A Skeptical View of Anthropogenic Global Warming

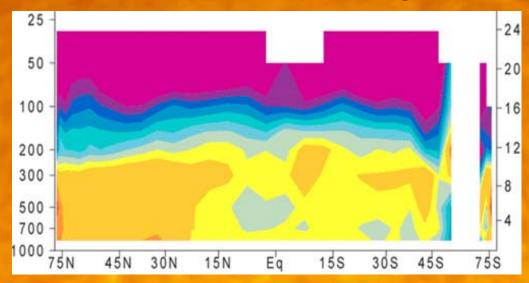
Having the courage to do Nothing
For the Cambridge Society
April 6, 2009
Friends of Science Society
Ken Gregory
Presented by: Peter Burns

Runaway greenhouse effect?

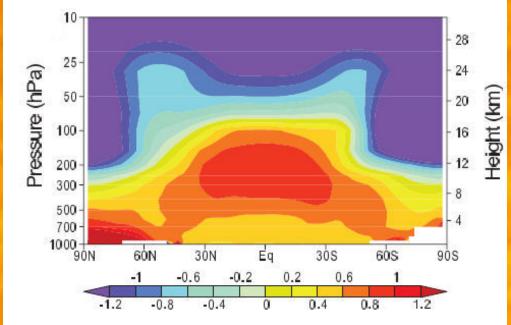
- CO₂ accounts for 0.039% of atmosphere
- Each CO₂ addition has less effect
- If nothing else change, doubling CO₂ might cause 0.5 to 1 °C increase
- Models multiply this by large positive feedbacks from water vapour and clouds
- Actual data shows water vapour and clouds provide strong negative feedbacks

Where's the "hot spot"?

Actual Temperature Data

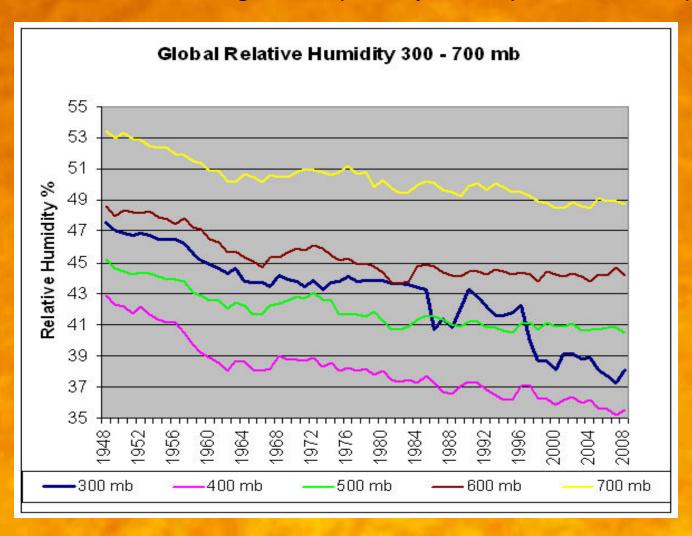


Model Predictions



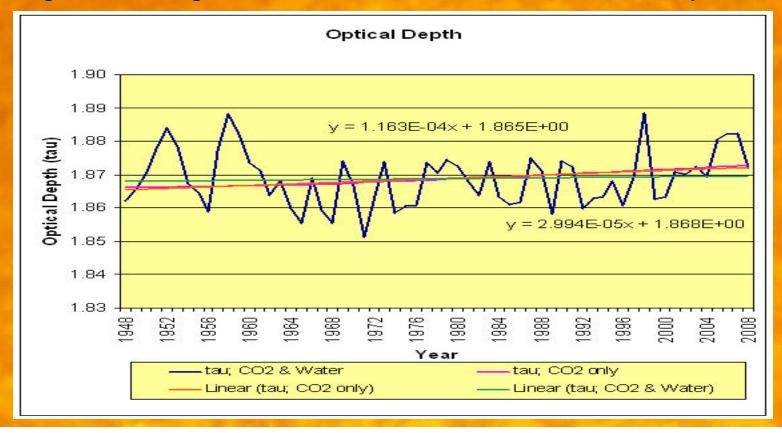
Water vapour content is falling

- GCM predict constant relative humidity (RH) with global warming.
- NOAA data shows falling RH, especially at the predicted hot spot.



Total Greenhouse Gases have not Increased.

