
Solar Minimum, Atlantic Basin Named-Storm Forecast

An Historical View of Sunspot Activity Effects on USA
Temperatures and Atlantic Basin Named Storms
and a Forecast of Each During a Solar Minimum
with Florida Supplement

By C. Paul Pierett
Lt. Colonel, Retired
U.S. Army
Revised
11 June 2011

*For Notes, Open View
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Keep in mind:

- There is evidence of hurricane activity during the Mini-Ice Age
- My work is solely based on Sunspot Activity
- I believe all evidence of global warming points to the Milankovitch Cycles
- I tend to stay on an historical viewpoint
- Projections and Forecasts are based on history.

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Simply a summary statement of what is viewed at this point. I do not believe man-made global warming is causing our warming. It actually is our safety net. Without global greenhouse gasses, the Earth would react more quickly to changes in sunspot activity.

The Earth, is in a place of space and time, that began with the Big Bang. Like a father and a son tossing a ball, the Earth is somewhere between the man and the son. We are somewhere in the moment of time where the Earth is only so far from the Sun, at a certain angle, at a given distance from the Moon, and receiving a thermostat amount of sunspot activity, that keeps us from a mini-ice Age at this time. The next ice age is coming in about 10,000 years. Topography is at a given place, global warming is at a given place, tree lines are at a given height above the ocean line and latitude.

Perma-Frost is only so high in the latitudes of the Earth now, that probably left Atlanta 10,000 years ago.

We appear to be in some type of Climate Change Dark Ages. There is so much garbage out there causing confusion and poor government and educational decisions.

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The purpose of this briefing is to show relationship between Sunspot Activity and:

Lake Levels
Accumulated Cyclone Energy
Glacier Activity
USA Average Temperatures
Hurricane numbers

To do so, Sunspot Activity needs to be described in simple detail
Show that the Sun has entered some type of sunspot minimum

Finally, a forecast of temperatures and hurricane activity during this solar minimum

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Nearly 80 years ago, Sir Richard Gregory proved correlation between sunspot activity and the lake levels of Lake Victoria. The work appears In a book by Sir James Jeans, titled, *Through Space and Time*.

This is where the research for this project was given birth.

Sir Gregory's work is shown in the next slide

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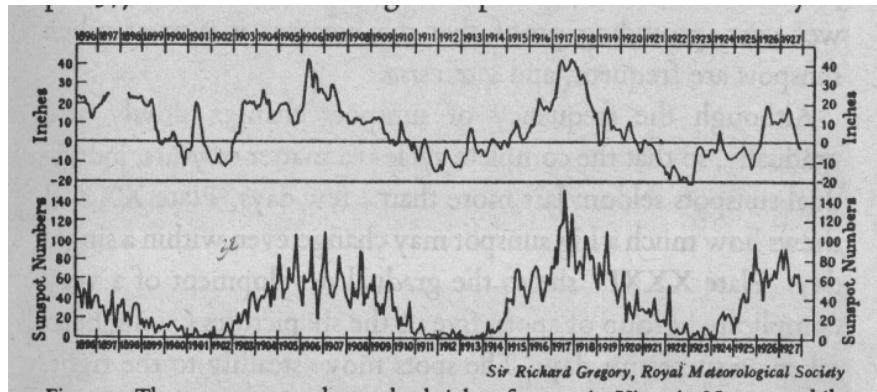


Figure P-1 "The upper curve skews the height of water in Victoria Nyanza [(Lake Victoria, Uganda) (Feeds the Nile)], while the lower skews the frequency of sunspots a the same time. We see that the curves keep almost perfectly in step with one another demonstrating that sunspots have an influence on terrestrial weather." from page 159 of "Through Space and Time" by Sir James Jean, John Wiley and Sons, INC, New York, 1963. Permission granted for reproduction from Cambridge University Press, Mr. Adam Hirschberg, June 19, 2008.

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This work is the foundation for this presentation. From this one page, the work of comparison of sunspot activity to accumulated cyclone energy was developed and concluded. There is a correlation between sunspot activity and accumulated cyclone energy.

If there is a correlation between accumulated cyclone energy and sunspot activity, accumulated cyclone energy reflecting the strength and endurance of hurricanes, then there is a relationship between sunspot activity and hurricane numbers and strength.

Thus, we begin...

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Melting Glaciers:

Based on his work, there should be other areas of our climate that are changed by sunspot activity. Using his base, a search was started for those climate changes.

The first area noted was the lost of the fjord glacier in Glacier Bay National Park

The glacier was first discovered by explorers around 1750.

Correlation: The glacier began to melt with the return of sunspot activity in 1700 after the Maunder Minimum or also known as the Mini-Ice Age.

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Shortly after the Mini-Ice Age, the fjord glacier extended into the inter-coastal seaway until 1750 when the glacier was first discovered by Vitus Bering.

The extent of the glacier was at the area shown in **red**. It was 4000 feet thick, 100 miles long and 20 miles wide.

By 1879, the glacier had receded 30 Miles. Rapid Recession in 1899 stopped tours due to the danger of the falling ice.

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Some of my work began with the Glacier Bay fjord glacier. Why? That is what was available to me on the internet some 6 years ago. That led me to search for a relationship with glacier activity to hurricane activity. There is a balance. It is slowing going to be clarified in the coming years.

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Annual temperatures for the cooler cycles 1902 to 1933 range from 54 to 54.43.

The cycles that had a sharp peak at the start of the cycle and had a total average for the cycle above 600, are considered by the author to be "Global Warming" cycles and reflected an USA average temperature above 55.49.

During cooler cycles, the Glacier Bay fjord glacier only melted ½ mile during the 300 or 400 sunspot cycle.

During warmer 600 to 900 sunspot cycles, the glacier melted 1 mile during a cycle.

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Just some observations for future research. Once the USA average temperatures rise above 54.5, there is a significant change in the speed of melting of the fjord glacier of the Glacier Bay Glacier. In oral histories the fjord glacier pushed the local tribes out a couple of times. One tribesman said they ran for their lives. Historically, we need to watch that in the next 30 years and see if the fjord glacier grows.

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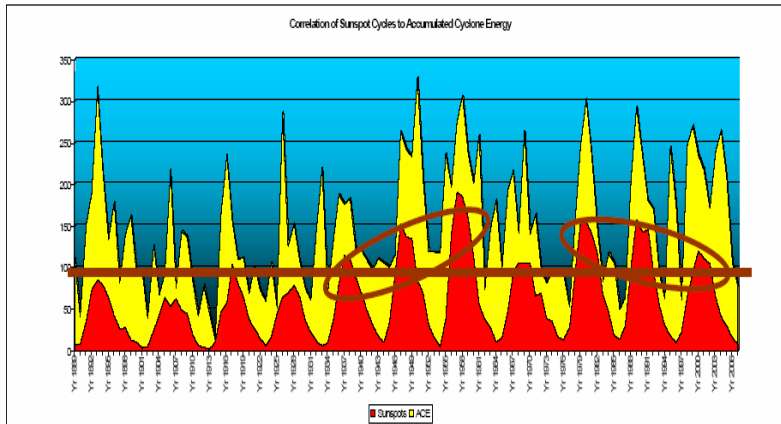
Correlation of Sunspot Activity to Accumulated Cyclone Energy (ACE).

Following Sir Richard Gregory's lead, the following was based on his work.

The object, find similar climate activity that correlates to sunspot activity. Named-storms were hard to correlate to sunspot activity.

However, ACE showed a strong correlation

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One of the Author's first pieces of work in correlation studies of sunspot activity to Accumulated Cyclone Energy.

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This slide shows the rough visual of sunspot correlation to accumulated cyclone energy. It is not a perfect balance. But then, is your cheese burger purchased at a local franchise the same as the last time you purchased it. Is it the same as in the photo on the wall above the coffee pots. They are similar, but difference.

What is noted in this slide is the slow growth noted nearly three years ago in a letter to the Governor of the State of Florida. As I stated to Governor Crist, we appear to be entering global cooling. At best, we entered global cooling somewhere in 2006. That year, the all temperatures of the USA, changed from global warming to global cooling. Florida lagged behind as will be seen at the end of this slide show.

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Of the available data, it is known that sunspot cycles last about 11 years.

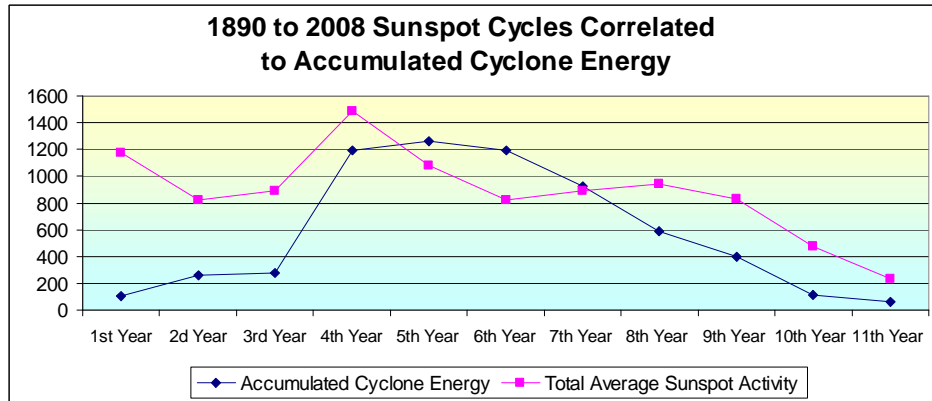
USA data for ACE goes back about 120 years.

Good sunspot data goes back 311 years.

If we take the total average sunspot activity for each first year, then the second year and so on, we would have a basic model of a sunspot cycle over the last 120 years.

