

Climate Change, Global Warming and Scientific Theory

- **Everybody talks about the weather,**
- **but very few know what they are talking about.**

Why did Global Warming become Climate Change?

- **Since 1998 world has cooled**
- **Atmospheric CO₂ continues to increase**
- **Huxley said, “The great bane of science; a beautiful hypothesis destroyed by an ugly fact.**
- **No problem, shift the goalposts.**
- **Climate change allows you to say warmer, cooler, hotter, drier, windier, calmer, stormier all due to humans.**
- **Ignores natural variability.**

Policy and Fear

- ***“In order to manage risk, you must scare people”.*** Lord Givens policy advisor to Tony Blair.
- ***"The whole aim of practical politics is to keep the populace alarmed by menacing it with an endless series of hobgoblins, all of them imaginary.”*** Mencken
- ***“The urge to save humanity is almost always only a false-face for the urge to rule it.”*** Mencken

There is a vast gap between what the public generally knows and what science knows.

Focus on human CO₂ as the cause of climate change is like looking at one nut on the right rear wheel and essentially ignoring the engine and the transmission when the car is not running properly.

What happens if it cools? What about precipitation?

Consensus

- **The opinion of 10,000 men is of no value if none of them know anything about the subject. Marcus Aurelius**
- **Consensus is not a scientific fact**
- **In 1970 the scientific consensus warned of catastrophe from global cooling.**

More consensus

I know that most men, including those at ease with problems of the greatest complexity, can seldom accept even the simplest and most obvious truth, if it be such as would oblige them to admit the falsity of conclusions which they have delighted in explaining to colleagues, which they have proudly taught to others, and which they have woven, thread by thread, into the fabric of their lives.

Tolstoi

Paradigm Shift

Western education teaches with a uniformitarian philosophy, which assumes change is gradual over long periods of time.

In fact change is dramatic in quite short time periods.

As a result any sudden change is assumed unnatural, that is, caused by humans

Mark Twain



- **There is something fascinating about science. One gets such wholesale returns of conjecture out of such trifling investment of facts.**
- **Actually unfair because it is how science works.**
- **Once a theory is presented other scientists challenge and test to try and show the theory is incorrect.**
- **You don't try to prove theory; what Karl Popper called 'falsibility'.**

With global warming the consensus was reached before the research had even begun.

Richard Lindzen, MIT Professor of Atmospheric Physics and member of the IPCC

Theory Thwarted

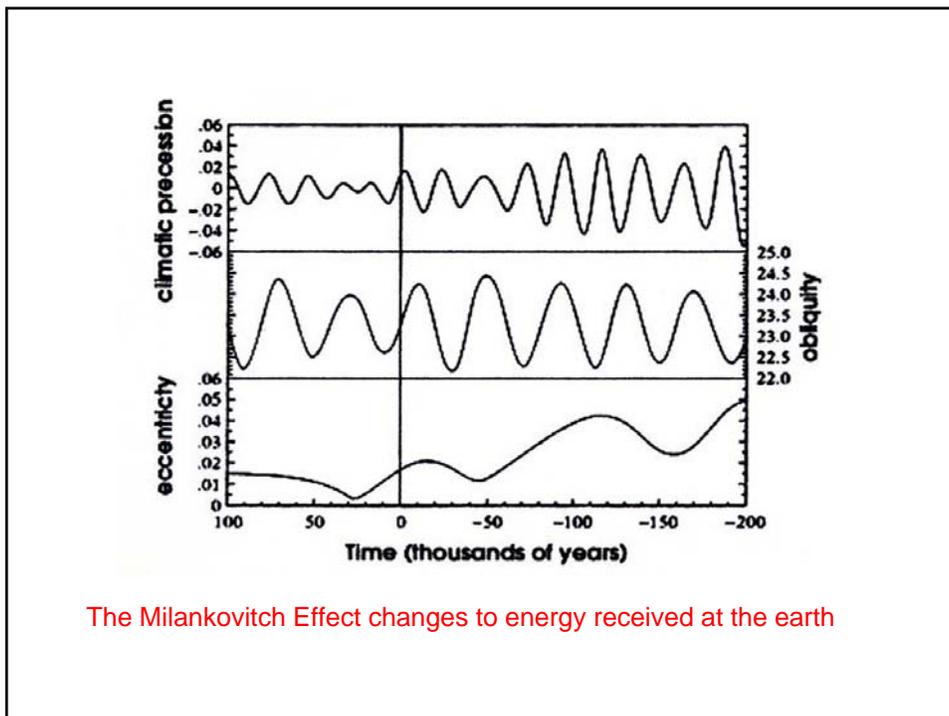
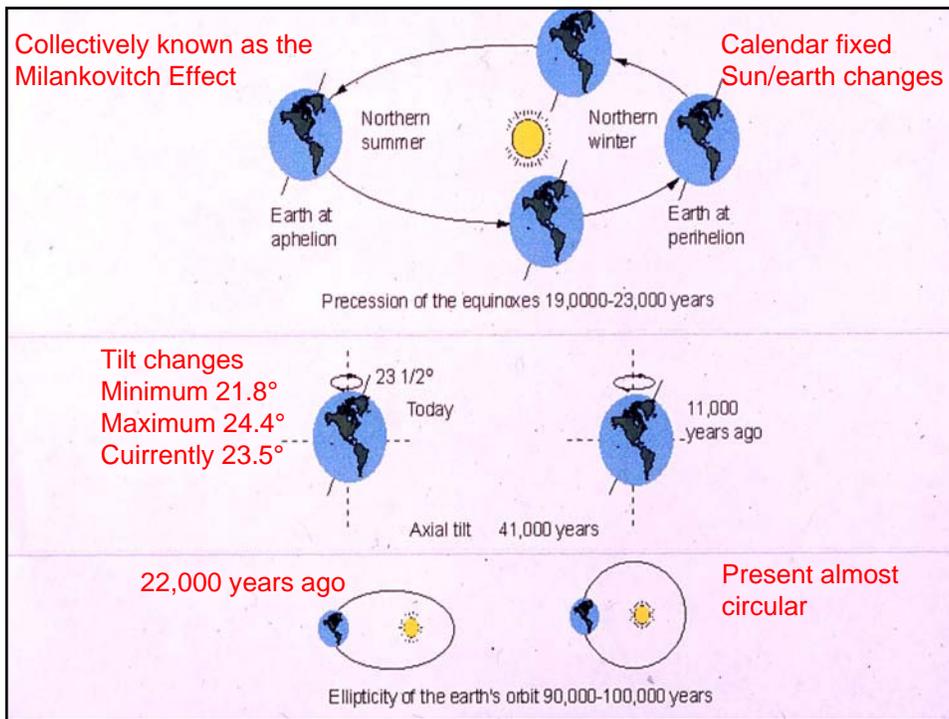
- **Those who tested the theory, as all scientists should, were attacked and labeled skeptics or even worse “deniers” with all the holocaust connotations.**
- **So far they have effectively stifled, but not completely suppressed, the normal scientific method.**
- **Evidence overwhelming CO2 not the cause of change.**

