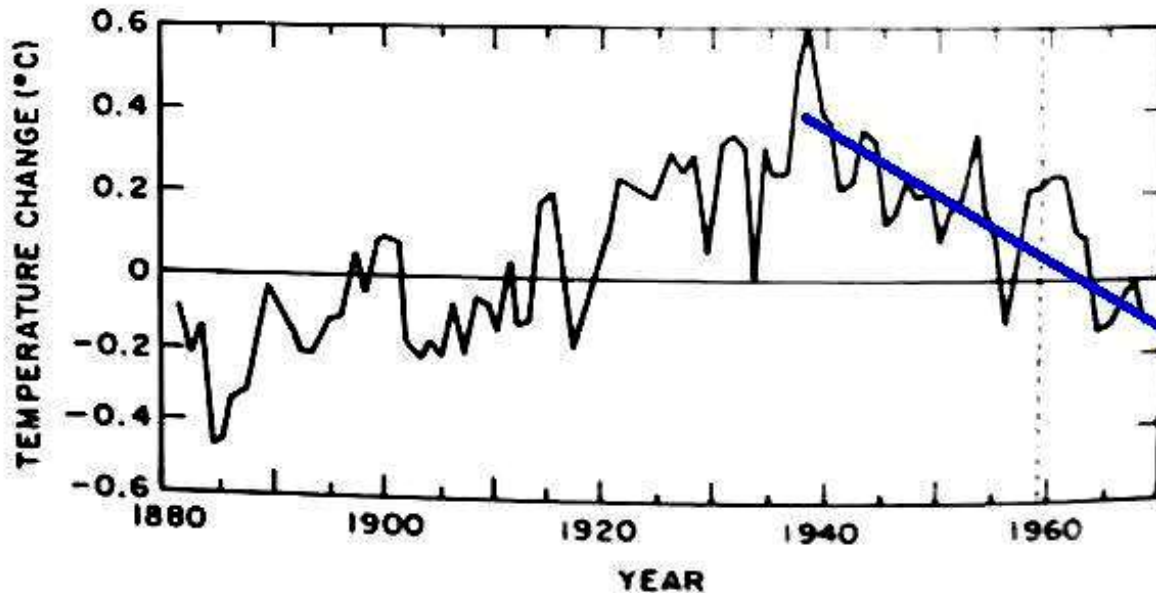


Data.

The observed climate.

**When I wrote that Ph.D. thesis,
a new ice age seemed a possibility
(by some scientists, including current “warmers”
and the media).**

Global Temperatures
(from Budyko & Asakura)



1963: Cooling

 nature publishing group

nature

article

Nature **242**, 310 - 313 (30 March 1973); doi:10.1038/242310a0

Five-Year Climatic Trend for the Northern Hemisphere

VICTOR P. STARR* & ABRAHAM H. OORT†

*Massachusetts Institute of Technology, Cambridge, Massachusetts

†Geophysical Fluid Dynamics Laboratory/NOAA, Princeton University, Princeton, New Jersey

Between May 1958 and April 1963 the mean temperature of the atmosphere in the northern hemisphere fell by about 0.60° C. The data which lead to this conclusion are presented in this article.

1977: Still Cooling

 nature publishing group

nature

article

Nature **270**, 573 - 580 (15 December 1977); doi:10.1038/270573a0

New data on climatic trends

G. J. Kukla^{*}, J. K. Angell[†], J. Korshover[†], H. Dronia[‡], M. Hoshiai[§], J. Namias ,
M. Rodewald[¶], R. Yamamoto[§] & T. Iwashima

Indicators of large-scale climate developments show that the oscillatory cooling observed in the past 30 yr in the Northern Hemisphere has not yet reversed. This conclusion was reached by updating our data on the month-to-month, season-to-season, and year-to-year variations of selected zonally averaged meteorological parameters.

Of course, the ice age was going to be caused by humans.

30 December 1976

737



Atmospheric Carbon Dioxide and Aerosols: Effects of Large Increases on Global Climate

Abstract. Effects on the global temperature of large increases in carbon dioxide and aerosol densities in the atmosphere of Earth have been computed. It is found that, although the addition of carbon dioxide in the atmosphere does increase the surface temperature, the rate of temperature increase diminishes with increasing carbon dioxide in the atmosphere. For aerosols, however, the net effect of increase in density is to reduce the surface temperature of Earth. Because of the exponential dependence of the backscattering, the rate of temperature decrease is augmented with increasing aerosol content. An increase by only a factor of 4 in global aerosol background concentration may be sufficient to reduce the surface temperature by as much as 3.5°K. If sustained over a period of several years, such a temperature decrease over the whole globe is believed to be sufficient to trigger an ice age.

“sufficient to trigger an ice age”

26. We again thank Dr. J. E. Hansen for his many contributions. The work was done while S.H.S. held a NAS-NRS resident research associateship at the Institute for Space Studies, Goddard Space Flight Center, NASA.

7 April 1971; revised 18 May 1971

S. I. RASOOL
S. H. SCHNEIDER
*Institute for Space Studies, Goddard
Space Flight Center, National
Aeronautics and Space Administration,
New York 10025*



The future looked cold and ominous in this Science News depiction from March 1, 1975.

“Scientists Ponder Why World’s Climate is Changing; A Major Cooling Widely Considered to Be Inevitable”

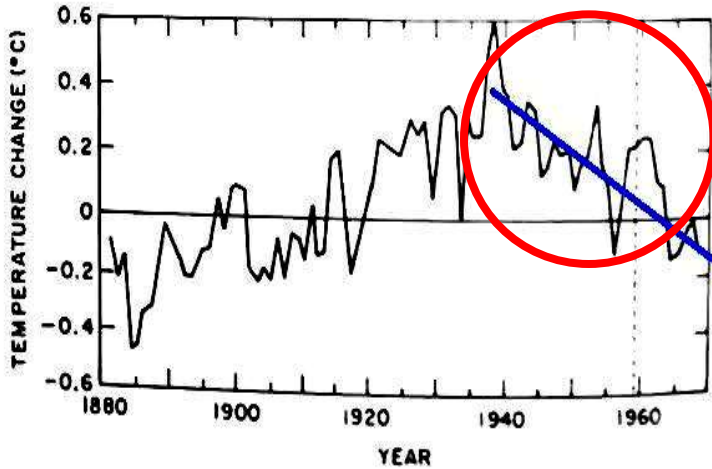
—The New York Times
May 21, 1975

Strangely, the Ice Age didn't happen.

Matter of fact, the GW community has done their best to cleanse it from the record!

The Warmers now deny that there ever was a cooling trend, or that they ever predicted further cooling.

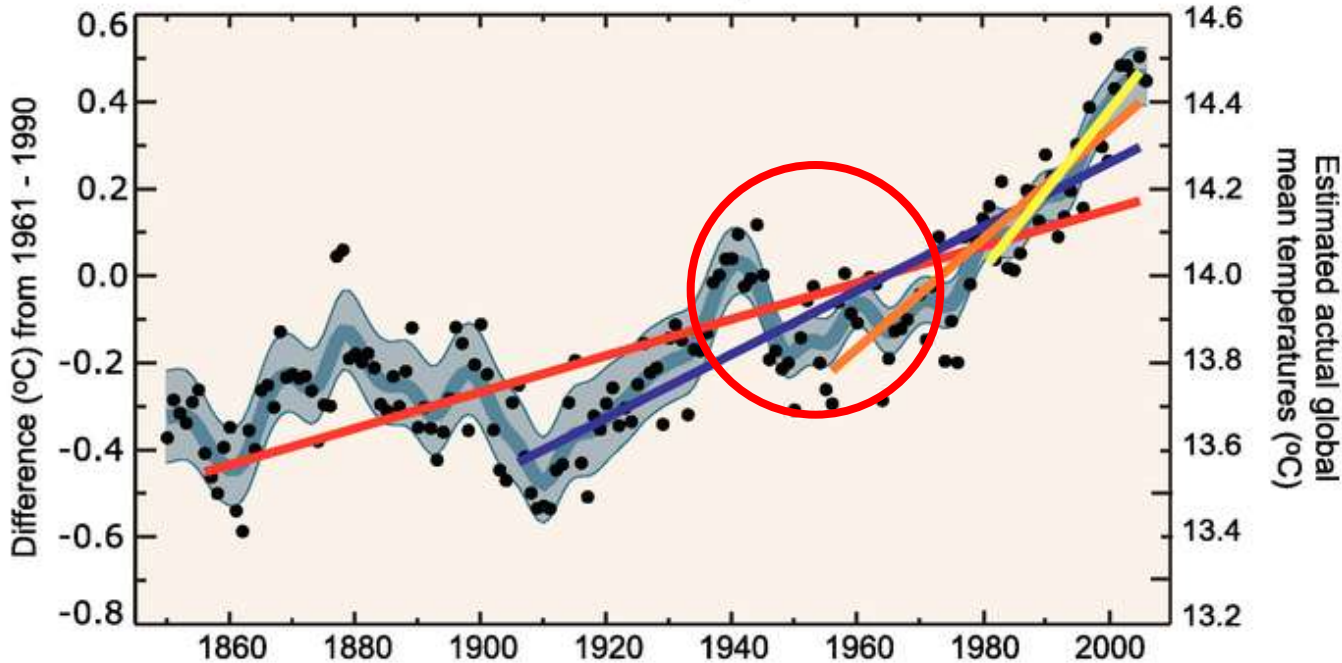
Global Temperatures
(from Budyko & Asakura)



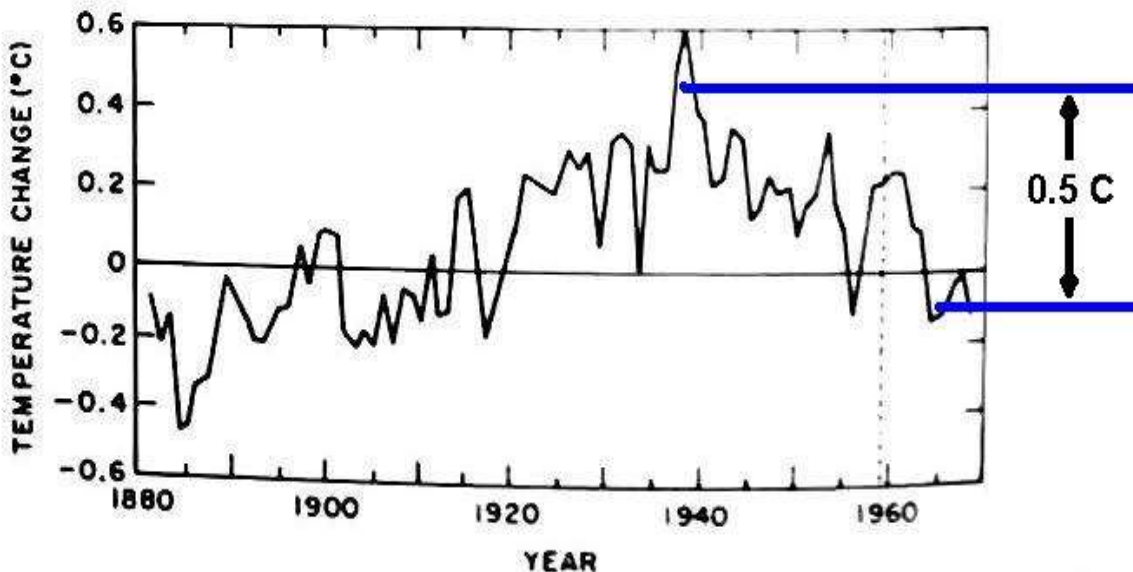
**Version 1975 (top)
vs.
version 2005 (bottom)**



Global Mean Temperature



Global Temperatures
(from Budyko & Asakura)

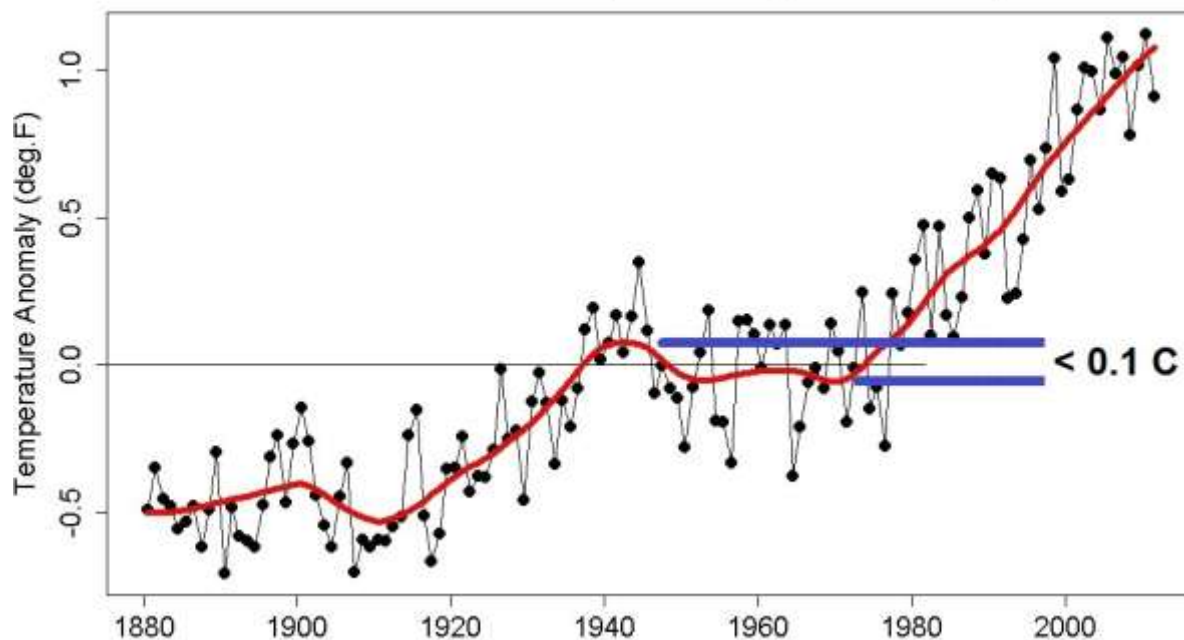


**Recent “adjustments”
nearly eliminate the
depth of the 1960’s
“micro ice age”.**

**This makes recent
warming look better.**

**The 1960’s “Micro Ice
Age” and 1930’s “Dust
Bowl Maximum” are
reduced to minor
blips.**

Global Temperature (NASA 2012)

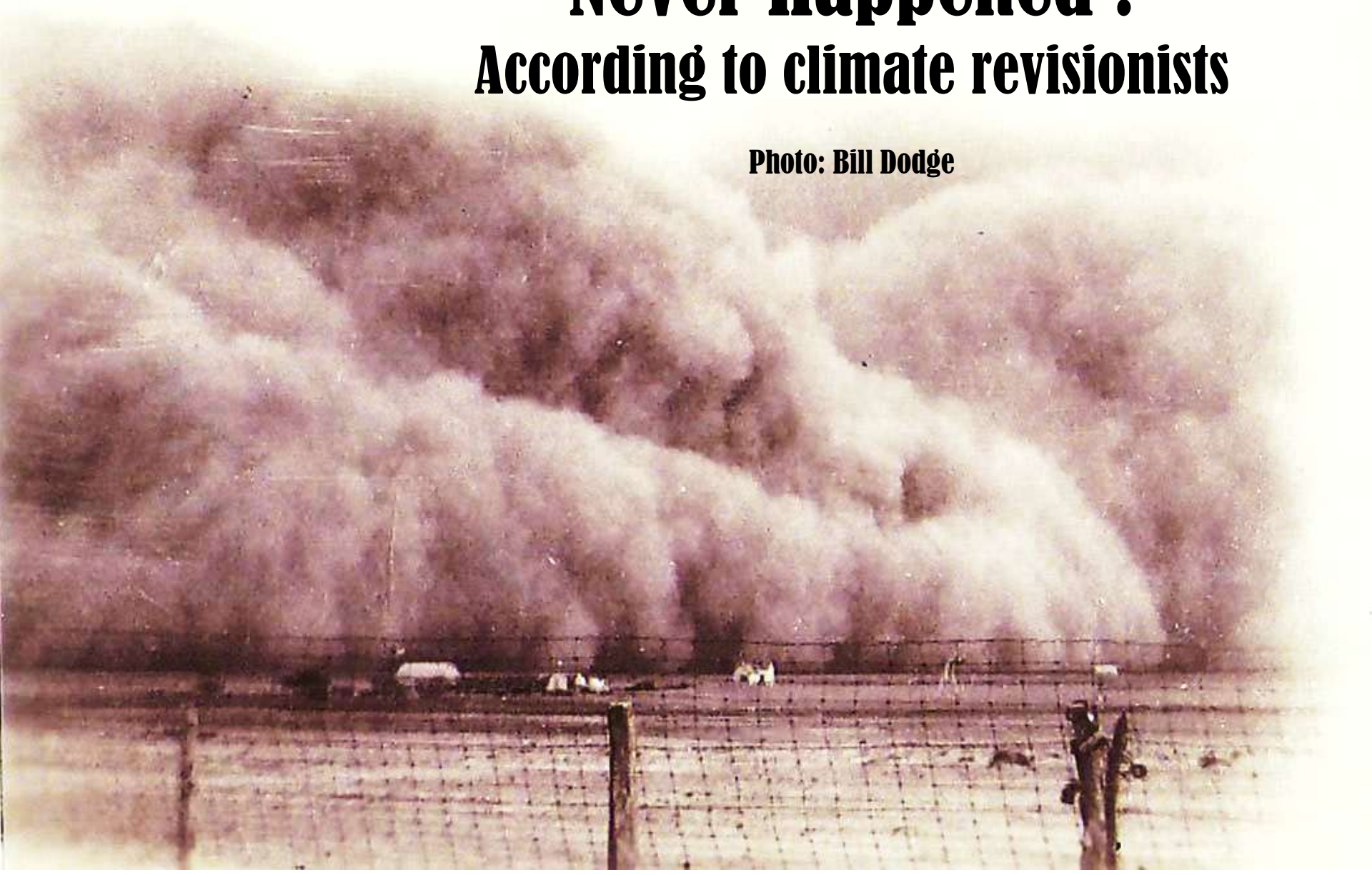


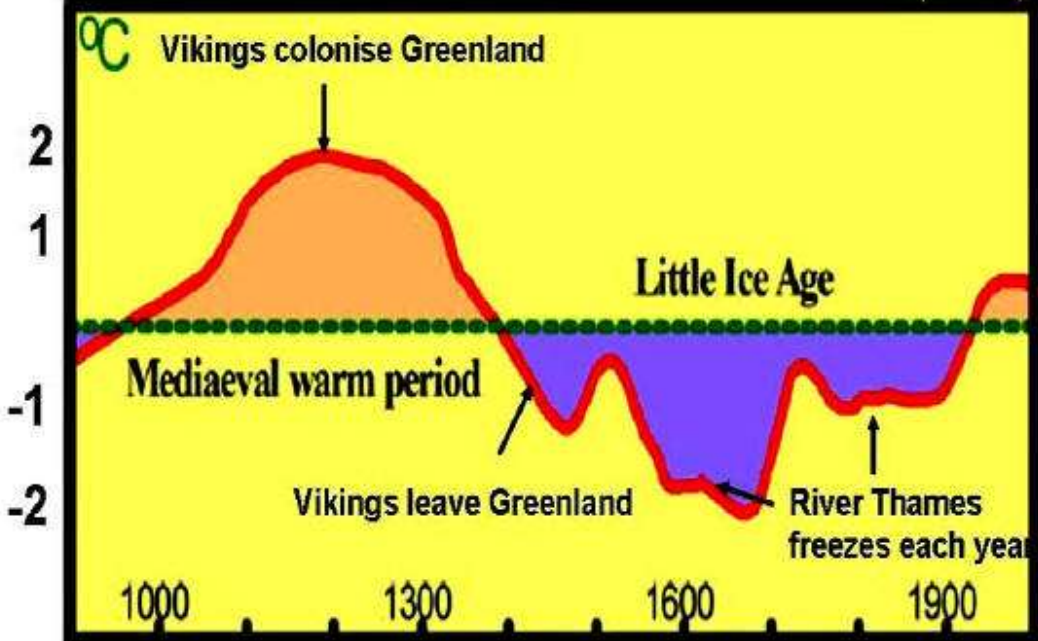
Grenada Colorado, 1934

Never Happened !

