

Failure to Warm

Occasional Address

AGM Lavoisier Group 22 October, 2007

David Archibald

I will start this address by giving thanks and making a confession. The thanks are to Bob Foster, who set me off on this journey two years ago when he asked me to contribute a paper to an edition of Energy and Environment of which he was the editor. Bob wanted me to replicate the work of Theodor Landscheidt on the influence of the planets on Earth's climate. My mathematical ability falls well short of such a task, but it did start me down some interesting paths of enquiry.

Before I discuss what I found down those paths, I will make my confession. Theodor Landscheidt's widow had written to Bob Foster, offering to provide him with electronic copies of Theodor's computer programmes. She lived in Waldmunchen, a little village hard by the Czech border. I offered to Bob to travel to Germany to retrieve this precious trove of data. Precious, because Theodor Landscheidt had the best track record for predicting the timing and severity of El Nino events. For Australia this would be an enormous benefit for agricultural planning. I thought that I could combine a side trip to Waldmunchen with other business on the continent. By the time that happened, I had been beaten to the precious trove. A PhD student from Potsdam University had been given it.

Potsdam University is a notorious hotbed of climate modeling activity. There is no doubt that Landscheidt's work has been irretrievably lost. Instead of going to Germany immediately I had heard of Frau Landscheidt's offer, I hesitated, and the fruits of Theodor Landscheidt's prodigious intellect have now been lost to Western Civilisation. It is as if we were back in the Middle Ages, and a rare manuscript had been destroyed by the Mongol hordes. I have tried to make good that loss, at least in part, by doing original work of my own.

My reward for this work, as it is for every member of the Lavoisier Society, will be in Heaven, for the Forces of Darkness control the science journals, government departments, public institutes and universities. They reward each other for concocting ever more fantastic apocalyptic visions. It is as if all the biology journals were edited by creationists.

In life, we practitioners of rational science are formally recognized for our efforts in only one place - a website called De Smog Blog, which maintains a list of what it calls "climate change deniers". I want to be on that list, and I am not just thinking of myself in this matter. I have asked that my friend Warwick Hughes also be listed.