- HARTCODE model sums the amount of CO2 and water vapour across the electromagnetic spectrum for 61 years.
- The pink line shows the trend from CO2 with water vapour held constant.
- The blue line is CO2 plus water vapour, green line is the linear trend.
- Water vapour reduced the trend negative feedback
- Total greenhouse gases have not increased over the last 61 years.

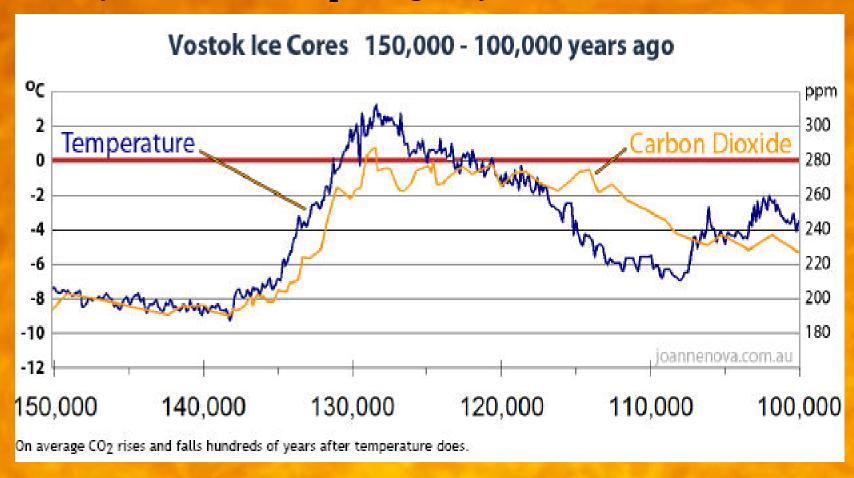


Clouds' strong negative feedback

- IPCC GCM assumes clouds amplify warming.
- Satellite measurements show heat-trapping high clouds decrease with warming, allowing heat to escape.
- Low clouds increase with warming, reflecting sunlight back to space.
- Both types of cloud changes provide strong negative feedback, offsetting the effect of CO₂.
- Water vapour plus clouds may provide near 100% negative feedback, so that CO₂ has negligible effect.

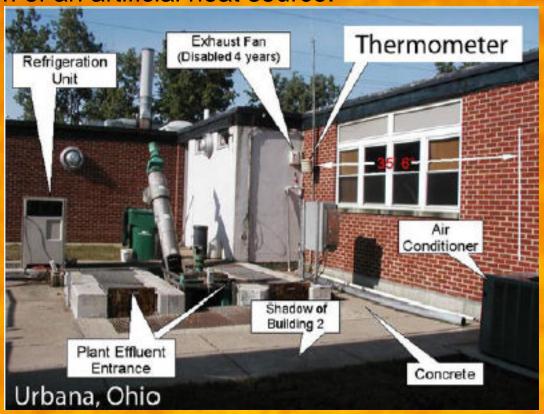
CO₂ lags behind temperatures

• Vostok Ice Core Data
Temperature leads CO₂ changes by about 800 Years.



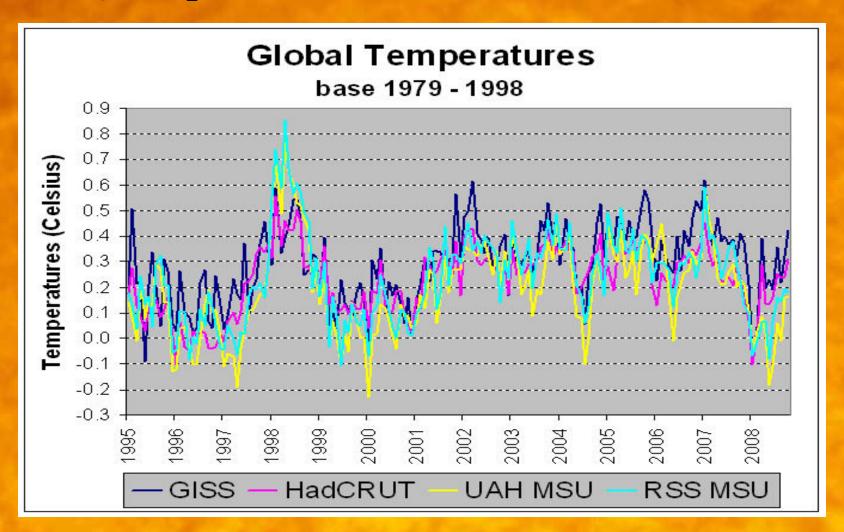
Urban heat island effect

- Correcting surface temperatures for the UHI effect would reduce the warming trend over land by half.
- The GISS "corrects" for UHI in the **wrong** direction in 45% of the adjustments. Hadley Hadcrut makes no adjustments.
- In the USA, only 11% of stations are in suitable locations, 69% are within 10 m of an artificial heat source.



