The fires that are still burning in NSW as I write this are widely being attributed to global warming, particularly by the Greens, can anyone show there is a link? As far as I am aware no one has ever shown a link between atmospheric carbon dioxide (CO2) levels and rainfall in any of the longer rainfall records, however many have used a time frame starting around the 1950's which was the period of highest rainfall in many parts of Australia to put across a link between Global Warming and declining rainfall. If you come forward from the 50s rainfall usually declines, if you go back to the early 1900's rainfall also declines and there is no correlation between rainfall and atmospheric CO2 levels in the records as a whole.

Rainfall in many parts of the world, and many parts of Australia appears to have a clear relationship with solar activity, the higher the solar activity the higher the average rainfall. The earths volcanic activity also appears to have an inverse relationship to solar activity, the higher the solar activity the lower the volcanic activity and vice versa.

The graphs 1&2 below have been taken fromhttp://www.thelongview.com.au/documents/Sun-Defines-the-Climate-Abdussamatov-2009.pdf and they show the relationship between sunspot numbers and solar energy output (total solar irradiance)



If you study the rainfall as best you can since around 1800 it becomes apparent that since the first records rainfall is highest for much of Eastern Australia during the periods of high solar activity and droughts more frequent during the periods of lower solar activity.

Better records of the 20<sup>th</sup> century have allowed the Bureau of Meteorology to produce rainfall trend maps which can be obtained **from**-<u>http://www.bom.gov.au/cgi-</u> <u>bin/climate/change/trendmaps.cgi?map=rain&area=aus&season=0112&period=1900</u>



This map of the trend in rainfall from 1950 to present shows a significant decline in rainfall from the period of very high solar activity to the present for much of Eastern Australia, particularly the areas presently suffering from the fires.



The trend map from 1900, when solar activity was similar to the present shows that much of eastern Australia was dryer then than now, including the areas presently fire affected.

When you look at the graph of volcanic activity derived from a study of sulphate deposits in the ice at the two poles obtained from

<u>http://www.ep.sci.hokudai.ac.jp/~yokohata/work/review/pdf/20051214/AN03.GRL.pdf</u> it becomes obvious that there is a relationship between volcanic activity and rainfall in eastern Australia-



Let's look at five periods on the graph, I have used Sale, near where I have used as a reference for rainfall changes.

Period 1 Early 19<sup>th</sup> century, peak in volcanic activity associated with the Dalton Minimum, a period of low solar activity. First fleeters suffered very badly from the ravages of drought.

Period 2 mid 19<sup>th</sup> Century. In the 1850's and 1860's it was a low period of volcanic activity in the cycle and high point in solar activity. South Australia was growing half of Australia's wheat, much of it north of the Gwyder Line, a line drawn on the map to show the expected northern boundary of land suitable for cultivation. North of the Gwyder Line was previously considered, and later proved, too dry for cultivation and pursuits such as growing wheat. Written accounts suggest much of inland Australia recieved more rain during this period. Accounts I have been given say Bushy Park near Boisdale had a 32" annual average rainfall, now probably around or slightly below 26".

Period 3. Late 1880's-1920ish. Volcanic activity peaked and solar activity declined, drought gripped much of Australia. Sale's rainfall which averages around 620mm (calculated mid 80's) dropped to around 450mm on a 5 year average.

Period 4 Late 1940's to early 60's. low period of volcanic activity, resurgance of agriculture in inland S.A.. Sale's rainfall got up 780mm on a 5 year average (1952). This indicates a 330mm (13.2") difference in the annual average rainfall for Sale, varying with the 70-90 year volcanic and solar cycles.

Period 5. Late 80's onwards, heading towards another peak in volcanic activity, decades of below average rainfall.

There appears to be a clear relationship between volcanic activity and rainfall in eastern Australia but no relationship whatever between atmospheric CO2 levels and rainfall. The period from 1940 to 2000 has been said to have been the highest solar activity for the last 8,000 years and if so then what we think of as normal for rainfall could be a one in 8,000 year high.

In addition to solar influences on rainfall there appear to be lunar influences also with tree ring studies in other parts of the world showing a link between an 18.6 lunar cycle with rainfall and drought. The plane of the orbit of the moon moves towards the two poles and then back to more aligned with the equator over an 18.6 year period. In eastern Australia a double lunar cycle of 37.2 years seems more pronounced with droughts.

Let's have a look at fires <u>http://home.iprimus.com.au/foo7/firesum.html#3</u> and drought <u>http://en.wikipedia.org/wiki/Drought\_in\_Australia</u>

Much of eastern Australia has suffered in the recent drought it started around June 2012 in my area, east Gippsland. If you go back 4x18.6 years it takes you back to the start of the drought that preceeded the 1939 fires and the lead up to those fires was worse than the lead up to these fires in many parts of eastern Australia, however the season hasn't finished yet. Back another 18.6 years and there was a severe drought over much of eastern Australia from 1918-20. One of Victoria's worst six fires occurred on this lunar cycle.

If you go back another 18.6 years it takes you back to the start of the Federation drought of 1901-2 which was worse in much of eastern Australia than this drought has been to the present and many fires occurred during these years. Back another 37.2 years to another drought and the Black Monday fires of 27<sup>th</sup> February 1865, said to be the worst day for heat and smoke since 1851.