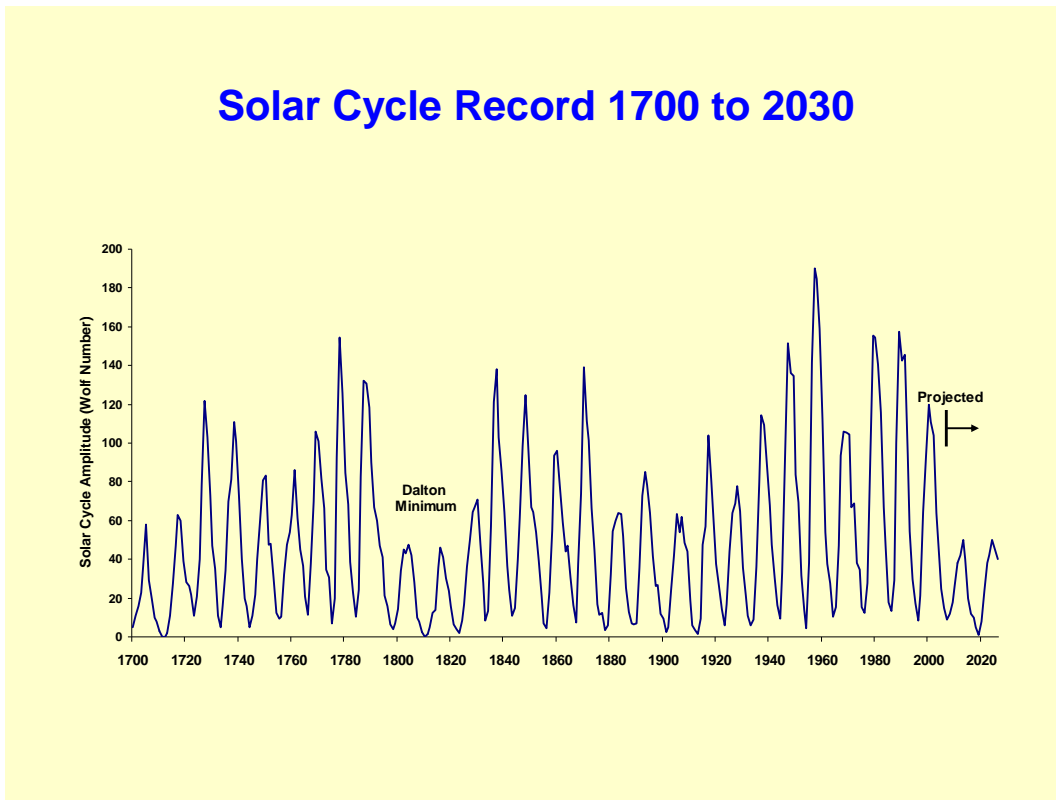


Figure 1: *Solar Cycle Record 1700 to 2030*

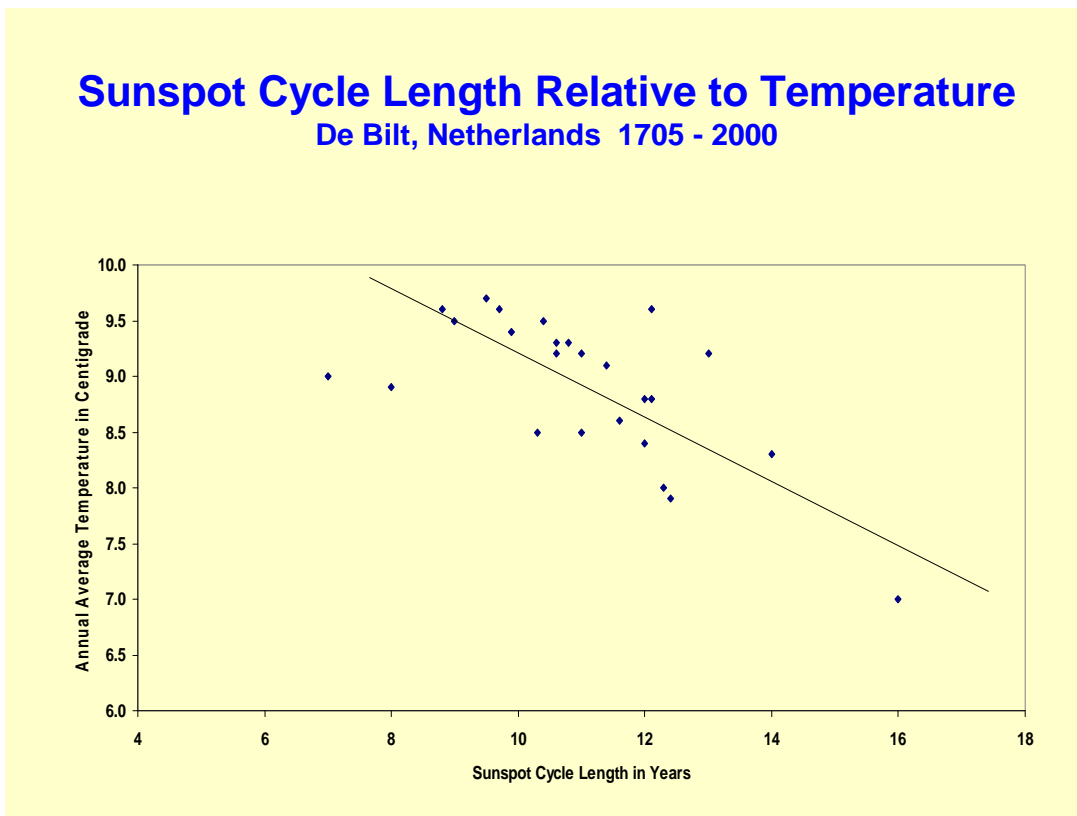


Figure 2: *Sunspot Cycle Length Relative to Temperature, De Bilt, Netherlands*

Now I will speak of what I have found in the field of climate science, and you will be the judge of whether or not I deserve to be included in De Smog Blog's list. I believe that I have made two useful contributions to the field, one of which is original. The first is my prediction that a very weak Solar Cycle 24 will make the second decade of the 21st century a very cold one. Others solar-driven predictions of cold decades to come have started with Solar Cycle 25, or another three decades out in mid-century.

My work says that cold weather for the mid-latitudes is upon us now. The basis for that prediction is simply this. There is one set of solar physicists who have correlated past solar cycles with the temperature record, and there is another set of solar physicists who look forward to predict solar activity. I simply applied the calibration provided by the former set to the predictions made by the latter set. Very simple indeed, but nobody had done that before.

Here's what the data looks like. Figure 1 shows the solar cycle record back to 1700, with a projection to 2030. Solar Cycles 4 and 5, in the early 19th century, were very weak. This was also a period of cold temperatures globally called the Dalton Minimum. This might just be a coincidence, but the correlation between solar cycle length and temperature is very strong over at least the last three hundred years, as shown in my work on the De Bilt data, seen in Figure 2.

It is also shown in this work by Butler and Johnson on 200 years of Armagh data, seen in Figure 3. They in turn were replicating the original observation of this relationship by Friis-Christensen and Lassen. In a few short years, we will have a reversal of the warming of the 20th century.

Now let's look at predictions of the amplitude of Solar Cycle 24. Figure 4 shows the range of predictions as at early this year. NASA subsequently came out with two predictions – one of 140 and one of 90, straddling the result of Solar Cycle 23. The more predictions NASA make, the more chance they have of being right.

The scientist with the greatest credibility in this field is Ken Schatten. Figure 5 shows the basis of his prediction – the sum of the field strengths of the Sun's toroidal and poloidal magnetic fields. He calls this the Solar Dynamo Index. It has been in a steep downtrend since the early 1990s. The amount of magnetic force available to make sunspots is declining.

This can also be deduced from the incidence of polar faculae on the Sun, shown in Figure 6. Polar faculae have been described as the poor man's magnetograph.

At its simplest, the relationship between the solar magnetic field strength and the Earth's climate is this: lower magnetic field strength means few sunspots, fewer sunspots means less solar wind, less solar wind means more galactic cosmic rays, more galactic cosmic rays means more low level cloud formation, more low level clouds means more sunlight reflected back into space, which in turn means less heating of the Earth's surface and atmosphere. This is graphically illustrated in Figure 7.

Sunspot Cycle Length Relative to Temperature Armagh, Northern Ireland 1796 – 1992