If we did the same for each matching year of ACE, we would have a correlation of sunspot activity and ACE as seen in the next two slides. The first is raw data and the second is for small community audiences.

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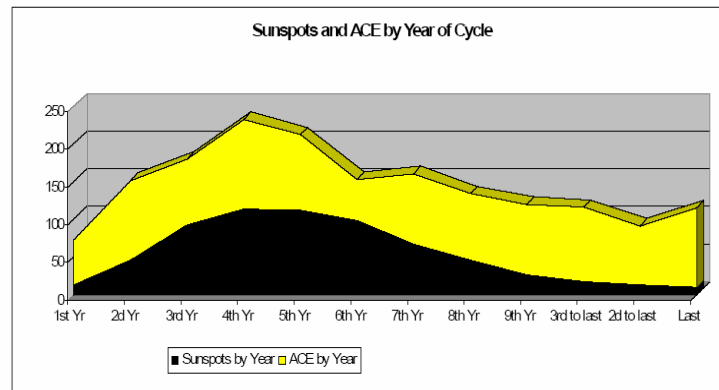
As stated in the previous slide, this is a raw data view of the correlation.

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This slide is the most accurate comparison of Accumulated Cyclone Energy (ACE) to Sunspot Activity. One thing stated in an earlier paper to the Library of Congress is the gaps in the perfect correlation is probably due to the named storm floating around the seas and Atlantic Ocean running up the numbers. Accumulated Cyclone Energy is based on a storm's endurance and strength. If a storm is floating around in the sea, being kept there by the dynamics of the Northern Hemisphere land mass, then, ACE numbers will run up. It can't hit land and stop the numbers.

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This slide is used for some small community audiences. The reason the slide shows 3rd to last and so on, is some of the Authors work found correlation of sunspot activity to droughts.

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This is my favorite slide showing a relationship of accumulated cyclone energy to sunspot activity. Yellow is Accumulated Cyclone Energy and the black is sunspot activity. There are one and two sunspot cycles that exceed the 11 year average of sunspot activity and those numbers skew the ends.

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This next section begins a review of some observations of USA temperature data based on sunspot cycles.

The key point in the next slide is that when the average winter USA temperature rises above 33°F, which happened in the last decade, the hurricane activity and ACE hits its highest known and numbers.

When the winter temperatures drop below 33°F, the hurricane seasons begin to die down and snow packs and glacier activity resumes at higher elevations and higher latitudes.

If someone were to study tree-line activity, there should be over a few decades a change in latitude and elevation of a tree-line during global warming and global cooling sunspot cycles.

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The first four slides summarize the effects on the Earth by sunspot activity.

Historical Overview

Hurricanes and Glaciers

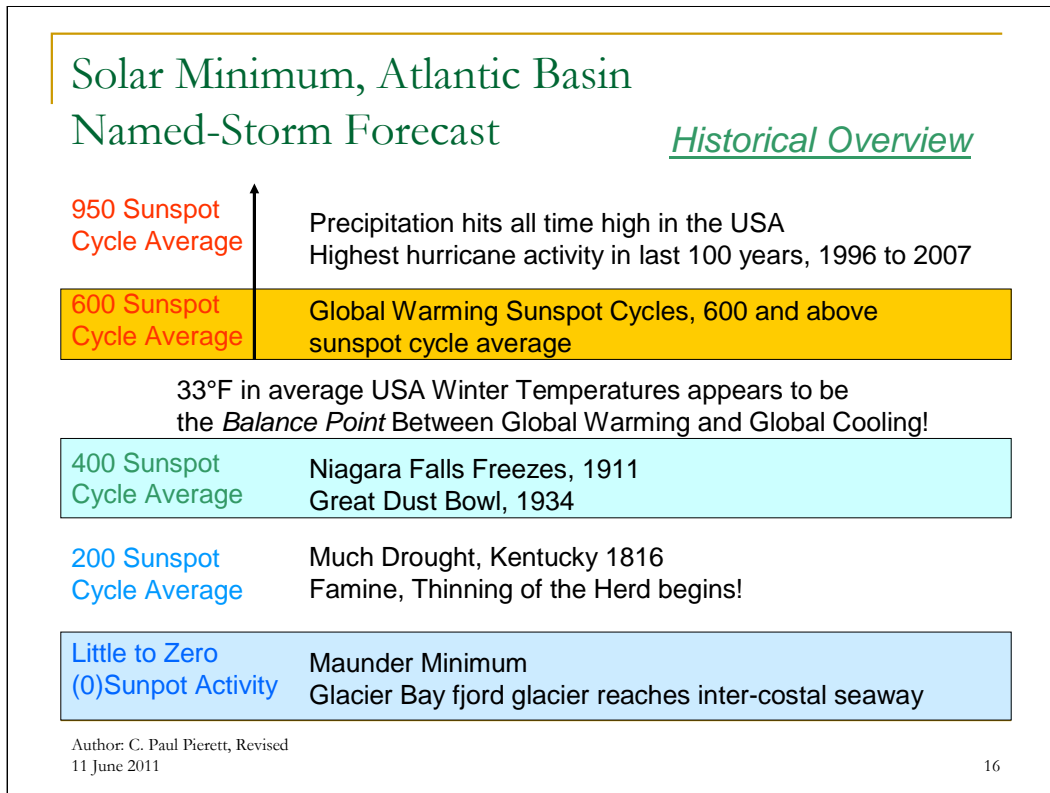
Topography Shift

Green House Gases

Life Cycles

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Those who watch know there is a slight change in the glacier activity at the higher elevations and higher latitudes.

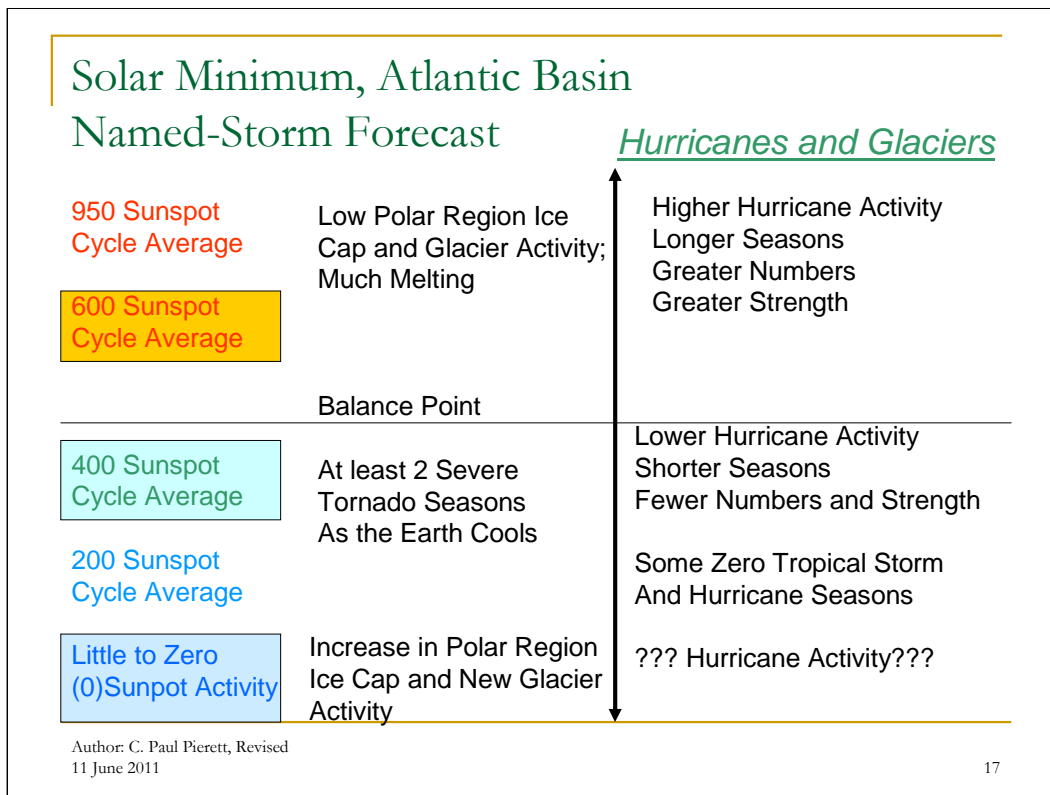
On the other hand, as shown in this slide show, hurricane activity is dropping, oh-so-slowly.

We have seen the first year of severe tornado seasons with one to follow.

We are cooling. If this were the start of an Ice Age, which it is not at this time, we would be recording the first pages of the transition of the Earth to an Ice Age period.

However, droughts and floods are common in low sunspot activity. A pro-meteorologist who understands the impact of sunspot activity or the lack there of, would have to explain why. One reason could be is the lack of the greenhouse gas, Humidity.

That needs to be recorded from a history standpoint for study later.



