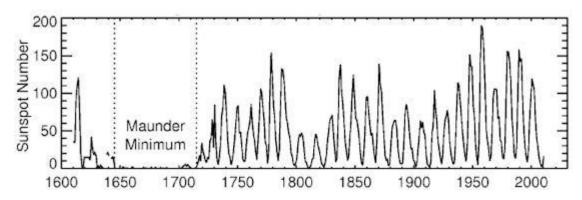
# Gabriel's Trumpet Part 3 – A Gong of Ice and Fire

"I wanna see it painted, painted black Black as night, black as coal I wanna see the sun blotted out from the sky I wanna see it painted, painted, painted black" Paint it Black by the Rolling Stones

# **Winter Was Coming**

In the **1970's** many scientists, as if to ram home the need for a climate warming campaign, warned of a coming mini-ice age based on the solar cycle and its correlation with global temperatures, perhaps exacerbated by the additional cooling effect of emitted sulphates. The sun was due for a prolonged winding down phase which would lead to a corresponding reduction in global temperatures. The last time this had occurred was known as the Maunder Minimum in the 17<sup>th</sup> and early 18<sup>th</sup> century which lasted for 70 years.

"Much has been made of the probable connection between the Maunder Minimum, a 70-year deficit of sunspots in the late 17th-early 18th century, and the coldest part of the Little Ice Age, during which Europe and North America were subjected to bitterly cold winters."



**Solar Variability and Terrestrial Climate** 

Recently an article appeared in a popular newspaper suggesting that a mini ice age might be ahead.

"The sun has gone "completely blank" for the second time this month suggesting that Earth could be heading for a mini ICE AGE.

Earlier this month, there were **no sunspots on the massive star's surface for four days** - something which hadn't happened since 2011. This has since happened again.

A lack of sun spots is totally normal, but it does hint that the sun is heading for its next "solar minimum phase".

The next solar minimum phase is expected to take place in 2019 or 2020, says meteorologist Paul Dorian of Vencore Weather, who expects to see an increasing number of spotless days over the next few years.

The last time the sun saw a such a long phase with no sunspots, it ushered in what scientists refer to as a the 'Maunder Minimum' back in 1645.

This caused temperatures to plunge dramatically, and even resulted in the Thames freezing over.

Some experts think that a similar mini ice age could be coming again soon."

The sun has 'gone blank' and there could be another ice age on the way

Jasper Kirkby, an atmospheric scientist at Cern predicted that the maunder minimum would occur around 2015.

CERN scientist says another Maunder Minimum in solar activity could occur by 2015

The British Climate expert, Hubert Lamb, wrote an article in **1971** entitled "Climate-engineering schemes to meet a climatic emergency."

Recall that this was also the year in which nearly all the leading scientists from the US and Western Europe, met with the Russian scientists in Leningrad. It was here that **Mikhail Budyko** expressed his conviction, in contradiction to everybody else, that the earth would be warming due to human activity. It was not well received. Budyko, however, thought this was good news and that nothing should be done to prevent it. Indeed, it was he that had suggested coating the Arctic with soot to melt the ice.

Later, in 1974, Budyko calculated:

"that if global warming ever became a serious threat, we could counter it with just a few airplane flights a day in the stratosphere, burning sulfur to make aerosols that would reflect sunlight away."

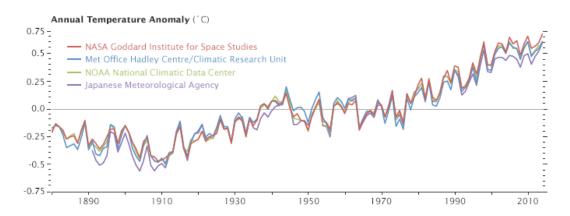
In 1975, Newsweek published an article, in which the following was written:

"Climatologists are pessimistic that political leaders will take any positive action to compensate for the climatic change, or even to allay its effects. They concede that some of the more spectacular solutions proposed, such as melting the Arctic ice cap by covering it with black soot or diverting arctic rivers, might create problems far greater than those they solve. But the scientists see few signs that government leaders anywhere are even prepared to take the simple measures of stockpiling food or of introducing the variables of climatic uncertainty into economic projections of future food supplies. The longer the planners delay, the more difficult will they find it to cope with climatic change once the results become grim reality." Emphasis mine

# 1970s Global Cooling Scare

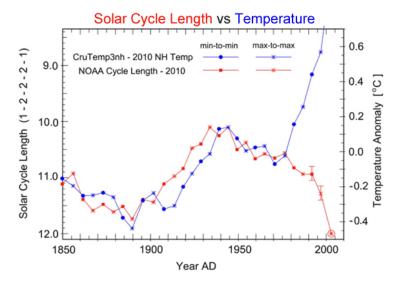
# The Grim Reality

According to an ongoing temperature analysis conducted by scientists at NASA's Goddard Institute for Space Studies (GISS), the average global temperature on Earth has increased by about 0.8° Celsius (1.4° Fahrenheit) since 1880. Two-thirds of the warming has occurred since 1975, at a rate of roughly 0.15-0.20°C per decade.



Were the majority of the scientists wrong? Certainly the correlation between solar cycle and global temperatures was well recognised and is today, although the exact mechanism has not yet been agreed upon.

Let us look at the degree of correlation that actually occurred during this period.



Solar cycle length (red) vs Northern Hemisphere temperature (blue) (Stauning 2011).

It can be seen that despite the winding down of the solar cycle, from 1975, global temperatures have been going up and the sunspot correlation has been broken.

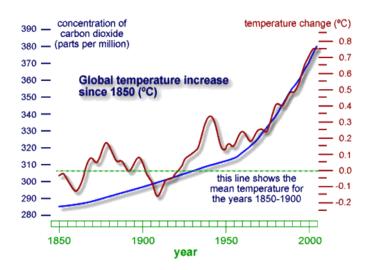
This does not nullify the effect of the solar cycles on the climate as up to that singular point in history, there **had** been such a correlation, well recognised by scientists. Indeed, it is clear to see the correlation between temperatures and solar activity, declining in tandem from 1850 to 1900, rising from 1900 to 1940 and declining again from 1940 to 1970.

The decline in temperatures from the 1940s can easily be ascribed to the **downturn** in **solar activity**, **not sulphate emissions nor geoengineering for cooling**, as suggested by Dane Wigington. This also applies to the decline in temperatures from the 1850s. We can safely assume there was **no geoengineering** of any consequence going on then.

After 1975, the relationship between the sun and temperature breaks down. This is generally recognised as **the period in which the anthropogenic fingerprint makes its mark.** 

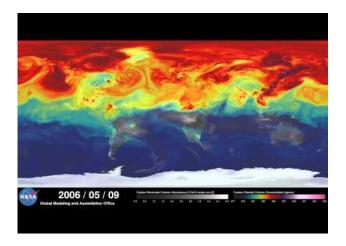
There does seem to be a definite upturn in CO2 levels from around 1960 that correlates with this.

Let us look at Carbon Dioxide levels in the atmosphere versus the temperature increase in degrees Celsius.

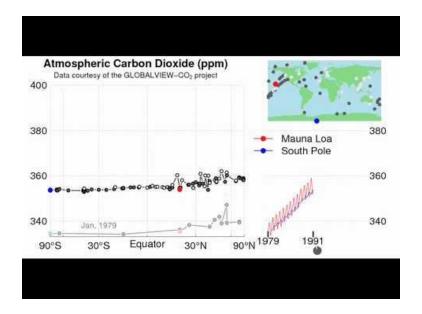


In this video depicting CO2 levels in the atmosphere over 1 year, 2006 we can readily observe that this gas is primarily **emitted** in the northern hemisphere, as one might expect.