According to climate revisionists

Photo: Bill Dodge

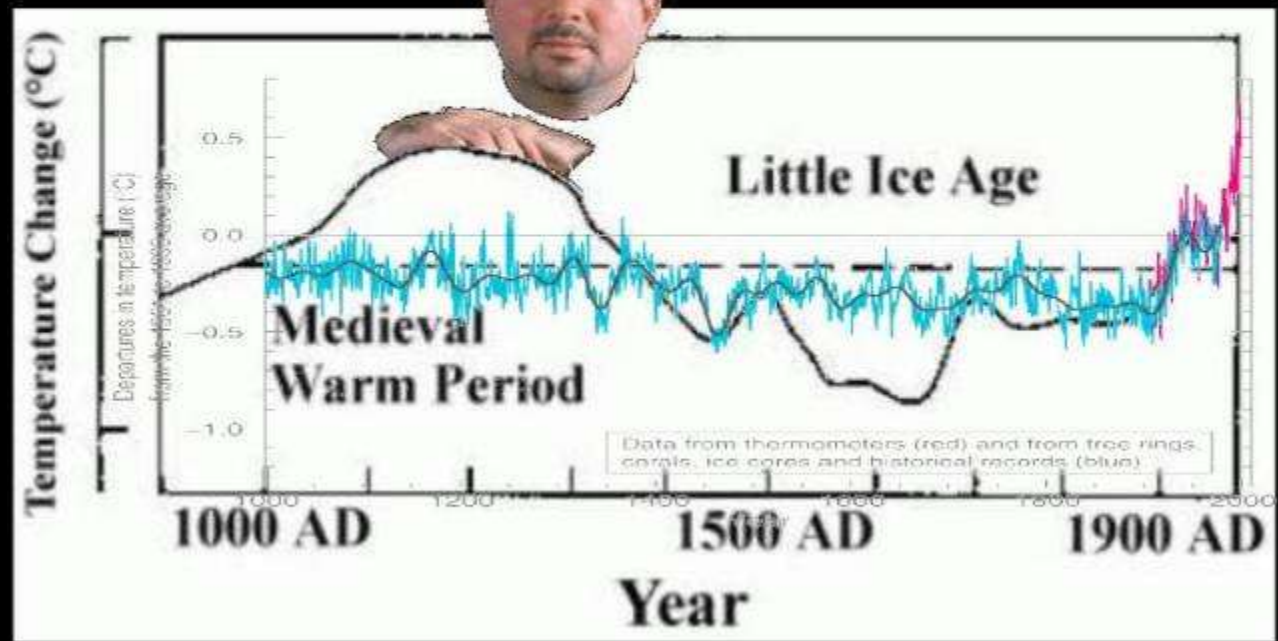




Likewise, the 1600's Little Ice Age and the 1000 AD Medieval Warm period are removed to highlight the recent warming.

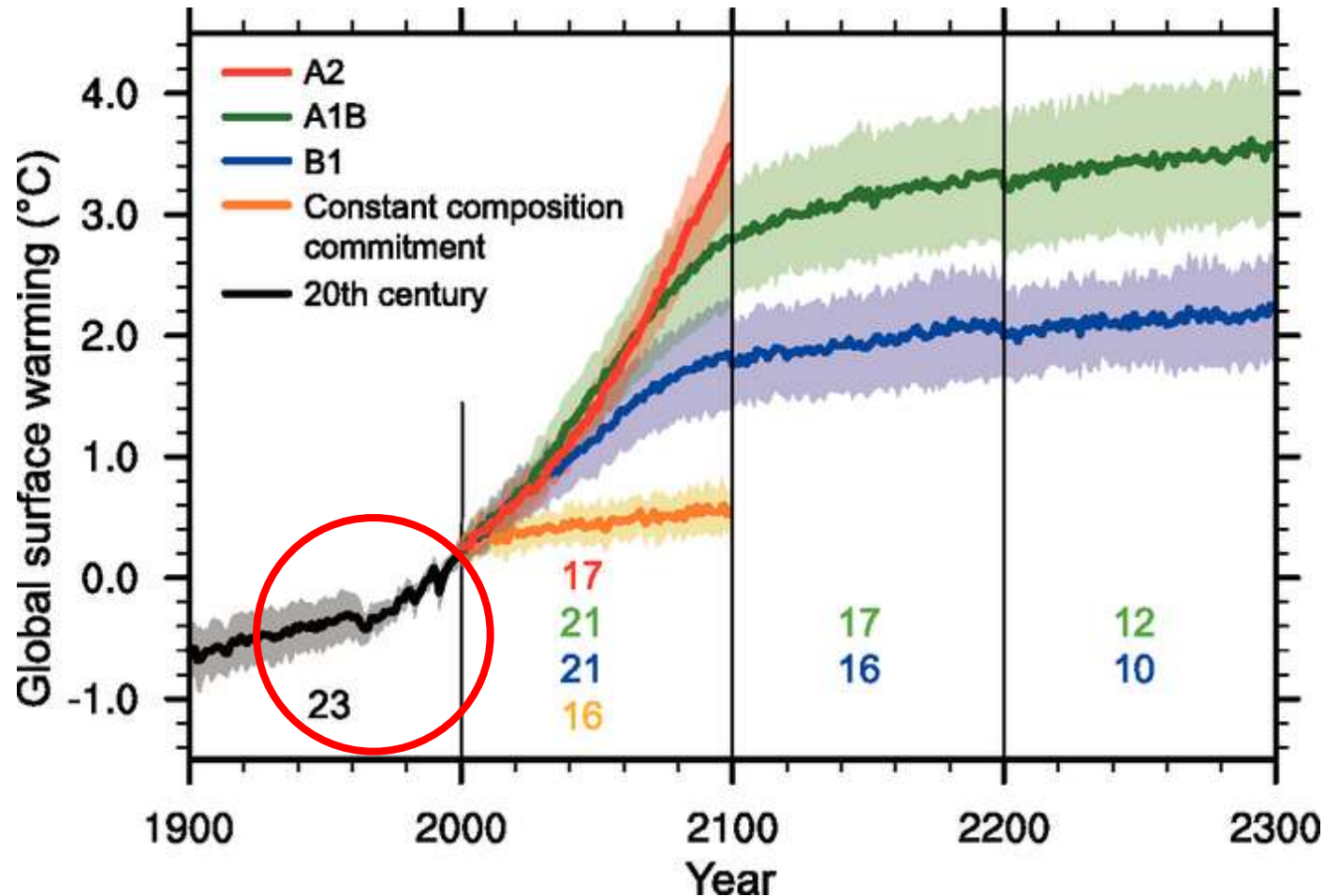
Medieval warm period? Yes. This drawing of a graph in the IPCC's 1990 report shows it clearly.

**Mann-made warming:
the Hockey Stick**



WHY do they do this?

So the “data” fits their models.



**“People underestimate the power of models.
Observational evidence is not very useful.”**

-- John Mitchell, Chief Scientist at the UK Met Office & IPCC

**Erasing past events from history has been
done before.**

Commisar Yezhov would understand.



**Erasing past events from history has been
done before.
Commisar Yezhov would understand.**



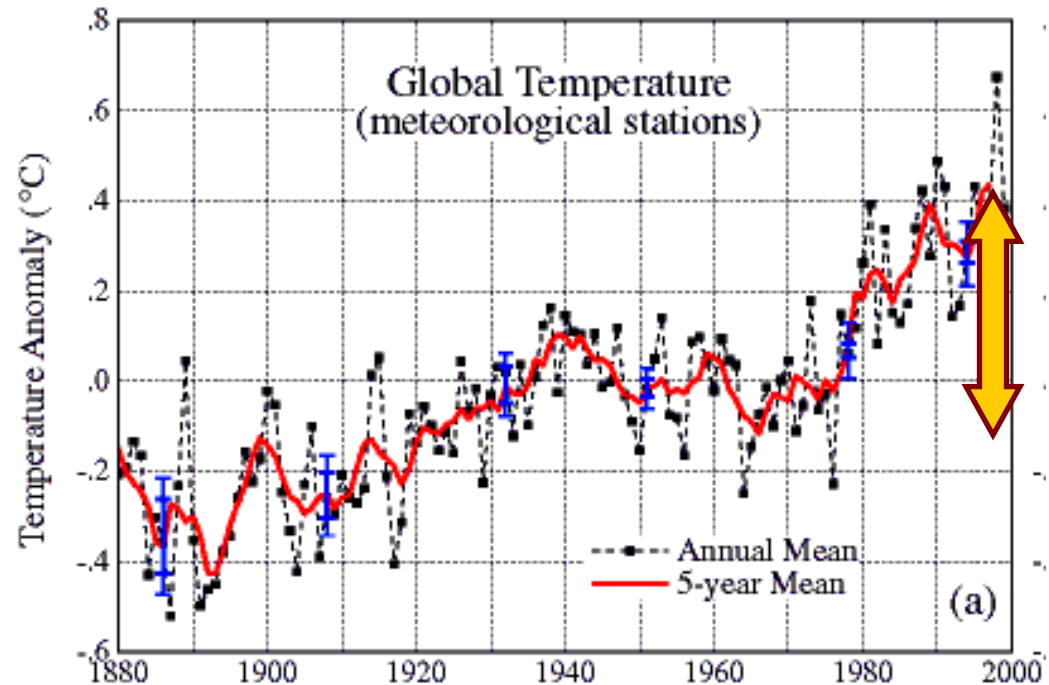
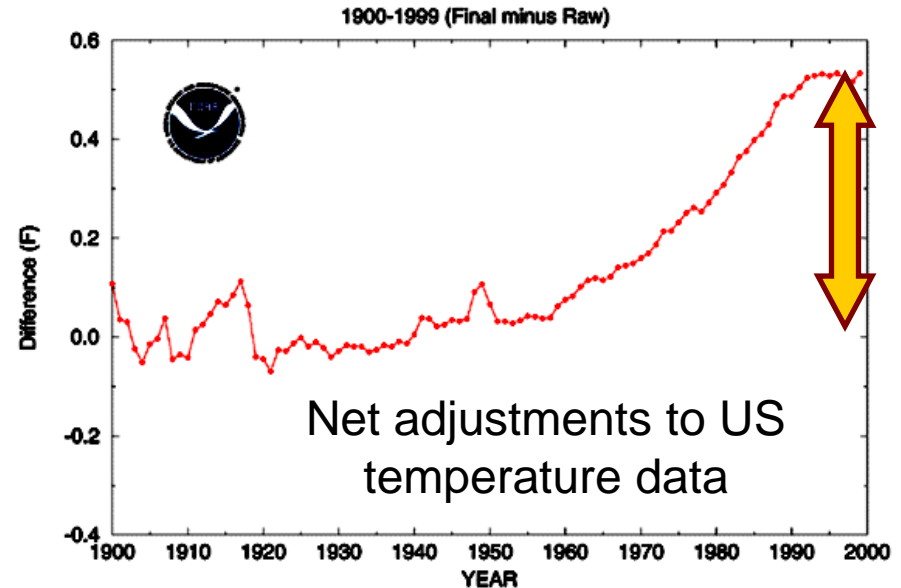
How do they rewrite climate history?

Part I.

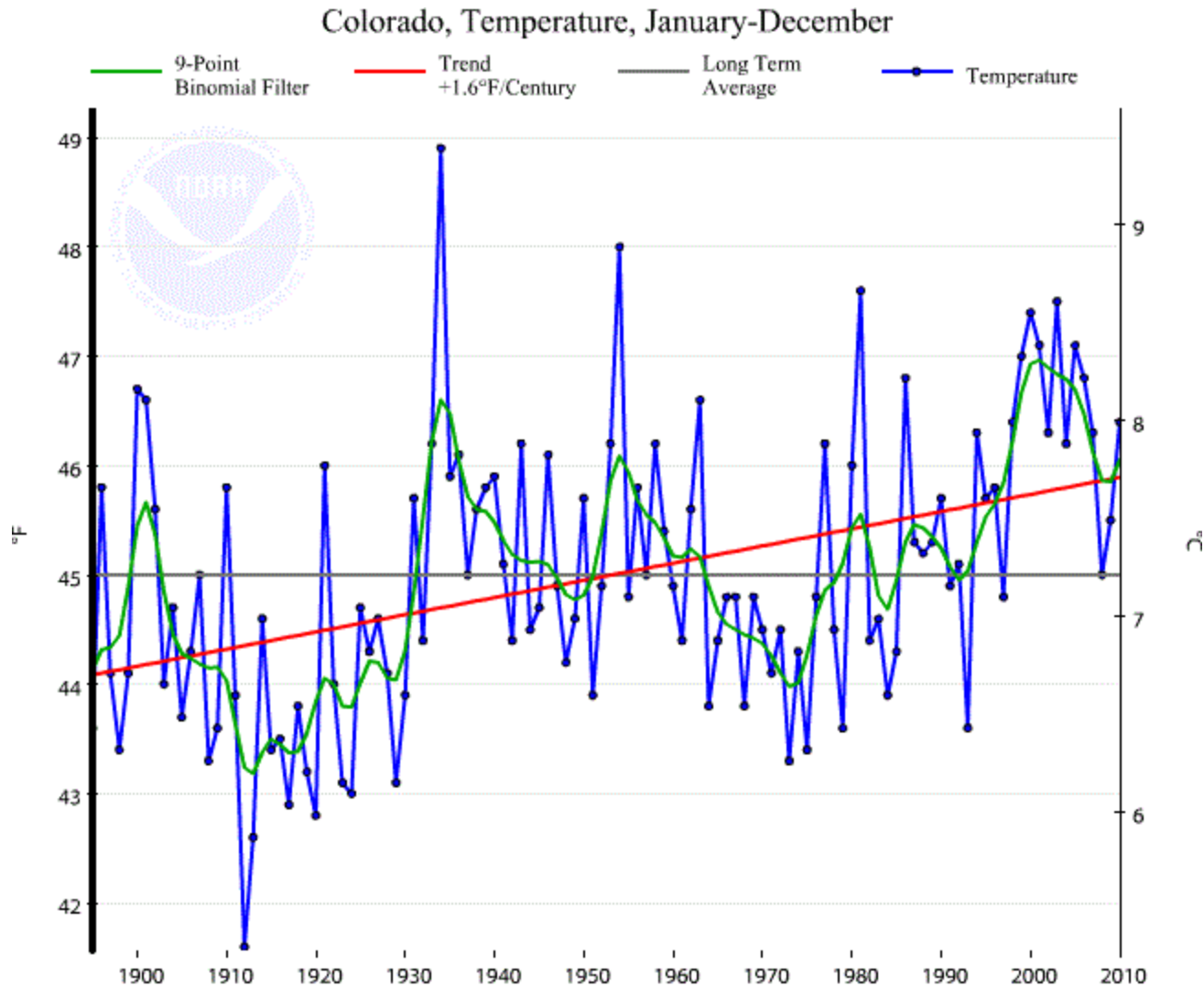
“Correcting” the data.

Curiously, the 0.5 C “warming” between 1950 and 2000 is equal to the upward “adjustments” to the data !!!

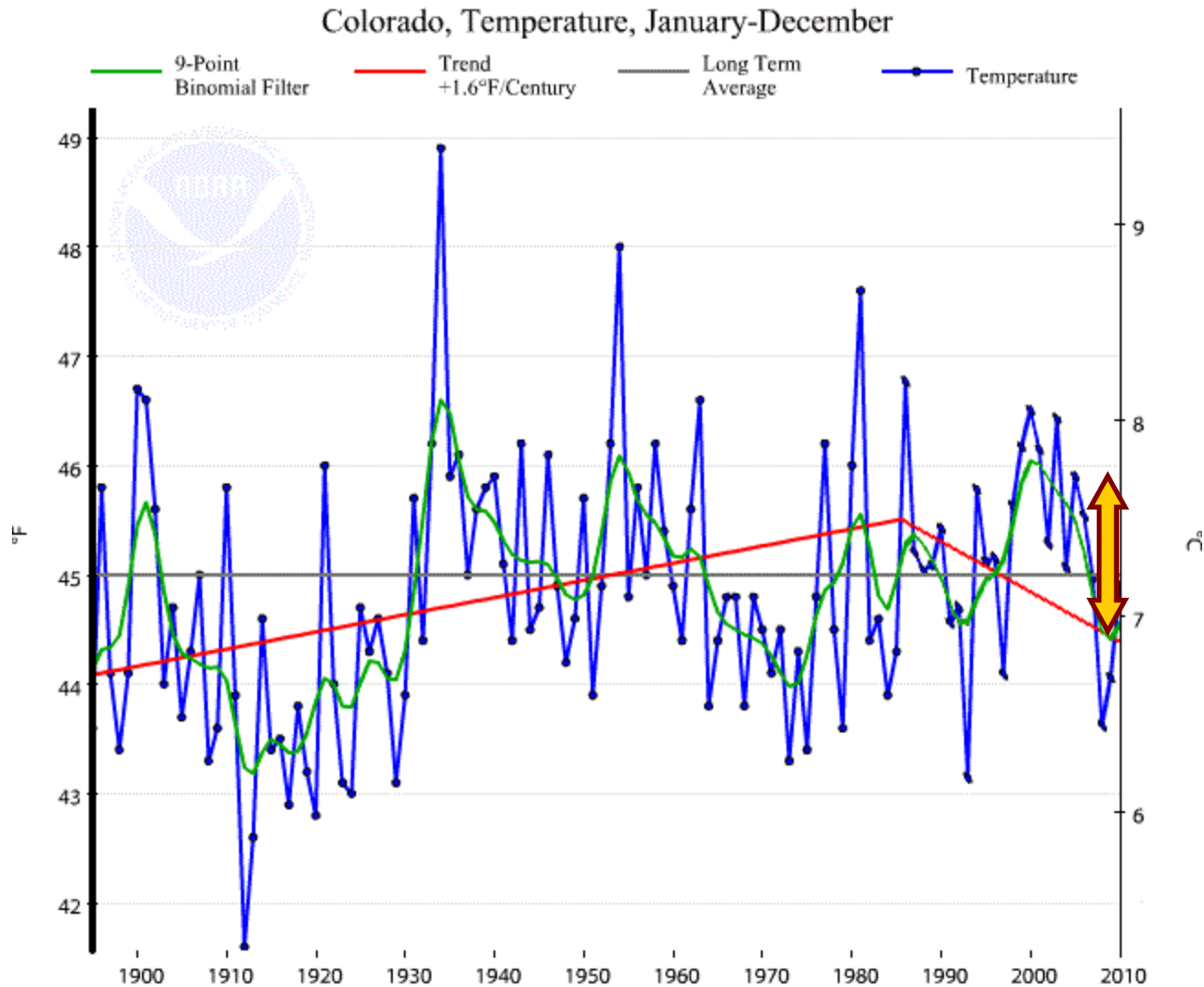
DIFFERENCE BETWEEN RAW AND FINAL USHCN DATA SETS



Removing those “corrections” changes the story.



Removing those “corrections” changes the story.



Another way to rewrite climate history...