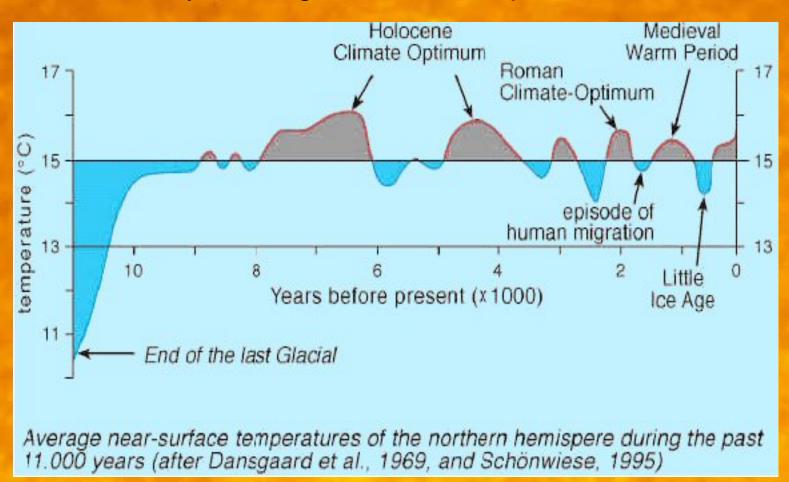
Current cooling

 Satellite data show a small cooling since 2001, even though CO₂ levels have increased



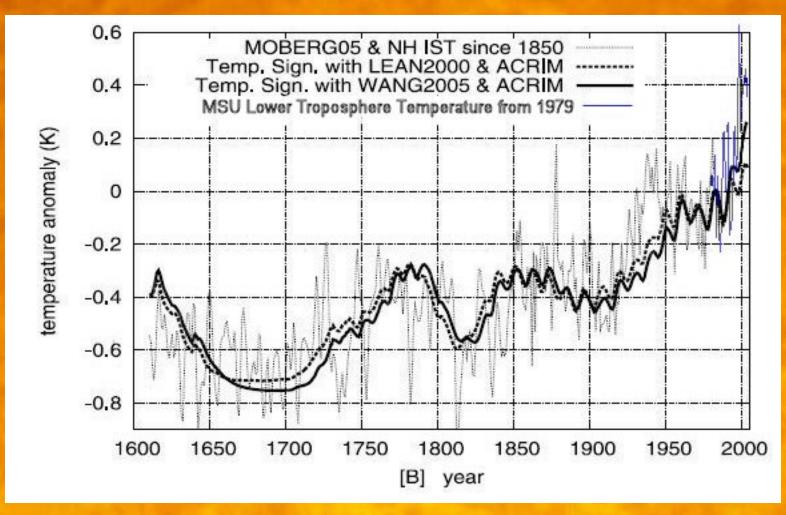
Previous warm & cool periods

Climate always changes with no help from Man.