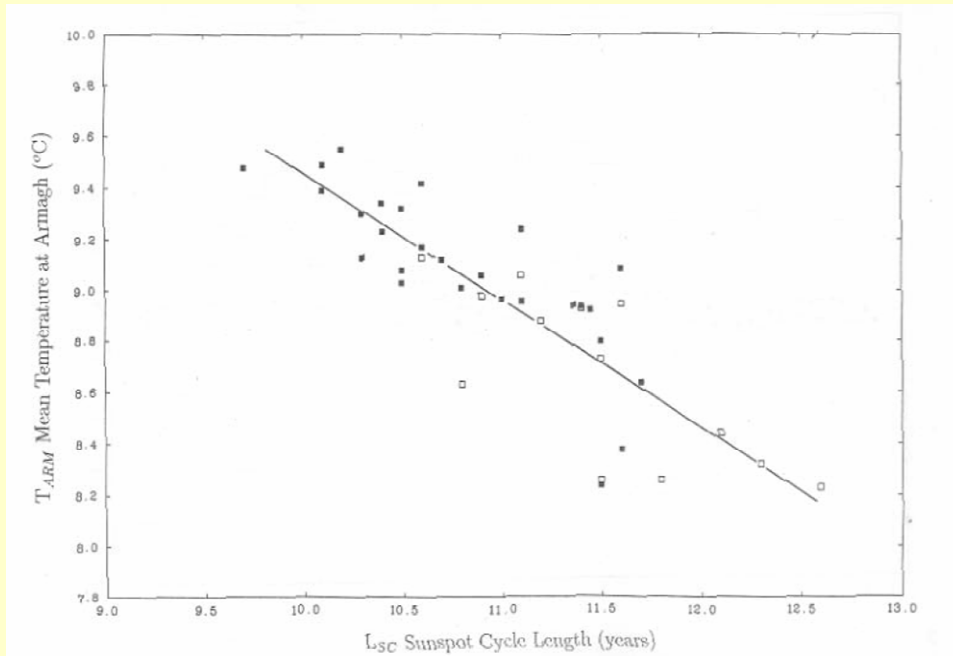


Figure 3: Sunspot Cycle Length Relative to Temperature, Armagh, Northern Ireland

Predictions of Solar Cycle 24

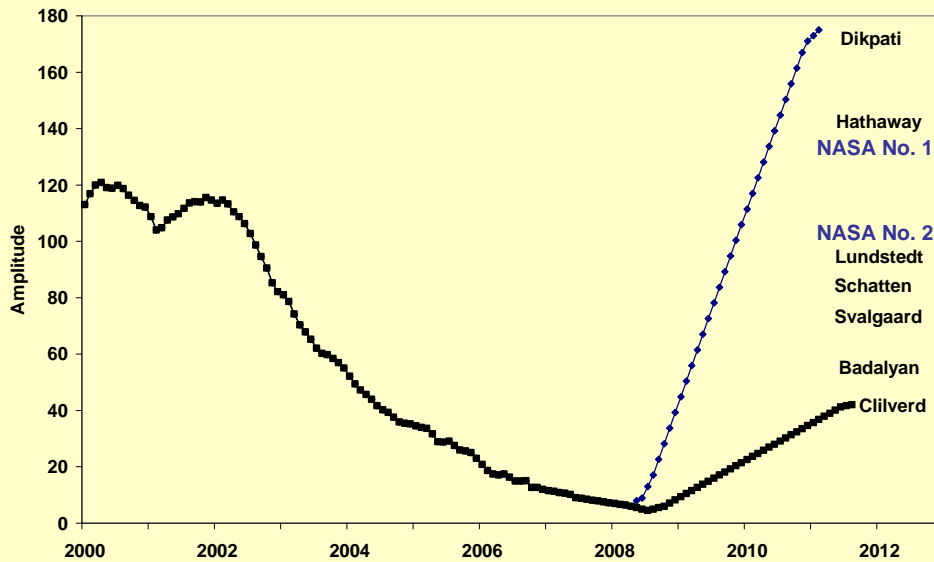


Figure 4: Predictions of Solar Cycle 24

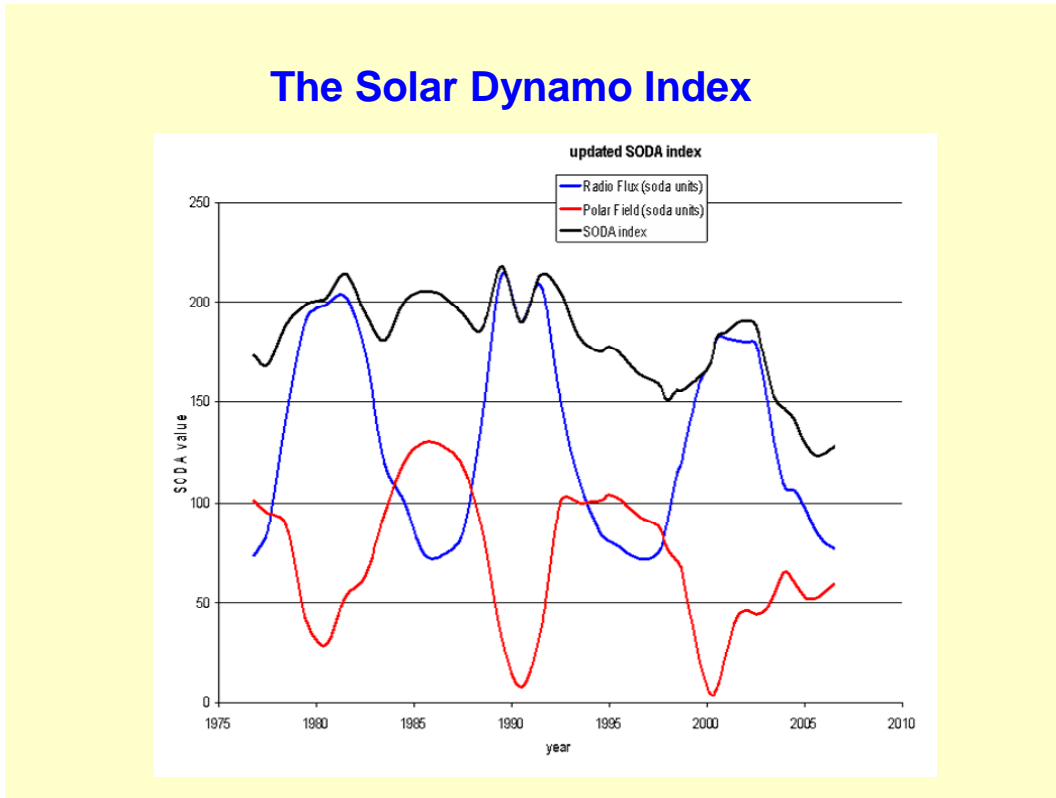
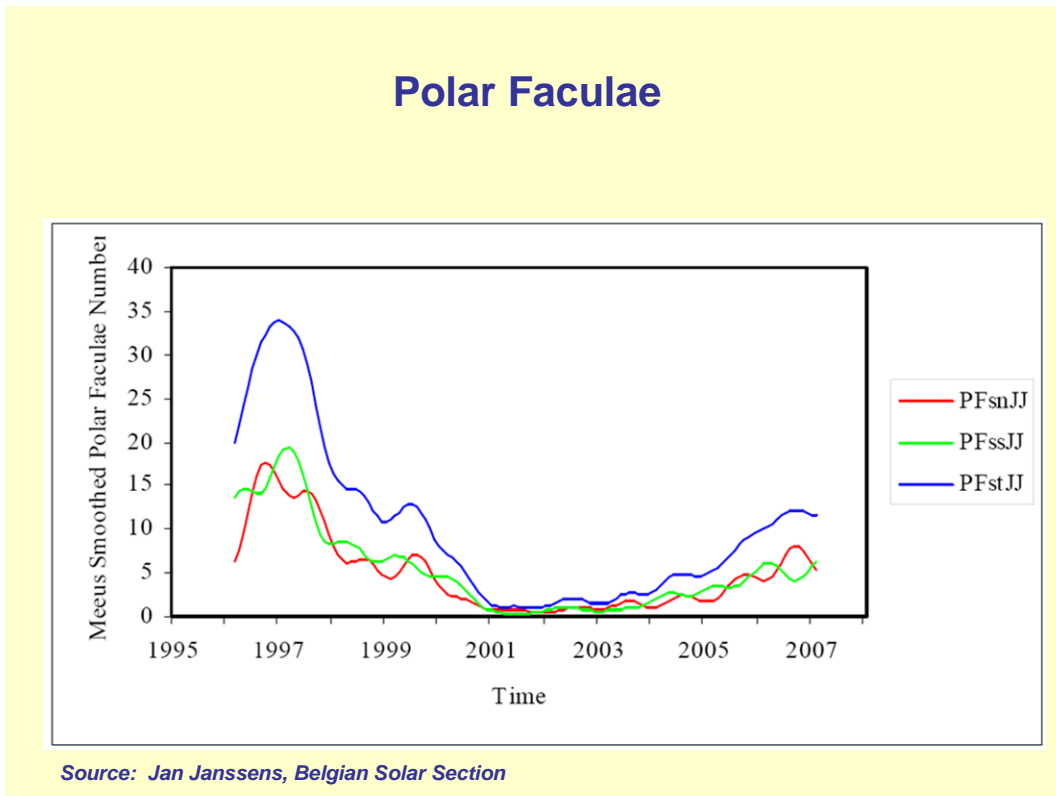