The drought that started some 16 months ago seems to be cyclic with no apparent link to global warming, however the cycle wasn't significant during the period of high solar activity from 1940 to 2000. I can see no mechanism that causes this apparently cyclic drought.

In 2006 the plane of the orbit of the moon appeared to increase the gravitational effect on the poles and this was likely the cause of the large break down in the ice caps that got my Global Warming Friends so excited. It also likely brought up cold water from the deep in a process called "vertical mixing". Some two years later the cold water had moved sufficiently north to give us three of the driest years on record (the three driest years for Bairnsdale with records going back to 1880). The Black Saturday fires occurred during this drought, 2x18.6 years earlier we got our driest year on record in 1972. Go back another 4x18.6 and you have the Red Tuesday fire of 1898. Two of Victoria's six worst fires occurred in this lunar cycle.

In October 2015 the plane of orbit of the moon will have reached the opposite end of its cycle and the gravitational effect may be the greatest on the tectonic plates on the sea floor in the Eastern Tropical Pacific, I have been given figures of two thirds of the worlds volcano's are undersea in the Eastern Tropical Pacific and their numbers vary. This will likely increase the volcanic activity and the increased volcanic activity will cause the warming of the sea surface associated with el Nino's, expect a greatly increased likelihood of a significant el Nino during the following four years.

Once again we'll go back 18.6 years to the el Nino of 1998 and another 18.6 years to the 1981-2 el Nino and the Ash Wednesday fires of 1983. Back another 2x18.6 years to the very dry years from 1942-45 and widespread fires. Back another 18.6 years to the severe fires of 1926 which took 31 lives in Warburton on Black Sunday the 14<sup>th</sup> February. Back another 2x18.6 years and the drought of 1987-9 which saw NSW's driest year since records began in a drought of all eastern states and S.A.

Back another 37.2 years to 1851 and you have what appears to be South East Australia's worst ever fire, fire weather and one of our worst droughts. In excess of 5 million hectare was burnt. http://home.iprimus.com.au/foo7/fire1851.html

Three of our worst six fires occurred on this lunar cycle and it is likely to give us another significant el Nino sometime during the years from 2016-2020. What else could the future hold? There appears to be a close relationship between both solar activity, volcanic activity and rainfall. What was likely Victoria's worst six fires economically 1851, 1898, 1926, 1939, 1983 and 2009 occurred on one of these three lunar cycles and weren't caused by global warming. Temperatures may also average a little higher during the droughts of these cycles but there doesn't appear to have been an increase in the temperature overall in the areas affected by these fires-

http://www.mythandthemurray.org/no-increase-in-hot-days-at-bathurst-or-the-misguided-politicsof-attributing-bushfires-to-global-warming/

A quote from the French philosopher Voltair "Atrocities will not cease to occur until absurdities are ceased to be believed."

The problems with the present fires are purely a result of mismanagement of the forest environment and this is an excellent read-

<u>http://jennifermarohasy.com/2013/10/bushfire-management-in-australian-forests-a-note-from-roger-underwood-2/</u> People need to be shown that the linking of these fires to human caused climate change is an attempt to gain political advantage from peoples suffering and a very callous one at that.

If there is an additional link between rainfall and volcanic/solar activity what does the future hold?

The graph of the pH of the Greenland Ice sheet below came from-

<u>http://earth.usc.edu/classes/geol150/stott/evolution/lastmillenia.html</u> Volcano's put large amounts of sulphates and other chemicals into the atmosphere that make rain and snow falling back to earth is acidic and the the greater the volcanic activity the lower the pH of the Greenland Ice Sheet.



What we think of as normal for volcanic activity (and rainfall) is one of the few periods of low volcanic activity since 600 A.D. and we are likely headed for the opposite end of the range in volcanic activity over the coming decades. Note the peaks in volcanic activity at the end of each period of low volcanic activity, that is likely what we can expect in the coming couple of decades. Solar activity seems to be largely influenced by the alignment of the planets and the alignment over the coming decades is expected to give us very low solar activityhttp://www.landscheidt.info/images/sharp2010.pdf

Examples of dead trees that have grown for many decades in swamps and lakes occur in various localities around eastern Australia, one detailed by Kevin Longhttp://www.thelongview.com.au/documents/MEGA-DROUGHT-DEVELOPING-Kevin-Long.pdf

Another account in the Book Recipe for Disaster by Max Leitch-

"There is ample evidence to suggest that dry cycles can last half a century or more. On my property there is a large lagoon about one hundred acres in area and some 30-odd feet deep. It has been the main river channel at some bygone age, set in the middle of a flood plain that fills from the river when the river reaches 23 feet. It has been suggested that the mouth silted up but this is not possible because the water from the river runs in from both sides and both ends at once. This lagoon has been dry twice since white men took up the country in 1840- once in 1914 when it was dry for a

few months, and in 1945 to 1950. It has a local catchment that puts some water in it every year and it normally takes ten years to go dry if it is not filled by the river. The amazing thing about this lagoon is that right in the bottom there were quite large dead trees that must have taken at least 50 years to grow, so it must have been bone dry for that length of time."

The dry periods they are describing are likely an inevitable consequence of an alignment of the planets as they will be aligned over the coming decades and it will greatly compound the problems of the high fuel loads that have given us the mega fires of recent times. I thank Kevin Long http://www.thelongview.com.au/ for his continued sharing of knowledge that has helped me put this together and would welcome any other observations from around Australia that indicate past megadroughts-