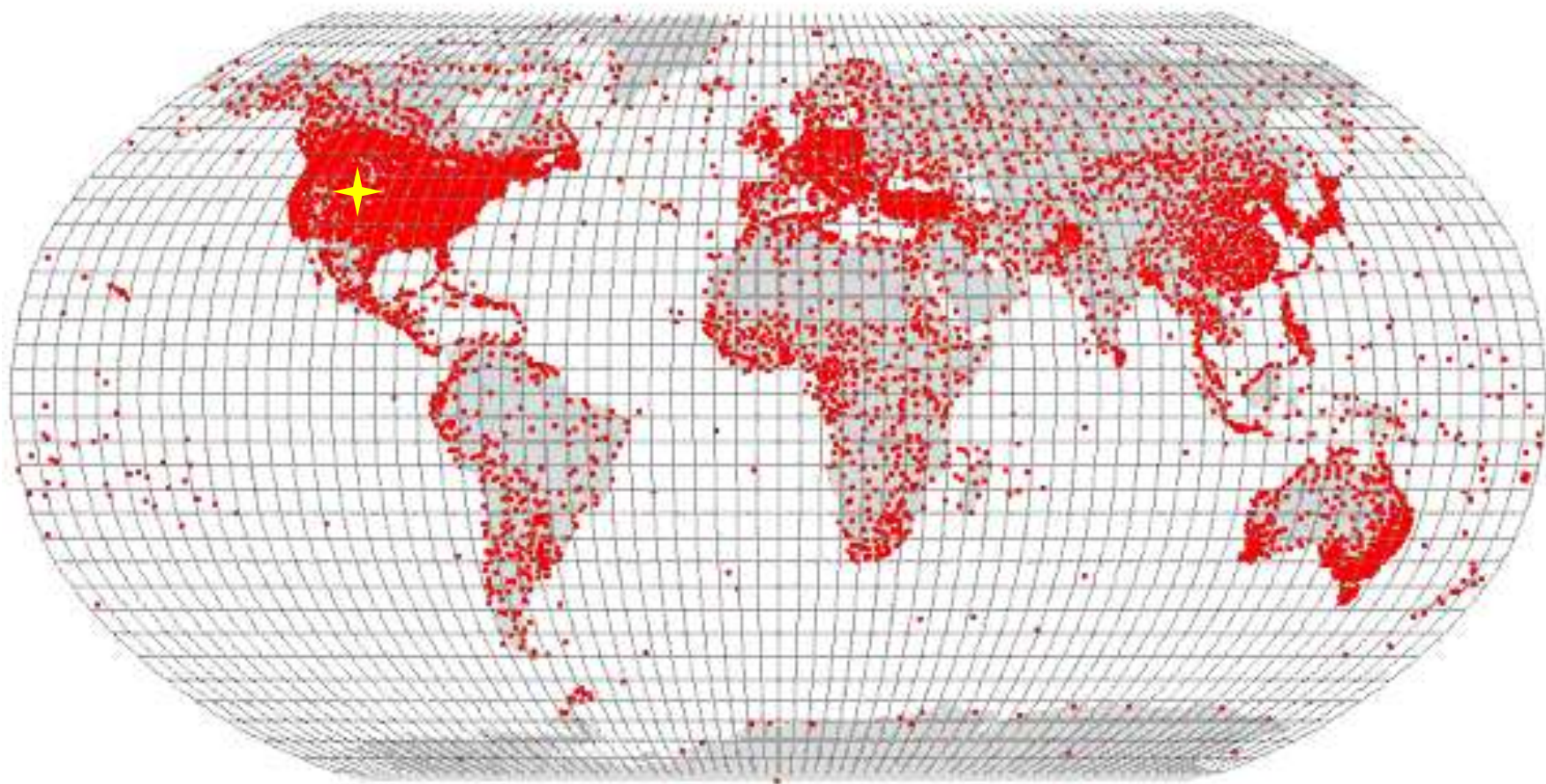
**Part II. Interpolate
(i.e., create data where none exists)**

**The globe's temperature has always been
poorly sampled.**

**Analysts have a lot of leeway in how they fill
in the blanks to divine global temperatures
from sparse and intermittent data.**

**Global temperatures are not global.
Only a third of the globe is sampled, leaving lots of
blanks to fill with created “data”.**

GHCN Temperature Data Set Station Locations



Station locations are indicated by the individual red circles that are superimposed on top of the 5° latitude by 5° longitude grid boxes to which they belong.

“Global” temperatures are a fantasy.

Let’s take a different approach.

Like doctors, find some “sweet spots” that are particularly sensitive to AGW* and which have reasonably good data.



Then look at their record.

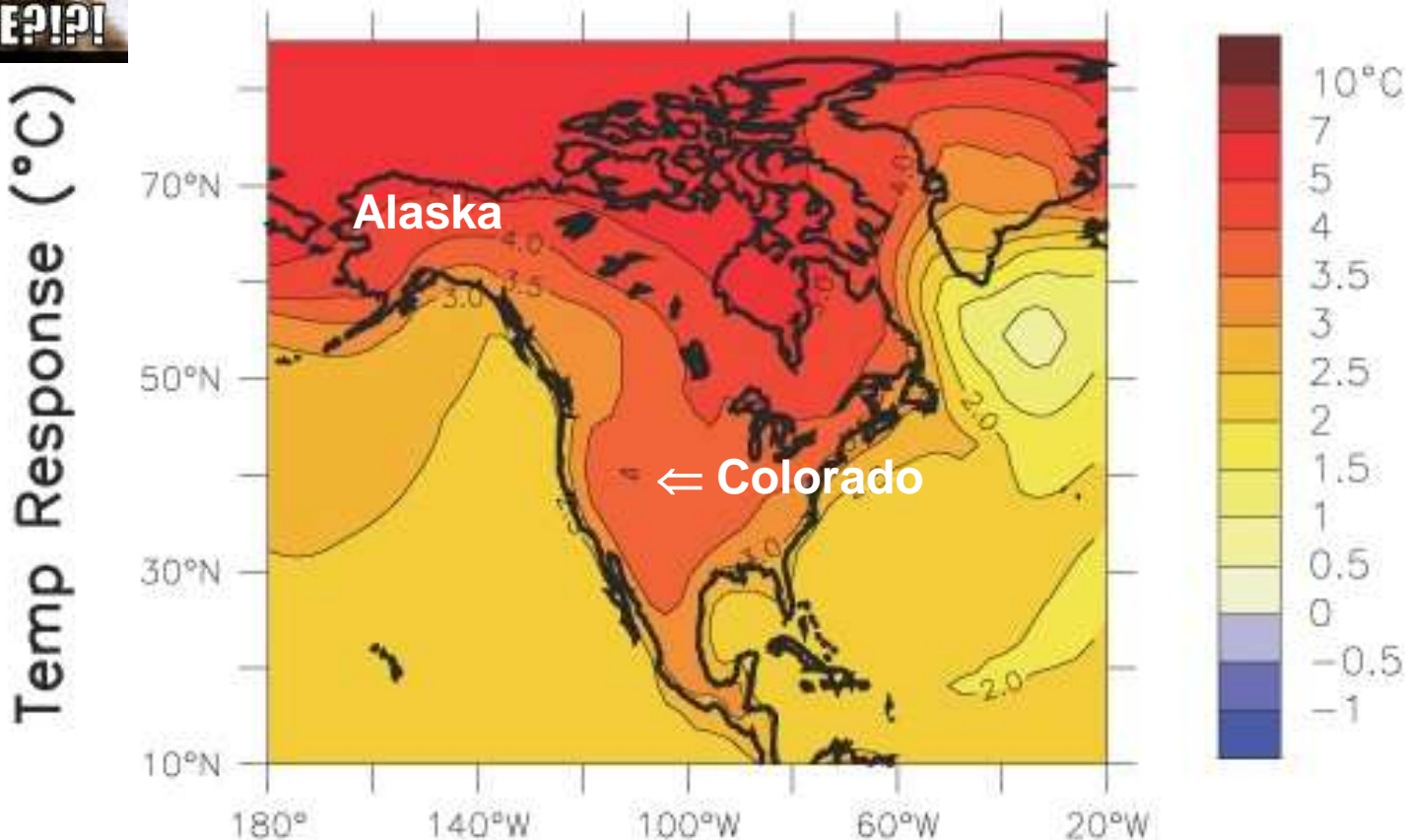
***AGW = Anthropogenic Global Warming**





Two sweet spots – Alaska and Colorado Both predicted to warm 4°C (7°F) by 2099

Annual



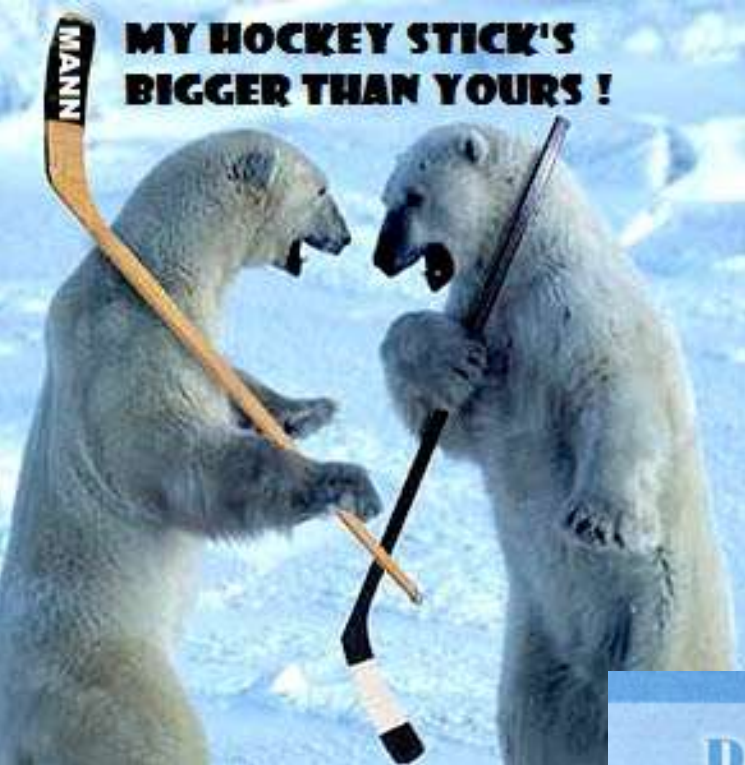
IPCC fig-11-12

Temperature changes over North America from the MMD-A1B simulations. Annual mean temperature change between 1980 to 1999 and 2080 to 2099, averaged over 21 models

Alaska



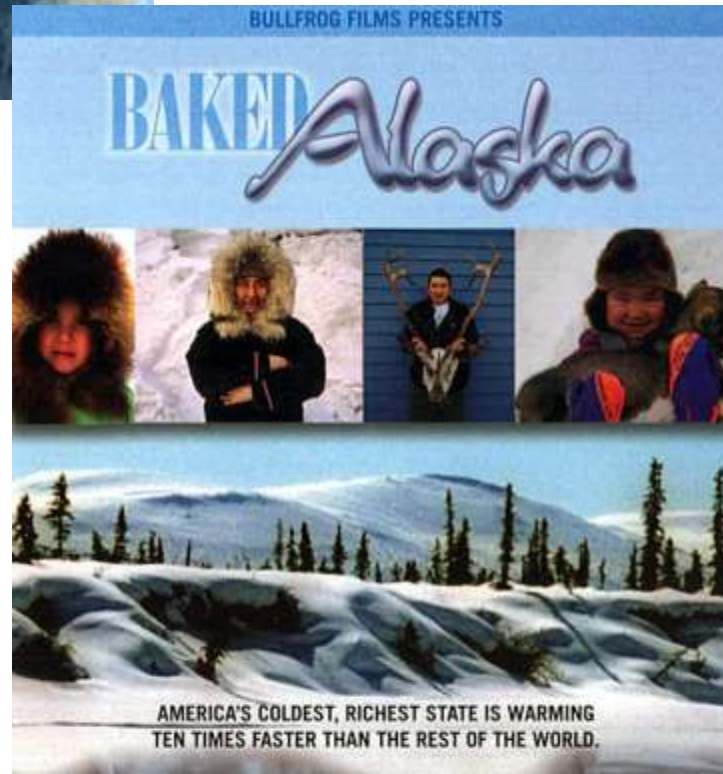
Gilkey Glacier, Juneau Ice Field, Alaska
Photo: Richard Keen



**MY HOCKEY STICK'S
BIGGER THAN YOURS !**

**Alaska is a
Global Warming
poster child.**

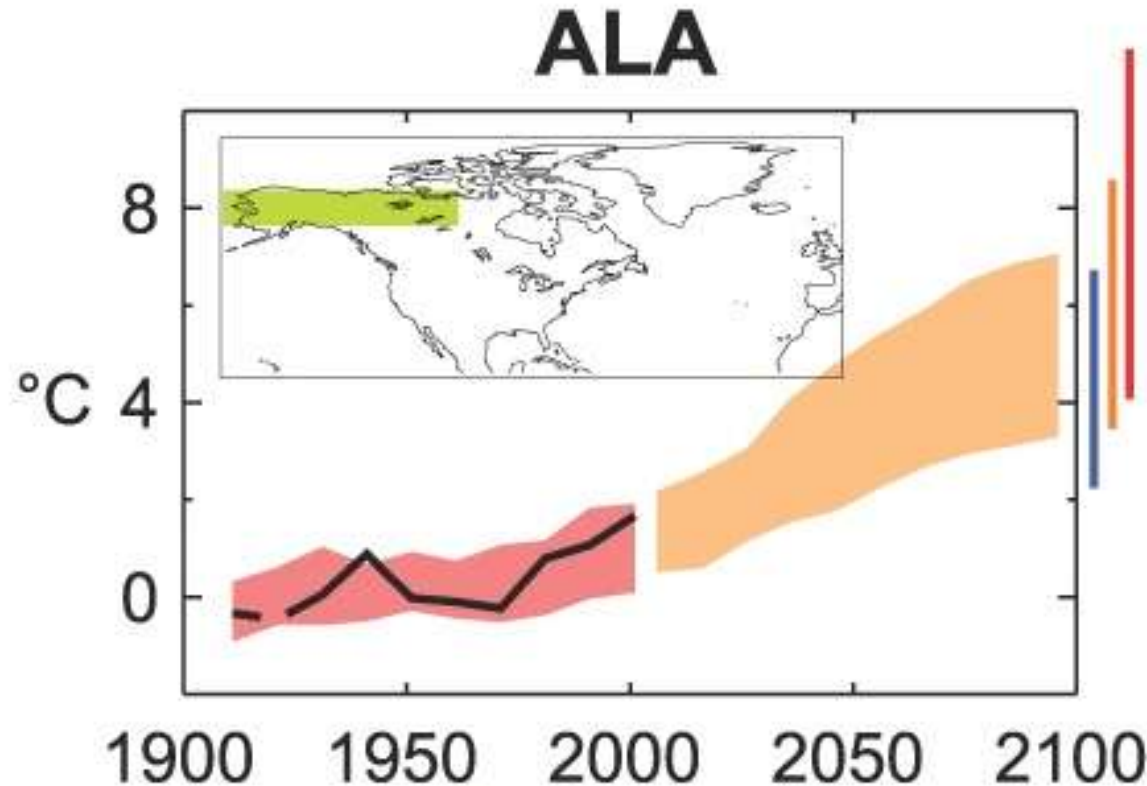
Is it melting?



**AMERICA'S COLDEST, RICHEST STATE IS WARMING
TEN TIMES FASTER THAN THE REST OF THE WORLD.**

IPCC would like to think so.

**Alaska: 4°C (7°F) warming by 2100
1°C (2°F) has already happened, says IPCC**



IPCC fig-11-11

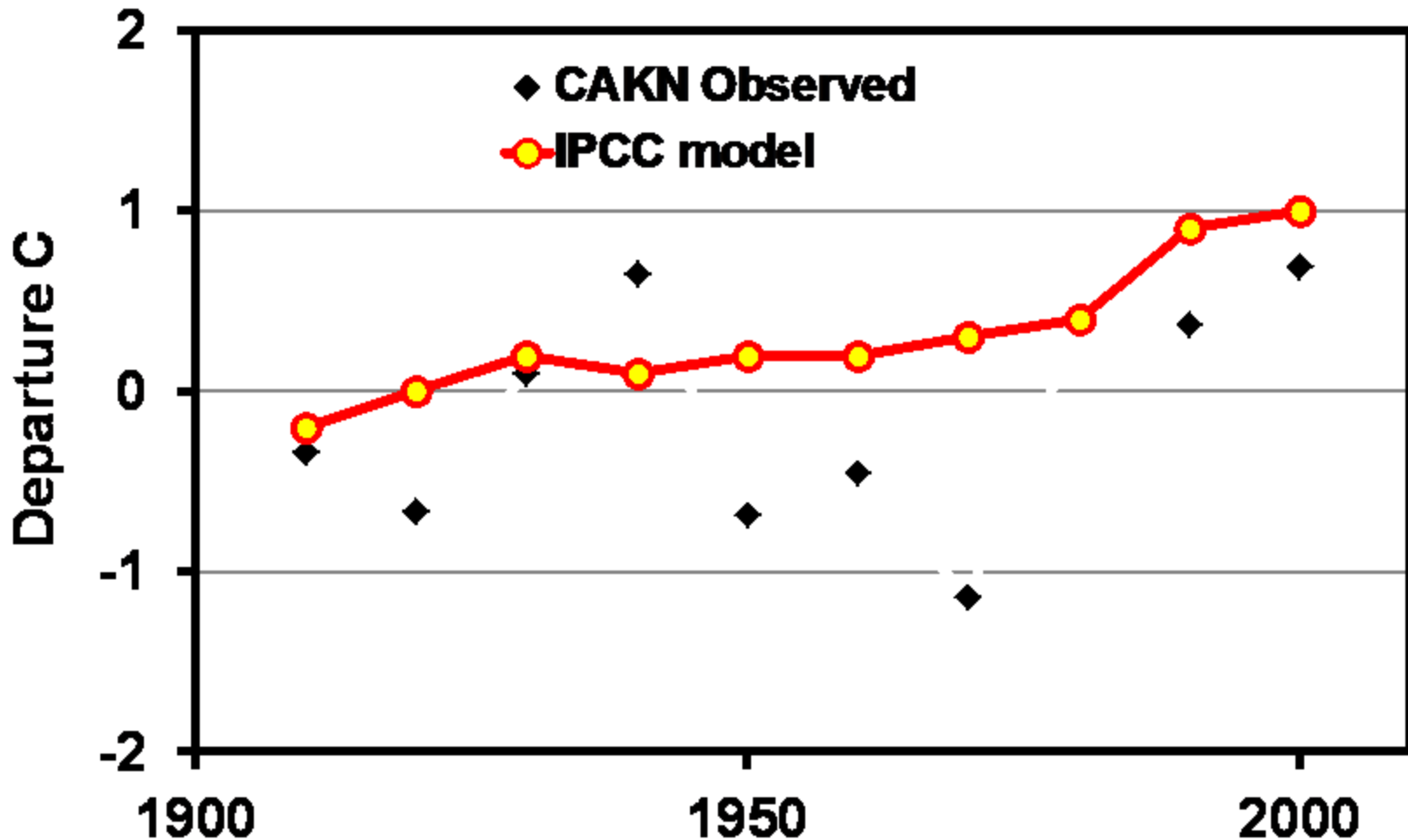
Alaska climate: past century (black line)

Model past & future (color band)

IPCC = Intergovernmental Panel on Climate Change (UN)

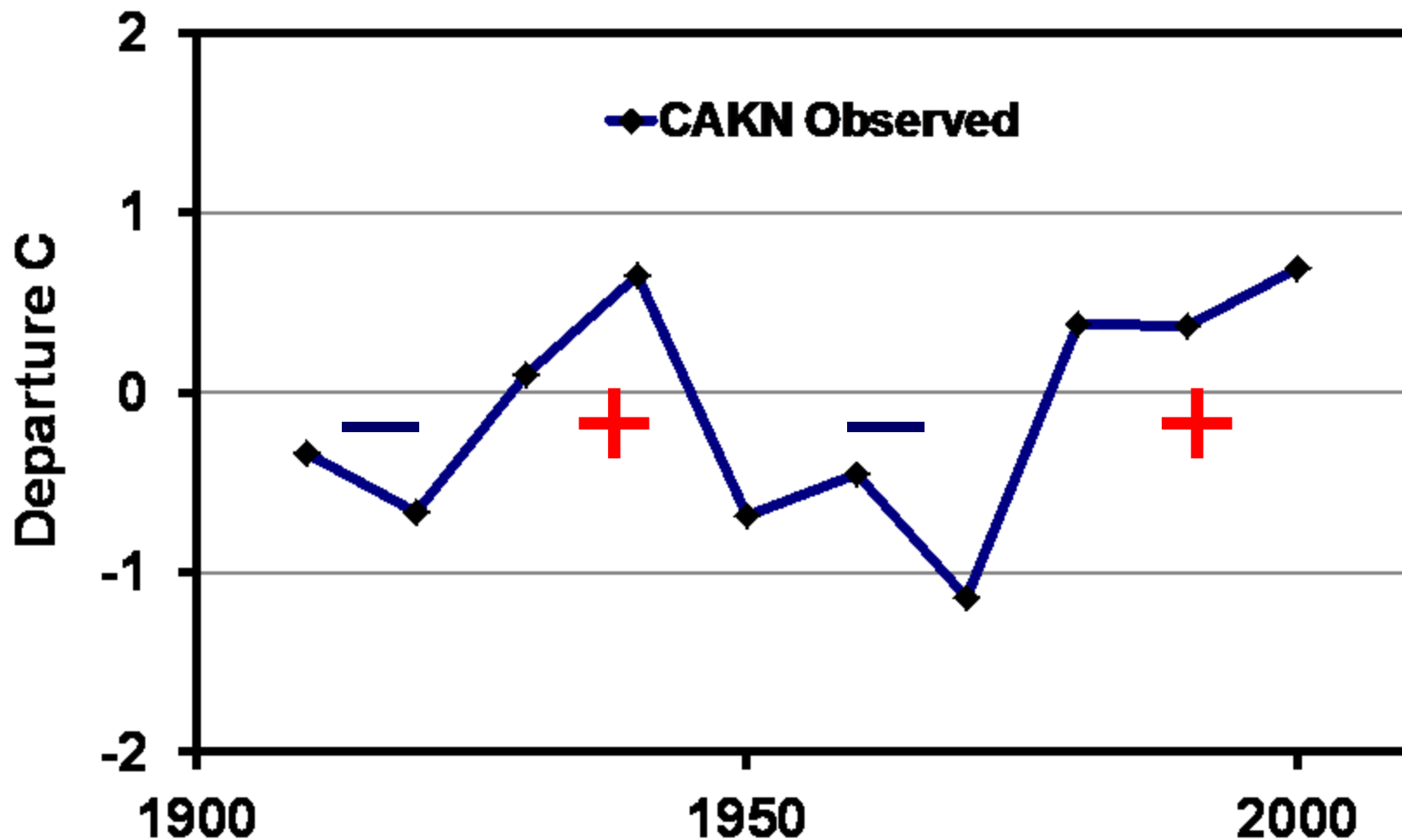
IPCC's models show a 1°C warming since 1900.