Figure 5: *The Solar Dynamo Index*



Source: Jan Janssens, Belgian Solar Section

Figure 6: *Polar Faculae*

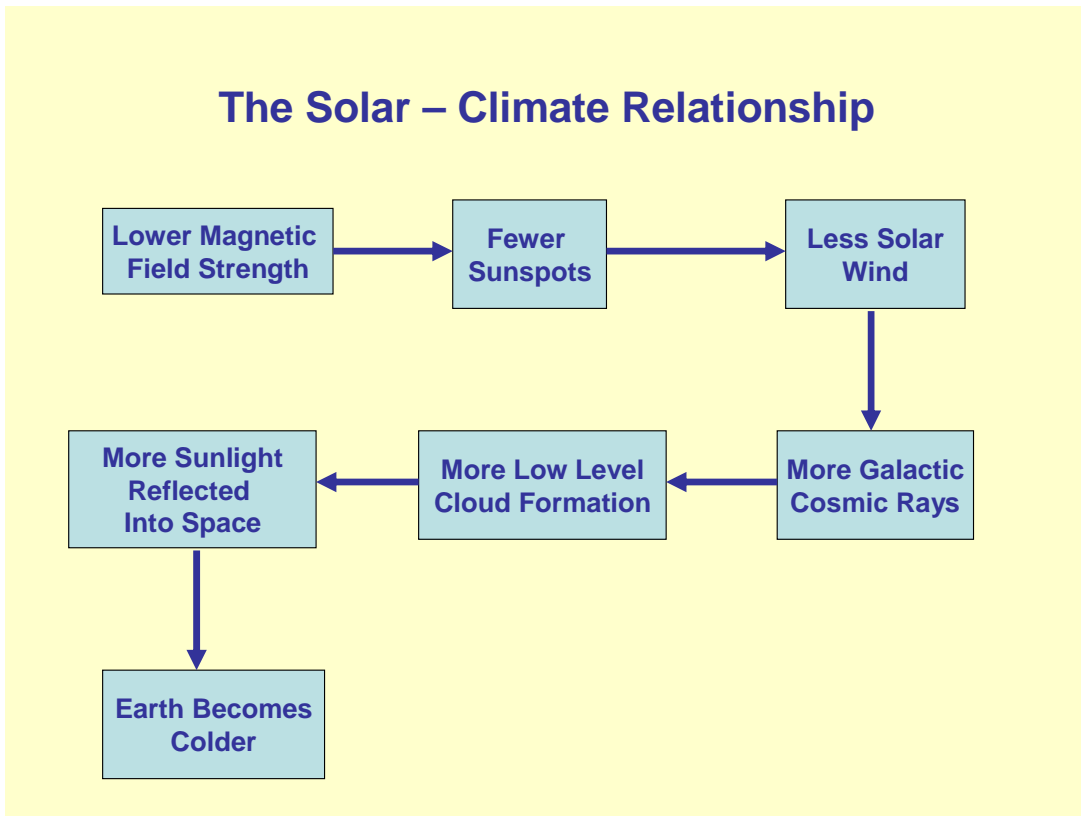


Figure 7: *The Solar – Climate Relationship*

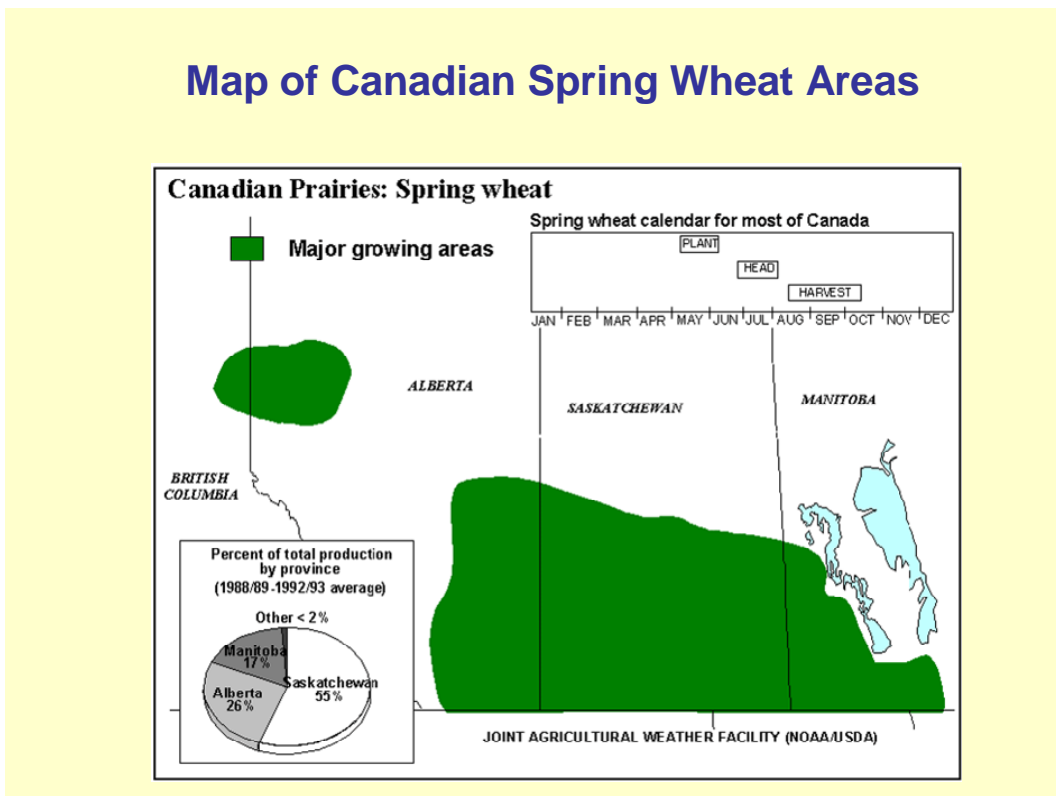


Figure 8: *Map of Canadian Spring Wheat Areas*

When Bob Foster originally set me upon my task, I remember saying to him that I didn't think that climate is a random walk. And I have demonstrated that it isn't. If you can find a solar physicist who will make a prediction of solar activity, you can use that to make a prediction of climate. That prediction will be good for perhaps twenty-five years out.

We are all aware that the Forces of Darkness have concocted a range of apocalyptic visions of the future, and have used those visions to try to force us to have cold showers, amongst other things. As it turns out, my climate prediction is even more apocalyptic, and more immediate, than those of the Forces of Darkness.

Let's look at the effect on Canadian grain production, as an example. My work, first published in *Energy and Environment* last year, predicts a two degree decline in annual average temperature for the mid-latitudes, equating to the experience of the Dalton Minimum.

Figure 8 is a map of the Spring Wheat areas of the Canadian Prairies. It conforms to the area in which the July daily average temperature is in the range of 16 to 20 degrees centigrade. A two degree decline in temperature will halve the growing area, with production going from 22 million tonnes per annum to perhaps 10 million tonnes per annum. Similar effects can be expected through Russia and into northern Europe.

In theological terms, the global warming belief system is a reversion to animism. It is like the Old Testament story of Moses going out into the desert and coming back to find the Israelites worshipping a golden calf. We on the rational side of science know to worship a higher god – the Sun. I, for one, examine its auguries on a daily basis, specifically looking for the first sunspot of Solar Cycle 24. If Solar Cycle 23 was a normal cycle, 10.7 years long, then we would have seen the first sunspot of Solar Cycle 24, at a high latitude and with reversed polarity, in January 2006 and solar minimum would have been in January 2007.

As at the date of this Annual General Meeting, no such sunspot has been seen, which means that the month of solar minimum will be in October 2008, or later. My own estimate is that the month of solar minimum will be July 2009.

Each day's delay in the onset of Solar Cycle 24 means that the world will be 1.4 thousands of a degree cooler during that cycle. That doesn't sound like much, but days become weeks, which run into months, and then years, and each year of delay is good for a half degree decline in temperature. If you are expecting three years of delay, as I am, that amounts to one and a half degrees. For we few, we happy few of the Lavoisier Society, our immediate thought is of how we are going to adjust to longer ski seasons. Less fortunate people will be spending more time staring out through frosty windows onto the barren wastelands of their frozen fields, wondering when Spring will come.

We on the rational side of science now have our own belief system. That is very important when you are battling a theological menace. Of the Christian leaders in Australia, only Cardinal Pell has recognized global warming alarmism as a reversion to animism, and is thus a competing religion. Other church leaders have tried to incorporate global warming into their belief system, not realizing that it will eat them up.