NASA - A Year in the Life of Earth's CO2



However, the video only showed us CO2 over 1 year, 2006. Let us now look at how measurements of this gas vary over different latitudes covering the period from 1979 to 2006 as in this video below:



CO2 as a gas, although emitted mostly in the northern hemisphere, is dispersed evenly throughout the globe by the atmospheric circulation.

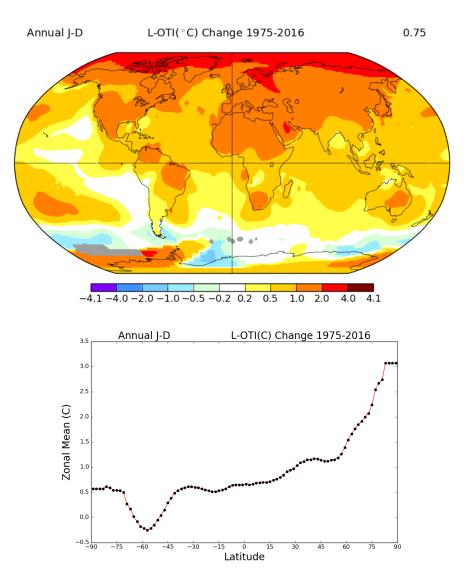
If CO2 were **solely** responsible for the warming we **should** see:

- Warming of the Troposphere, the lower part of the atmosphere, and a cooling of the Stratosphere as heat is prevented from reaching this level.
- Equal warming during the night as during the day.
- More warming in winter.
- More warming at the **poles** than at the equator.

All the points **except** for the last one are what we have actually observed.

It can **hardly be said** that **both** poles are warming more than the equator.

This does **not** sit well with the heat signature of the planet covering the period from 1975 to 2016.



GISS Surface Temperature Analysis

This even spread of CO2 does not correlate with the **uneven** distribution of global temperature changes.

From 1975 to 2016 temperatures increased by 0.75 °C on average. At around 90° latitude, the North Pole, they increased by 3.07°C. That is four times greater than average. At the equator, 0° latitude, temperatures rose close to the average, by 0.66°C.

However, at the South pole, -90° latitude, they only rose by 0.65°C, slightly less than at the equator.

Roger Revelle predicted that both poles would warm due to an increase in CO2 due to the even heat blanket effect, leading to an average 1-3°C increase

over this century. His student, **Al Gore** and mainstream scientists also claim this is what should be happening. It is clearly not happening **in this fashion.** 

By the methods of observation and exclusion we have established that this thermodynamic footprint points towards something **other** than CO2 **alone**.

# **Sootprints**

Let us recap for a moment. Scientists in the early 1970's were concerned about an oncoming mini-ice age and proposed such schemes as covering the Arctic ice with soot to warm the climate. In the twenty-year period before this, prominent scientists from the US, Canada, Western Europe and Russian were discussing such schemes and the possibility of collaboration on a grand scale.

Then the climate proceeds to warm, despite downturns in the solar cycle, in an uneven fashion, contrary to that expected from global increases of CO2 emissions.

And lo and behold, what do we find tarnishing the landscape of the Arctic circle since that very period?



It has been suggested that as much as **45%** or more of the warming in the Arctic **since 1976** has been due to **black carbon**, commonly known as **soot**. These particles absorb solar radiation and have a strong warming influence both in the atmosphere and on the surface where they counteract the albedo effect of the ice.

**James Hansen** himself attributes its effects as one quarter of that due to CO2 since 1880.

"The effect of soot on snow is unambiguous, it causes a strong warming effect."

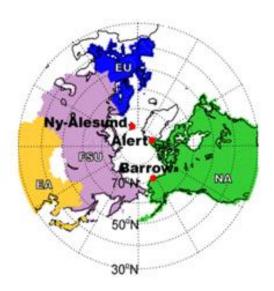
"There is no way to account for the rapid retreat of ice globally based only on global warming,"

# Soot worse for global warming than thought

Hansen claims that the Arctic is blanketed with black carbon haze, one-third from Asia, one-third from fire around the world, and the remaining third from the United States, Russia, and Europe.