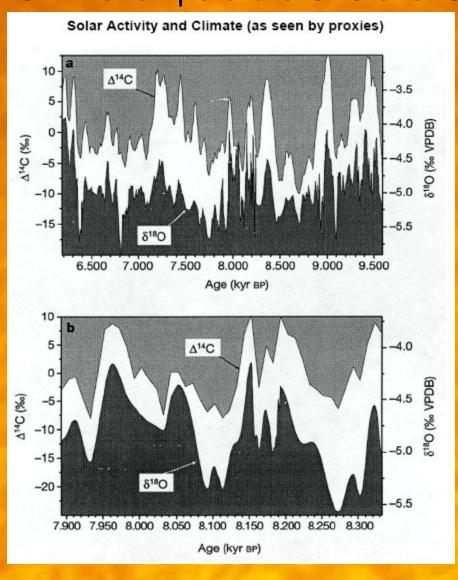
The Sun and temperature proxies

Sun TSI versus temperature since 1600



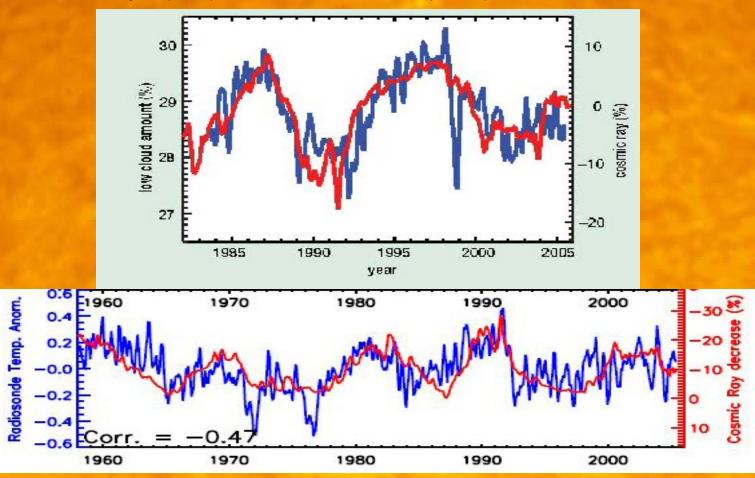
The Sun and temperature proxies

Solar proxy C14 vs temperature O18 over 3000 years.



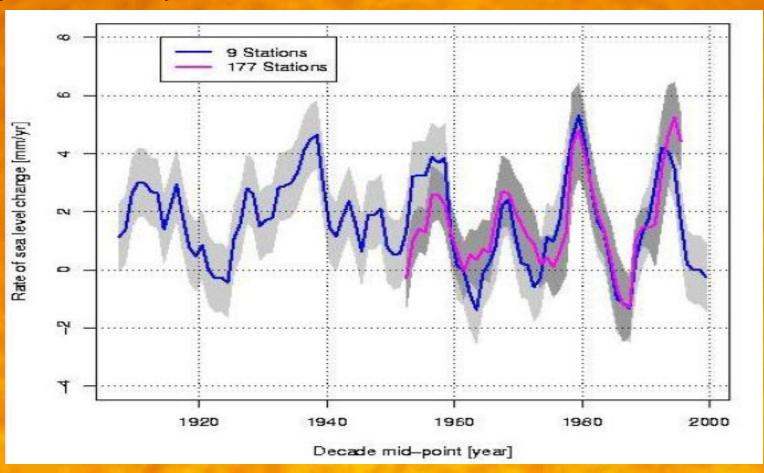
The Sun and cosmic rays

- An active Sun diverts cosmic rays resulting in fewer low clouds and allowing more sunlight to warm the Earth.
- Cosmic Rays (red) and Low Clouds (blue)



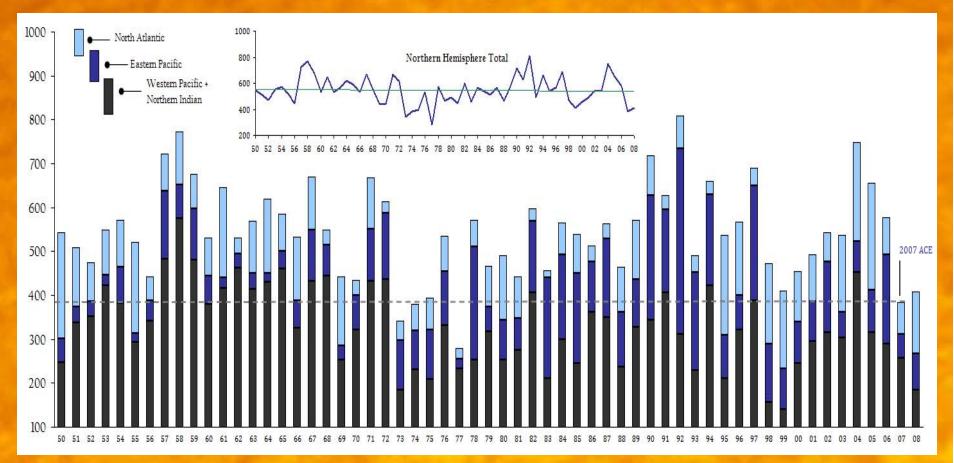
Sea level rise has not increased

- The highest quality tide gauges show the sea level rise has not increased over the last 100 years.
- The rate of sea level rise correlates strongly with the 11 year solar cycle.