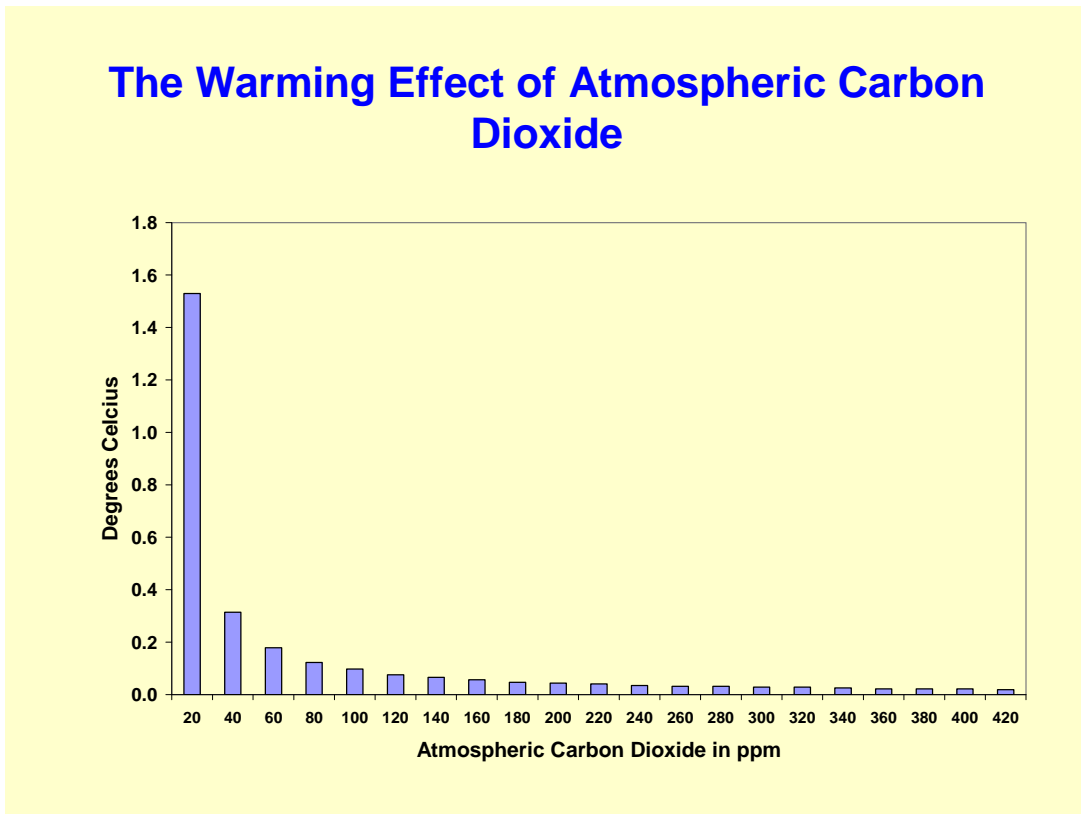


Figure 9: *The Warming Effect of Atmospheric Carbon Dioxide*

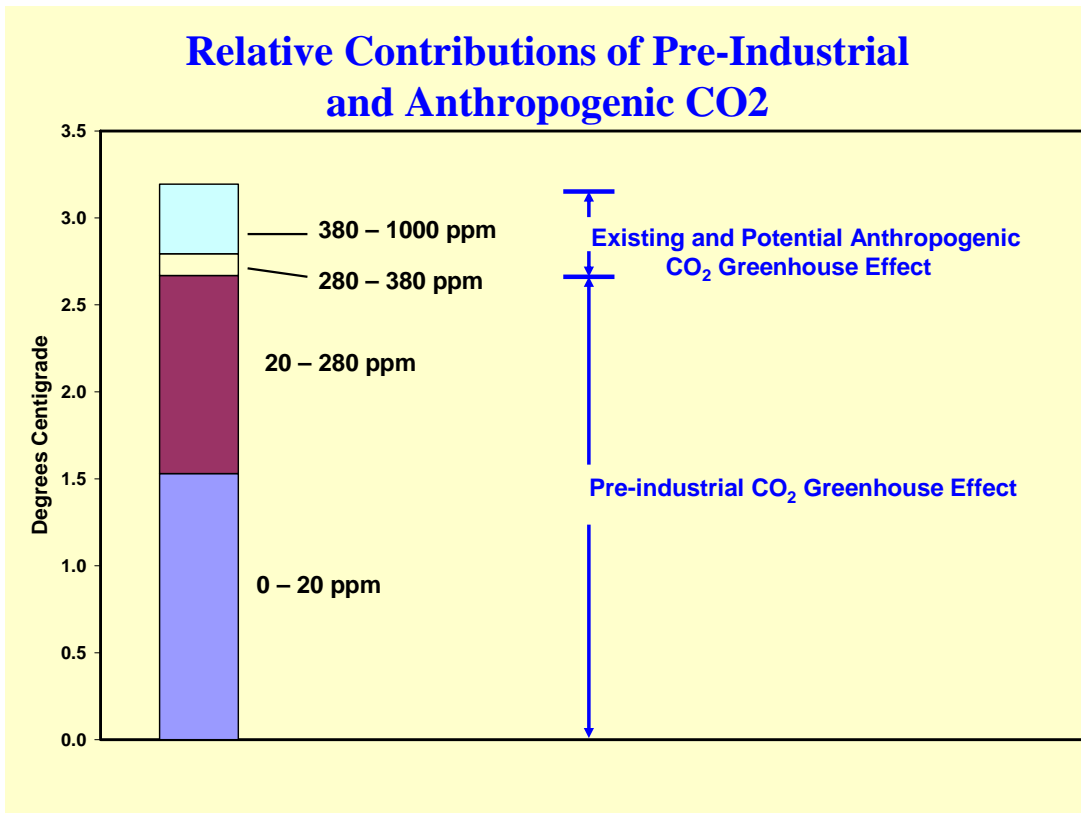


Figure 10: *Relative Contributions of Pre-Industrial and Anthropogenic CO₂*

My second contribution to climate science was to examine in detail the warming effect of atmospheric carbon dioxide. It is well known that the 380 ppm of carbon dioxide in the atmosphere makes it about three degrees warmer than it would otherwise be. To a casual observer, it looks like the relationship is 100 ppm of carbon dioxide equating to one degree of warming. On that basis, temperature would move up in lockstep with carbon dioxide and we are all going to fry, apart from those who will drown first due to the melting of the Greenland ice sheet.

Examination of the carbon dioxide – temperature relationship using the MODTRAN facility, maintained by the University of Chicago, demonstrates a strong logarithmic relationship. Lo and behold, Figure 9 shows that the first 20 ppm is good for half of all the warming effect to this point. By the time you get to our current atmospheric concentration, each 100 ppm increase is only worth 0.1 of a degree. This isn't much, in fact it is almost next to nothing. To the end of time, and let's call that 1,000 ppm of carbon dioxide in the atmosphere, which might take three hundred years from here, the total effect might be good for 0.4 degrees. It is hard to get excited or concerned about such a number. It is swamped by natural variability, for example the two degree temperature range of the 20th century, and the two degree temperature fall to come over the next decade. Figure 10 illustrates the relative contributions of pre-industrial and anthropogenic carbon dioxide to atmospheric temperature.