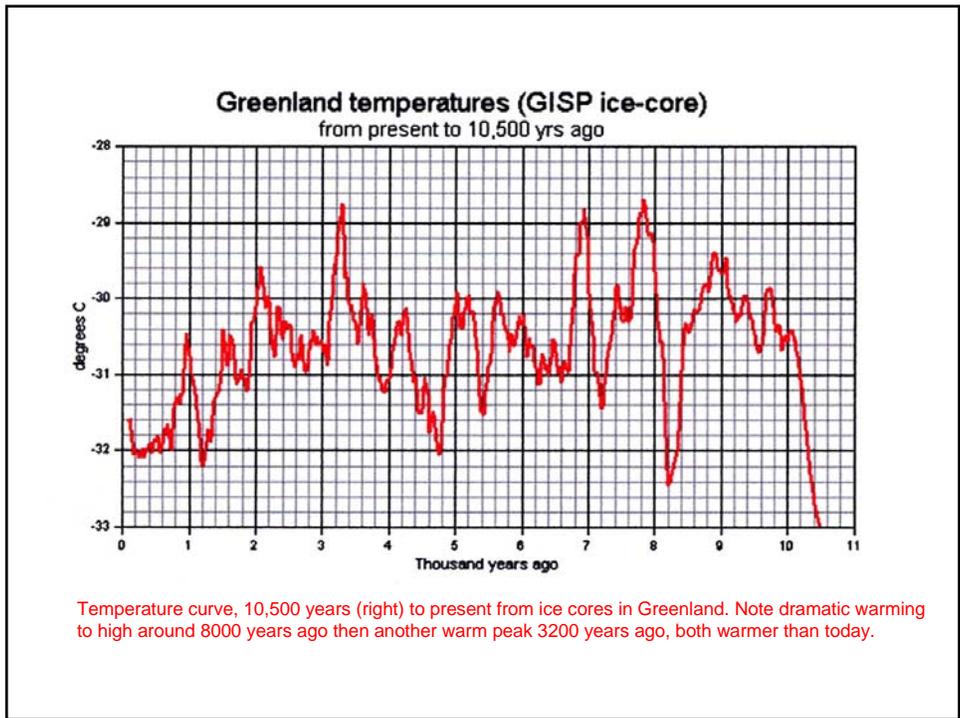
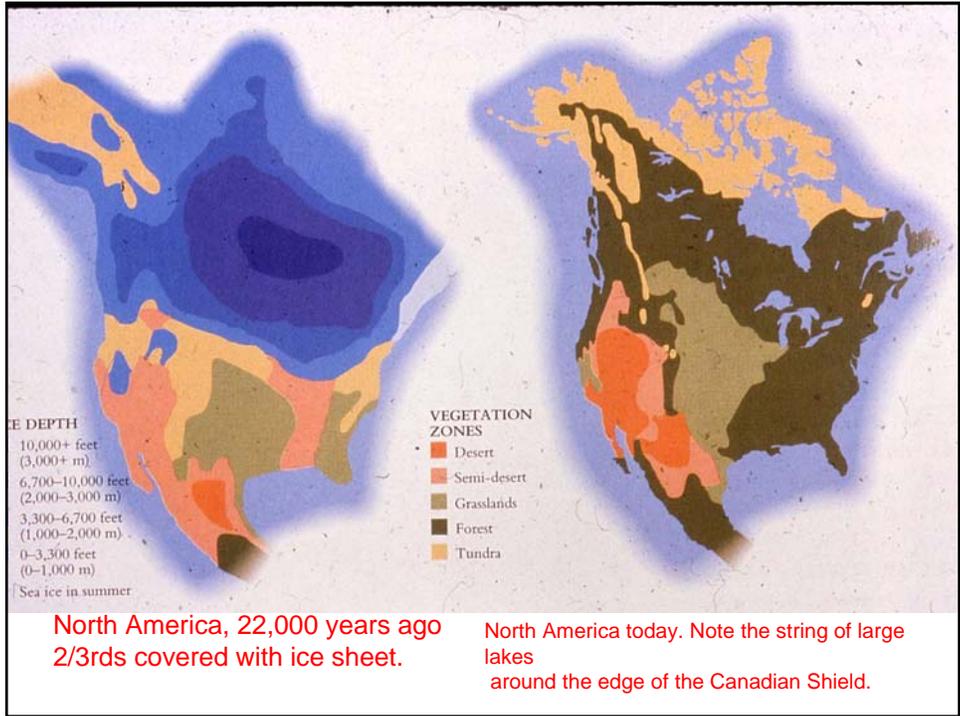
Global Warming Hypothesis/ Assumptions

- CO₂ is a greenhouse gas that traps heat
- Atmospheric CO₂ would increase from human activity
- Because of the increase of CO₂ global warming would occur
- Temperature would continue to rise as long as humans continued to add CO₂
- Atmospheric CO₂ would double

Solar variability is the Major Factor in climate change

- The sun's energy at the earth is changed in three ways
- Sun/Earth Relationships (Orbit, Tilt, Precession)
- Variation in Electromagnetic Radiation (Heat/Light)
- Variation in Corpuscular Radiation (Solar Wind)







White Spruce 100 km north of current tree line - Radiocarbon Date 4940±170:
 Courtesy of Professor Ritchie