Central Alaska Decadal Temperatures
Average of 9 long-term rural stations

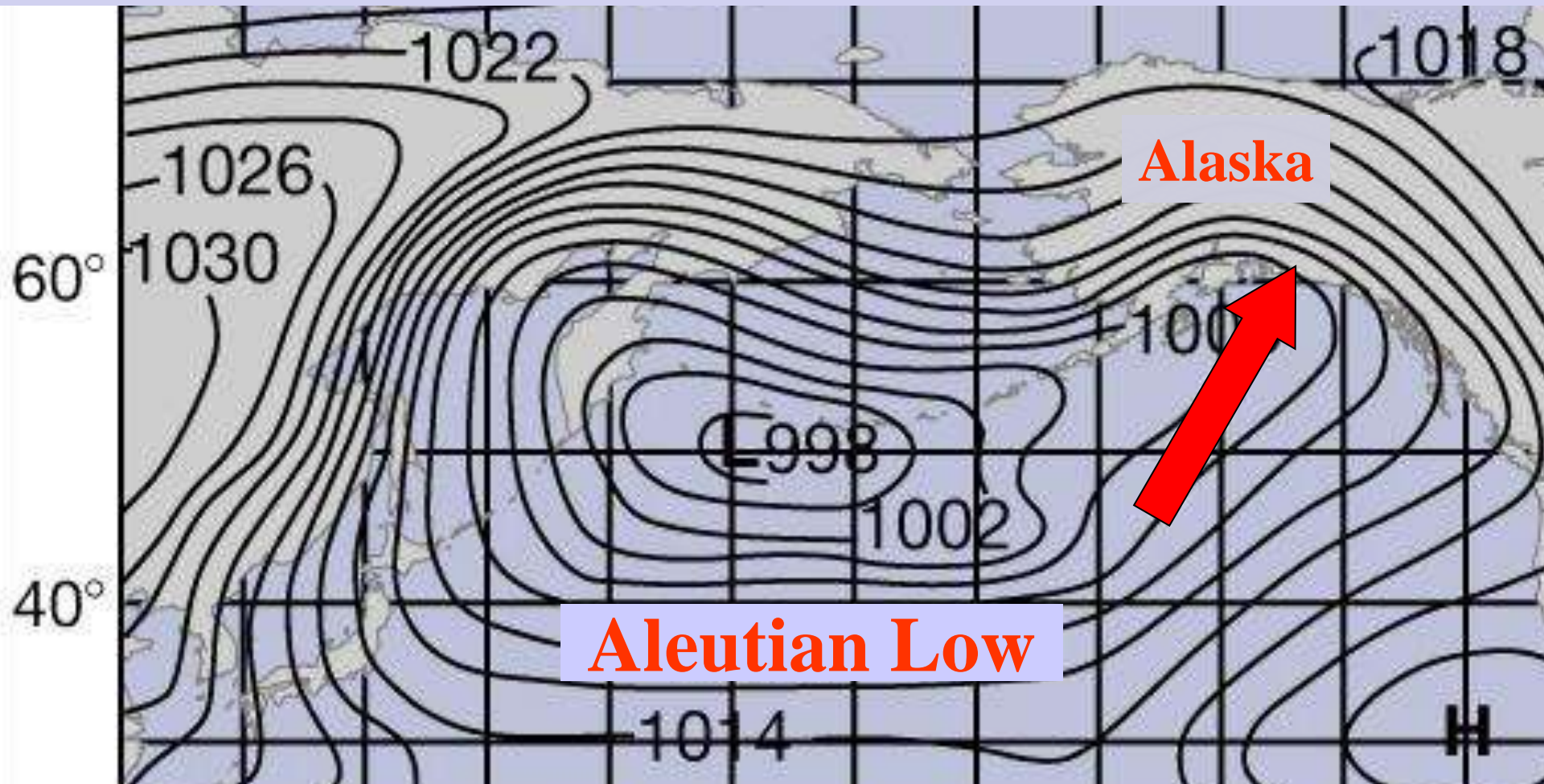


Actual data for Alaska shows 30-year cycles, but no change overall. What causes the cycles?

Central Alaska Decadal Temperatures
Average of 9 long-term rural stations

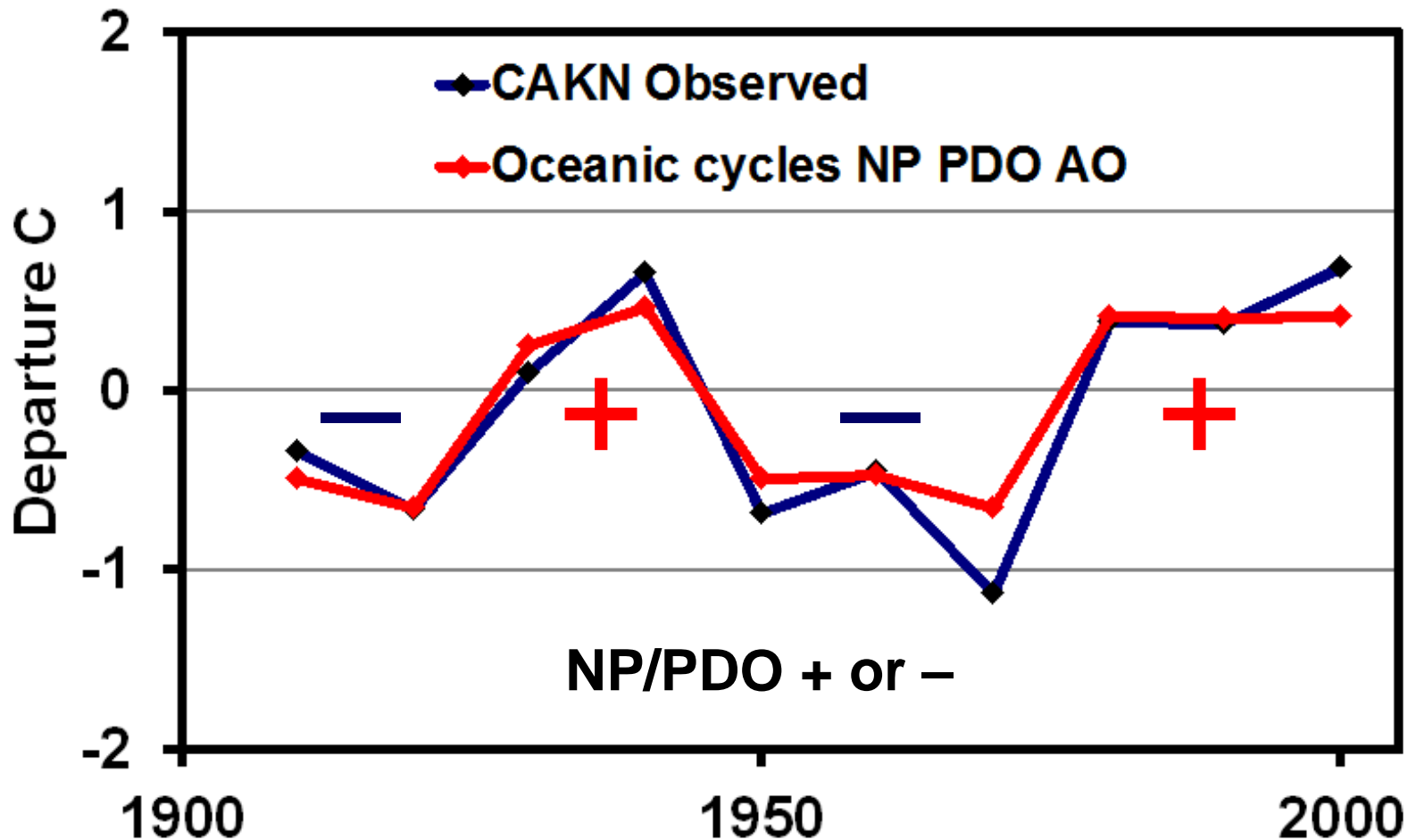


The PDO = Pacific Decadal Oscillation, or NP = North Pacific index, a measure of the atmospheric pressure over the North Pacific Ocean. When pressure goes down, the Low is stronger, and Alaska gets warm southerly winds.



Alaska's climate variations follow the PDO cycle closely. The models do not.

Central Alaska Decadal Temperatures
Average of 9 long-term CAKN stations compared to
Oceanic cycles



PDO/NP cycles are natural, lasting 20 - 66 years, typically around 30 years since 1600.

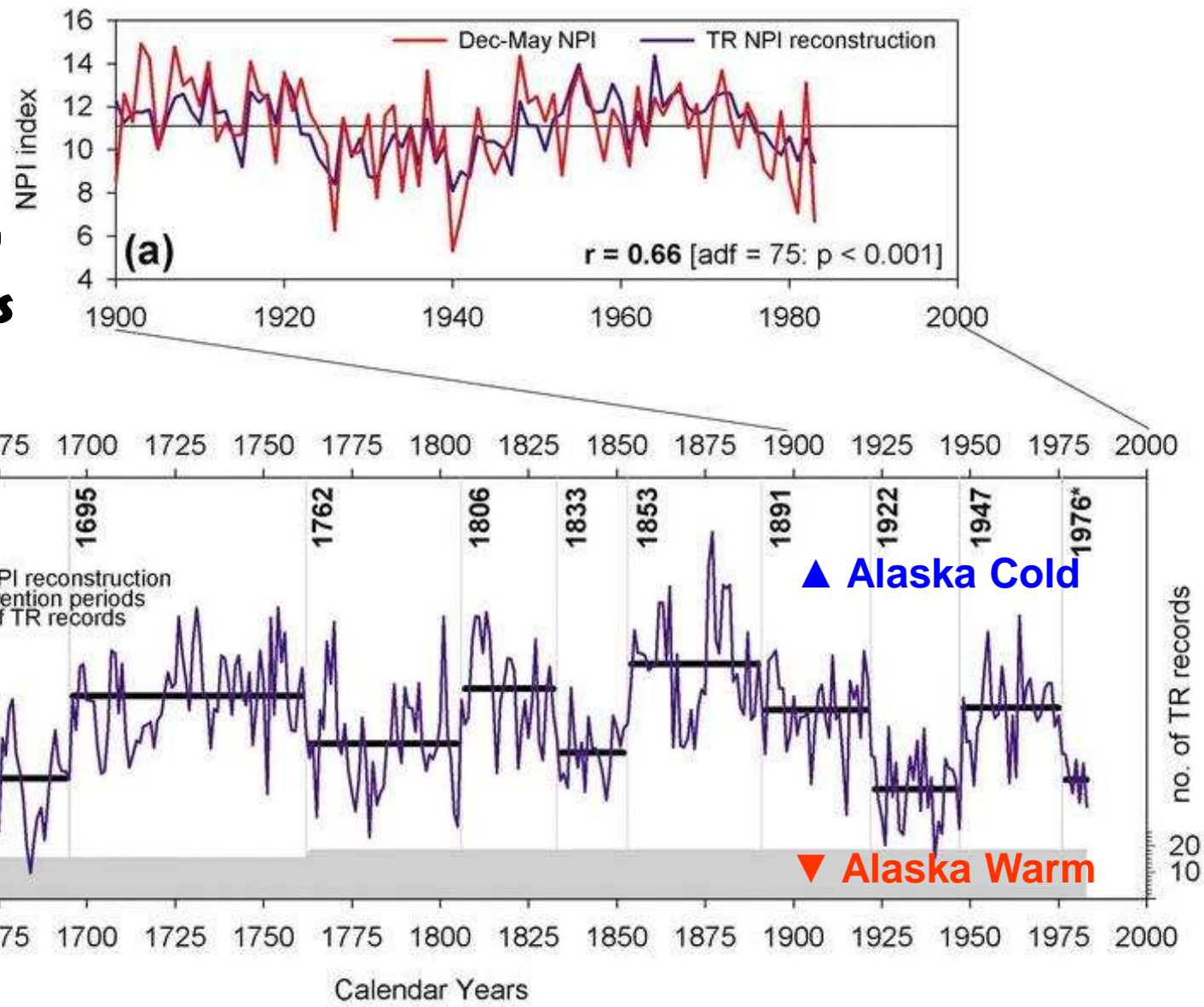


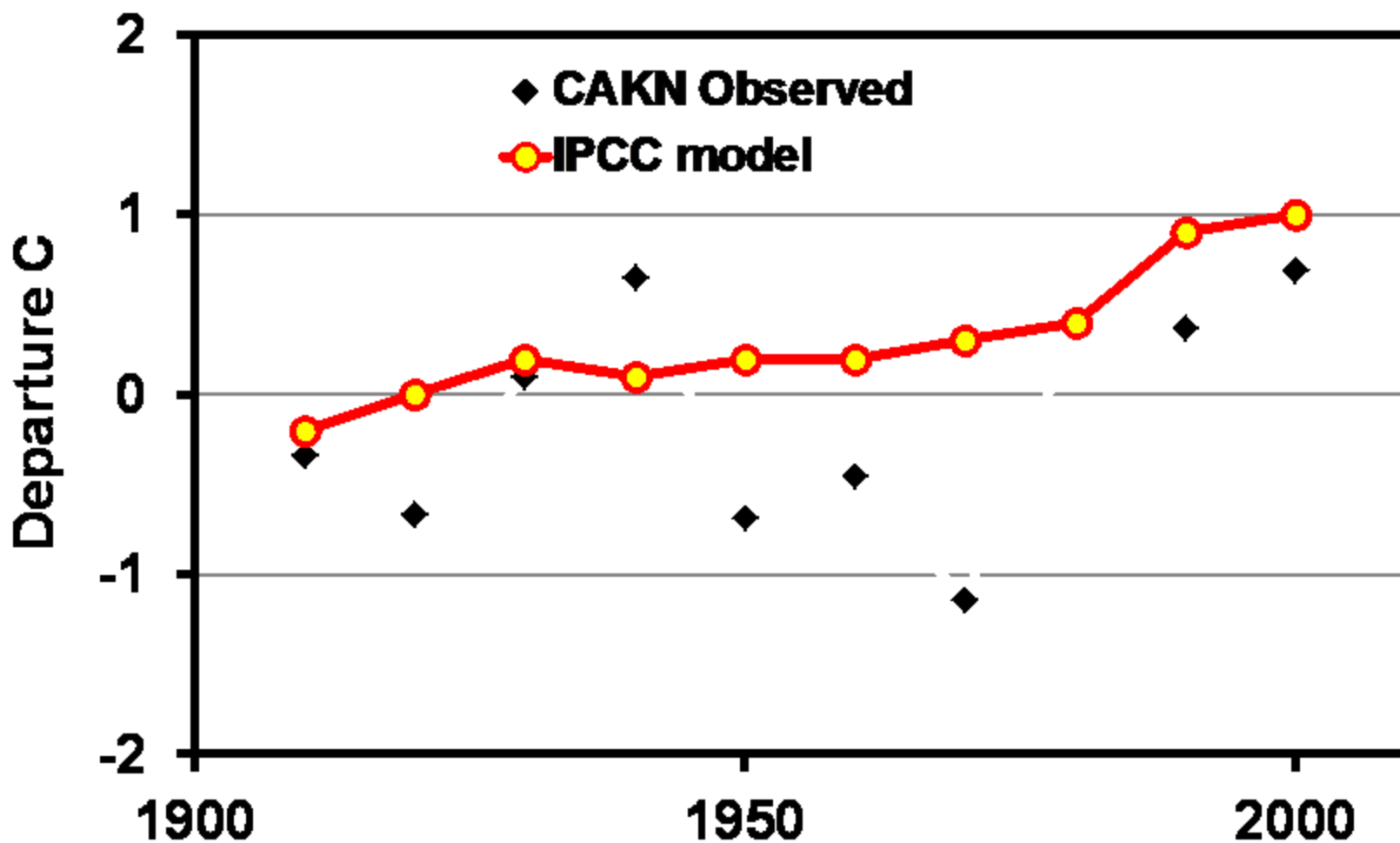
Fig. 2. Tree-ring based NPI reconstruction. (a) Actual and estimated Dec–May NPI for the 1900–83 calibration period: (b) Reconstruction of Dec–May NPI from 1600–1983 based on North Pacific tree-ring data. Highlighted phase shifts identified using intervention analysis (significant at the 90% confidence limit).

Journal of Climate Volume 18, Issue 24 (December 2005): pp. 5253–5265 Tropical–North Pacific Climate Linkages over the Past Four Centuries
 Rosanne D’Arrigo, Rob Wilson, Clara Deser, Gregory Wiles, Edward Cook, Ricardo Villalba, Alexander Tudhope, Julia Cole, and Braddock Linsley
 Tree-Ring Laboratory, Lamont-Doherty Earth Observatory, Palisades, New York

Models do not forecast the PDO and other cycles, which are the largest influences on regional climate.

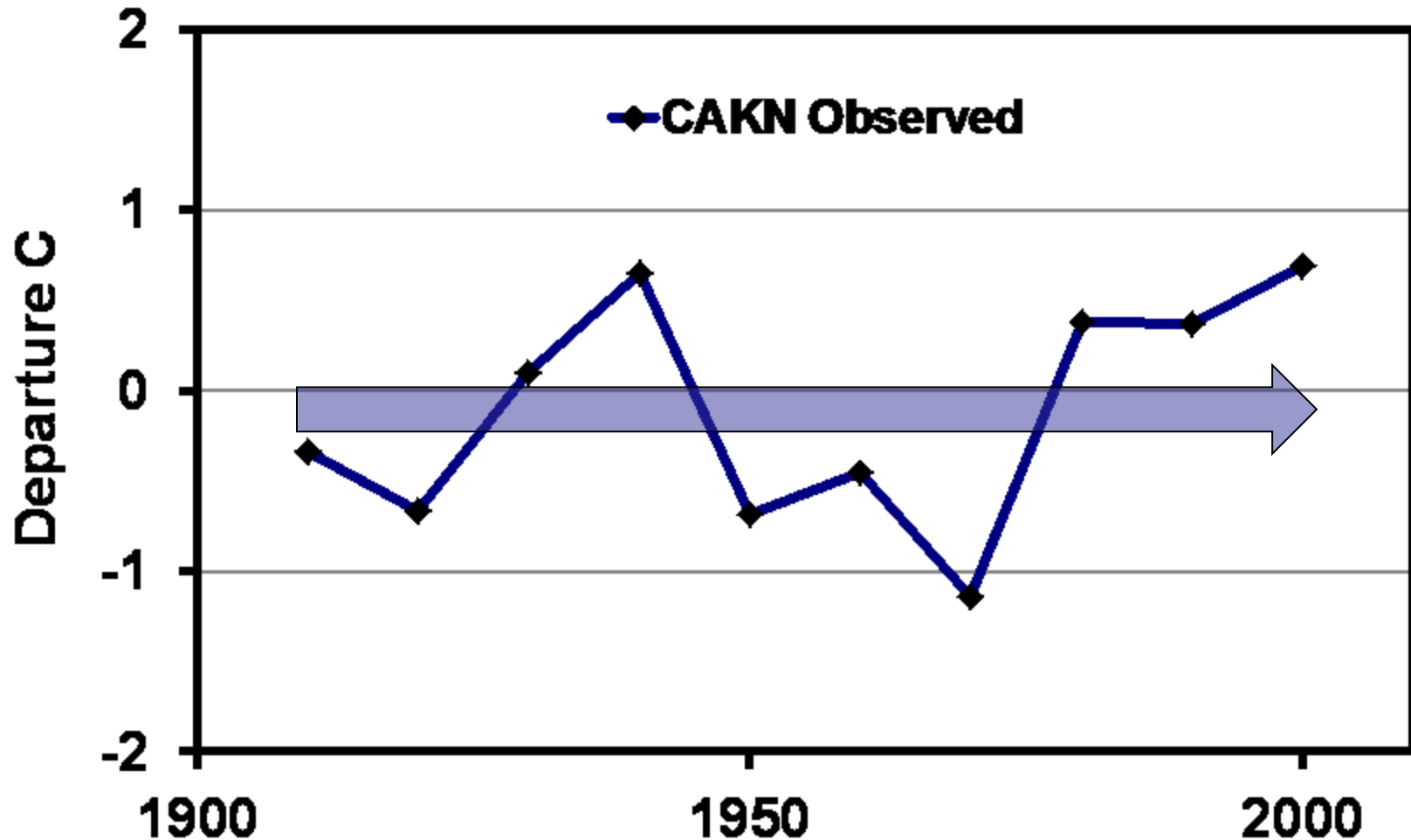
How do IPCC modelers get around this ?