To any animists in attendance to our AGM, I will now offer a theory that incorporates Gaia to explain the role of humans in helping the planet. As Figure 11 shows, one hundred and fifty million years ago the carbon dioxide level in the atmosphere was almost ten times what its pre-industrial level was, and more than ten times the 180 ppm that carbon dioxide got down to during the ice ages of the last one million years. There has been a lot of research done demonstrating the effect of high carbon dioxide levels in enhancing plant growth, and we will get to that.

There also has been research on the effect of artificially low levels of carbon dioxide on plant growth. This research shows that 180 ppm is about the lower limit at which plants can grow and reproduce themselves. The fact that levels didn't get below 180 ppm during glacial periods may be due to the fact that terrestrial vegetation was struggling to grow at that level. If plants were doing climate science, instead of we humans, they would be looking at that 90% decline in atmospheric carbon dioxide over 150 million years and conclude that they were facing imminent extinction, and so it might have been.

For the plant kingdom, the ice ages came along just in time to accelerate human evolution and get a lot of buried carbon back into the atmosphere where it came from. Catastrophe has been averted by the hand of Gaia in bringing on the ice ages. It is therefore quite evident that the true purpose of mankind in being responsible custodians of this planet is to get as much carbon dioxide into the atmosphere as we possibly can.

It is not commonly known that the Earth's original atmosphere was 20% carbon dioxide, which is 200,000 ppm. Over the last two billion years, almost all the carbon that was bound to each oxygen molecule currently in the atmosphere has been stripped off by photosynthesis and buried in sediments, either as carbon or bound up in carbonates. Humankind will only be able to get about half a percent of that carbon back into the atmosphere before we will run out of rocks we can economically burn. And we should burn them.