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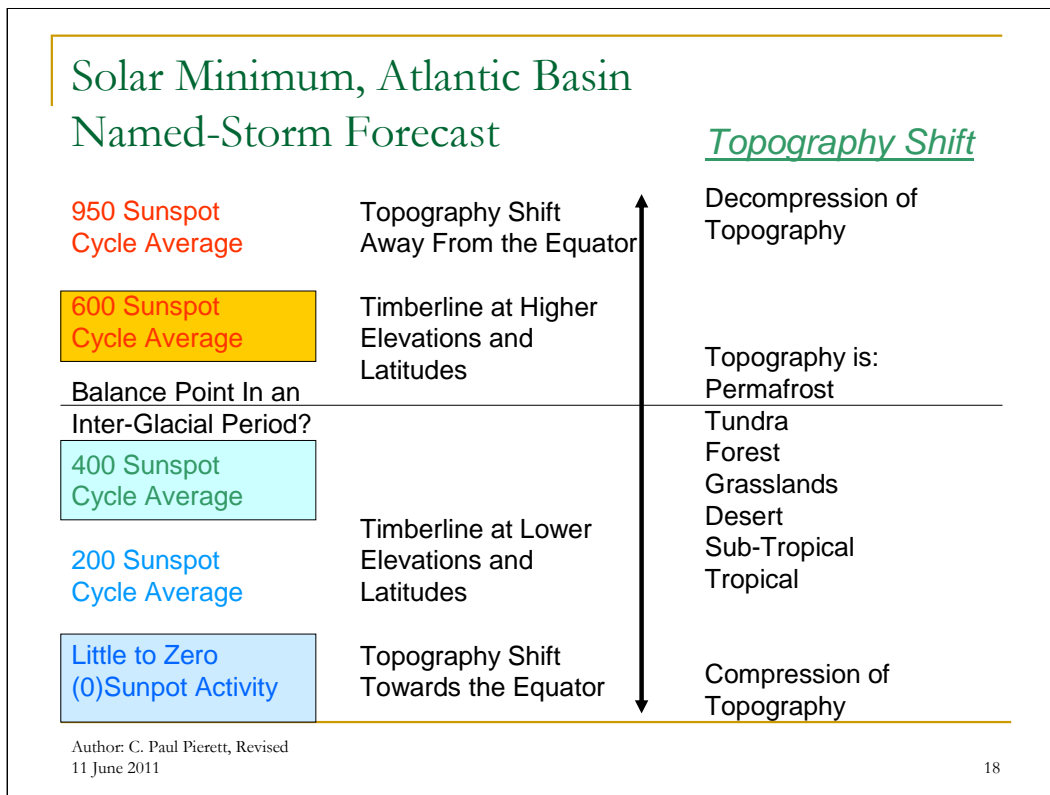
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Solar Minimum, Atlantic Basin Named-Storm Forecast		<u>Green House Gases</u>
950 Sunspot Cycle Average	Critical Ozone Numbers	Humidity in Upper Atmosphere
600 Sunspot Cycle Average	Good Ozone Numbers	Greater numbers of Carbons Released from Ice Caps and Glaciers, produced by Animals
Fracture Point		
400 Sunspot Cycle Average	Depletion of Ozone	Climate Lag of 5 to 14 Years
200 Sunspot Cycle Average	Possible Larger Hole In Ozone Layer	Greater numbers of Carbons Recaptured by Ice Caps and Glaciers, less produced by Animals due to "Thinning of Herd"
Little to Zero (0) Sunspot Activity	Unknown	

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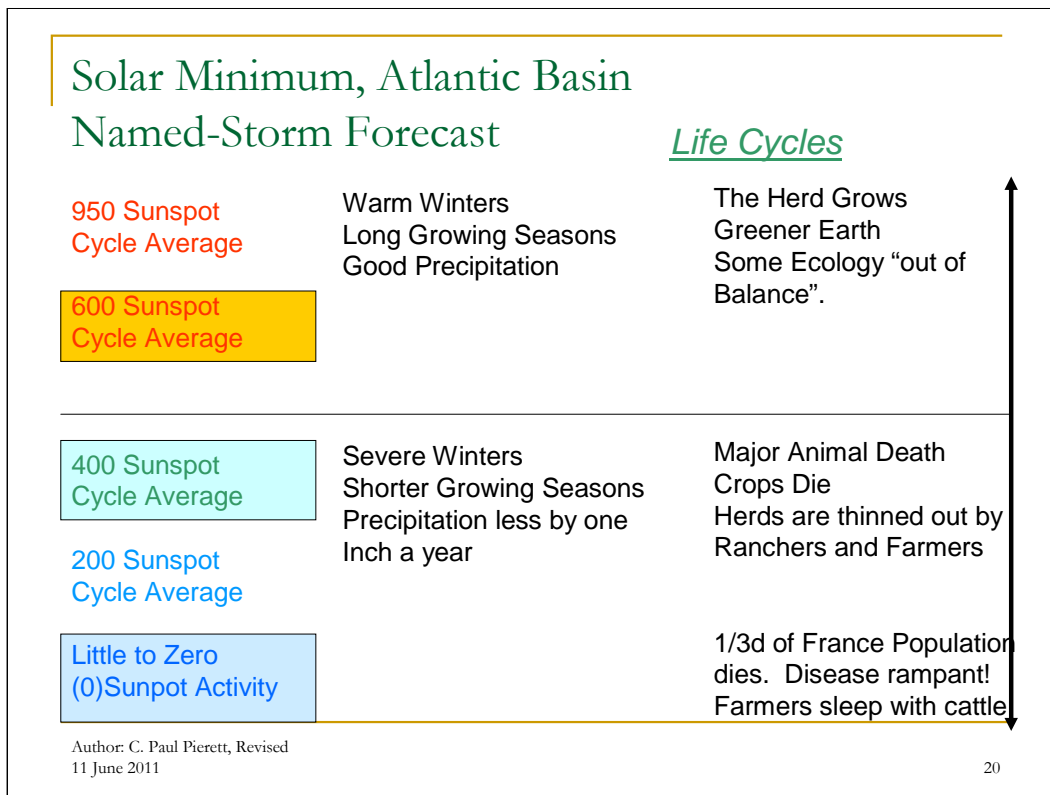
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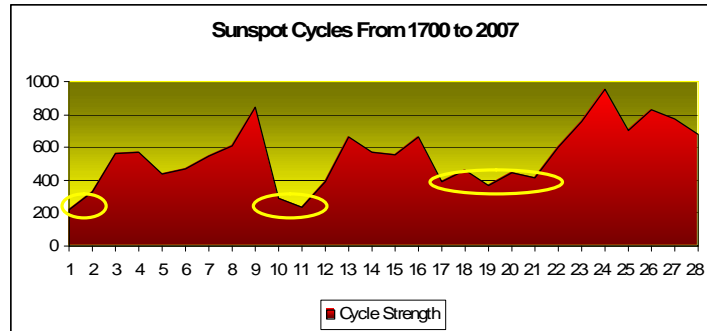
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- In the following slides, the sunspot history of the correlation studies are presented. The last 300 years of sunspot averages are used.
- The purpose is to show during our place in Space and Time, the effects of sunspot activity on the climate.
- The slides will show the difference in each 100 years of sunspot cycles and how they effect our temperatures, numeric numbers of hurricanes and finally a projection of temperatures and hurricane activity.

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In this figure the total average sunspot activity of each year of a sunspot cycle is added together for a total. Each cycle was totaled up and stood on end. Minima shown in yellow circles. 1700s appear to be stronger than the 1800s and 1900s appear to be stronger than the 1700s and 1800s. The next slide shows the overall strength of each century.

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If one were to take the total average sunspot activity for a cycle, add it all up, stand it on end, one would have this figure.

There are various sunspot minimums and they vary from 200 to 400 total sunspot averages.

600 **plus** total sunspot averages for a whole cycle gives us our global warming cycles if there is a recognizable peak. If there is a peak, then there is a global warming cycle.

If the peak is not present and the cycle flattens out, then it can be a cold cycle such as the one around 1964 to 1975. That cycle flatten out and it became the 3rd coldest cycle of the past century.

Solar Minimum, Atlantic Basin

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Solar Minimum to Solar Minimum

Century	Total No. of Yrs & Cycles	Total of Yearly Sunspot Avg.	Average Per Year
1700-1798	98 years 9 cycles	4577.4	46.71
1799-1901	103 years 9 cycles	4168.5	40.08
1902-2007	106 years 10 cycles	6533.78	61.64

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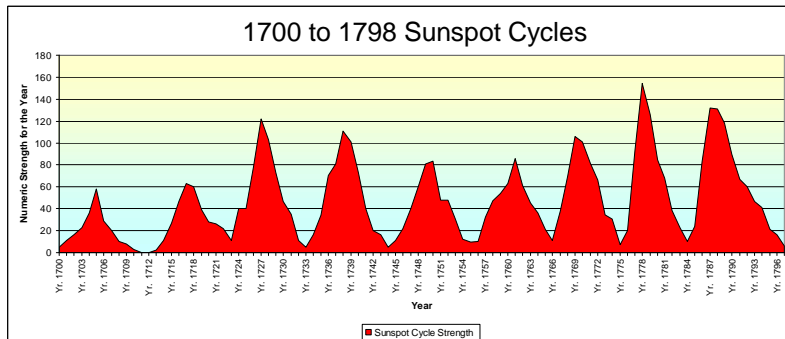
After the Mini-Ice Age the first 100 years of cycles were warmer than the 1800s. The 1900s were much more active than the previous two. This may have contributed to the global warming scare.

There may be an *accumulated* global warming affect for the last 300 years. The fjord glacier in Glacier Bay continued to melt since its discovery.

One must note that the last century did not have a true solar minimum as did the 1700s or 1800s. Instead the 1900s had a head start on the other two centuries. The 1900s began with sunspot cycles twice the size of the sunspot cycles that began the 1700s and 1800s. Thus, the 1900s had a head start on a global warming century over the others. Also, the 1900s had more consistent, stronger cycles.

This leads me to believe that the coming century will be colder. When the sunspot cycle is small at the start of the century, the rest of the century has smaller, rougher sunspot cycles.