**Central Alaska Decadal Temperatures
Average of 9 long-term rural stations**



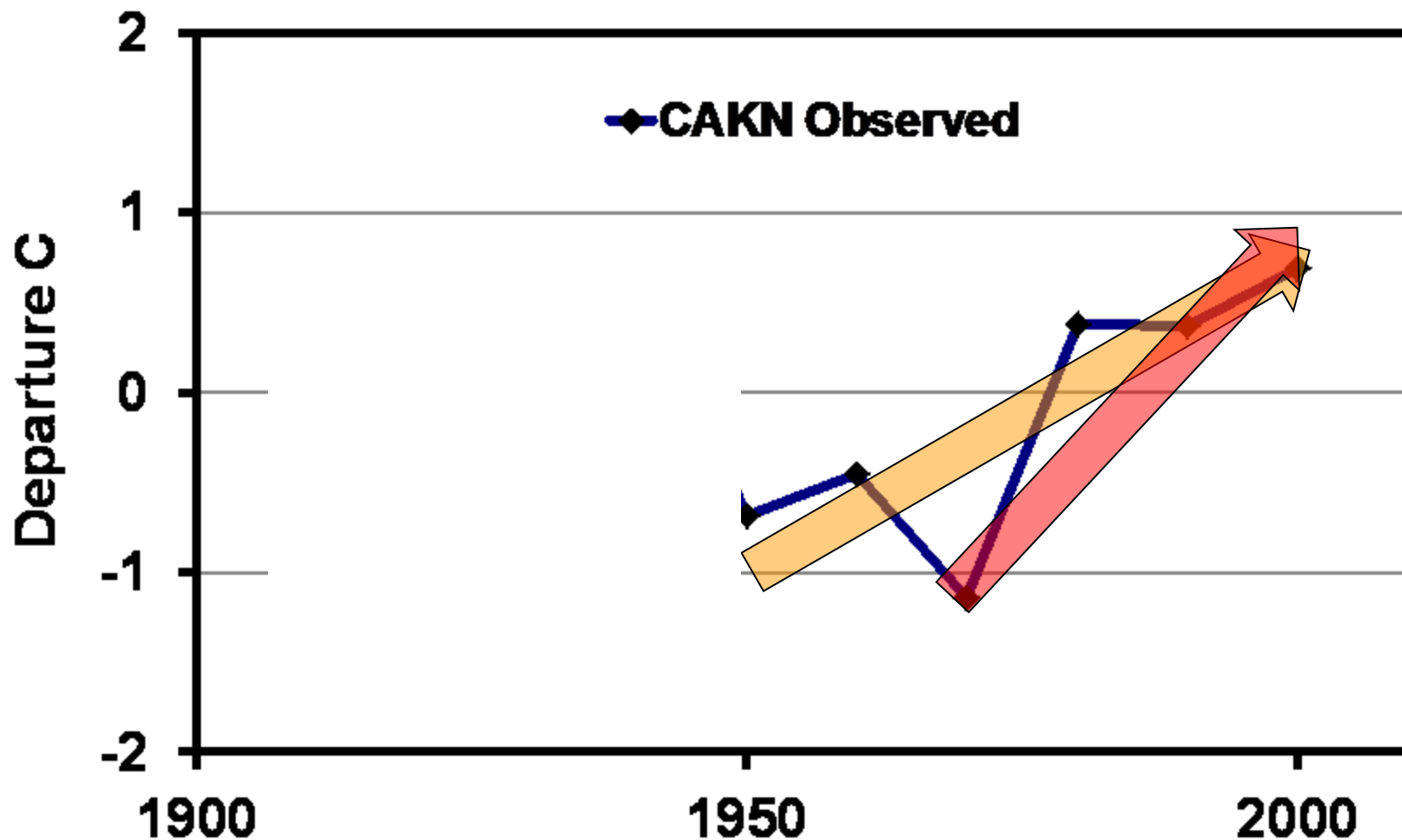
Easy: Ignore, or erase, climate history prior to 1950-1970 (Yezhov would understand)

Central Alaska Decadal Temperatures
Average of 9 long-term rural stations



Easy: Ignore, or erase, climate history prior to 1950-1970 (Yezhov would understand)

Central Alaska Decadal Temperatures
Average of 9 long-term rural stations



Dilbert would understand, too.



Dilbert.com DilbertCartoonist@gmail.com

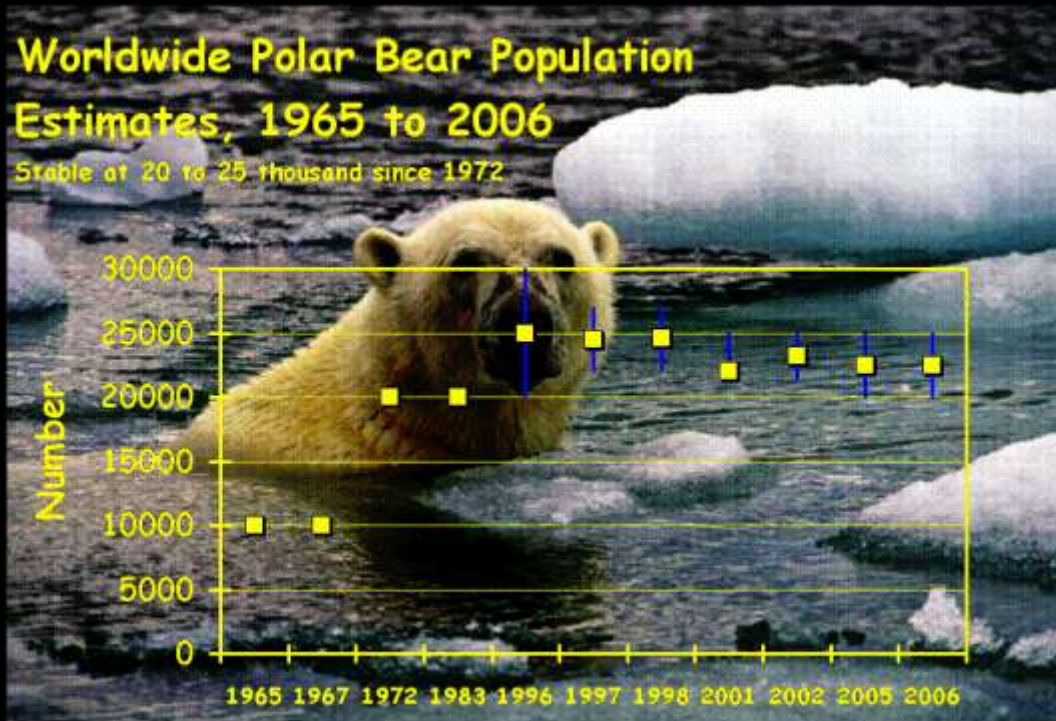


8-11-10 © 2010 Scott Adams, Inc./Dist. by UFS, Inc.



How are Polar Bears doing these days ?

Ursus Maritimus (Sea Bear) enjoy swimming, and are doing just fine, just as they did with thin ice 70 and 250 and 1000 and 8,000 years ago, thank you!



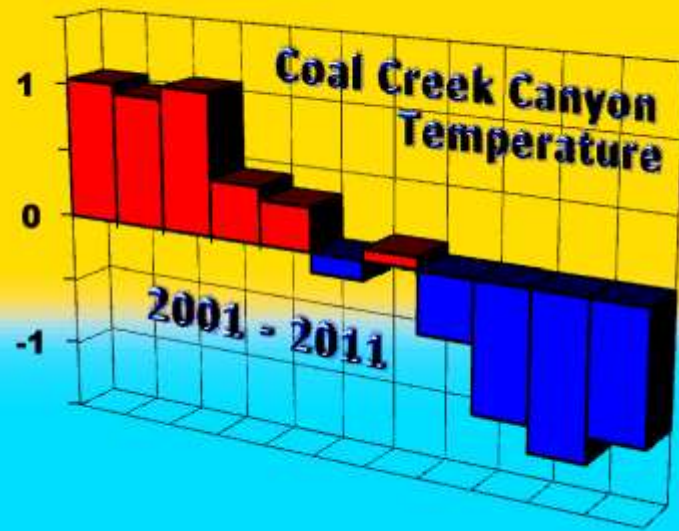
**Another Hot Spot:
Colorado.**

**Coal Creek Canyon
co-op station,
aka Home.**

**IPCC: 2°F warming
over 30 years.**



Bumper sticker science



COLORADO
COOLING

Down 2°F in 12 years. Colorado, and the rest of the world, hasn't warmed in 15 years (since 1998).

Not to worry, IPCC now says we need 17 years of cooling!

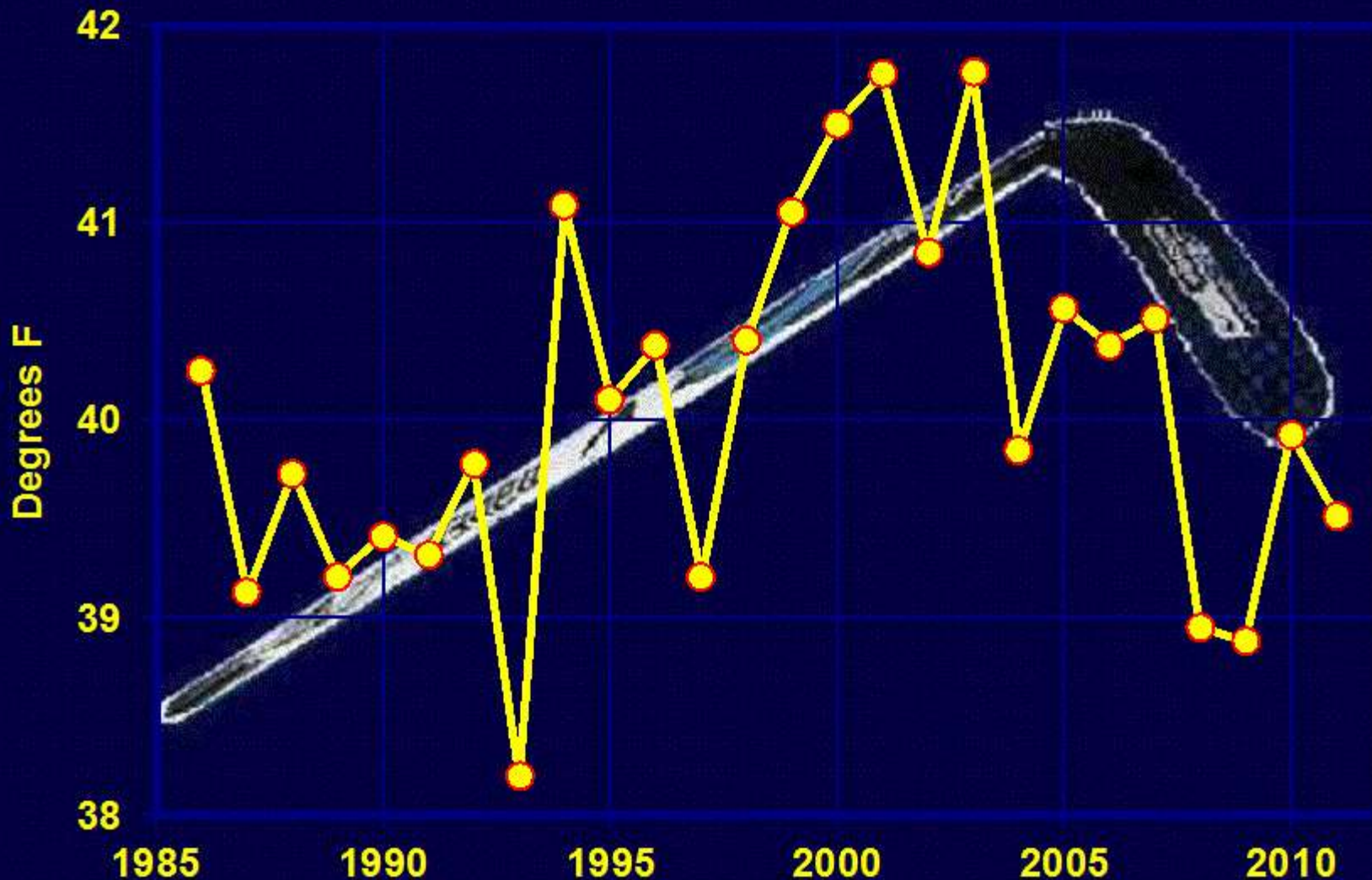
IPCC Santer et al. (2011):

“To separate human-caused global warming from the “noise” of purely natural climate fluctuations, temperature records must be **at least 17 years** long.”

OK, how about 28 years?
0.5°F warming, 1/4 of IPCC's guess
Coal Creek Annual Temperatures

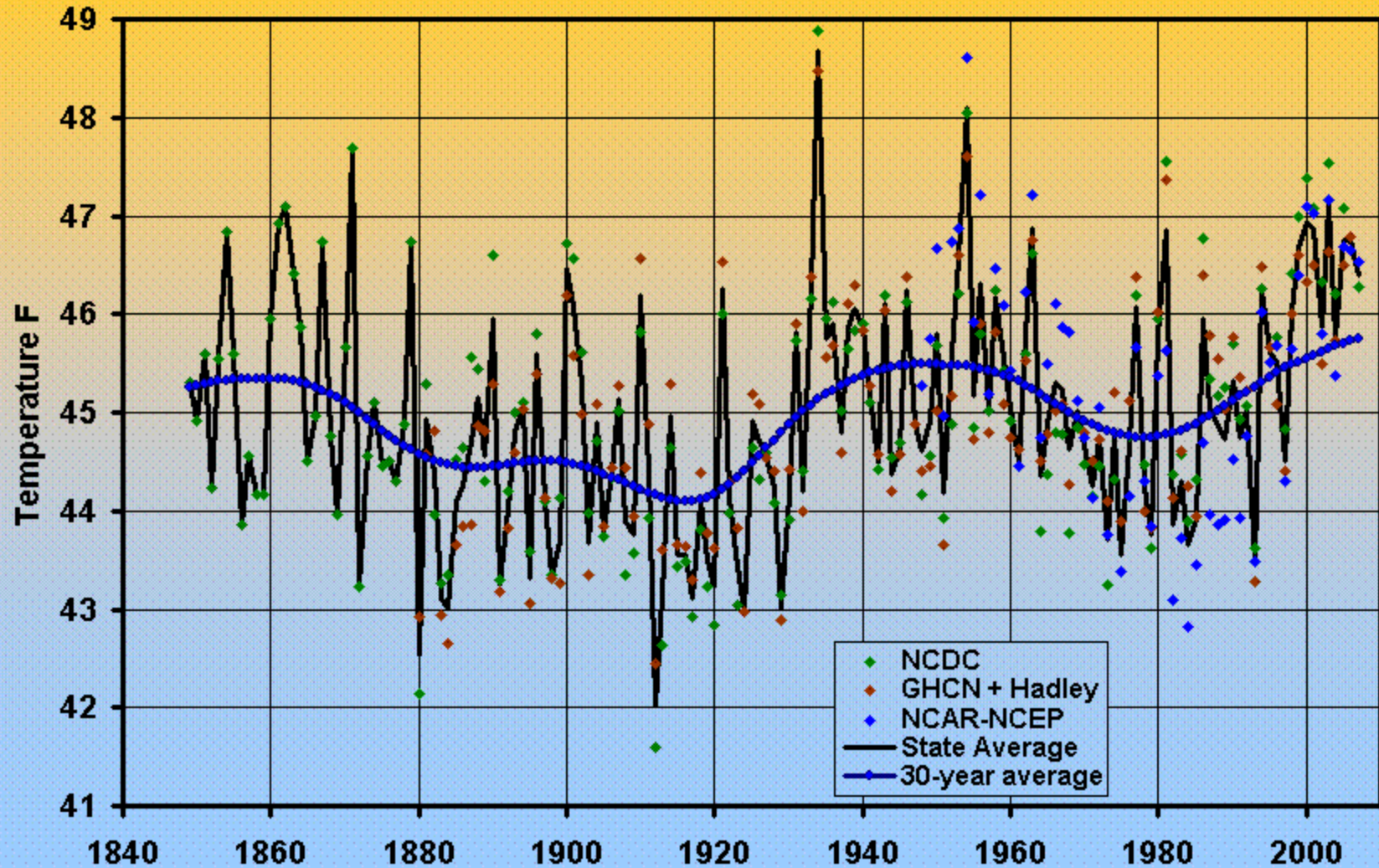


OK, how about 28 years?
0.5°F warming, 1/4 of IPCC's guess
Coal Creek Annual Temperatures



Is 160 years enough? Colorado: PDO cycles, but only 1/4-degree warming since 1849!

