

Copenhagen, 6th March 2020

To the President
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500



Open letter sent to politicians and news media, see attached mailing list.

Dear Mr. President.

What you have to do, to win the next election – and to win back the Global Climate debate.

This is not an attempt to interfere in US elections, but in order for you to win the next, you need to come up with answers on what to do, in order to counter Global Warming. In your 2016 election, less than 10% of US voters thought Global Warming was the most important issue. This year however, more than 50% of all US voters will view Climate Change as their number one priority, before casting their votes, since we are going to experience more extreme weather events in 2020, like hurricanes, tornados, droughts and extreme flooding, than ever before in history. We will have more forest fires across USA, than we have ever seen in a presidential election year. We will see the highest sea level and experience the highest "King tides" in history, hitting areas in Florida, the Gulf of Mexico and all other US coastlines. We will see places under water, that has never been flooded before, and we will measure the warmest oceans in history. 2020 will be a turning point in peoples understanding of Climate Change, and those politicians, who don't understand this simple fact, will not stand a chance of getting reelected – including the coming US President.

And in order to win back the Climate debate – from a young teenager like Greta Thunberg, concrete actions will prove millions of times more efficient – in order to get reelected, than throwing out empty political promises, insults and tens of thousands of hollow words, like all politicians will do this year.

But first some facts of physics: Here in 2020, the sun will add a surplus of approximately +250 Zetta Joules (ZJ, 1 ZJ = 10^{21} Joules) into our Global heating account, compared to 1981-2010 average. +250 ZJ of excess heat, that will be stored in our oceans and not escape back into space as infrared radiation. An excess heat equal to that of many nuclear bombs being detonated each and every second – day by day, week after week, month after month. See article in: *ADVANCES IN ATMOSPHERIC SCIENCES*, vol. 37, February 2020, page 137–142, "Record-Setting Ocean Warmth Continued in 2019".

And if old men like you and me – Sir, choose to do nothing, what you will see is, that Mar-a-Lago, Palm Beach, Downtown Miami, Key West, Fort Lauderdale, Coastline of Long Island New York, Lower Manhattan, Coast of Louisiana, most of Long Beach in LA and many other coastal places will be gone before start of the next decade. 10 years from now, your home will no longer exist, Sir! In 10 years, USA will lose an area equal to the state of Florida, to the world's oceans! And +50 million Americans will be relocated, before we enter 2030. If we choose to do nothing, your youngest son and your grandchildren will not live a full lifespan, since the annual +250 ZJ will continue to grow in density, until our climate is no longer balanced by waters triple point. When all Global ice is gone, the next point of balance will be waters boiling point! Much like in a "nuclear reactor meltdown", it will happen much faster than we think possible!

If nothing is done, 3-5 years from now – Sir, Global economy will start to collapse. Global economy will take a hit a million times harder, than that from the Coronavirus (CoVID-19), as people start to realize, that all coastal real-estate, with low elevation, are an extremely fragile investment – an investment soon to be lost! Soon the most expensive houses in USA will be gone – lost, together with all the money tied.

However, if we can find safe methods, on how to send the excess heat back into space – and as such eliminate the effects of this incoming and unwanted surplus of solar energy, human survival will no longer be threatened, from Global Warming, why I pray that you will take your time to read my hypothesis, since it will give your youngest son and your grandchildren the right to live a full lifespan, on Mother Earth.

11th September 2001, 2,977 people died in a tragedy, far beyond anything that we understand. But doing so – by unfairly being taken away from us, they gave the World an answer, that now could come to our rescue. For the first time in history, we could actually measure the effect and influence of aviation on surface temperatures. For the first time in history it was seen that nights get colder and days get warmer, when you have no airplanes in the sky. An effect described in a paper, in 2002, by D. J. Travis, A. M. Carleton and R. G. Lauritsen. A paper made public in *NATURE*, vol 418, 8th August 2002. A paper that is easy to read – and very easy to understand, why I have taken the liberty to include the full text below.

Contrails reduce daily temperature range.

A brief interval when the skies were clear of jets unmasked an effect on climate.