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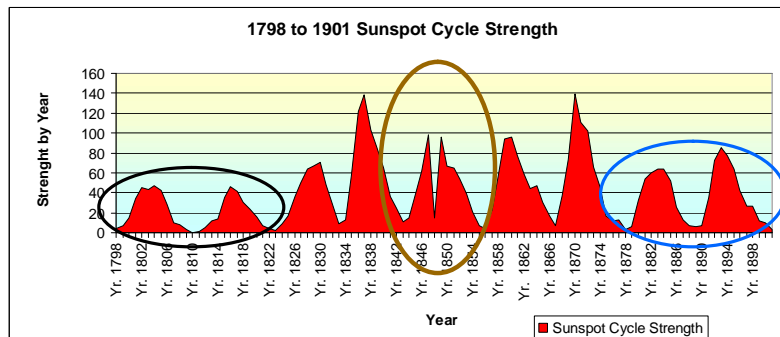
The 1700s was the first century after the last mini-ice age with regular sunspot activity. The century began with cycles that had peaks of 60 average sunspot activity. An observation, the peaks tend to play in the strength of a cycles warming potential. Without the peaks the sunspot cycle tends to be cooler. A cooler minimum causes a cooler century.

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This is a summary of the 1700s sunspot cycles. It was a colder century and if this present minimum holds true, the 2000s, the 21st Century will be colder.

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The 1800s began with a smaller two cycles; had four global warming sunspot cycles; and declined into less than global warming sunspot cycles at the end of the century. (Brown Circle) Note the mid-point collapse in the 1843 to 1854 cycle. The cycle dropped from 98.5 to 14.7 and then back up to 96.3. It had to be a cooler century than the 1900s.

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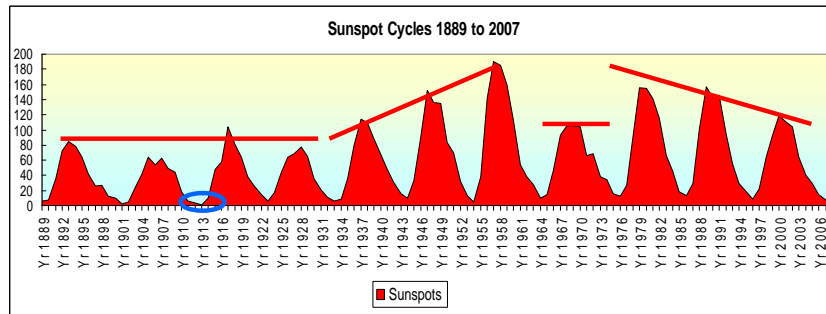
The 1800s were full of irregularities. It began with a solar minimum and had a various strange cycles. We need to remember the Sun was awakening from a mini-ice age. What is regular? Note the middle cycle. Hot, then not, then hot. One year, it dropped to 20 total sunspot average for the year.

If one were to review all the hurricane data for a sunspot cycle, one would find that there is not consistency. It all varies, it all changes. One year can be a few hurricanes and the next, the maximum for the sunspot cycle.

However, as to be seen, hurricane activity does fit in a box. The range of hurricane numbers can't exceed what is available in sunspot activity.

Hurricanes and, soon to be found out, Ozone are global warming features.

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The 1900s began with four short smaller cycles that led to the Niagara Falls freeze of 1911 and one tropical storm in 1914 (See blue circle). The six of the last seven cycles gave us our “Global Warming” scare. Hurricane numbers and strength should be growing and glaciers should be melting at lower latitudes and lower elevations. We should see that reverse somewhat in the next 20 years.

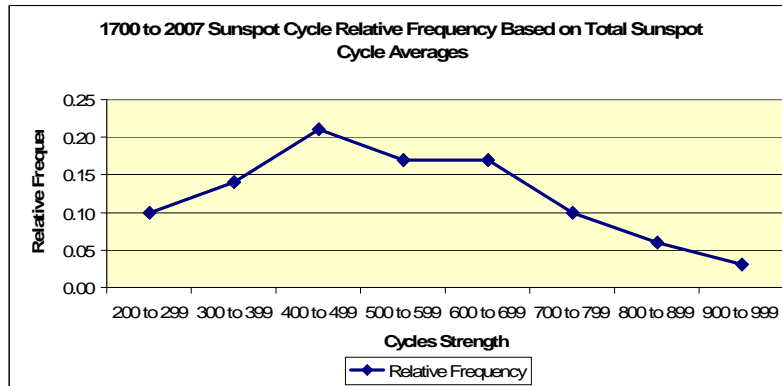
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The 1900s spilled over into the early 2000s. This added one more cycle to this 100 year sunspot cycle described by Joseph D’Aleo. There was not a true minimum in terms of reaching a 200 total sunspot minimum for the century.

This minimum of nearly 400 total sunspot average for the cycles gave the 1900 s through 2006 a boost in overall global warming, which will be greatly missed in that next 10 years.

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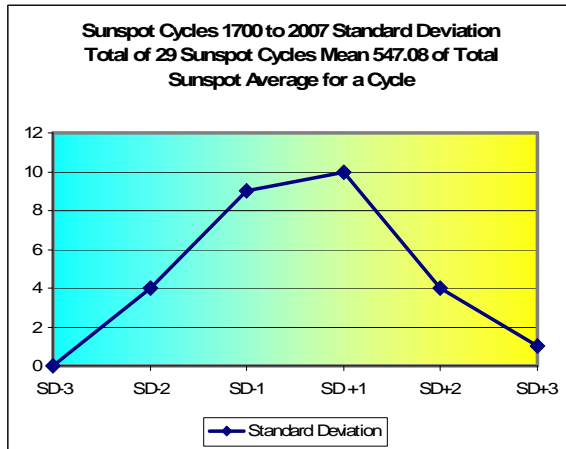
This is the frequency distribution for the last 300 years. There tends to be more of the 400 to 500 strength sunspot cycles than the others. An historical observation, when there are Smaller cycles at the start of the century, the overall cycles tend to be smaller. This points to a cooler century as well.

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People who are tied to numbers love numbers and this is a frequency distribution of sunspot activity over the last 300 years. Strong cycles are not as prevalent as weak cycles. Thus, the 21st century will probably be colder.

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SD broken out
Total Average
Sunspot Cycle
(TASC) is Given

29 Cycles
Mean is 547.08
SD is 182.82

SD+3 - 949.8
SD+2 - 756.7 to 846.3
SD+1 - 552.2 to 705
SD-1 - 539.4 to 371
SD-2 - 325 to 219
SD-3 - 0

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This slide reemphasizes the previous slide. As stated in my cover letters, we are closer to an Ice Age than a Dinosaur age is shown here. What gave us the Dinosaur Age has changed. Something changed a few million years ago and the earth transitioned from a reptile to mammal world with reptiles limited to given latitudes.

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Joseph D' Aleo Observed:

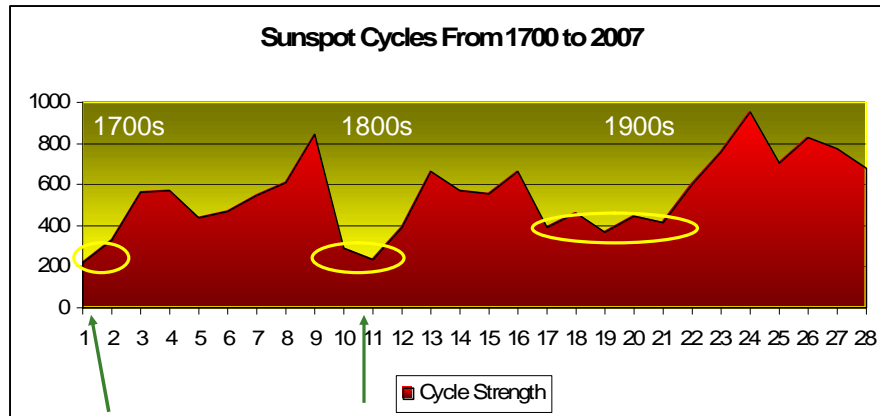
1. There is a solar minimum each century
2. The century tends to start with a solar minimum
3. The first cycle has fraternal twin
4. Thus, we began some type of minimum in 2008
5. The start of the minimum is now between the 1700 and 1800 minimum

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This is another fundamental in this slide show. I was almost on to this when my family of knowledgeable people and their friends sent me additional information after my first paper. Mr. D' Aleo, as the Navy commander stated, "He who wins, Got there first with the mostest." Thus, Mr. D" Aleo gets the credit by some 6 months. Oh well!, he got there first and he gets the credit. He figured out that every century there is a minimum of some type and size.

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We are looking at the two minimums as the present models. Per review of present SIDC count, we appear to be in a minimum because the numbers are too low for the fourth year of a sunspot cycle.

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We are now into explaining minimums. As will be shown in the next slides, why the NASA, constant changing predictions, are not historic. The Data shown reveals the most probable sunspot minimum. However, there is not constant. What history shows is the most probable route.

Solar Minimum, Atlantic Basin Named-Storm Forecast

Year	Sunspot Average	219 Total Avg. Sunspot Cycle	441 Total Avg. Sunspot Cycle	613 Total Avg. Sunspot Cycle
2008	2.9	1700	5	1913
2009	3.10	1701	11	1914
2010	16.5	1702	16	1915
2011		1703	23	1916
2012		1704	36	1917
2013		1705	58	1918
2014		1706	29	1919
2015		1707	20	1920

2008 Sunspot Cycle compared to other startups in different sizes of sunspot cycles. The present sunspot cycle appears to be a solar minimum cycle of approximately 200 total average sunspot cycle.

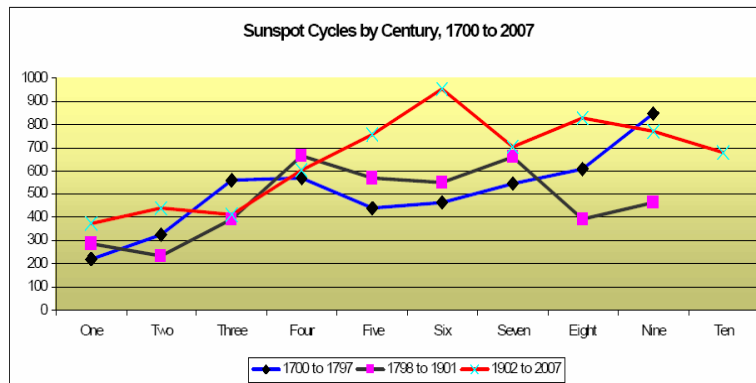
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NASA has changed its predictions two or three times since the start of this minimum. At this time, they are predicting that the cycle will hit 60 average sunspots for this year.