Colorado Annual Mean Temperature, 1849-2007
Average of four different sources



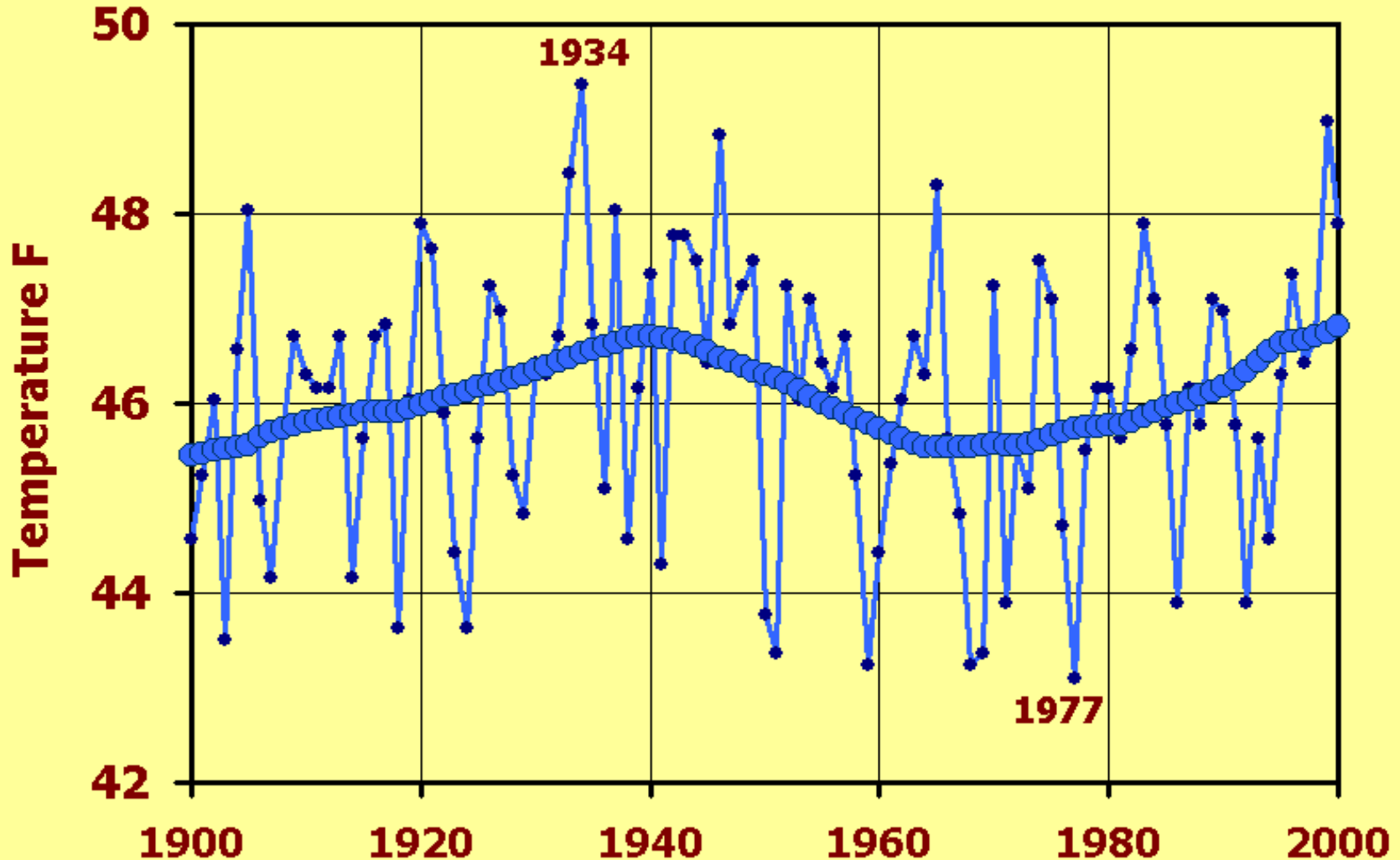
**“People underestimate the power of models.
Observational evidence is not very useful.”**

**-- John Mitchell, Chief Scientist UK Met Office
& IPCC**

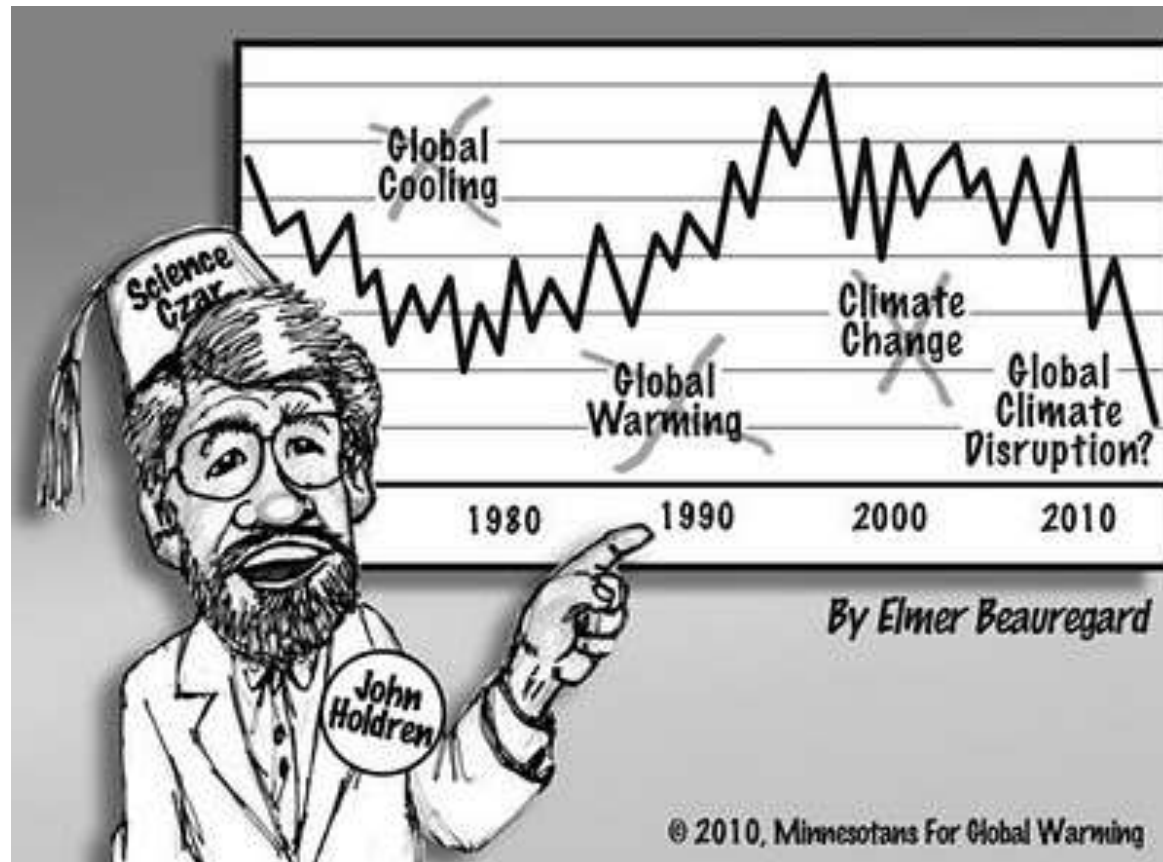


**The power of models, indeed.
Rolling dice simulates the past climate
better than the taxpayer's billion \$\$ models.**

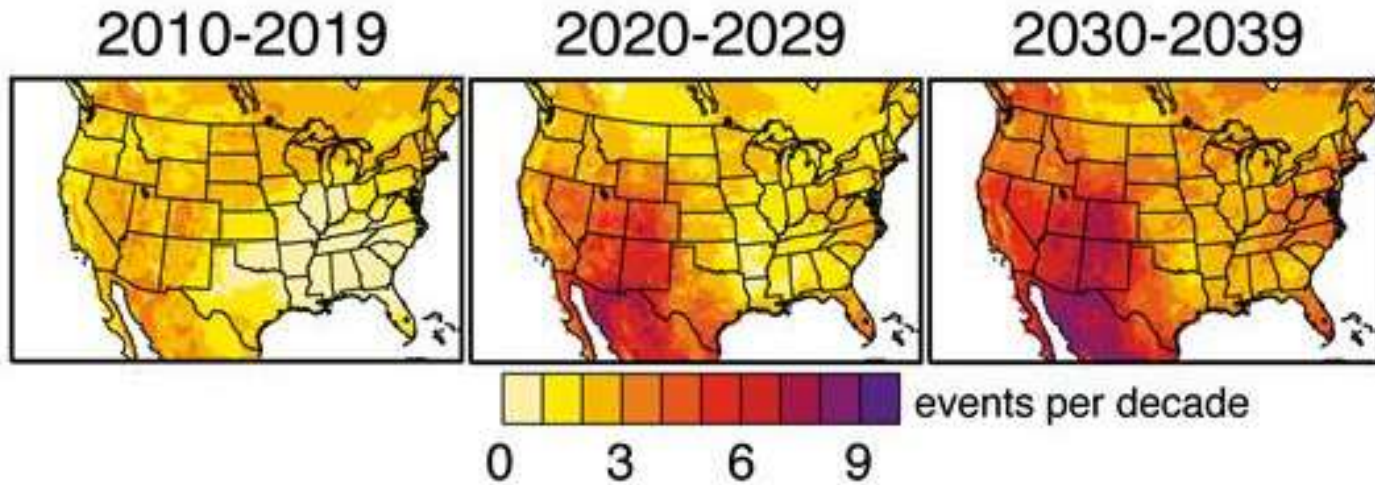
**Dr. Keen's Advanced Climate Simulation Model
(101 rolls of dice)**



Hey, we meant to say the climate would get more Xtreme, not warmer.

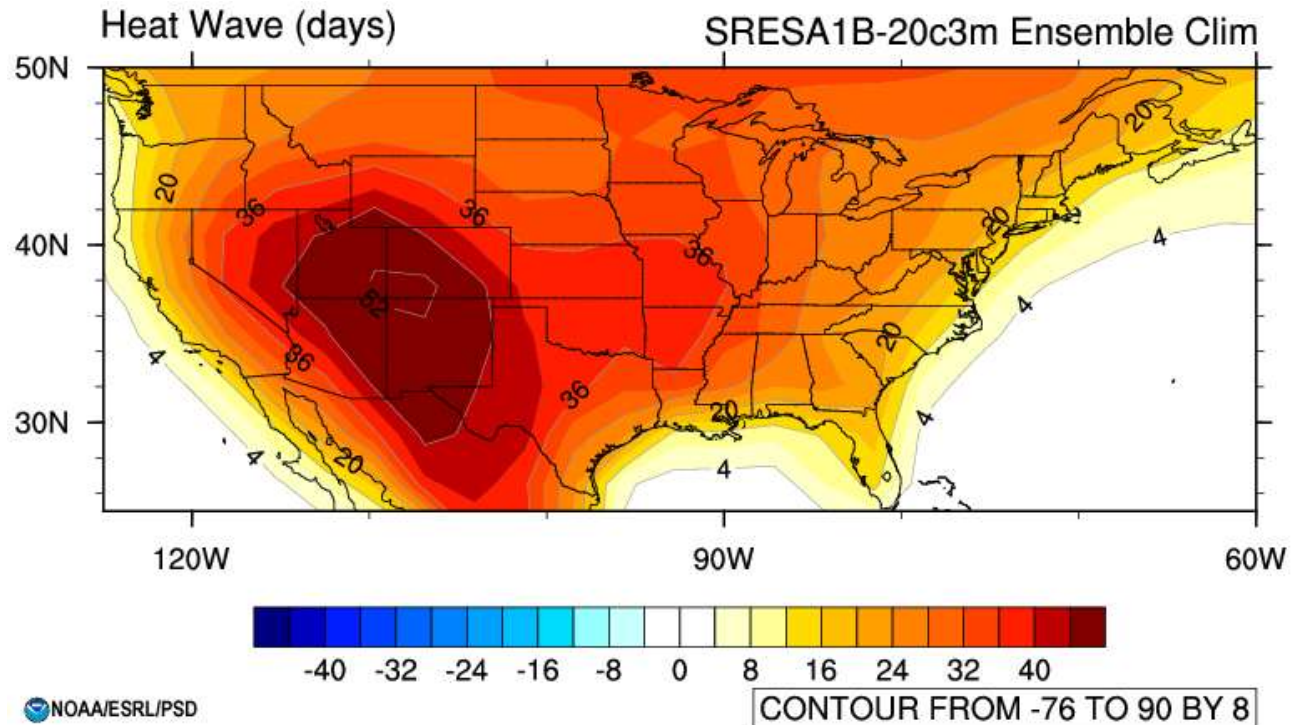


Number of Extremely Hot Seasons Per Decade



Hotter Hots.

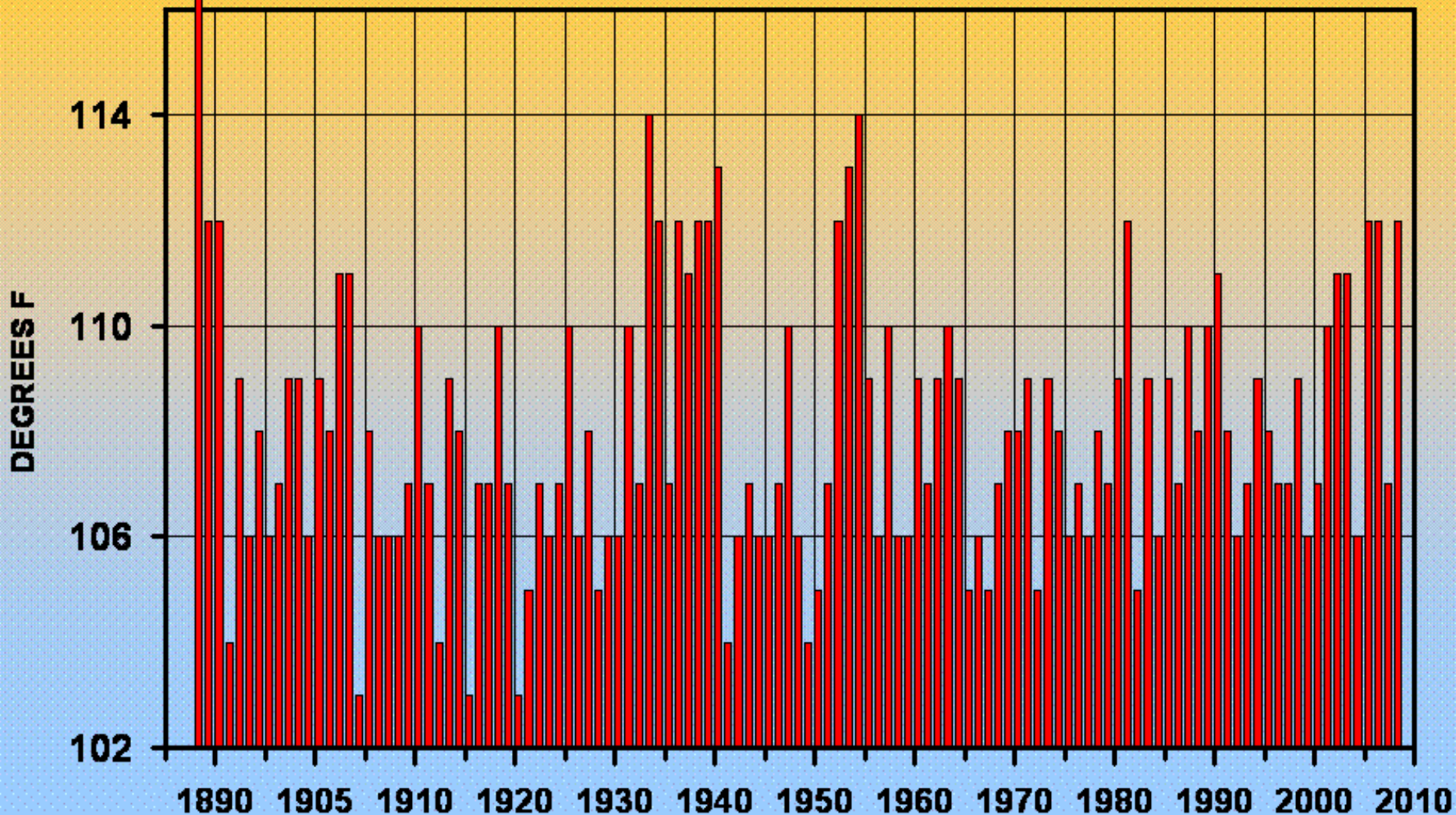
**Thus
speaketh the
Models.**



Colorado heat waves aren't increasing

COLORADO EXTREME TEMPERATURES STATEWIDE HIGHS, 1888-2008

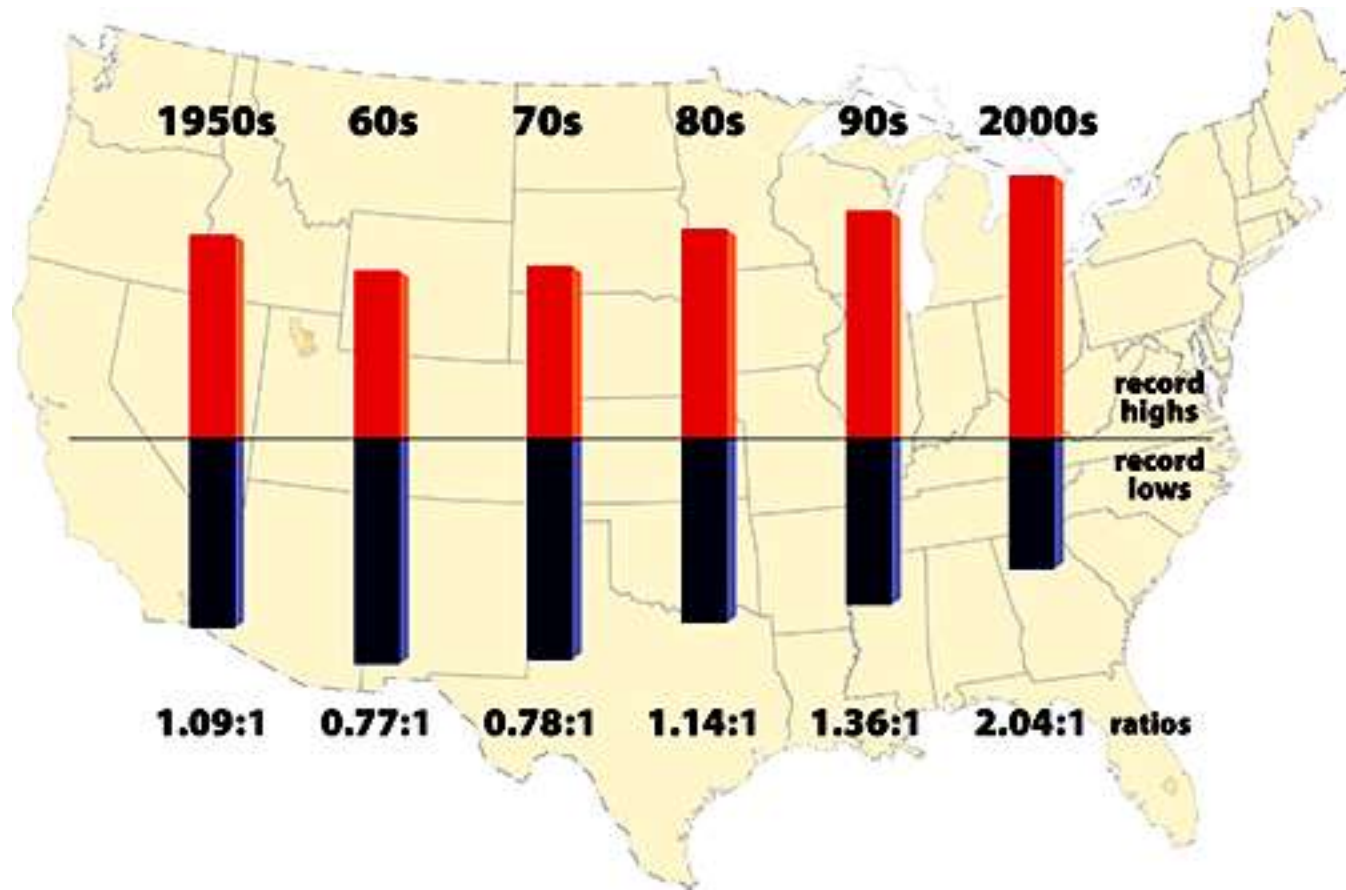
Doubtful 1888
Max of 118



IPCC says (Meehl et al. 2009):

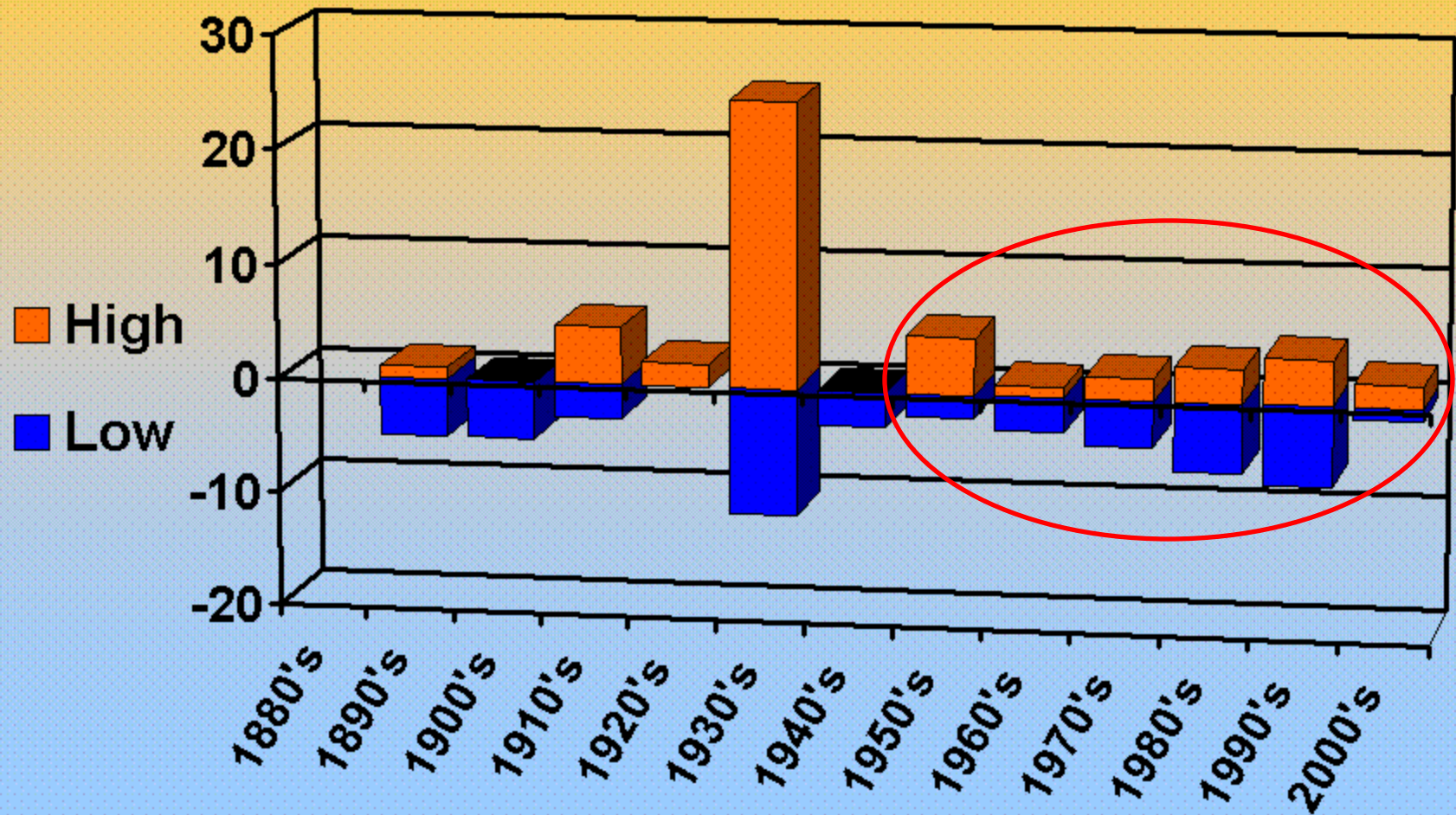
Since 1950, record high temperatures are increasing at the expense of record lows – has to be global warming.