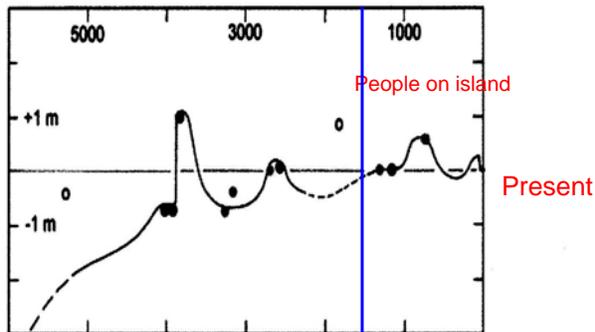
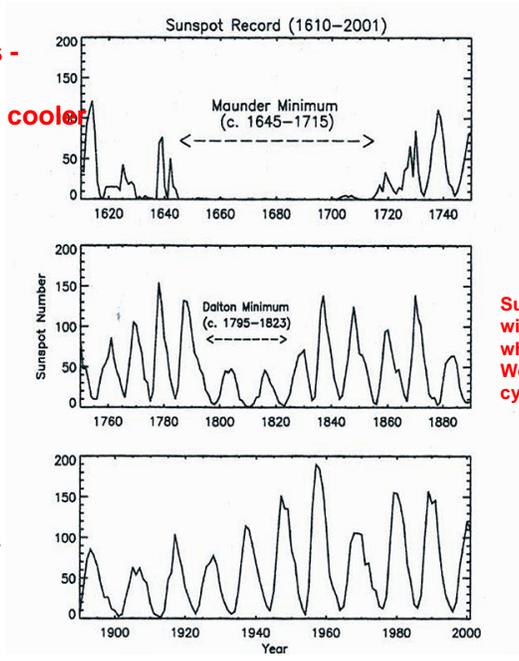


Fig. 1. Sea level curve for the last 5000 years for the Maldives. Black DOTS=past sea level positions dated by radiocarbon (AMS), grey DOTS=dates by [Woodroffe, 1992] with uncertain relation to sea level, open CIRCLES=dates by [Woodroffe, 1992] without closer relation to a former sea level. The sea level curve is oscillating with four levels above the present level; +1.1–1.2 m at 3900 BP, +0.1–0.2 m at 2700 BP, +0.5–0.6 m at 1000–800 BP and +0.2–0.3 m at AD 1900–1970. The islands have been inhabited, at least, since 1500 BP.

**Sea levels for the Maldive Islands (Indian Ocean) Compare this with ice core
 Notice how previous people have survived higher levels than today.**

Source: Mörner

More sunspots -
Warmer
Less sunspots cooler



Sunspot records begin with Galileo in 1610, which was cycle 1. We are currently entering cycle 24

Source:
Wei-Hock Soon, 2004

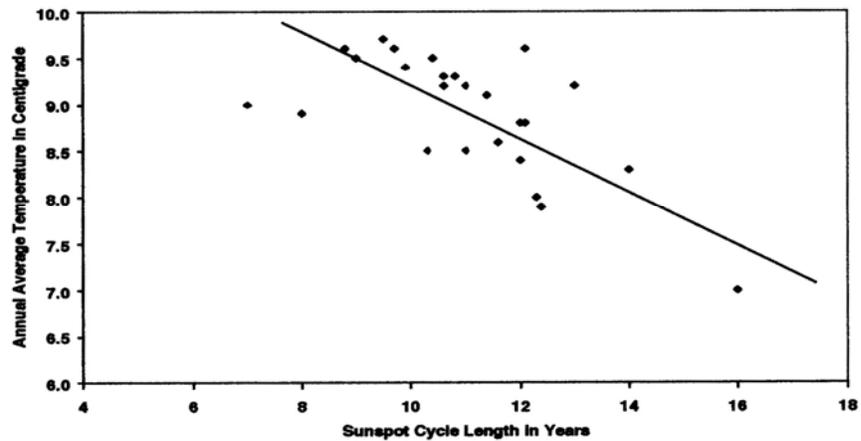
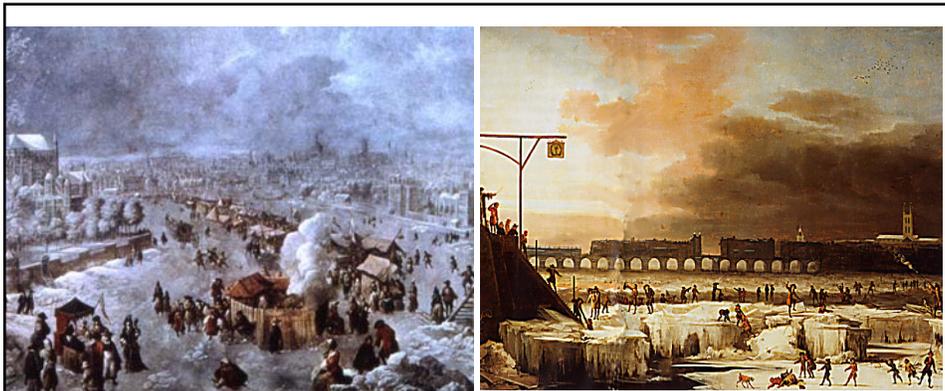
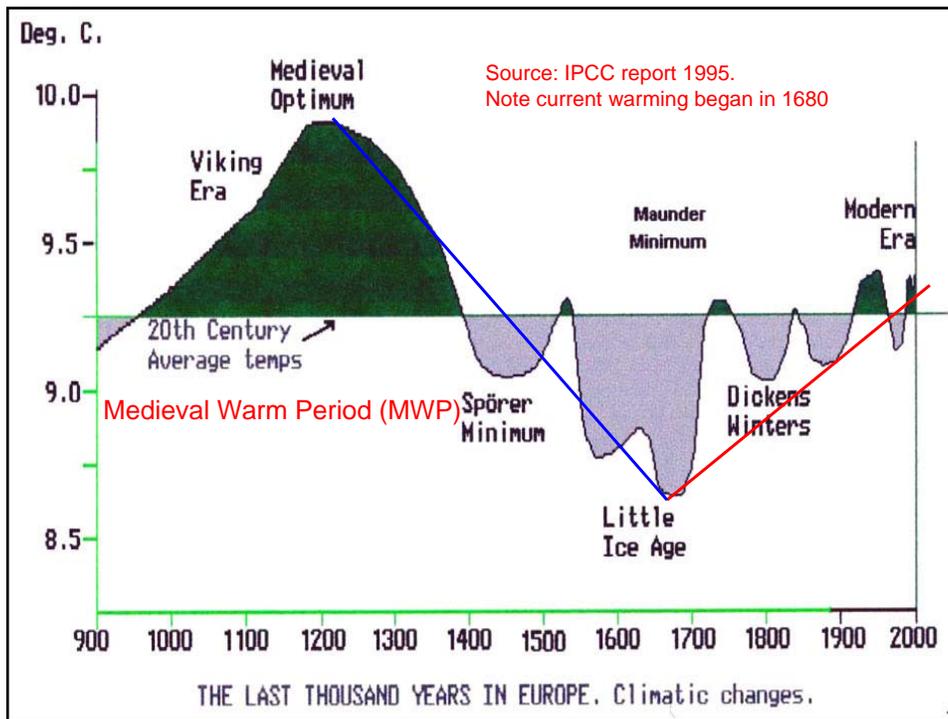


Figure 5: Sunspot Cycle Length relative to Temperature 1705 to 2000

This figure shows the strong correlation between sunspot cycle length and average annual temperature at De Bilt, Netherlands.