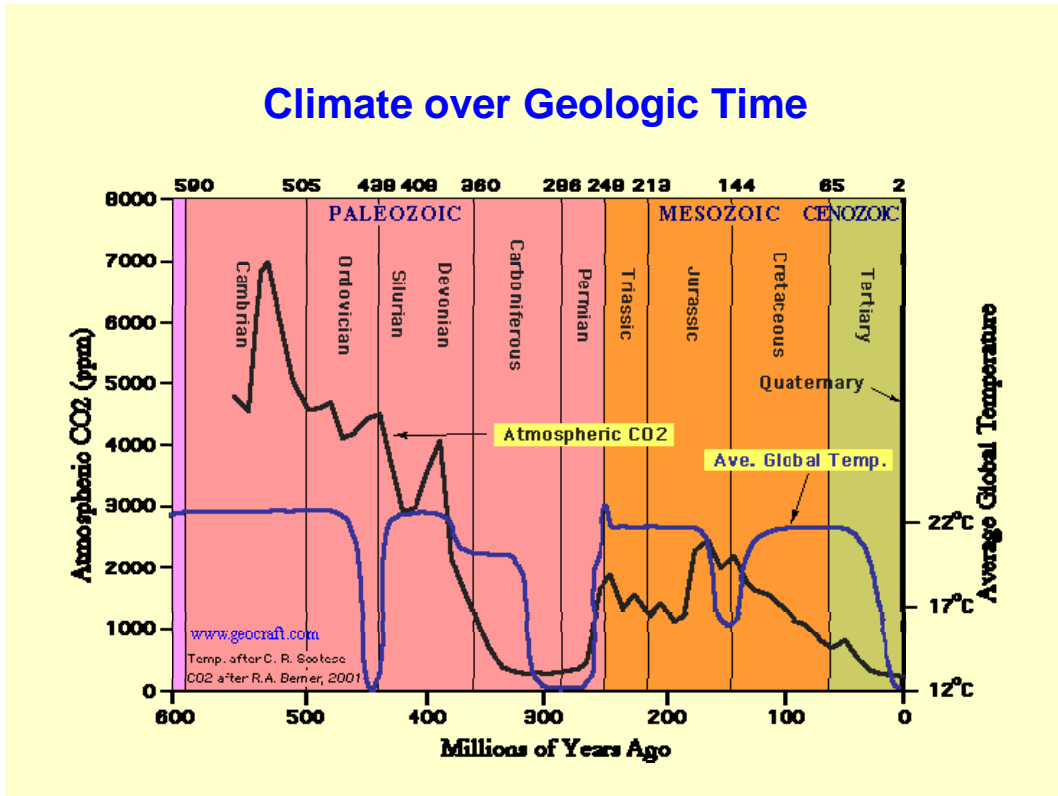


Figure 11: *Climate over Geologic Time*

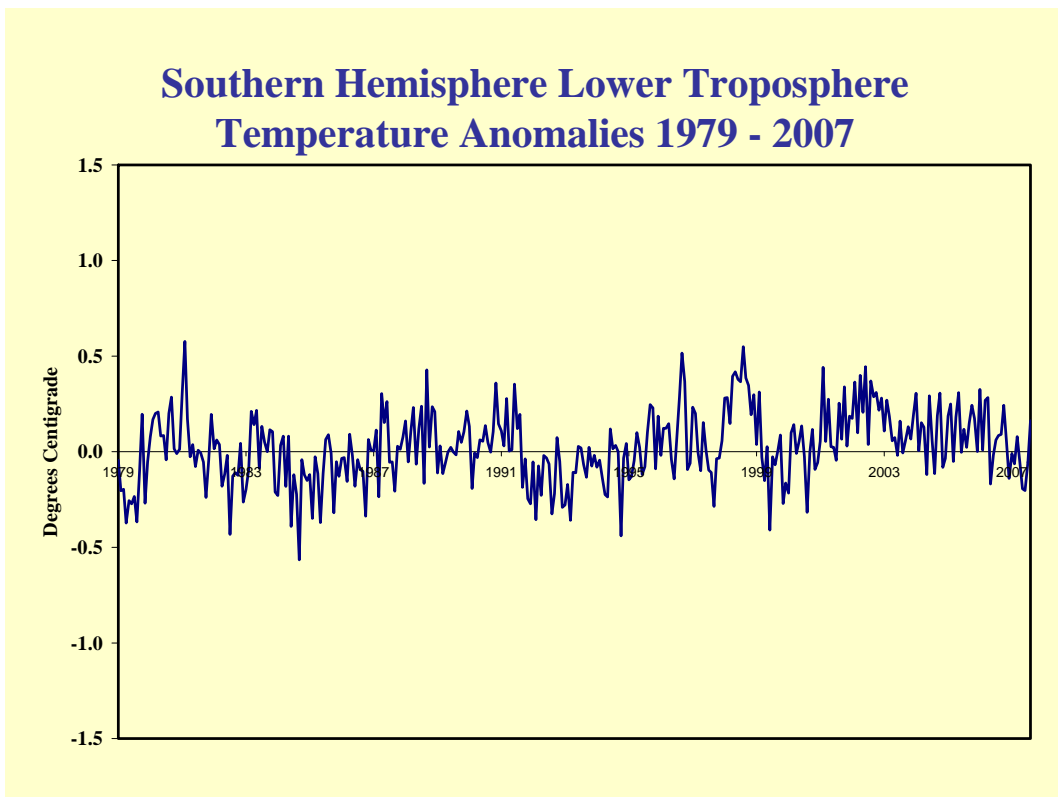


Figure 12: *Southern Hemisphere Troposphere Temperature Anomalies 1979 - 2007*

Plant growth responds dramatically to higher atmospheric carbon dioxide. It is the best thing that the developed world can do for the third world. Giving the third world higher atmospheric carbon dioxide is like giving them free phosphate fertilizer. And my prediction for the Canadian wheat crop suggests that the developed world will need all the help it can get from higher atmospheric carbon dioxide also.

Now the fact that higher atmospheric carbon dioxide levels are wholly beneficial to life on this planet leads us to the strange notion of clean coal technology. The Forces of Darkness want us to adopt this technology in order to reduce emissions of carbon dioxide into the atmosphere from whence it came. This notion is strange at a number of levels. Firstly, it is very hard to keep carbon dioxide in the subsurface. It is very soluble in water, and thus the popularity of soda water. There are almost no naturally occurring fields of carbon dioxide, because it is so soluble, as compared to natural gas fields. At the last Australian Petroleum Production and Exploration Association conference, an Exxon operative told me that they had been trialing burying carbon dioxide, and it was coming straight back to the surface.

The burial of carbon dioxide will be difficult enough, but the getting it there will be even more inane. The energy required to strip carbon dioxide from the exhaust stream of power stations will come from the burning of more coal, and coal consumption will increase by 30% to 50%, or perhaps more, per unit of electricity produced. So this is a proposition which will halve the economic life of Australia's coal reserves.

You might expect in a normal world that a proposal to double Australia's power costs and halve the economic life of our coal reserves might have some rigorous scientific examination associated with it. But there has been none. Relative to the scale of the impoverishment of the Australian people being attempted, and the squandering of our natural endowment, none whatsoever. All the institutions which should be guarding us against the climate change rent seekers and carpetbaggers have abrogated their responsibility. The worst, and by this I mean the CSIRO, are actively conniving against the interests of the Australian people. Our largest companies have become rent seekers, promoting their version of clean coal technology. This perverse ideology has corrupted so many. The money changers are in the temple.