But records go back to the 1800s – why start in 1950?



So they don't have to deal with the 1930s. Did I mention the Dust Bowl ?

Number of all-time Temperature Extremes for each Decade for the 50 United States.





Et cetera,

et cetera,

et cetera

Climate in a nuthouse, er, nutshell

The largest climate changes are regional and cyclical; global change is minimal.

Taxpayer funded climate groups (IPCC, NCDC, GISS) can not predict these cycles.

Models predict Colorado & Alaska are warming.

Colorado & Alaska are not warming.

Predicted disasters are not happening.

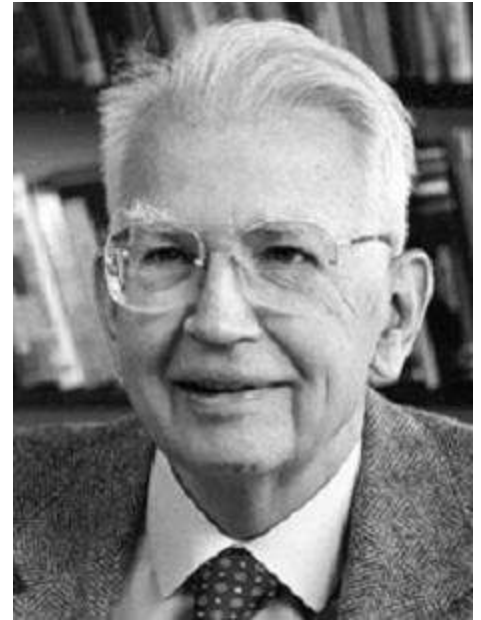
The models are wrong, and Humans are not significantly affecting the climate.

So, to justify their paychecks, IPCC and Fed funded labs torture the data to make it look like warming.

**"If you torture the data long enough,
it will confess."**

**Ronald Coase,
British economist.**

Nobel Prize in Economics, 1991.



**“It is a capital mistake to theorize
before one has data.
Insensibly one begins to twist facts
to suit theories, instead of theories
to suit facts.”
—Sherlock Holmes
(Arthur Conan Doyle)**



**The modified scientific method is
an inevitable consequence of the
nature, organization, and purpose
of the IPCC and the US Climate
Change Research Program.**

The Root of all Evil.

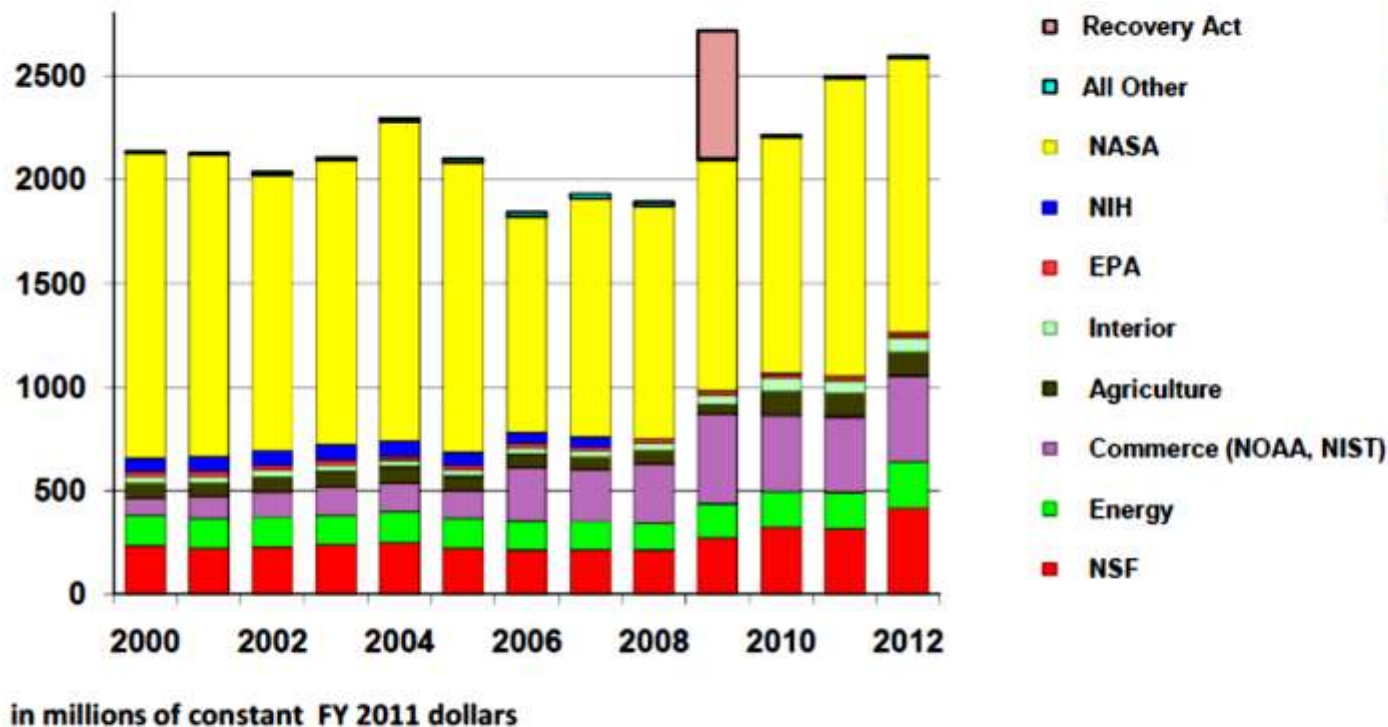


“The National Climate Assessment (NCA) is being conducted under the auspices of the Global Change Research Act of 1990, which requires a report to the President and the Congress that evaluates, integrates and interprets the findings of the **\$2.6 billion USGCRP every four years.”**

“ aimed at understanding and responding to global change, including the cumulative effects of human activities ”



Combating Climate Change: US Global Change Research Program



FEB. '11 OSTP
2011 figures are preliminary estimates.



Understanding and Responding to Our Changing Planet

*The U.S. Global Change Research Program
in the 2012 Budget*

Figure 1.

After inheriting a program suffering from several years of declining funding, the Obama Administration has revitalized the USGCRP (see Figure 1). The 2009 Omnibus Appropriations

IPCC

INTERGOVERNMENTAL
PANEL ON
CLIMATE CHANGE



Here's what the IPCC says about itself.

“The stated aims of the IPCC are to assess scientific information relevant to:

- human-induced climate change,**
- the impacts of human-induced climate change,**
- options for adaptation and mitigation“**

Translation: The IPCC's role is to assess human induced climate change, not to determine if it is real. Just like the USGCRP

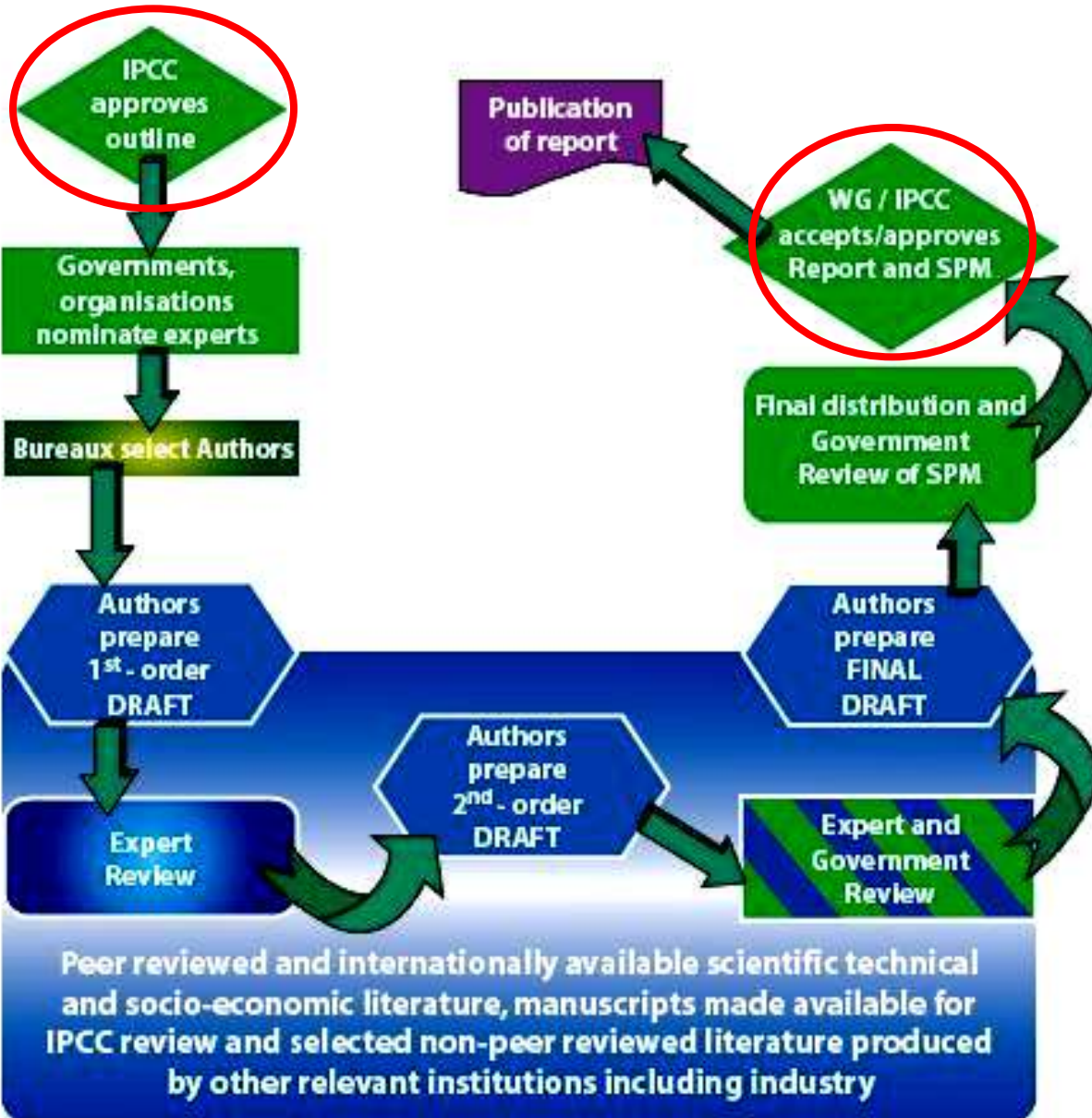
Start here

IPCC flow chart.

The IPCC panel “approves” the outline of the report before the authors are selected, then chooses the authors, and approves the final product when the authors are done.

Along the way there’s “government reviews”.

Green = Government
Blue = Science



Who's paying for all this?

Who do you think?

WHY are you paying for this?

“Urgent and unprecedented environmental and social changes challenge scientists to define a new social contract...a commitment on the part of all scientists to devote their energies and talents to the most pressing problems of the day, in proportion to their importance, in exchange for public funding.”

-- Jane Lubchenco

when she was president of AAAS in 1999.

Now Obama’s NOAA chief.

Translation:

We’ll pay you to study what WE decide is important (global warming).

We won’t pay you to not study global warming.





Akin to, and largely responsible for the sweeping changes in our industrial-military posture, has been the technological revolution during recent decades. In this revolution, research has become central; it also becomes more formalized, complex, and costly.

A steadily increasing share is conducted for, by, or at the direction of, the Federal government.

Today, the solitary inventor, tinkering in his shop, has been overshadowed by task forces of scientists in laboratories and testing fields. In the same fashion, the free university, historically the fountainhead of free ideas and scientific discovery, has experienced a revolution in the conduct of research. Partly because of the huge costs, a government contract becomes virtually a substitute for intellectual curiosity. For every old blackboard there are now hundreds of new electronic computers.

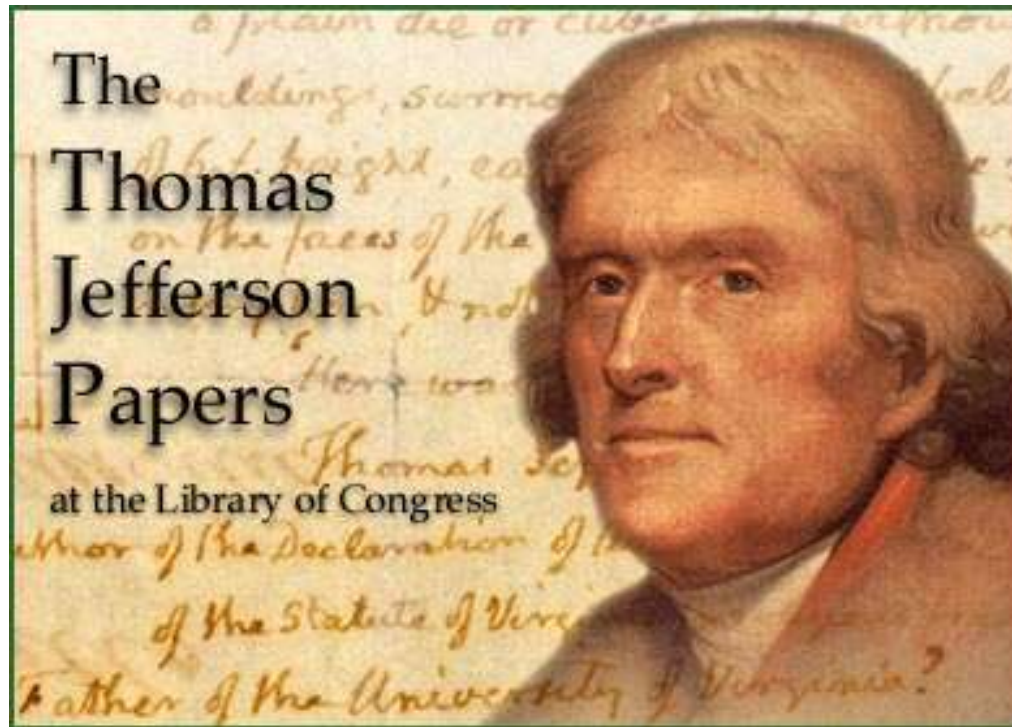
The prospect of domination of the nation's scholars by Federal employment, project allocations, and the power of money is ever present -- and is gravely to be regarded.

Yet, in holding scientific research and discovery in respect, as we should, we must also be alert to the equal and opposite danger that public policy could itself become the captive of a scientific-technological elite.

**President
Dwight D.
Eisenhower
Farewell Address
17 January 1961**

51 years ago

Two Billion dollars per year to the climate industry (plus a Billion stimulus), and they still don't get it right.



**"It is error alone which needs the support of government. Truth can stand by itself."
--Thomas Jefferson: Notes on Virginia, 1782**