Based on the projection of amplitudes of about 50 for solar cycles 24 and 25, the correlation in Figure 5 derives a temperature fall of 1.5°C relative to the recent cycles 22 and 23, which had maxima of 157.6 and 119.6 respectively.



Painting of the frozen Thames in 1683
By Jan Grifier

Painting of the Thames artist unknown.
See London Bridge in the background.

“Get Rid of the MWP”

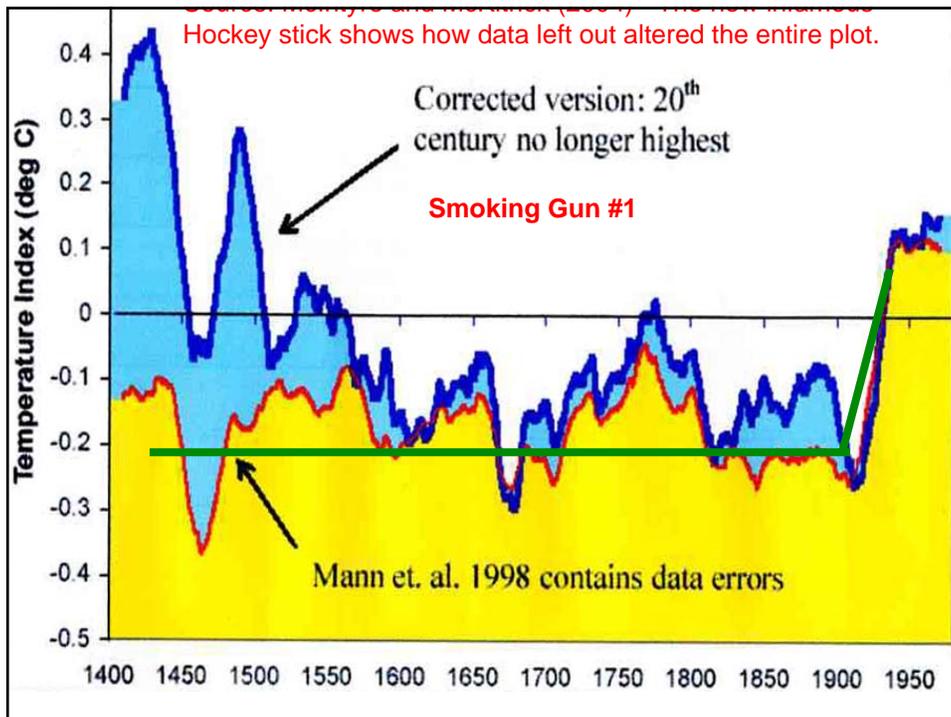
- D. Deming, *Science* 1995

*“With the publication of the article in Science [in 1995], I gained significant credibility in the community of scientists working on climate change. They thought I was one of them, someone who would pervert science in the service of social and political causes. So one of them let his guard down. A major person working in the area of climate change and global warming sent me an astonishing email that said “**We have to get rid of the Medieval Warm Period.**”*

Source: Presentation by S McIntyre At Conference Stockholm Sweden, September 9 2006

Reproducible Results

- **A basic test in science**
- **Must be able to obtain the same results using the same data and methods.**
- **Requires full disclosure**
- **Canadian researchers McIntyre and McKittrick used the same data and attempted to reproduce the temperature curve (red), but obtained a different curve (blue)**



Wegman Report

In our further exploration of the social network of authorships in temperature reconstruction, we found that at least 43 authors have direct ties to Dr. Mann by virtue of coauthored papers with him. Our findings from this analysis suggest that authors in the area of paleoclimate studies are closely connected and thus 'independent studies' may not be as independent as they might appear on the surface.

Most people are unaware water vapor is by far the most important greenhouse gas

Anthropogenic (man-made) Contribution to the "Greenhouse Effect," expressed as % of Total (water vapor INCLUDED)

Based on concentrations (ppb) adjusted for heat retention characteristics	% of All Greenhouse Gases	% Natural	% Man-made
Water vapor	<u>95.000%</u>	94.999%	0.001%
Carbon Dioxide (CO2)	<u>3.618%</u>	3.502%	0.117%
Methane (CH4)	0.360%	0.294%	0.066%
Nitrous Oxide (N2O)	0.950%	0.903%	0.047%
Misc. gases (CFC's, etc.)	0.072%	0.025%	0.047%
Total	100.00%	99.72	0.28%