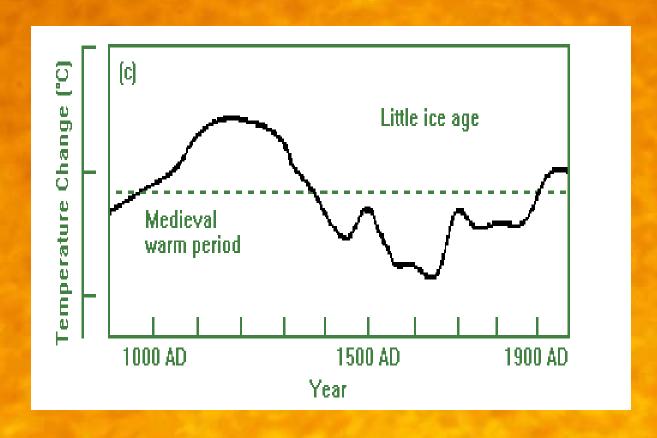
Severe weather has not increased

- Global hurricane activity has decreased to the lowest level in 30 years. ACE is the combination of a storm's intensity and longevity.
- Northern Hemisphere ACE undergoes significant variability but exhibits no significant statistical trend (1950 – 2008).



Temperature History England

- Published by IPCC 1990
- Climate always changes



CO₂ enhances plant growth

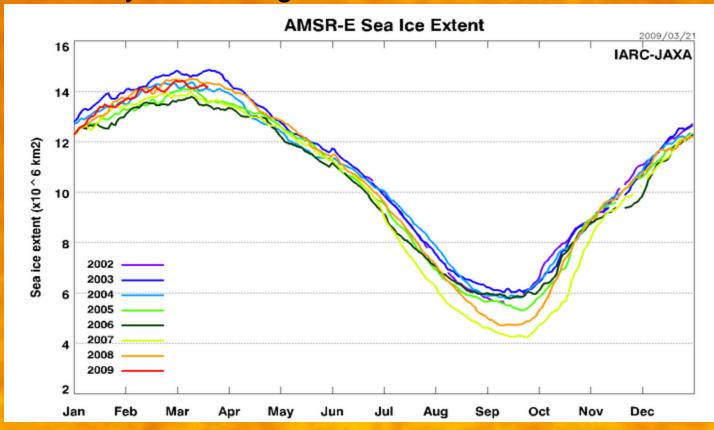
- CO₂ increases since 1950 have enhance crop yields by about 15%.
- CO₂ is a wonderful by-product of industrialization it helps feed the starving.
- Field experiments show a 50% increase in CO₂ increases wheat yield by 23% in dry conditions.
- A 300 ppm CO₂ increase would raise the productivity of woody plants by about 50%.
- CO₂ enhanced growth reduces and delays the destruction of animal habitat and species extinctions.

AGW Alarmism

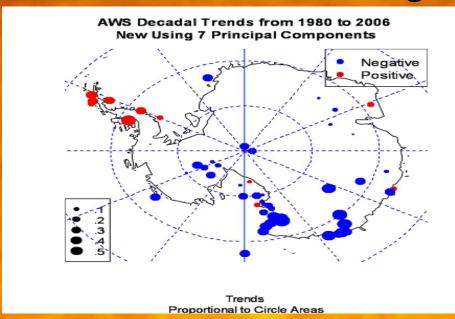
- AGW only occurs in computer models that do not work
- Tremendous Cost
- Revamp structure of our society
- Eliminate our rights to choose
- Starvation in third world countries
- Greatly reduced living standard at home
- There is NO EVIDENCE that anthropogenic CO₂ causes warming!

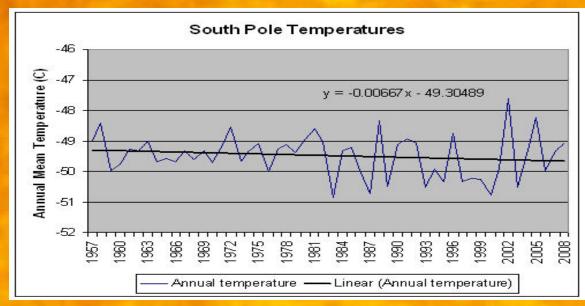
Polar sea ice

- The global sea ice area is at the 1979 2000 average.
- Southern ice is well above the 1979 2000 average.
- Northern sea ice extent in February 2009 is greater than the last 7 year average as shown below.



Antarctica Cooling





Friends of Science

- Our taxes should be spent to solve real problems.
- See <u>www.friendsofscience.org</u>
- Don't miss our annual luncheon on May 21, 2009 with Dr. Timothy F. Ball, PhD, Former Climatology Professor, University of Winnipeg. Topic: "Recent Theoretical and Observational Evidence for Atmospheric Cooling"