

**Given the present declining trends in sunspot activity and solar radiation levels, we have no time to waste on futile debates about global warming and increasing levels of CO<sup>2</sup>. That was last century's debate. Today we must develop and implement new strategies to prepare for the colder, dryer, less-productive climate that is now becoming apparent.**

**During the last 400 years, the earth has experienced the extremes of solar-driven climate change.**

First a very cold, dry climate, then a much warmer and wetter climate and now the cold dry climate again.

The period of approximately 1600-1700 AD is known as the “The Little Ice Age”. This cold climate was the result of a period of very low sunspot activity called the “The Maunder Minimum”. Famines, plagues and droughts caused the collapse of many cultures reducing the world's population by one third. During this period the average world temperature cooled by about 1.5 °C compared to the peaks in the preceding 4,000 years.

After the Dalton Minimum period 1800 to 1830 AD, the average solar radiation rapidly increased again until peaking in the mid-1970's. This was the highest average peak for 8000 years. This peak produced a rapid rise in the world's average temperature and also the highest recorded rainfall averages throughout Australia.

**Since the mid-1970's the average levels of solar radiation have rapidly declining again.**

The effects can now be seen very clearly. Firstly, the average rainfall declined in parallel to the reducing solar radiation. Secondly, after 1998 the global temperature peaks also commenced declining in line with the 20-year time lag required for thermal inertia loss from the world's oceans. This declining trend in global temperature peaks since 1998 has trashed the IPCC predictions in which they stated that the continuing rise in CO<sup>2</sup> levels would produce a corresponding rise in world temperatures. Actually in recent years the global average has declined and is now about 0.15 °C lower than the peak year. This trend is confirmed by the Bureau of Meteorology's data. See graph on my website in the “Climate Change, Sunspots and Lunar Cycles” section.

The devastating decline in southern Australia's rainfall during the last four decades correlates very closely to the declining solar radiation levels. Bendigo's decadal average rainfall is typical of this; 1970's - 627mm, 1980's - 574mm, 1990's - 536mm. The decade 2000-2009 produced a new low record of only 418mm.

**Sunspot experts from both Russia and the US are forecasting that the present 30-year decline in solar radiation will continue well into the future. A leading Russian expert says the world will cool and produce another Little Ice Age period by about 2042.** His article “*The Sun Defines the Climate*” is on my website.

**With the insight of this knowledge, I make the following predictions for the next two decades:**

I make these predictions based on my understanding of the effects of the reducing solar radiation, the present lunar cycle and regional climate drivers such as the new phenomenon that I have called “The Chinese Effect”. (See my website page “The Chinese Effect”)

- The 18.6 year lunar cycle influence is fundamental to our flood and drought cycles. At present, Australia is progressing through the typical 3-year period of lunar rain-enhancement floods, (May 2009 to May 2012).
- This 3-year rain-enhancement period occurs only once during each cycle and will not reoccur until 2028.
- Above-average rainfall is likely in southeastern Australia for most months this year, although I predict 2011 will be the best year of this cycle delivering a wet winter and about 120% of the long-term average rainfall.
- Generally, every fourth year will continue to be a La Nina year. However, in future very little increase in rainfall will be observed in these La Nina years due to the dominance of “The Chinese Effect”.
- Due to (a) the current weak Sunspot Cycle No. 24 (2009-2020 peaking in late 2013), (b) “The Chinese Effect” and (c) the progression of the lunar cycle, these compounding effects will diminish the average rainfall during most of the next two decades. I forecast this decade (2010-2019) will set another new low record of approximately 66% of the long-term average rainfall across most of southern Australia. Another major drought period is scheduled to occur around the middle of this lunar cycle (2020).

**2028 starts the next 18.6 year cycle when we should see another 2-3 year period of wetter climate.**

From this point on, we all need to develop new strategies ASAP to help us adapt to unprecedented shortages of water. This new, colder, dryer climate cycle will result in most irrigation systems in Australia's Murray-Darling Basin being rendered unsustainable, including most of the traditional agriculture. The present crash in rural land values will continue for many years.

New debates will be focussed on “how to adapt to runaway Global Cooling” and how to feed the world's multitudes, during these shorter, slower growing seasons and the resulting less-productive conditions.