

The Global Climate Status Report (GCSR)

Summary Climate Assessment

December 10, 2014



Image 1. The Earth : NASA

**A product of the Space and Science Research Corporation (SSRC)
Orlando, Florida, USA**

Summary Climate Assessment

After a thorough review of the selected climate status parameters up through December 10, 2014, the current summary climate assessment and prediction for the Earth's climate future are as follows:

1. Current Climate Status.

a. Overall Climate Status. The Earth is presently in a sustained phase of GLOBAL COOLING though moderated by recently past peak of solar heating during solar cycle #24. Though there is new evidence of a reduction in this rate during the 2013-2014 period, the rate of temperature decline on a 100 year trend line is the steepest seen during that time frame going back to 1914. We conclude that the past period of global warming, as a natural phase of climate variation caused by the Sun, has ended, and a new cold climate epoch has begun.

b. Two Hundred Year Solar Cycle Continues to Dominate Global Climate. The most recent multi-centennial climate epoch which began around 1830, has begun to reverse direction from a global temperature standpoint. The past period of generally increasing warmth for the Earth, which was caused by the Sun's natural and regular cycles of activity, reached an average peak of warming between 2007 and 2008 as measured by global atmospheric temperatures in the lower troposphere. This change was observed in oceanic temperatures as early as 2003. Acting primarily under the influence of a repeating 206 year solar cycle, a new "solar hibernation" has begun, and is marked by a significant decline in the Sun's energy output. Starting with solar cycle #24, this energy reduction has initiated an expected reversal from the past warm era to a new cold era.

c. Near Term Trends. Major features of the Earth's current climate status include the following sustained trends:

(1) There has been no effective growth in global temperature for eighteen (18) years. Temperatures in the lower troposphere have temporarily stabilized from a previously declining short term trend because of 2013-2014 warming. This trend is expected to revert to COOLING in the next year or two.

(2) Integrated Global Atmospheric and Oceanic Temperatures have stabilized in part because of the heating from the peak of solar cycle #24.

(3) Substantial flux among climate parameters is evident in the ongoing destabilization in climate trends during the transition from the past period of global warming to the new cold climate.

(4) Polar regions have now displayed a consistent trend of colder temperatures and growth in sea ice.

2. Climate Prediction for the Next Thirty Years.

Based on the SSRC's Relational Cycle Theory (RC Theory) using natural cycles as a means for climate prediction and in view of the trends demonstrated by the twenty four global climate parameters, the following climate prediction is believed to be the most accurate available for the period of 2015 to 2044:

a. Highly variable and extreme weather events are expected during the transition from the past warm period to one of rapid global cooling.

b. This next climate change to a long and deep cold era is expected to last for at least the next thirty to forty years.

c. The extent and depth of the cold weather produced in this new climate era is estimated to be the worst in over two hundred years producing a global temperature reduction of 1.0 to 1.5 degrees centigrade.

3. Likely Future Climate Scenarios.

The SSRC believes existing climate change indicators support the assessment that a new potentially dangerous cold climate age has begun. It should be emphasized that unless a significant unexpected and rapid change in the present declining solar activity trend occurs, there are only two climate scenarios that appear likely at this time over the next forty years. Each scenario results in a new cold climate era:

a. Scenario 1. A solar hibernation similar to the Dalton Minimum (1793-1830). This would result in routine establishment of new 200 year cold weather records.

b. Scenario 2. A solar hibernation similar to the one during the Maunder Minimum (1615-1745). A climate period like this would see 400 year temperature records and widespread climate and weather extremes.

c. Human Impacts. A review of the history from these periods shows they were marked by significant increases in cold weather deaths, starvation through global crop losses, livestock losses, and loss of life through concurrent civil unrest, warfare and disease. Record cold effects of the current hibernation are already being felt and instances of crop damage may occur at any time. During that past Dalton era the crop damage was so severe that one US historian has called the period mankind's "...greatest subsistence crisis." Both scenarios for the Earth's climate future are likely to result in substantial, global, social disruption and loss of life. The difference will be one of degree.

d. Increased Geophysical Activity. Further, the SSRC and other researchers have determined that there exists a strong correlation between solar hibernations and the largest recorded earthquakes and volcanic eruptions. Large volcanic eruptions (Volcanic Explosive Index of 6+) may exacerbate the ongoing transition to a new cold climate epoch through augmented aerosol

and dust shielding and reflection of incoming solar radiation. This correlation was examined in detail in a scientific paper in edition 2-3014 of the GCSR, dated June 10, 2014.

4. New Climate Predictions (from SSRC Press Release 4-2014).

- a. The Earth is about to begin a steep drop in global temperatures. The analysis of the level and variability of sunspots in the current solar cycle 24, including the warming of atmospheric temperatures between 2013 and 2014 indicates that the Earth is following a climate change path similar to solar cycle 5, during the last 206 year solar cycle driven solar hibernation.
- b. Average global atmospheric and oceanic temperatures will drop significantly beginning between 2015 and 2016.
- c. The predicted temperature decline will continue for the next fifteen years and likely will be the steepest ever recorded in human history discounting past short term volcanic events.
- d. Global average temperatures during the 2030's will reach a level of 1-1.5°C lower than the peak year of 1998.

The Space and Science Research Corporation grants unrestricted use of this Summary Climate Assessment for reproduction or transmission to others either in total or any portion thereof.