The story now gets even more bizarre, because all the wailing from the CSIRO and others is in the face of a temperature that has not changed. Figure 12 shows lower troposphere temperature anomalies in the southern hemisphere since satellite records began in 1979. This is the part of the world we live in. There is no doubt that this temperature record is correct as it agrees with weather balloon data. While the southern hemisphere, lower troposphere temperature is not quite as constant as the Northern Star, the trend is flat. Antarctica has cooled appreciably over the same period. In the Northern Hemisphere, the United States and Greenland were both warmer in the 1930s than they are now. The ability to believe in global warming in the face of a failure to warm, proving that theory wrong, demonstrates an enormous capacity for self-delusion.

While Australia is badly afflicted by global warming self-delusion, it is even worse in Europe, for there strange ideologies have slaughtered tens of millions over the last seventy years. You might have thought that those painful experiences would have inoculated the Europeans against misanthropic ideologies, but not so, and they will suffer also, with that suffering made yet more bitter by longer winters.

A New Dark Age – The Perverted Science of Global Warming

“the whole world, including the United States, including all that we have known and cared for, will sink into the abyss of a new Dark Age, made more sinister, and perhaps more protracted, by the lights of perverted science.”

Sir Winston Churchill, June 4, 1940

Figure 13: A New Dark Age – The Perverted Science of Global Warming

In this quote, Winston Churchill warned of the perverted science of national socialist ideology. It is just as applicable today to the perverted science of global warming.

Global warming alarmism has been compared to the Y2K scare. I think that a more apposite analogy is the internet bubble on the world's stockmarkets. In that bubble, tens of thousands of the world's most intelligent and highly paid people succumbed to a mass hysteria.

That bubble ended in tears, but the current global warming alarmism is causing real suffering, even in the farthest reaches of darkest Africa, where subsistence farmers are displaced for the planting of carbon offset forests.

I believe that the Lavoisier Society was formed so that we as a group could do what we can to protect the Australian people from the suffering that all our political leaders want to impose upon us for no good reason, while squandering our birthright in the process. We must not resile from that task, nor falter, or fall beside the wayside. For without us, the Australian people have no prospect of being spared the depredations of that perverted science. As I said earlier in this address, we will get no thanks in this life, but Australians as yet ungotten, and unborn, will have cause to thank us.