The potential of condensation trails (contrails) from jet aircraft to affect regional-scale surface temperatures has been debated for years ¹⁻³, but was difficult to verify until an opportunity arose as a result of the three-day grounding of all commercial aircraft in the United States in the aftermath of the terrorist attacks on 11 September 2001. Here we show that there was an anomalous increase in the average diurnal temperature range (that is, the difference between the daytime maximum and nighttime minimum temperatures) for the period 11–14 September 2001. Because persisting contrails can reduce the transfer of both incoming solar and outgoing infrared radiation ^{4,5} and so reduce the daily temperature range, we attribute at least a portion of this anomaly to the absence of contrails over this period.

We analyzed maximum and minimum temperature data ⁶ from about 4,000 weather stations throughout the conterminous United States (the 48 states not including Alaska and Hawaii) for the period 1971–2000, and compared these to the conditions that prevailed during the three-day aircraft grounding period. All sites were inspected for data quality and adjusted for the time of observation.

Because the grounding period commenced after the minimum temperatures had been reached on the morning of 11 September and ended before maximum temperatures were attained on 14 September (at noon, Eastern Standard Time), we staggered the calculation of the average diurnal temperature range (DTR) across adjacent days (for example, 11 September maxima minus 12 September minima). We repeated this procedure for the three-day periods immediately before and after the grounding period, and also for the same periods (8–11, 11–14 and 14–17 September) for each year from 1971 to 2000.

DTRs for 11–14 September 2001 measured at stations across the United States show an increase of about 1.1°C over normal 1971–2000 values (Fig. 1). This is in contrast to the adjacent three-day periods, when DTR values were near or below the mean (Fig. 1). DTR departures for the grounding period are, on average, 1.8°C greater than DTR departures for the two adjacent three-day periods.

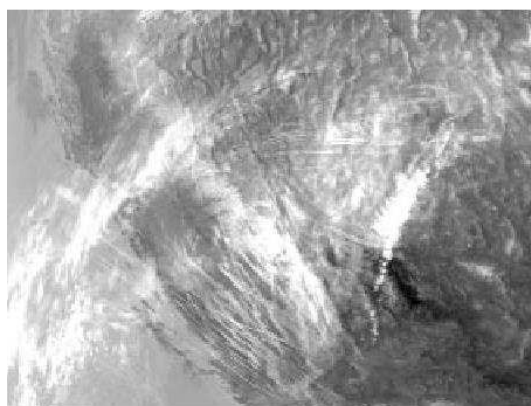


Figure 1 Departure of average diurnal temperature ranges (DTRs) from the normal values derived from 1971–2000 climatology data for the indicated three-day periods in September 2001. These periods included the three days before the terrorist attacks of 11 September; the three days immediately afterwards, when aircraft were grounded and there were therefore no contrails; and the subsequent three days

This increase in DTR is larger than any during the 11–14 September period for the previous 30 years, and is the only increase greater than 2 standard deviations away from the mean DTR (s.d., 0.85°C). Moreover, the 11–14 September increase in DTR was more than twice the national average for regions of the United States where contrail coverage has previously been reported to be most abundant (such as the midwest, northeast and northwest regions) ⁷.

Day-to-day changes in synoptic atmospheric conditions can affect regional DTRs ⁸. In particular, a lack of cloud cover helps to increase the maximum (and reduce the minimum) temperature. Maps of the daily average outgoing long-wave radiation (OLR) ^{9,10} — a proxy for optically thick clouds — show reduced cloudiness (that is, larger OLR) over the eastern half of the United States on 11 September, but more cloud (smaller OLR) over parts of the west. Cloud cover subsequently decreased in the west and increased over much of the eastern half of the country during the next two days, producing predominantly negative three-day OLR changes in the east and positive values in parts of the west.

Our findings indicate that the diurnal temperature range averaged across the United States was increased during the aircraft grounding period, despite large variations in the amount of cloud associated with mobile weather systems (Fig. 2). We argue that the absence of contrails was responsible for the difference between a period of above normal but unremarkable DTR and the anomalous conditions that were recorded.



NOAA SATELLITE ACTIVE ARCHIVE

Figure 2 Flight lines: jet contrails can clearly be seen as thin streaks in this satellite image of the southwestern United States.

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Competing financial interests: declared none.