Historically, it will be a stretch for this cycle to make 60 sunspot average for the year. As shown in this chart, using other sunspot cycle minimum data and the data for other sunspot cycle strengths the present cycle is patterned after the 1700s and 1800s minimums.

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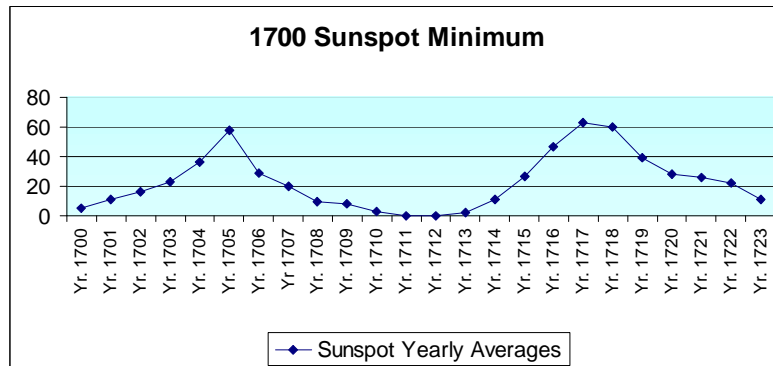
The 1700s started out slow, went into a valley and then, peaked.
The 1800s began low, peaked, went into a valley and dropped.
The 1900s kept some momentum and had strong cycles throughout. The
1900s lowest valley was stronger than any of the 1800s and Glacier Bay fjord
glacier kept melting

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Somewhat, self explanatory. This slide shows the closest regularity in sunspot activity over a century.

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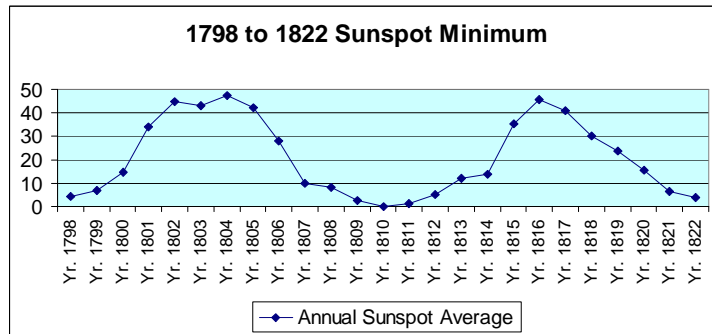
As of January 2011, the present cycle has numbers starting between the 1700 and 1800 minimums. NASA is predicting a 60+ sunspot year. The minimum cycles may end up looking something like this or the next slide of the early 1800 minimum.

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Samples of the 1700 solar minimum.

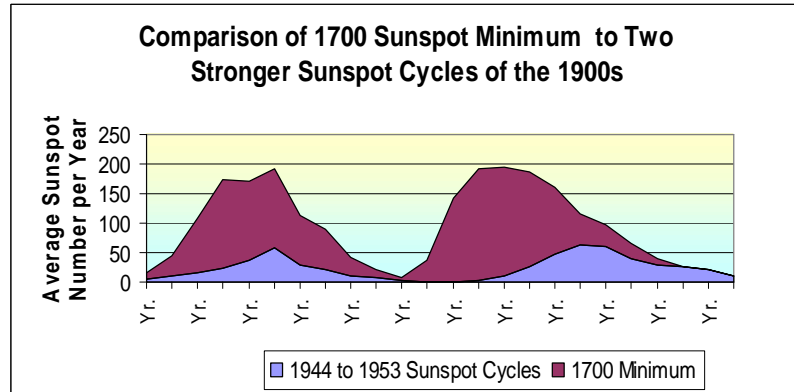
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Some of the things that happened during a minimum:

- Napoleon lost his Army in Russia to severe cold winter
- The Turks lost a division 100 years later in another cooler sunspot cycle
- Niagara Falls froze over in 1911
- One Tropical Storm occurred in the 1914 hurricane season

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A minimum can be one-fourth the size of a “global warming” sunspot cycle.

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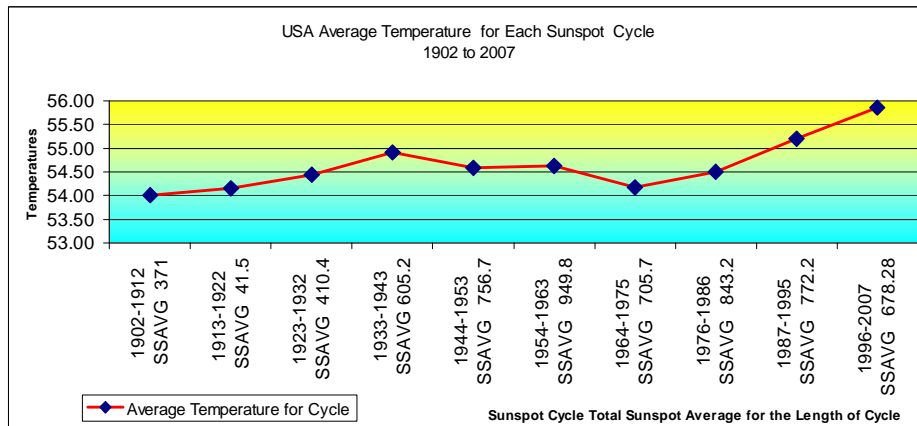
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What is the difference? This slide shows the difference between the stronger cycles of the 1900s and the weaker sunspot cycles of, say, the 1700s.

Solar Minimum, Atlantic Basin Named-Storm Forecast

The following work is provided to show relationship between sunspot activity and Earth's temperatures. USA average annual, winter and summer temperatures are used as a gauge for comparison. Official available temperature data begins in the last years of the 1800s

Solar Minimum, Atlantic Basin Named-Storm Forecast



In this first slide, the average annual USA temperature is shown for each sunspot cycle listed underneath. The years of the cycle are given and the total sunspot average for the sunspot cycle is given. The annual temperature rose nearly 2°F.

Author: C. Paul Pierett, Revised
11 June 2011

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Sunspot Activity is Declining

Average Temperatures for the last three cycles were climbing

Hurricane activity follow suit.

Glacier melt continued

Solar Minimum, Atlantic Basin Named-Storm Forecast

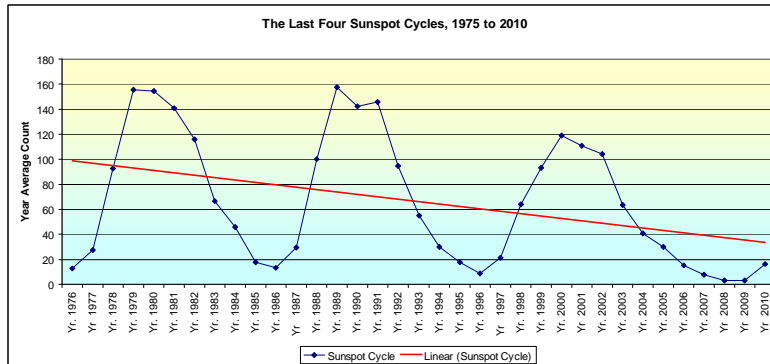
USA Average Annual Temperatures, 1902 to 2007				
Sunspot Cycles	USA Annual Temperatures	Sunspot Mean	Ranked by Temperature/Sunspots	
1902-1912	54.00	371.00	10	1
1913-1922	54.16	441.50	9	3
1964-1975	54.18	705.70	8	6
1923-1932	54.43	410.40	7	2
1976-1986	54.49	843.20	6	9
1944-1953	54.59	756.70	5	7
1954-1963	54.62	949.8	4	10
1933-1943	54.92	605.20	3	4
1987-1995	55.20	772.20	2	8
1996-2007	55.86	678.28	1	5

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11 June 2011

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During the 1900s the Average Annual Temperatures of the USA increased from 1902 to 2007

Solar Minimum, Atlantic Basin Named-Storm Forecast



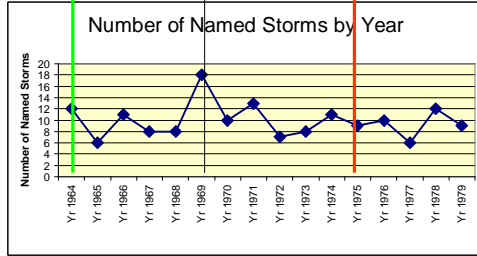
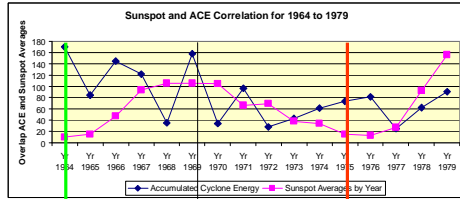
Things to note in this slide: The last three cycle have been in decline. *The last cycle shown was stronger than nearly all the cycles of the 1700s and 1800s.* The overall average USA winter temperatures began to decline in 2000. The USA annual and summer average temperatures began to decline in 2006.

Author: C. Paul Pierett, Revised
11 June 2011

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Sunspot cycles are declining. Unlike other centuries, this one was gradual. 2006 was probably the year we switch from global warming to global cooling. If we think of thermostat, there is a point where something feels warm and something feels cool. 2006 was the year the USA switch from warm to cool. All USA average temperatures switched from warm to cool by that year.