However, we see that levels of black carbon in the atmosphere measured at key stations, **north of 70**° have actually recorded **reduced carbon black levels** of around 50% since 1990.

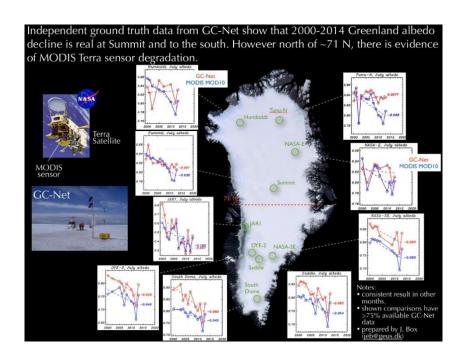
This NOAA study found that levels of black carbon in the atmosphere have **declined since 1990** at measurement sites Alert in Canada (55%), and Barrow in Alaska (45%). Ny-Alesund in Svalbard only has measurements from the year 2002 but shows similar levels. This is despite increases in the source regions.



Map showing the location of high Arctic, long-term, black carbon measurement sites at Alert (82°N, 62.3°W), Barrow (71°N, 156.6°W) and Ny-Ålesund (79°N, 12°E), and the source regions for black carbon in the Arctic: Europe (EU), former Soviet Union (FSU), North America (NA) and east Asia (EA).

We also see that levels of black carbon deposited on the surface of Greenland **north of 71**° have remained the same for 60 years in contradiction to satellite information. The fault according to these scientists was that the MODIS satellite sensors were degraded.

However, as reported by Jason Box in 2014, south of  $71^{\circ}$ , an albedo decline from 2000 - 2014 indicates that deposited black carbon levels there have indeed increased.



Flying Over Dark Greenland Ice



Let us take the statement below into account:

"The burden of atmospheric black carbon north of 70°N in the Arctic is the result of long-range transport from the former Soviet Union, Europe, North America and east Asia (Sharma et al. 2013)"

We can now establish that black carbon north of 70°N in the Arctic has declined since 1990 and, applying the method of exclusion, rule out long-range transport of black carbon from the former Soviet Union, Europe, North America and east Asia as a factor in the unprecedented warming.

We can thus infer that **the burden of black carbon south of 71**°N is the result of emissions from **within** the Arctic circle itself.

Indeed, studies have shown that **local gas flaring** is the **largest source of black carbon within the Arctic**, far more than previously thought. Flaring is responsible for around 3% of black carbon emissions globally but 66% of **emissions north of the Arctic circle**. They found that 42% of the annual average surface concentrations of black carbon in the region are due to gas flaring.

Black carbon in the Arctic: the underestimated role of gas flaring and residential combustion emissions

What significance does gas flaring bear to the subject of this article?

#### Paint it Black

In 1972, a paper was written by **Dr William Gray** on the use of carbon dust (soot) for the purposes of weather modification. Following the controlled incomplete combustion of fossil fuels to generate particles of less than 0.1 microns in diameter, this method proposed utilising trapped solar radiation to produce heat convection to the surrounding air molecules.

This would be applied for numerous purposes, including:

- a. Rainfall enhancement along tropical and sub-tropical coastlines.
- b. Reduction of inner-core hurricane intensity.
- c. Cumulonimbus enhancement over selective land regions in need of precipitation.

- d. Alteration of extra-tropical cyclones.
- e. Fog dissipation.

### f. Accelerating snowmelt in agricultural areas.

Purposes **c** and **f** are particularly pertinent for obvious reasons. They could clearly have been applied to warming the entire Arctic. This would involve ground based generators dispensing black carbon into the boundary layer just above the ice. The particles would absorb both incoming solar radiation and that reflected by the snow and warm the air just above the ice by means of convection.