Source; F.Singer, 2003

Total atmospheric CO2- Human CO2- Kyoto

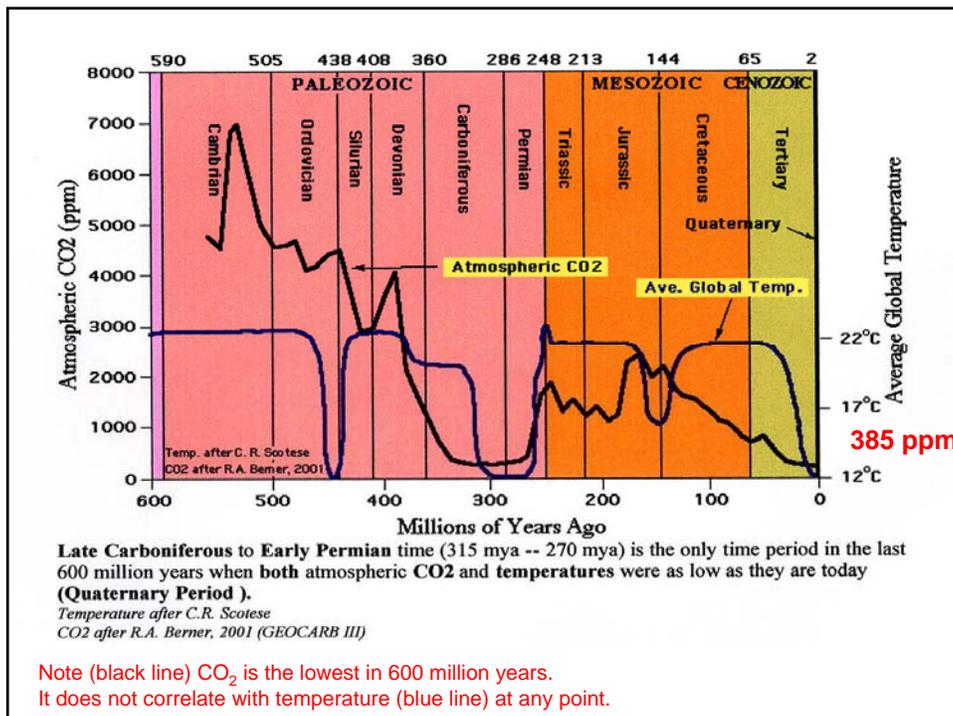
- **IPCC estimate of atmospheric CO2 is 750 Gigatons (Gt).**
- **Humans add 6 Gt per year from all activity**
- **Humans remove 3 Gt mostly with agriculture**
- **Canada's contribution is 2% of the global total**
- **China planning 500 coal burning plants in next 10 years**
- **Canada only country that signed Kyoto**

Carbon Cycle - Missing Sink (7 Gt)

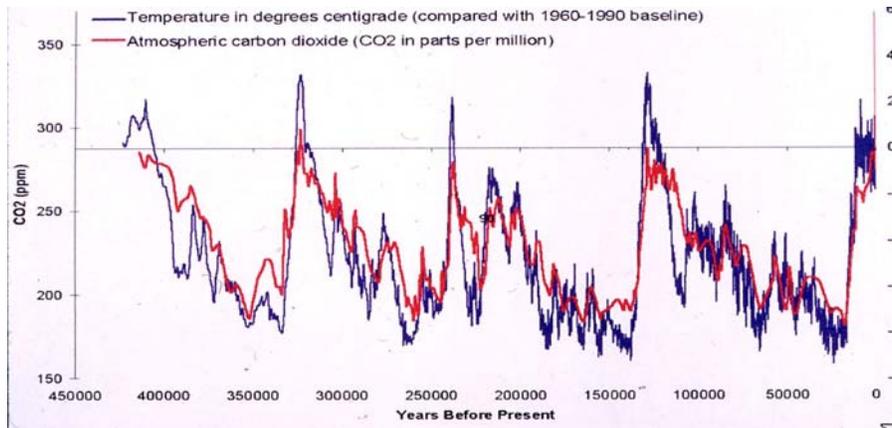
“Unfortunately, the global rates of photosynthesis and respiration are neither known nor measured well enough to determine annual changes in carbon storage.”

Richard Houghton, Senior Scientist, Carbon Research, Woods Hole Research Center,

Virtually all numbers are estimates.



Antarctic ice core records showing temperature and CO₂ changes for last 420,000 thousand years.



Present temperature on right. Note higher temperatures 130,000 and 320,000 years. Basic assumption is CO₂ change causes temperature change. The ice core record shows exactly the opposite.

Comparison of CO₂ readings over 2000 years. Smoothed ice core line on left and variable record from stomata.

Stomata are small opening in plant leaves and they vary with amount of CO₂ in the atmosphere.