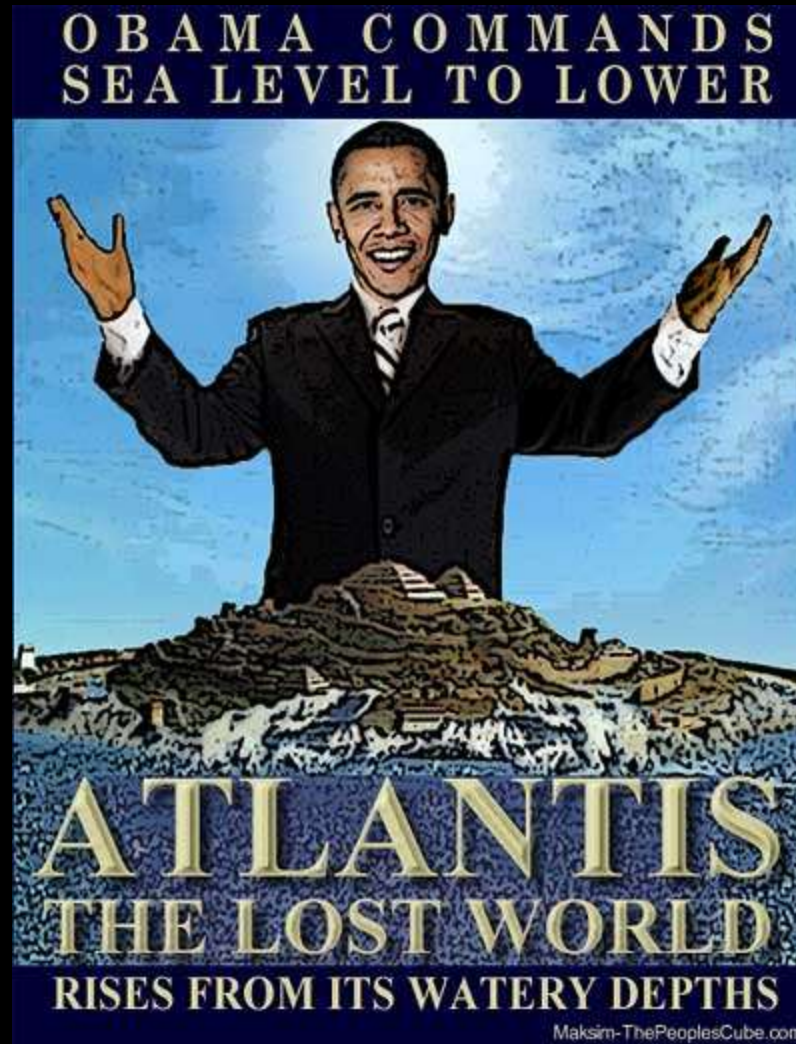


**No wonder
Jefferson is on the
2-dollar bill, and
Obama is on the
Trillion.**

**Which is worth
more?**



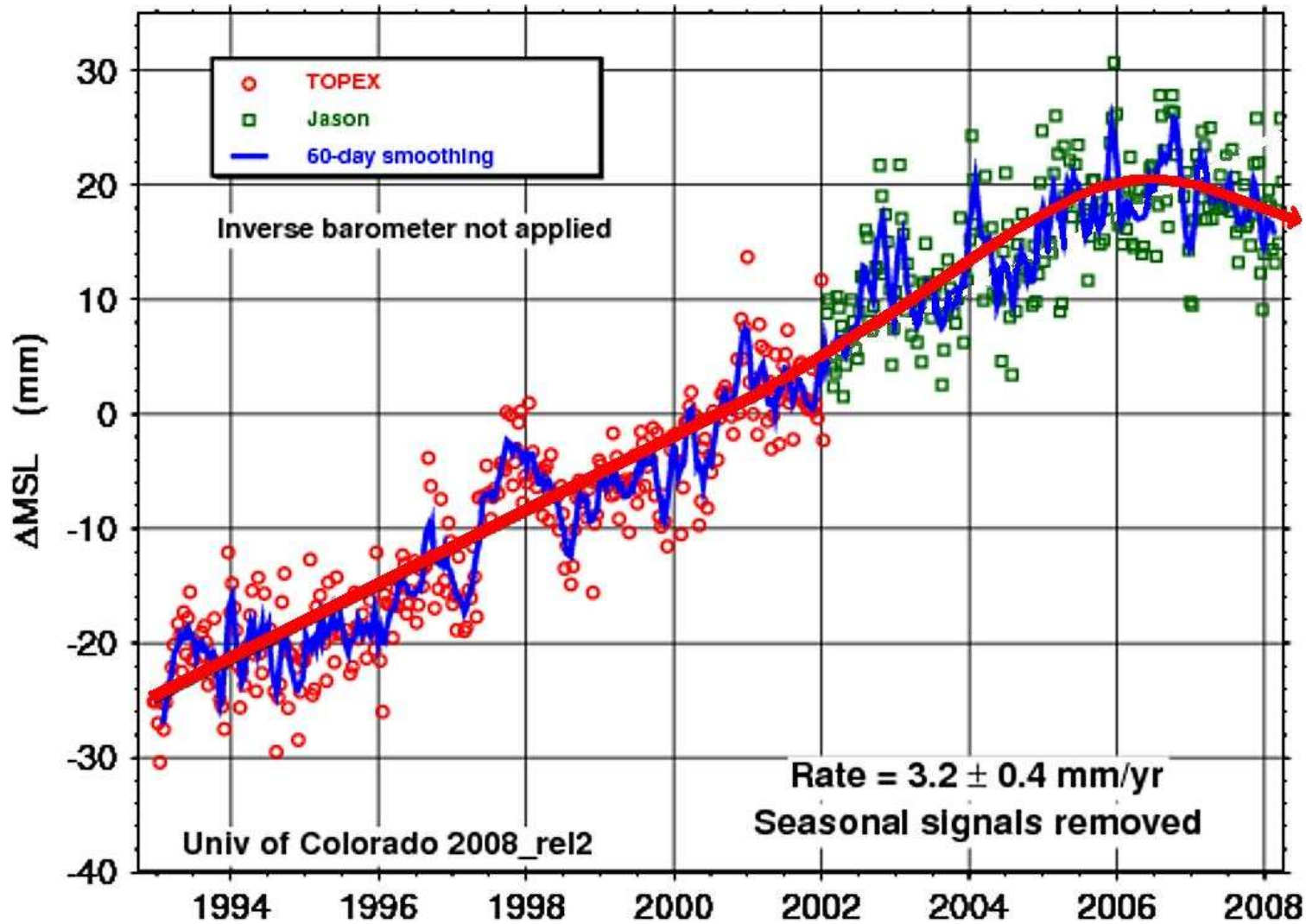
But can he lower the seas ?



“I am absolutely certain that generations from now, we will be able to look back and tell our children that this was the moment when the rise of the oceans began to slow and our planet began to heal.”

- Barack Obama, June 3, 2008

No need to. Been done ...



**In the past 12 years ...
Temperatures have fallen
US CO₂ emissions have diminished
Sea level rise has slowed
The planet began to heal**

**Thanks to President George W. Bush,
who did**

NOTHING

**Another case where doing nothing is the
best policy**

The direct impact of human CO₂ on climate is at most 0.2°C, the US contribution is a fraction of that, and US CO₂ emissions are now decreasing.

Therefore, strategies like Cap'n Trade and Kyoto are

Ineffective Policies

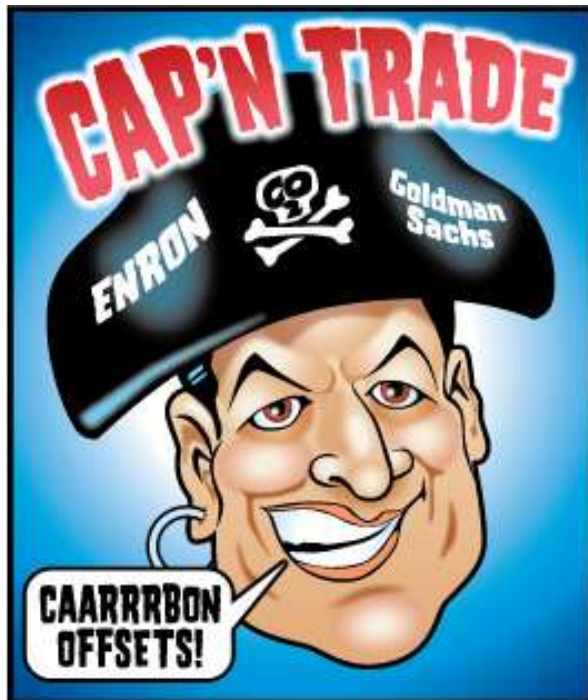
that will

Fail to Solve a

Nonexistent problem.

Why do we still consider them?

To justify other agendas, like...



Energy Policy & EPA “Power” grabs.

The price of purchased “science” is the tip of the iceberg.
Science is used to justify much more costly political policies.

Example: Obama’s rejection of the Keystone Pipeline.

Compare the pipeline map (left) with the 2008 electoral map (right) and draw your own conclusions as to the real reason for using climate as an excuse to reject the project.

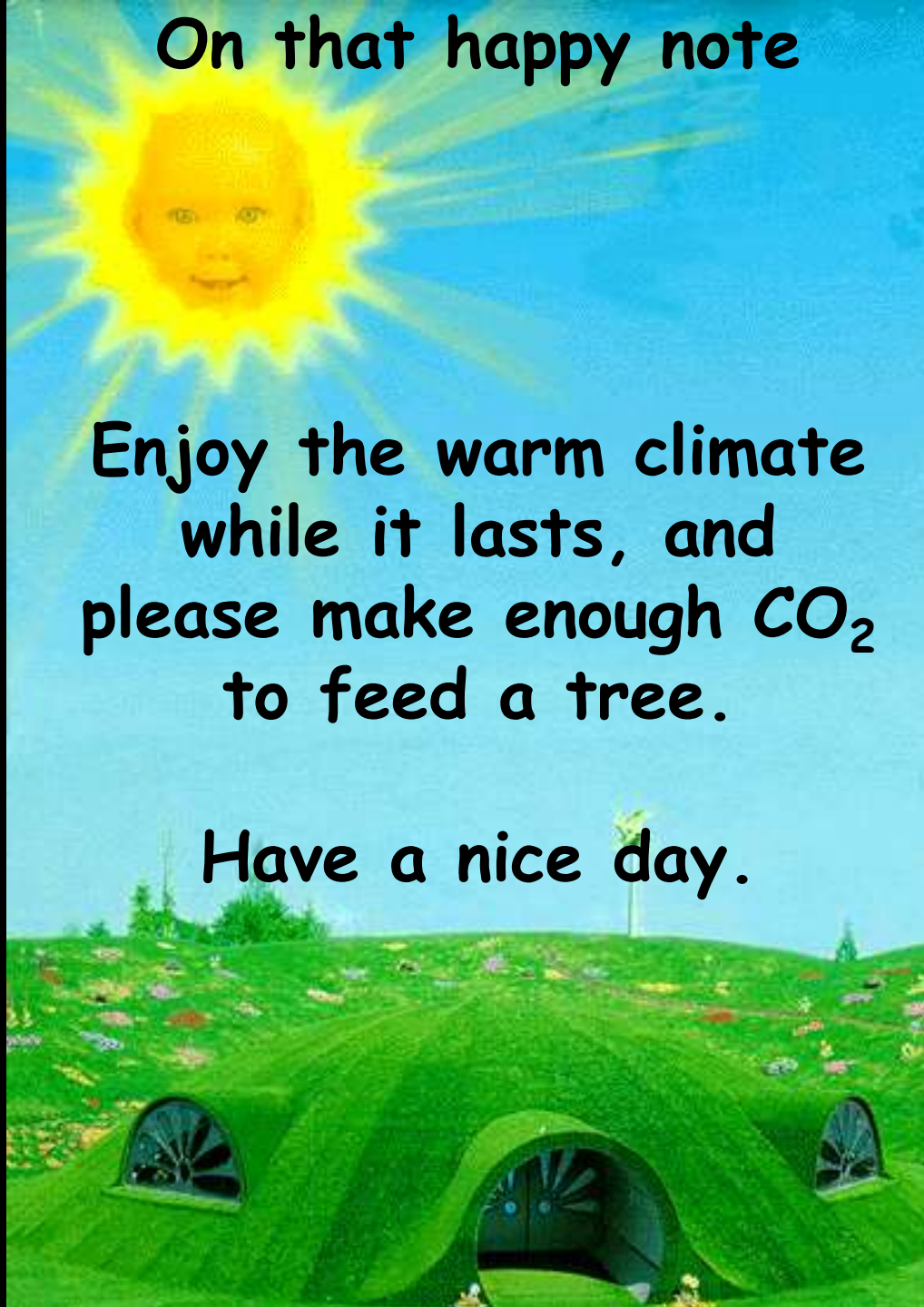


Red states are populated by undeserving boors who did not vote for Obama

On that happy note

Enjoy the warm climate
while it lasts, and
please make enough CO_2
to feed a tree.

Have a nice day.



More slides

These were left out of the live presentation to allow the audience to go home before dawn, but have some fun quotes and insights.

The new AGW scientific method



More on the IPCC and the psychology of climate policy.....

from "IPCC procedures (section 4)" ...

"Changes ... made after acceptance by the Working Group or the Panel shall be those necessary to ensure *consistency with the Summary for Policymakers* or the Overview Chapter."

The Summary is written by the political committee.

Translation: The full scientific report will be edited to agree with the prescribed conclusions of the politically appointed panel.

Actuality: scientific studies that are **not consistent with the "Summary for Policymakers" will be removed from the report.**

In some cases, the scientists have been purged from the IPCC.

Example: Dr. Chris Landsea.

“I personally cannot in good faith continue to contribute to a process that I view as both being motivated by pre-conceived agendas and being scientifically unsound.”



Dr. Chris Landsea, hurricane researcher at NOAA's Atlantic Oceanographic and Meteorological Laboratory.

He resigned from the IPCC when his contribution (“little if any increase in hurricane strength in the next 80 years”) was replaced with different conclusions (from a hurricane non-expert).

Result:

The reputed scientific "consensus" from the IPCC is a consensus among a group of scientists selected by a political committee.

Purging of dissenters further purifies the "consensus".

So, it's a consensus among the portion of the climate community that agrees with it.

**“We’ll make it
unanimous
without you.”**



**- Richard J. Daley, mayor of Chicago,
1955-1976, clearing up a vote in the city
council.**

Suppression of data and ideas that run counter to the Global Warming “consensus” is rampant in the “peer” (a.k.a., “pal”) reviewed literature, media, and in federally funded academe.

How can they justify censorship and suppression of evidence ?

**A few thoughts from those who have written on
Advocacy Science, Groupthink, and Bias**

The summary of Lysenkoism in the next slide is an effective decadal history of climate “science” from its primitive roots in the 1970’s to the 2000’s.

LYSENKOISM AND JAMES HANSEN

by Bob Carter

- Lysenkoism grew from four main roots:**
- a necessity to demonstrate the practical relevance of science to the needs of society (1970s);
 - the amassing of evidence to show the "correctness" of the concept as a substitute for causal proof (1980s);
 - noble cause corruption, whereby data are manipulated to support a cause which is seen as a higher truth (1990s); and
 - ideological zeal, such that dissidents are silenced as "enemies of the truth" (2000s)

Eight symptoms that are indicative of groupthink

(Irving L. Janis, 1983. Groupthink. Houghton Mifflin, Boston, rev 2nd ed.):

- **Illusions of invulnerability creating excessive optimism and encouraging risk taking.**
- **Rationalising warnings that might challenge the group's assumptions.**
- **Unquestioned belief in the morality of the group, causing members to ignore the consequences of their actions.**
- **Stereotyping those who are opposed to the group as weak, evil, disfigured, impotent, or stupid.**
- **Direct pressure to conform placed on any member who questions the group, couched in terms of "disloyalty".**
- **Self censorship of ideas that deviate from the apparent group consensus.**
- **Illusions of unanimity among group members, silence is viewed as agreement.**
- **Mindguards — self-appointed members who shield the group from dissenting information.**

**“Fairness & Accuracy In Reporting” (FAIR) www.fair.org
Extra! November/December 2004**

**“Journalistic Balance as Global Warming Bias
Creating controversy where science finds consensus.”
By Jules Boykoff and Maxwell Boykoff**

“A new study has found that when it comes to U.S. media coverage of global warming, superficial balance—telling “both” sides of the story—can actually be a form of informational bias.”

**Balance is Bias.
– Boykoff Brothers, 2004**

**War is Peace.
Ignorance is Strength.
Freedom is Slavery.
– Big Brother, 1984**



U.S. CO₂ Emissions

Annual Growth Rates

1949 to 2006

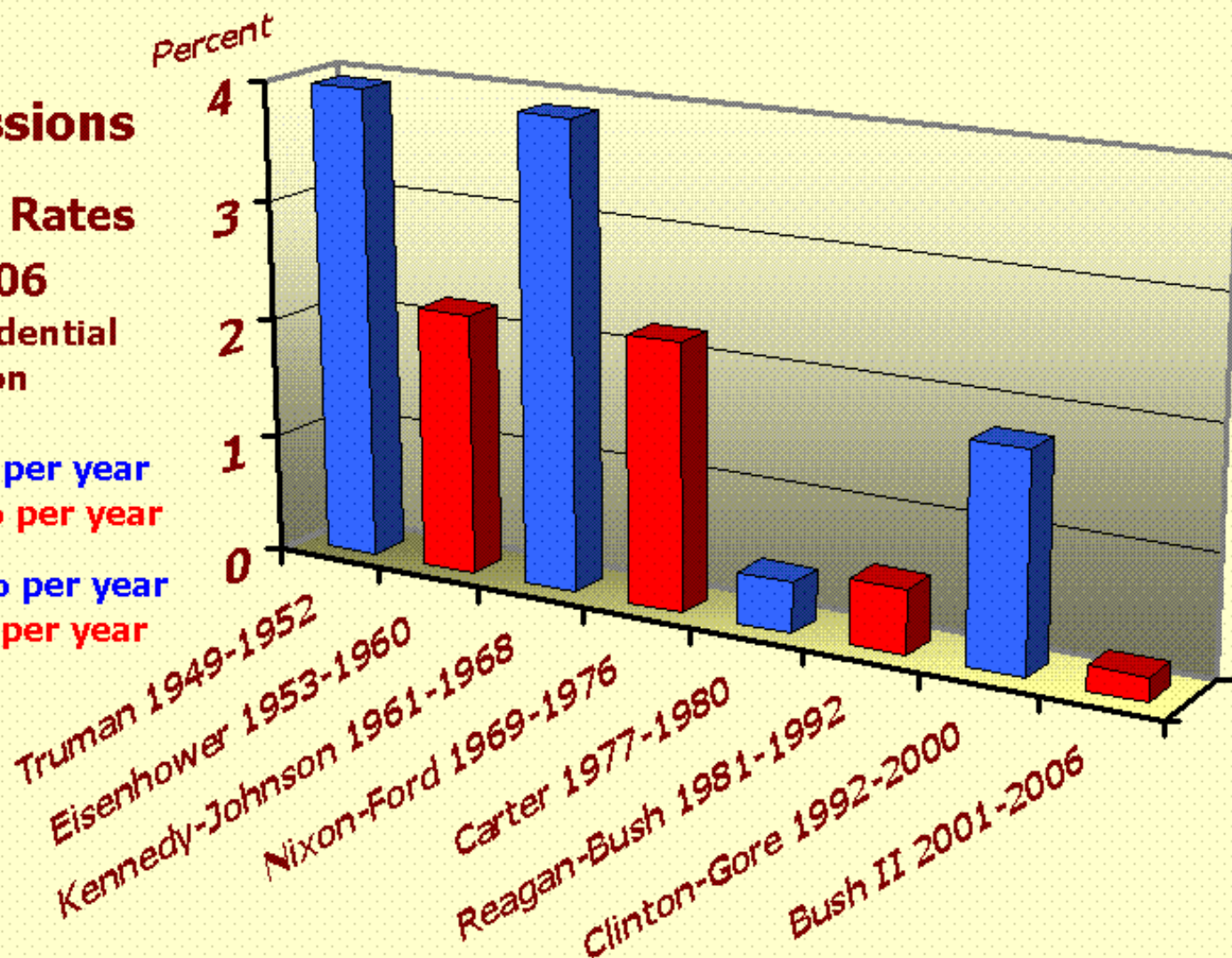
averaged by presidential administration

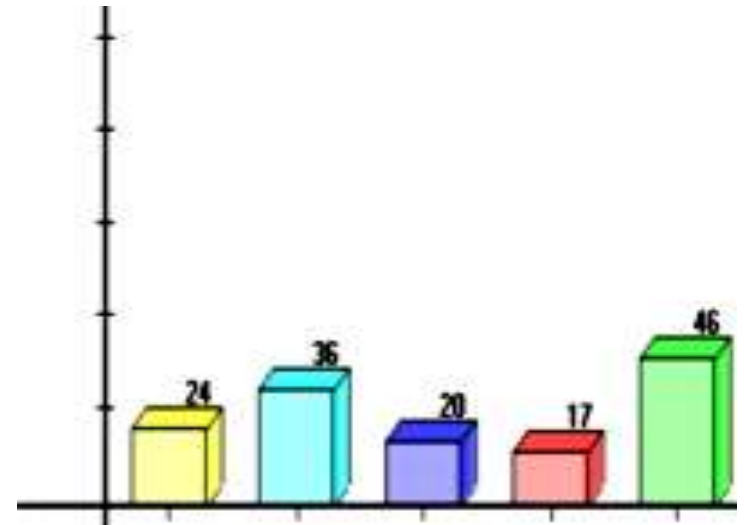
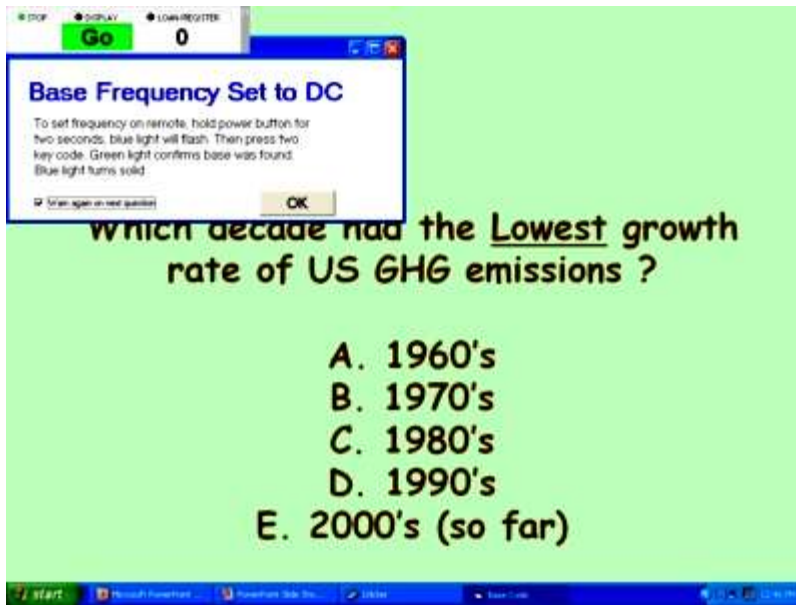
Democrats: +2.6% per year

Republicans: +1.3% per year

Clinton-Gore: +1.8% per year

G.W. Bush: +0.2% per year





“Banned in Boulder” Keen’s Global Warming Quiz

**censored in 2008, but enjoy it at:
icecap.us/images/uploads/Globalwarmingquiz.pdf**

**and the exciting story of its banning at:
www.nationalreview.com/planet-gore/16704/are-you-now-or-have-you-ever-been/chris-horner**