If we can use the knowledge, given to us by 2,977 innocent lives lost, in the aftermath of 9/11, we may have a chance to make our days as well as nights colder – and send some of the +250 ZJ of excess heat back into space – removing Global Warming, making our Mother Earth a colder place in space.

In order to test this "AVIATION-theory" NASA, NOAA and US Air-force should come together – "join forces". In a fact-finding mission / experiment / study, during June, July and August this year, it would be very easy to measure the ground effect on temperatures over an area like Bullhead City or Death Valley or Salt Lake City, where you already have many weather stations located. If an area, of approximately 100 miles in radius, is controlled and kept free from commercial aviation, it will be possible to measure the difference in aircrafts effect on regional-scale surface temperatures. It would be easy to do this experiment, for instance using Boeing B-52 Stratofortress bombers – or a number of old Boeing 747, carrying a payload of clean freshwater, that can be released at different altitudes – day and night, and then measure the difference in ground temperatures before and after water is released. If conducted during start of June until end of August, the result would be known before the start of the Presidential election. And if successful, you can take full credit for making Mother Earth colder – and if not, you can always blame, a "stupid" Dane.

Another full-scale experiment, in order to find ways on how to send some of the +250 ZJ back into space, could be to try to replicate the "reflecting" volcanic cloud activity during "Little Ice-age", by transporting warm and high humidity air from near the surface of the sea, up into the lower atmosphere. From 10 to 15 feet above sea-level, to an elevation of 5,000 to 10,000 feet above sea-level.

In order to do so, we need to find +3,000 feet tall mountains in the tropics or in the subtropics, located near the sea. Then you need to create two to six parallel 3 to 5-mile-long steel ventilation "shaft(s)" or "pipeline(s)", no less than +6 feet in diameter, going from near the surface of the sea up to the top of the mountain. On top of the mountain, we need to build a vertical +200 feet tall tower or chimney, from which we can lift trillions of cubic feet of wet air, at high speed (+250 miles per hour), high up into the sky.

From the effect of Foehn winds, we already know that air, at the surface of the sea, with a relative humidity (Rh) of more than +57%, at +68°F, will condense before reaching 3,000 feet (57% Rh will become 100% Rh and +52°F, when elevated 3,000 feet). We also know, that when air reaches the point of condensation, it will create clouds. Shiny white clouds, that will or could "reflect" incoming light (heat) back into space, cooling the surface of the Earth. Cooling the ground temperatures underneath the clouds, same as a giant umbrella or huge crystal white awning!

And what we also know, from the laws of physics is, that if air is allowed to expand through a decrease in pressure it will cool, while conversely it will reheat when it is compressed back into a smaller volume. Such temperature changes are called "adiabatic" because heat, in such a closed system, is neither supplied with energy from outside – nor will it emit energy to its surroundings.

As such we will only add the "reflecting" properties of the clouds created. If we can create perfect white clouds, it will hopefully reflect some of the incoming surplus of solar energy. Some of the incoming 250 ZJ of excess heat. What we need to establish is the cooling effect, if we "blow" thousands of trillions of cubic feet of warm and wet ground air, high (5,000 to 10,000 feet) into the sky. Will it – or can we, make Global Warning go away, if we chose the right time of day to do so? Shielding the Earth below the clouds, when the sun is heating it the most? And best of all – if we by using this technique could return something like 1 ZJ back into space each and every day, returning to same level of incoming heat, as back in 1955-1960!

Postscript:

Doing nothing is not an option – Sir. During the next 1-2 years, the whole world will start to understand the impact of +250 ZJ of excess heat per year – and global panic will start to rise, especially since we at this moment in time have no answer on what to do, in order to control the effects of Global Warming!

Doing nothing – Sir, would be the same mistake you made, when you underestimated CoVID-19! We can and must reduce our carbon footprint and our greenhouse gas emissions, as much as possible, but we will still have an incoming annual surplus of energy – equal to +250 ZJ, for many, many decades to come! Helping the world to find solutions that will keep Mother Earth cold, that will save Global economy from a total collapse and at the same time allow your son and your grandchildren to live, until they are 100 years old, will make you a Global "Hero" – Sir, while doing nothing will only make you a US President of the past.

Yours sincerely,

Per Uggen
Ship Master and VTS-operator.