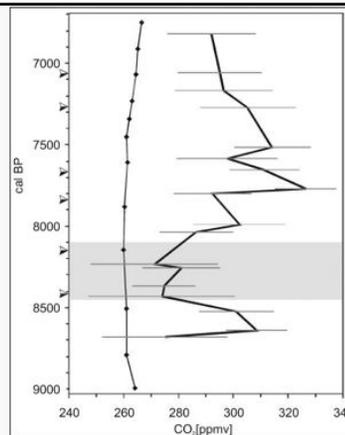
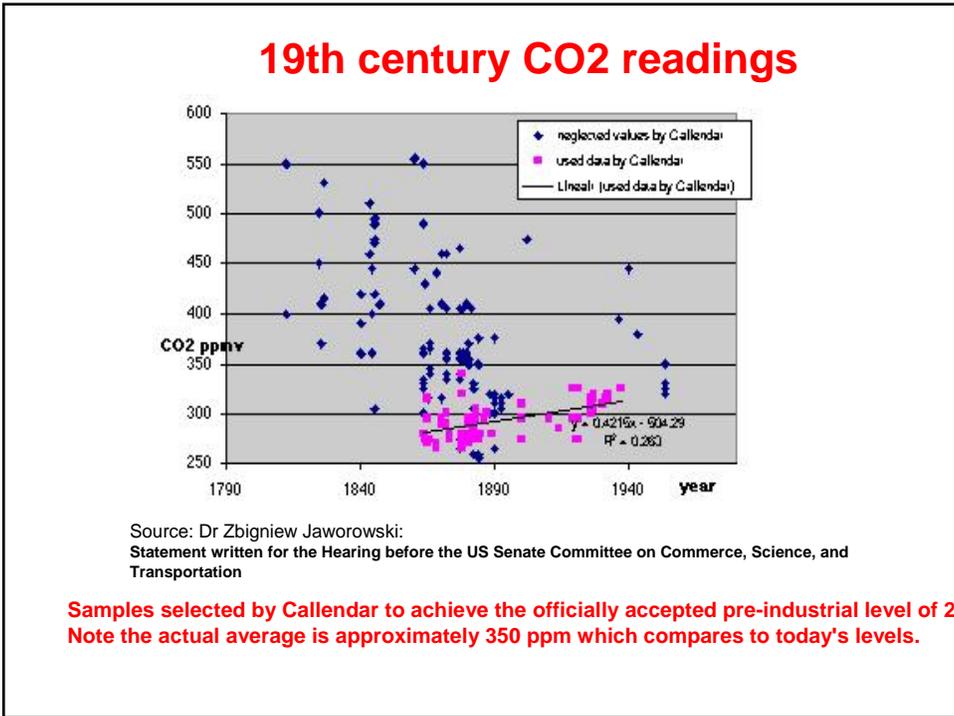
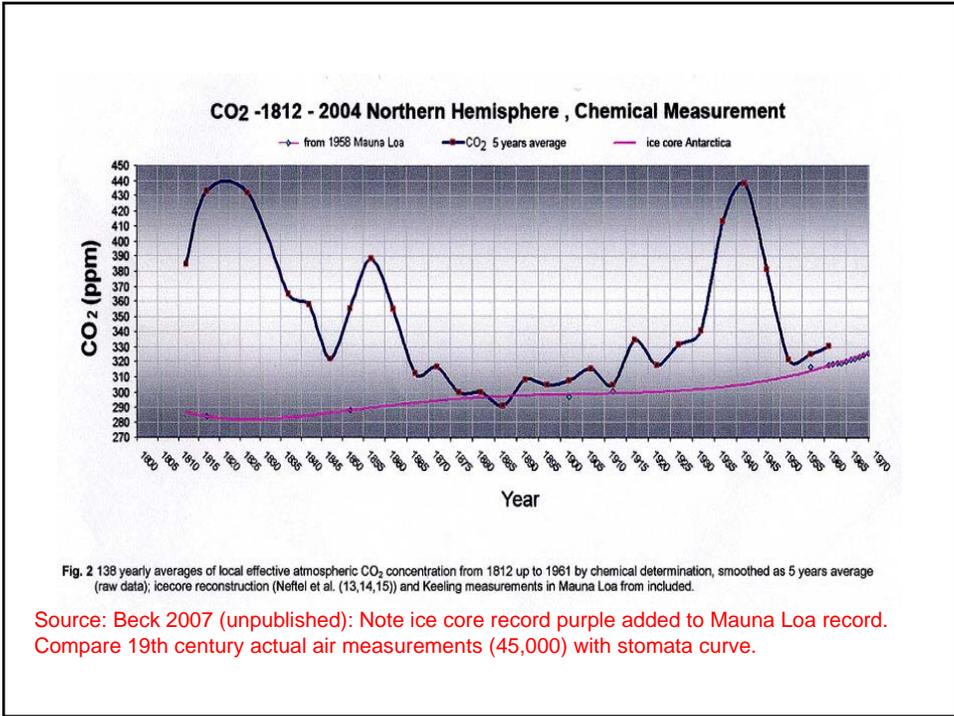
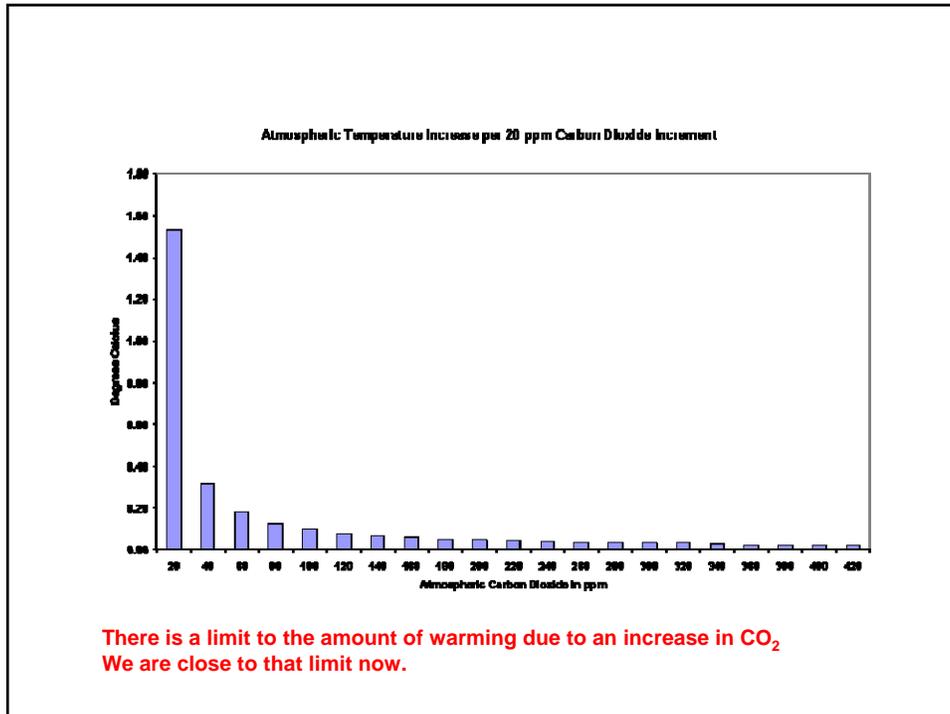


Fig 2.

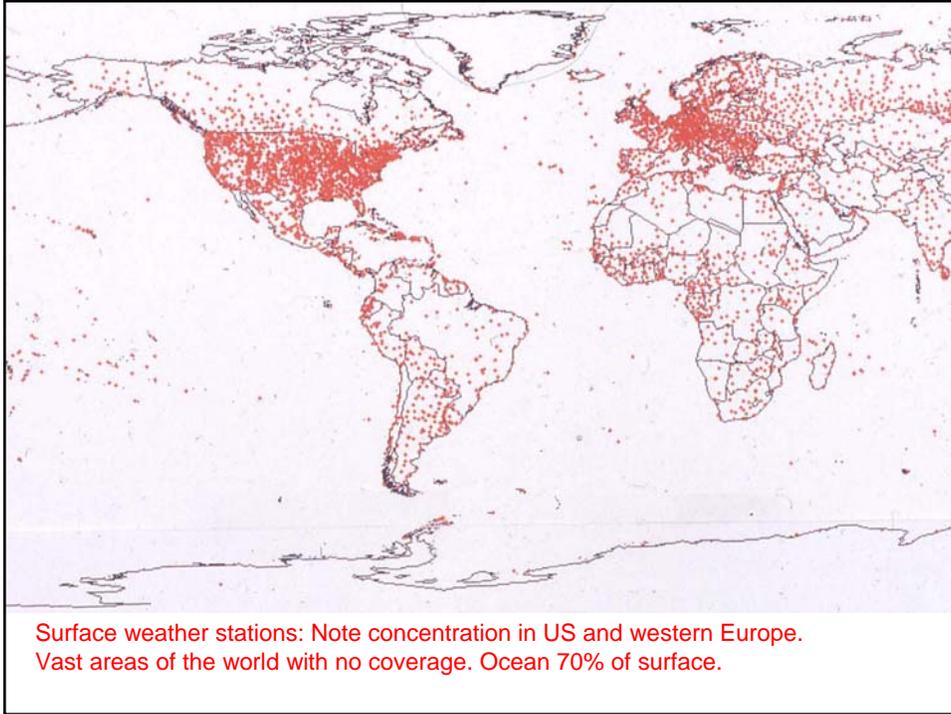
Reconstructed CO₂ concentrations for the time interval between ~8,700 and ~6,800 calendar years B.P. based on CO₂ extracted from air in Antarctic ice of Taylor Dome (left curve; ref. 2; raw data available via www.ngdc.noaa.gov/paleo/taylor/taylor.html) and SI data for fossil *B. pendula* and *B. pubescens* from Lake Lille Gribso, Denmark (right curve; see Table 1). The arrows indicate accelerator mass spectrometry ¹⁴C chronologies used for temporal control (Table 1). The shaded time interval corresponds to the 8.2-ka-B.P. cooling event (3-12). Quantification of mean CO₂ concentrations is based on the rate of historical CO₂ responsiveness of the European tree birches (Fig. 1); ±1σ CO₂ estimates are derived from the standard deviation of the SI mean values.