Solar Minimum, Atlantic Basin Named-Storm Forecast



The Coolest Cycle Amongst Giants

The characteristics of the 1964 to 1975 sunspot cycle over the others of the same size was the lack of a peak. Observation: The peak is needed for warming of the Earth.

The present cycle should end around 2019. The next cycle should end around 2030. Climate lag should carry to 2036 before the next cycle has an impact.

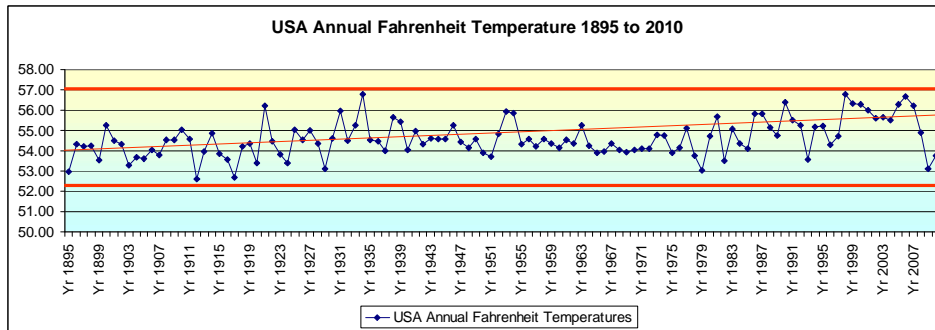
The Arctic met maximum known extent in 1979 since NASA began measuring its mass.

Author: C. Paul Pierett, Revised
11 June 2011

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Another look at ACE and a cool sunspot cycle.

Solar Minimum, Atlantic Basin Named-Storm Forecast



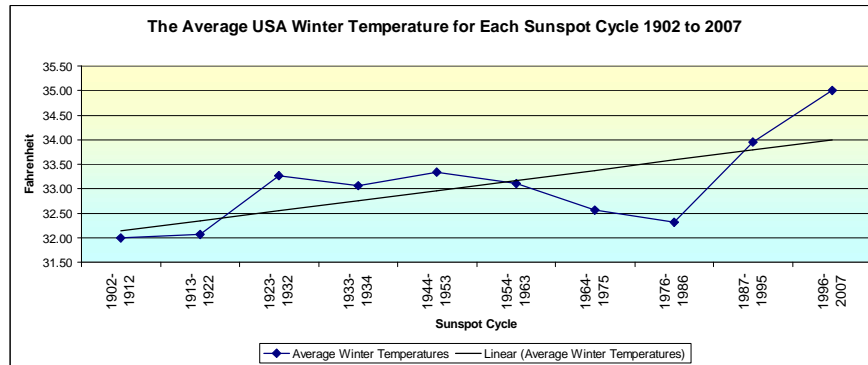
All things said and done, the USA temperatures rose about 2°F.

Author: C. Paul Pierett, Revised
11 June 2011

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There is, to skeptics of the influences of sunspot activity to our Earth's climate and weather, things that seem the same. Here are two examples of two patterns that appear to be the same. Are they? In both cases, the warmer sunspot cycles, though warmer, are cooling as well. Like cold spots in a room, that the heater can't reach, a cooler thermostat might give the colder spots an alibi. Thus, they crop up in the stats. This is also called an anomaly, oscillation, or this that or the other. Something that crops up that is irregular to the rules I am presenting. Since this is a new theory absent of man's influences, this is a "Rascal" to the detailed expansion of the Milankovitch Cycle theory.

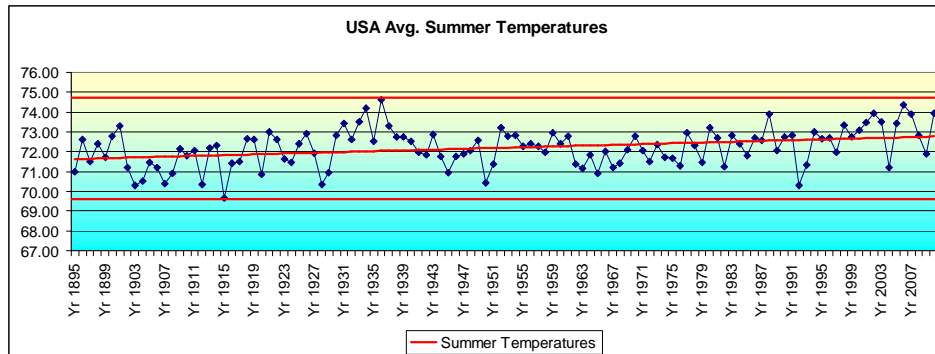
Solar Minimum, Atlantic Basin Named-Storm Forecast



Average temperature change in USA Annual Winter Temperatures was 3°F. The last three cycles in this 100 year cycle were stronger than nearly all of the sunspot cycles of the two previous centuries. Though one the 1964 to 1975 sunspot cycle was colder, there was a significant rebound in the latter part of the 100-year cycle.

Author: C. Paul Pierett, Revised
11 June 2011

Solar Minimum, Atlantic Basin Named-Storm Forecast



USA annual summer temperatures rose about 1°F.

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11 June 2011

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If one listened to global warming alarmists, the temperatures are going up, up, up and up. Actually, about 2°F is the overall gradual change for the USA, not a hockey stick. Notice the overall changes. Not a perfect correlation to sunspot activity, but as one scientist put it, there is a “casual relationship”.

Solar Minimum, Atlantic Basin Named-Storm Forecast

Temperature Forecast for the USA

Assumption: Accumulated global warming effect
since the 1700

Using average USA Annual Temperatures

600 to 900 Total Average Sunspot Cycles produce
54.5°F to 55.86°F

300 to 400 Cycles produce 54°F to 54.43°F

Overall annual average temperatures rose nearly
2°F in 100 years

Author: C. Paul Pierett, Revised
11 June 2011

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Going back to home thermostat comparison, this chart puts some rough estimate measurements into place. The question that should be measured over the next 30 years is the effect of sunspot activity on our temperatures.

Where are we in Time and Space? This work applies to "NOW". Can it be adapted in 5,000 years?

Solar Minimum, Atlantic Basin Named-Storm Forecast

Temperature Forecast for the USA

Thus:

600 to 900 Total Sunspot Average Cycles - 54.5°F to 55.86°F
300 to 400 Total Sunspot Average Cycles - 54.00°F to 54.43°F
The Difference Range - .50°F - -1.86°F

Should not a 200 total sunspot average cycle, being half of a 400 total sunspot average cycle and the 400 total sunspot average being roughly half of the stronger cycles and the temperature only varied .5°F to 1.86°F, then the average USA annual temperatures should drop at least 2°F to early 1900s temperatures.

Best estimate for this minimum at this time is USA annual temperatures should drop to about 50°F - 52°F. The USA will lose the 2°F it gained over the last century and 2°F drop due to the size of the minimum sunspot cycles, being half of a 300 to 400 sunspot cycle.

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This is more in line with the Milankovitch Cycles, than what is being claimed by Ice Age Alarmists on major news channels.

First Reality Check. In our place in "Time and Space" we are seeing a measurable temperature. As we have seen on Fox News this year, scientists with long hair and radical claims of ice age forecasts are on the front burner. This is a better picture of our next two decades of temperature. We need to remember what a New Zealand farmer said, "Any more than four degrees, (Celsius) change in temperature, is significant."

Solar Minimum, Atlantic Basin Named-Storm Forecast

USA Average Annual Temperatures, 1902 to 2007				
Sunspot Cycles	USA Annual Temperatures	Sunspot Mean	Ranked by Temperature/Sunspots	
1902-1912	54.00	371.00	10	1
1913-1922	54.16	441.50	9	3
1964-1975	54.18	705.70	8	6
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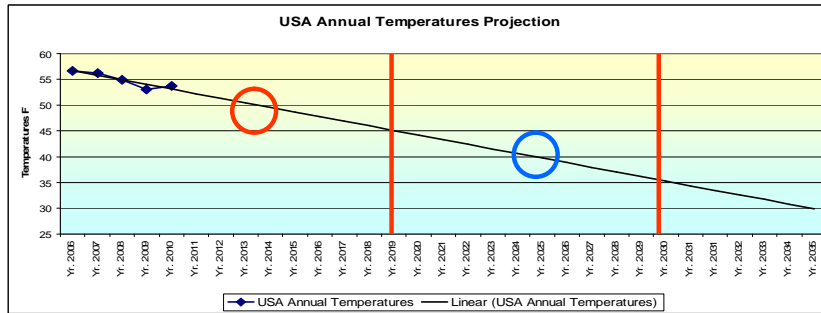
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11 June 2011

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During the 1900s the Average Annual Temperatures of the USA increased from 1902 to 2007

Something interesting in the 1964 to 1975 sunspot cycle. This cycle had as much average sunspot activity as the 1996 to 2007 sunspot cycle. The cycle lacked a peak and was overall flat. This impacted our weather and caused some stir. Some scientists believed we were heading for an Ice Age.

Solar Minimum, Atlantic Basin Named-Storm Forecast



If a sunspot cycle minimums produces a certain amount of energy, then the average temperature may stay around 50°F. See Red Circle.
Why would it not be around 40°F in 2024? See Blue Circle. The fall and spring annual temperatures almost match the annual temperatures. This keeps the annual temperature at near 50°F.