# Weather Modification by Carbon Dust Absorption of Solar Energy

If a deliberate, yet viable and clandestine attempt to melt the warm the Arctic was being made in alignment with Gray's proposals, then black carbon would have been emplaced by means of **ground based generators** dispensing the particles in the boundary layer above the ice. The particles would then fall onto the surface. The Arctic ocean, when frozen and during its annual thaw, would also receive this treatment.

Gray studied the carbon dust smoke **plumes** generated by **carbon black plants** and **petroleum fires** and found them to be typical of the type of **carbon plume** which would be used for **weather modification**.

Perhaps Gray's **ground based dispensers** are in place in the form of **flare stacks** contributing their carbon dust plumes in the Arctic to a degree around **twenty times greater than anywhere else in the world** in a region that is five times more sensitive.



This will increase as Arctic offshore oil and gas rigs grow in number and encroach further north.

"So it's not just a warming climate that's beating back the ice floes; it's the soot generated from myriad industrial operations in the region. Of course, as

the ice melts, more and more of those industries will set up shop in Alaska, Canada, Greenland, etc, and spew more and more soot onto the embattled ice."

The burden of black carbon that is contributing to Arctic ice melt is provided by **Big Oil.** 

# Worldfires

In addition to gas flaring, as documented by Jason Box, another source of Black Carbon deposited on the Arctic Ice are tundra wildfires. Wildfires are uncontrolled fires, fuelled by natural vegetation, that release **carbon dioxide**, **carbon monoxide**, **methane**, **black carbon** and **combustion ash** into the atmosphere.



Northern regions such as Alaska are experiencing record warmth and precipitation. Because of this, there is a consequent increase in vegetation and thunderstorms, and so, wildfires in the Arctic region are larger, more numerous, and their season is longer every year.



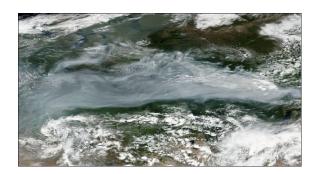
Created by Sam Carana with screenshot from wunderground.com

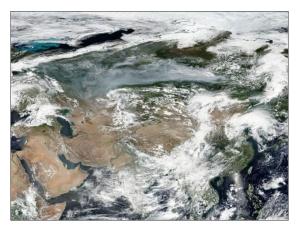
#### Wildfires in Canada affect the Arctic

Globally, wildfires have actually declined since the 1950's, most probably due to better detection, regulation, and control methods.

However, in the Western USA, they have increased dramatically. Further North in Alaska, the increase has been even more dramatic. The Arctic region over Norway is no exception to this increase, nor is Siberia where it has been established that wildfires are significantly under-reported.

"Large wildfires have been happening here every 10 to 30 years and in the last decades every 5-10 years because of increased anthropological pressure and global climate change."







Siberia's wildfires seen from 1 million miles away: even the tundra is burning

Now a singular fact has the utmost bearing upon this issue.

Wildfires are almost always the result of human behaviour.

Whilst humans seem to be the cause of 85% of wildfires, the 15 % caused by lightning seems to be responsible for 60% of the total amount of acres burned. The frequency of lightning on Arctic Tundra has also increased dramatically since the year 2000.

Now if the majority of wildfires have anthropogenic causes, and in the Arctic circle have increased whilst decreasing everywhere else (save the Western US) due to better detection, regulation and control methods, it stands to reason that incendiarism on a grand scale coupled with a blind eye to the growing conflagrations would have greatly supplemented the effect of gas flaring in coating the ice with black carbon.

I put it to you that scientists in the 70's were aware of the coming low sunspot phase of prolonged duration and utilised the fear of such an event to instigate a campaign to melt the Arctic ice and warm the climate.

In part 4 we shall examine the evidence revealing how the other primary method of altering the climate has likely been carried out over the same period.