Proc Natl Acad Sci U S A. 2002 September 17; 99(19): 12011-12014.





- ## False solution
- In the Computer models they assume CO₂ raises temperature
 - This increases evaporation
 - Increased water vapor causes increased temperature.
 - No scientific basis for this assumption.
 - More likely cloud cover would increase reducing temperature.



Data

- **“Deficiencies in the accuracy, quality and continuity of the records place serious limitations on the confidence that can be placed in the research results.”**

US National Research Council Report., February 3, 1999

- **“It’s very clear we do not have a climate observing system...This may come as a shock to many people who assume that we do know adequately what’s going on with the climate but we don’t.”**

Kevin Trenberth, National Center for Atmospheric research Boulder, CO.

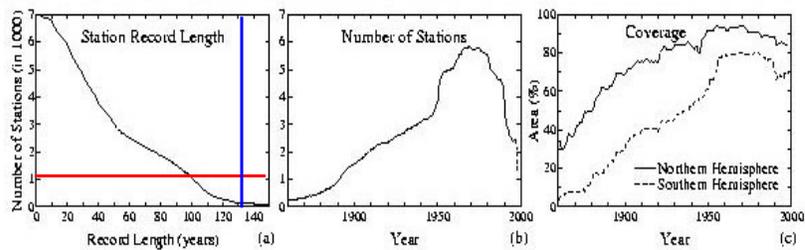
The global average surface temperature has increased by 0.6 ± 0.2 °C since the late 19th century.

Climate Change 2001: The Scientific Basis, IPCC Third Assessment Report (TAR), page 26

Smoking Gun #2

The figures below indicate

- a. the number of stations with record length at least N years as a function of N,
- b. the number of reporting stations as a function of time,
- c. the percent of hemispheric area located within 1200km of a reporting station.



Goddard Institute of Space Studies (GISS) P.D.Jones

Claim an accurate record for the last 130 years, but note there are less than 1000 stations with 100 years of record. We have less stations now than in 1960.

Disclosure

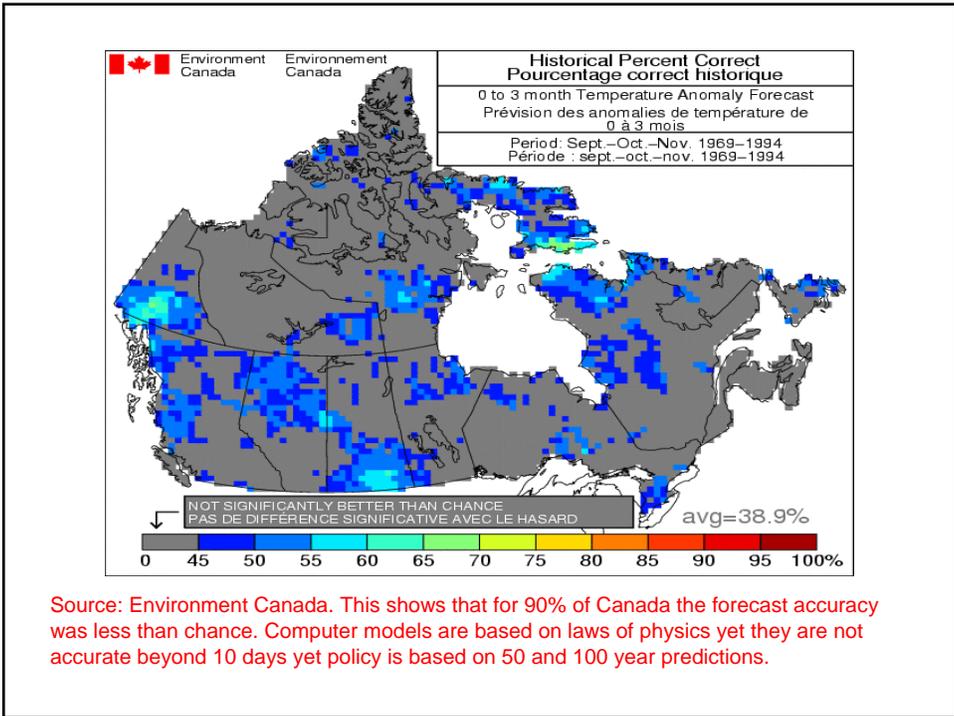
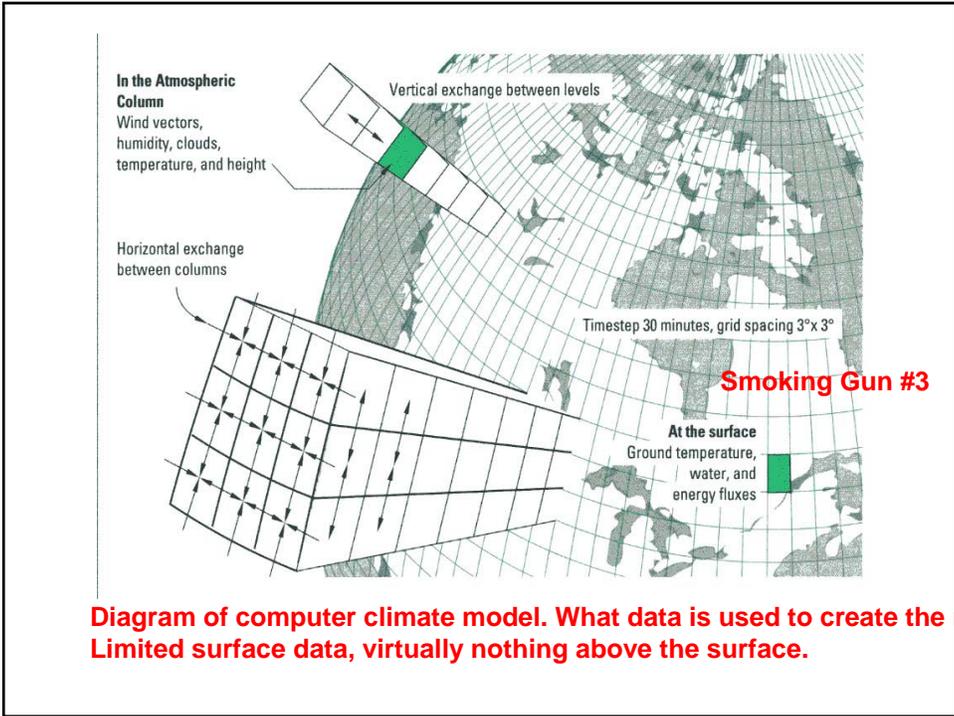
P.D. Jones refuses to disclose how he achieved the number.