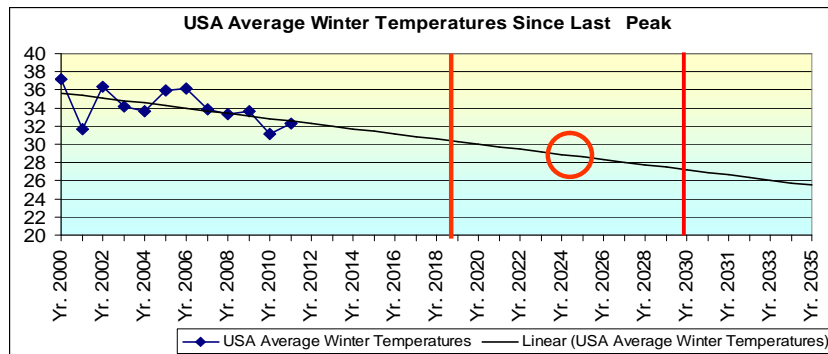
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Reality Check. No Ice Age, but significantly colder
Drought and flood conditions continue.

Topography shift

Solar Minimum, Atlantic Basin Named-Storm Forecast



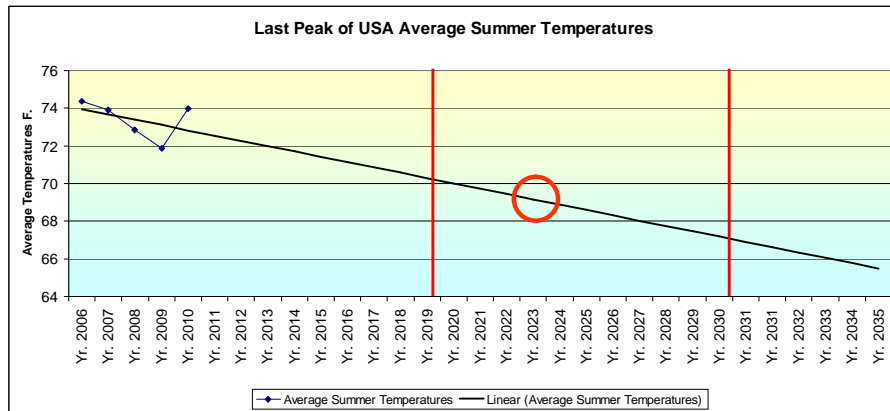
300 to 400 Cycles produced 32 to 33.27°F Winters
 600 to 900+ Cycles produced 33 to 35°F
 200 Cycles may only drop to 29°F for the next cycle
 A New Zealand Farmer said, "4°C Change in temperature is significant
 4°C = 5.4°F

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 11 June 2011

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The red circle may be what we are looking at in average temperatures for while. If forecast is true, then we are looking at nearly 9°F degrees of change in 20 years

Solar Minimum, Atlantic Basin Named-Storm Forecast



300 to 400 Sunspot Cycles produce 71°F to 72°F
600 to 900 Sunspot Cycles produce 72°F to 73°F
200 Sunspot Cycles should drop to 69°F to 70°F around 2023. See Red Circle.

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The Red Circle shows the possible average of summer temperatures for the USA.

Solar Minimum, Atlantic Basin Named-Storm Forecast

If:

The 300 to 400 Sunspot Cycles Produce 5.7 to 8.33 average Named Storms for a sunspot cycle

The 600 to 900 Sunspot Cycles Produce 9.2 to 14.42 average named storms for a sunspot cycle

Then, 200 Sunspot Cycles should at least produce the product of the subtracted difference.

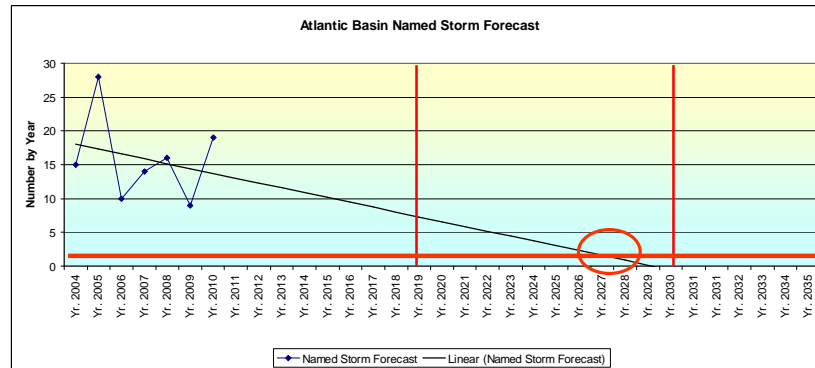
	Low	High
600 to 900 Sunspot Cycles:	9.2	14.42
300 to 400 Sunspot Cycles	<u>- 5.7</u>	<u>-8.33</u>
The Difference	<u>- 3.5 = ½</u>	<u>-6.39 = 1/2</u>
200 Sunspot Cycles	=2.2 = ½	=1.94 = ½

About 2 Named Storms a Year is the best answer.

Since this is an average. Somewhere in the future is a zero hurricane season.

Just looking at the picture with simple math.

Solar Minimum, Atlantic Basin Named-Storm Forecast



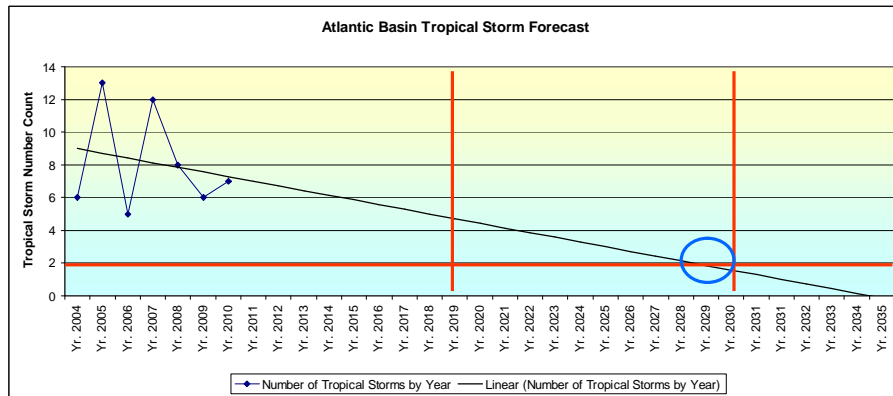
The Forecast at this time:
Using the Previous Slide Estimate of 2, then we are looking for a cutoff with
Zero Hurricanes Seasons in the mix.
By 2027, The hurricane season average will be around 2 Named Storms-
a-Year with a possible split of one Tropical Storm and One Hurricane

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Unlike the temperature charts, in the named-storm charts, we will find that the trend line is close to the simple math above.

Solar Minimum, Atlantic Basin Named-Storm Forecast



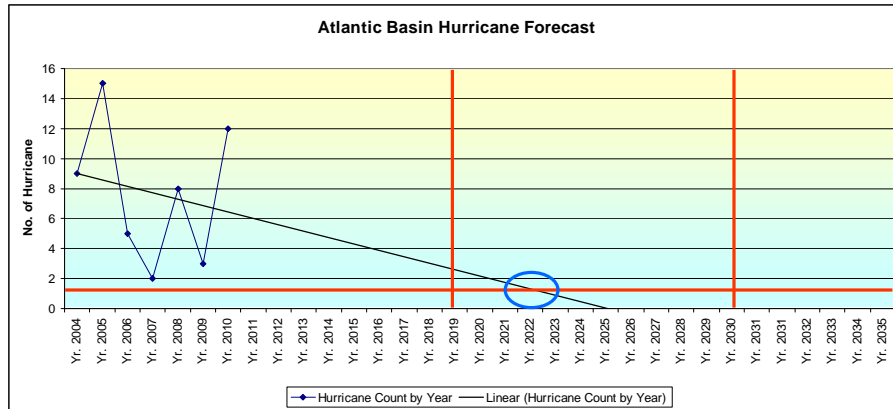
The math is about right. By the end of the next cycle, tropical storms should be the last to show up in an hurricane season.

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The Blue Circle is the most favorable points of Reality Check in the number of named storms in the future projections.

Solar Minimum, Atlantic Basin Named-Storm Forecast



At this time:

By 2019, Hurricanes will drop to 3

By 2025, Hurricanes will drop to zero, except,

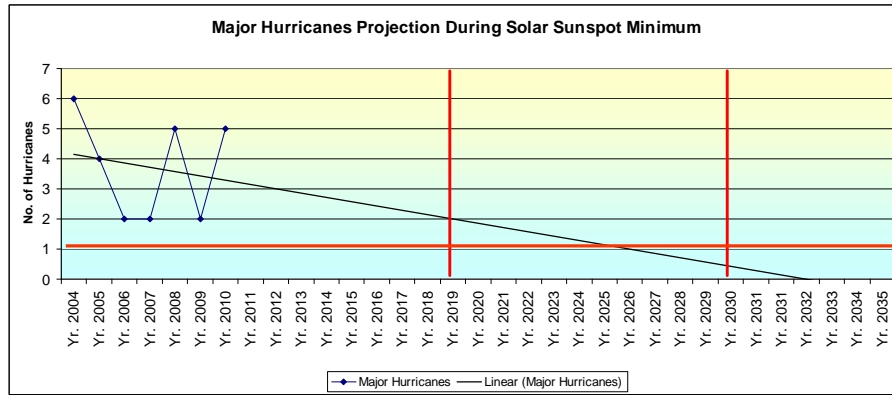
There were hurricane type storms recorded during the Mini-Ice Age

Author: C. Paul Pierett, Revised
11 June 2011

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No Comments

Solar Minimum, Atlantic Basin Named-Storm Forecast



There may still be a major hurricane now and then.
Around 2035, this will all turn around.

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No Comments

Solar Minimum, Atlantic Basin Named-Storm Forecast

The Range of Named Storms in Sunspot Cycle Sizes:

300 to 400 Sunspot Cycles: 1 Tropical Storm to 15 Named Storms; 5 Tropical Storms, 10 Hurricanes and 6 Major hurricanes within 2 years of each other

600 to 900 Sunspot Cycles: 5 Named Storms of 2 Tropical Storms, 3 Hurricanes and 1 Major Hurricane to 28 Named Storms of 13 Tropical Storms, 15 Hurricanes and 4 Major Hurricanes

200 Sunspot Cycles: As the earth cools, there should be zero seasons.

No comments

Solar Minimum, Atlantic Basin Named-Storm Forecast

Appendix: Florida Review

Sunspot Activity:

Florida's Annual, Winter and Summer Average Temperatures

Florida's Precipitation

What we are leaving is a century of warmer cycles and not much of minimum cycles at the start.

The century started stronger than the 1700s and 1800s.

As a reference point for the following slides, Florida, being a Subtropical Typography and its location that allows it to capture the winds and water from the Gulf, the Caribbean and Africa, as well as the Northern States cold and warm weather, the charts reflect those exchanges.

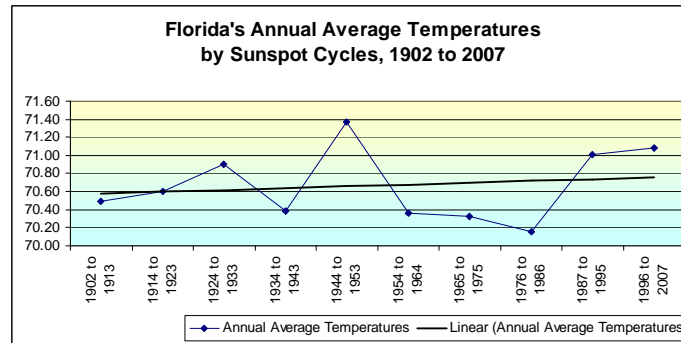
Around 2035, temperatures and hurricane activity should begin to rise.

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11 June 2011

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At the request of an area farmer, the Florida portion is presented at this time.

Solar Minimum, Atlantic Basin Named-Storm Forecast



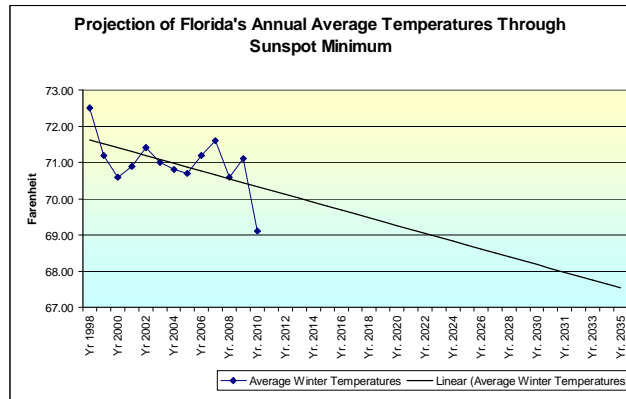
In this lead chart, the overall average temperature for Florida stayed within 2°F even during the coldest of sunspot cycles since 1902. During a minimum sunspot cycle of 200 Total Sunspot Mean for an average Sunspot Cycle, one should look for at least another 1°F to 2°F average temperature drop to 68°F

Author: C. Paul Pierett, Revised
11 June 2011

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No comment at this time

Solar Minimum, Atlantic Basin Named-Storm Forecast



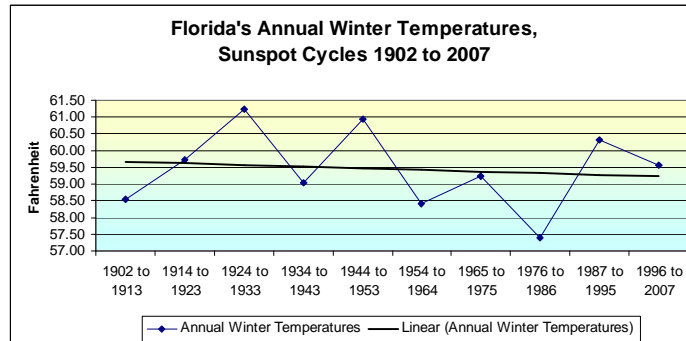
This Projection begins with the last sunspot cycle's peak temperature. Florida's average temperature will hit bottom around 2035. The present trend line projects 67.5°F, which ties in closely to the first slide projection of 68°F.

Author: C. Paul Pierett, Revised
11 June 2011

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No Comment at this time.

Solar Minimum, Atlantic Basin Named-Storm Forecast



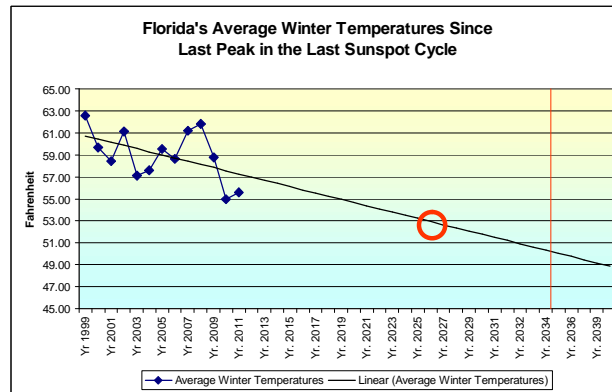
Florida's average winter temperatures reflect directly and indirectly the various sunspot cycles over the last 100 years. It appears that Florida's winters are greatly influenced by northern weather and jet streams.

Author: C. Paul Pierett, Revised
11 June 2011

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No comment at this time

Solar Minimum, Atlantic Basin Named-Storm Forecast



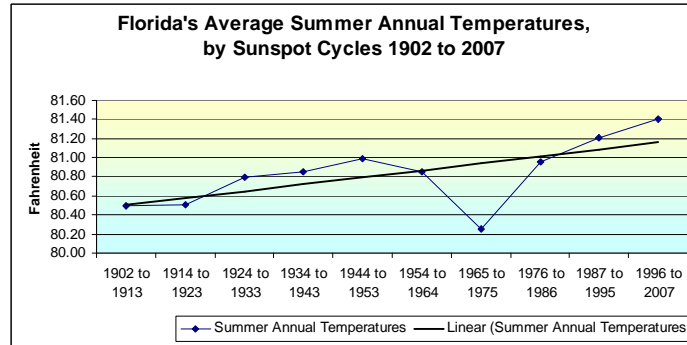
Per the previous chart, there is a 4°F difference in the overall high average of 61.25°F and the overall low average of 57.41°F. If we take another 4°F off the bottom, to match the projected sunspot cycle strength, then the projection should bottom out at approximate 53°F. Worst case, about 49.5°F.

Author: C. Paul Pierett, Revised
11 June 2011

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No Comment at this time.

Solar Minimum, Atlantic Basin Named-Storm Forecast



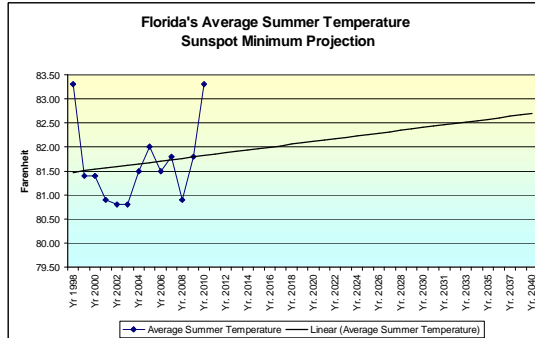
Florida's summers reflect the overall global warming from sunspot activity. Note the drop again. That period also had the 3rd coolest sunspot cycle of the 1900s and 1979 marked one of the greatest growth marks in the Arctic's Polar Region ice field.

Author: C. Paul Pierett, Revised
11 June 2011

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No comment at this time

Solar Minimum, Atlantic Basin Named-Storm Forecast



- Anomaly?
- Oscillation?
- Green House Gases Lingering Over Florida?
- Lost of Humidity
- Lost of Cloud Cover?

What should we label this chart? The data breaks the rule or theory. In the next chart, there will **not** be a large significant change in the overall average temperatures of Florida's Summers. Again, as stated above, Florida's Summers are influenced by at least five geographic areas. As the Earth cools, there should be variances in temperatures and this is one.

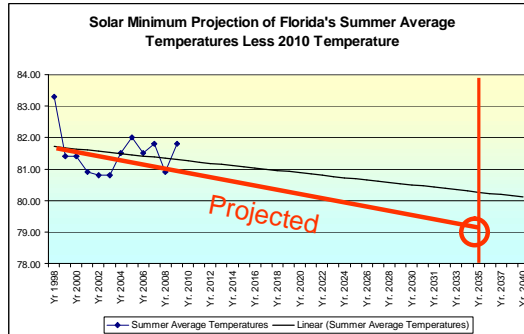
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11 June 2011

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No further comments at this time.

Solar Minimum, Atlantic Basin Named-Storm Forecast

Florida's Summer Projected
Average Temperature by the
End of the Solar Minimum



In this slide, the 2010 Summer temperature has been removed so as to capture the overall trend in the coming summers under the influence of a solar minimum. The overall projection of temperature drop is about right. The Summers in the Florida's Subtropical Topography should see an overall drop on about 1.16°F. The projected average Summer Temperature is 79°F. Historically, this will be valuable in the future studies of a solar minimum on Subtropical Topography.

Author: C. Paul Pierett, Revised
11 June 2011

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No Further Comments at this time.

Solar Minimum, Atlantic Basin Named-Storm Forecast

Summary:

Climate Change Possibilities:

1. New climate-change history to be written
2. Future hurricane seasons will be low mix of tropical storms, hurricanes and few major hurricanes.
3. Reduced Hurricane Activity through the next 25 years
4. May see some significant glacier growth
5. 21st Century to be cooler

Questions

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<http://anhonestclimatedebate.wordpress.com/2008/12/01/2008-in-top-five-years-for-sunspot> (accessed date unknown)

Sun blamed for Warming of Earth and Other Worlds by Ker Than, Live Science, March 12, 2007.