"We have 25 or so years invested in the work. Why should I make the data available to you, when your aim is to try and find something wrong with it."

***(Jones' reply to Warwick Hughes, 21. February 2005;
confirmed by Jones when asked by Von Storch)***

From Steve McIntyre's Blog September 19, 2006

Wjiborn Karlen is a prominent paleoclimatologist who has published dozens of peer-reviewed articles. He presented information on variability in the Holocene. We chatted afterwards; he's very concerned over the integrity of CRU temperature data and stated that no article involving Philip Jones could be relied on; I asked him if I could quote him on that and he said yes.



Motive?

Scientist's need "to get some broader based support, to capture the public's imagination...that, of course, entails getting loads of media coverage. So we have to offer up scary scenarios, make simplified dramatic statements, and make little mention of any doubts we may have...each of us has to decide what the right balance is between being effective and being honest.

Stephen Schneider, Senior Fellow at the Center for Environment Science and Policy of the Institute for International Studie, and Professor by Courtesy in the Department of Civil and Environmental Engineering at Stanford University, **Discover Magazine**.

Motive?

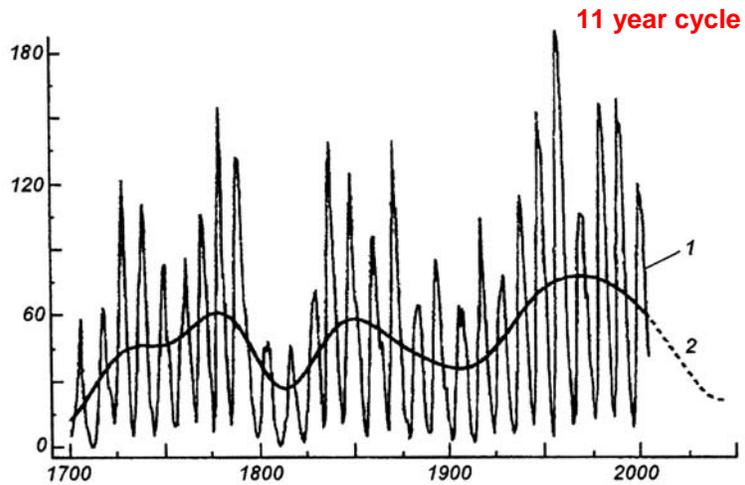


- **Isn't the only hope for the planet that the industrialized nations collapse? Isn't it our responsibility to bring that about?**

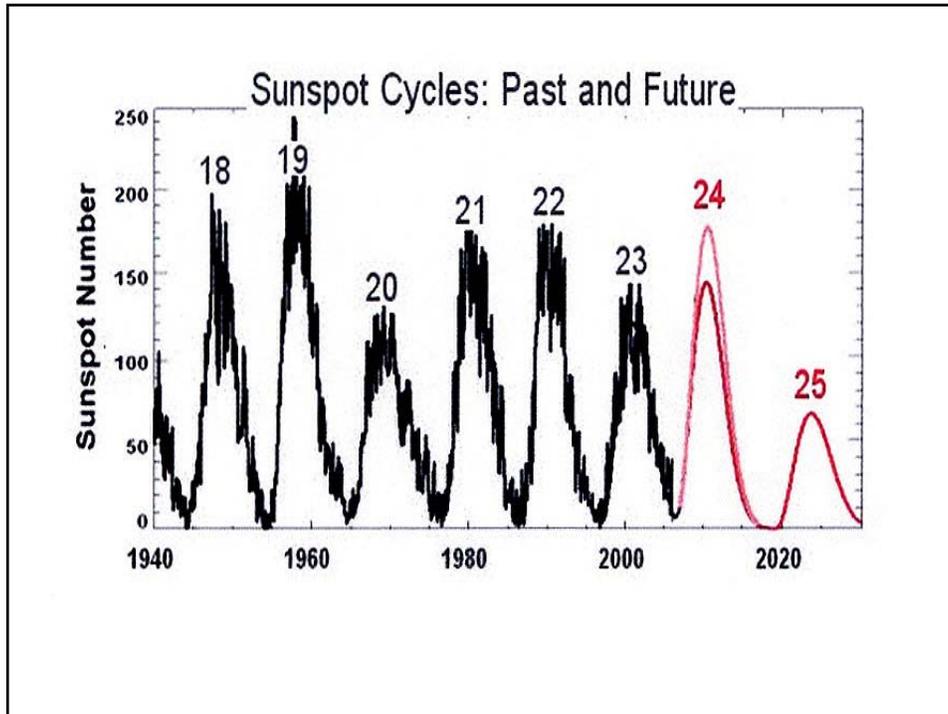
- Maurice Strong; Head of the 1992 Earth Summit in Rio and Executive Officer for Reform in the Office of the Secretary General of the UN.
- Quote from Junkscience.com

The Precautionary Principle

But what if there is a problem?
Shouldn't we act just in case?



Russian plot of sunspot cycles with superimposed longer trend.



Intergovernmental Panel on Climate Change (IPCC)

Changes (other than grammatical or minor editorial 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.**

