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# **Fundamental Climate Science Error: Concomitant Harm to Humanity and the Environment**

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### **Author's contribution**

*The sole author designed, analysed, interpreted and prepared the manuscript.*

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## **ABSTRACT**

The climate science community (CSC) has misrepresented climate change, falsely claiming carbon dioxide causes global warming, and developing computer models of Earth's radiation balance without taking into consideration the tropospheric particulate geoengineering that has been taking place for several decades, thus rendering invalid those models and their interpretations. The CSC misunderstands the science underlying particulate pollution in the troposphere, typically maintaining that aerosolized particulates cool the Earth. As described here, pollution particles, including those jet-sprayed into the region where clouds form, reflect some radiation, but also absorb radiation and become heated. The heat is transferred to the surrounding atmosphere, thus increasing its temperature. The increased atmospheric temperature causes loss of heat-transfer efficiency by convection from Earth's surface, and concomitant reduction of Earth's heat loss. Climate science has been corrupted and coerced by military, commercial, and globalist political agendas. Were the environmentally-devastating geoengineering activities to continue unabated, life on Earth will keep progressing towards the first anthropogenic mass extinction. One primal right of all human beings is to breathe clean air that has not been deliberately tainted with toxic substances, a right subverted by covert global geoengineering. Every sovereign nation has the right, and the obligation, to protect

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the health and welfare of its citizens. The deliberate aerial spraying of pollution particulates constitutes an attack, not only on a nation's citizens, but an attack on the sovereign nation itself, whether that attack originates from treasonous activities within the sovereign nation or from outside. Here I describe five policy proposals, applicable to all sovereign nations, to end geoengineering attacks on citizens.

**Keywords:** *Climate science models; intergovernmental panel on climate change (IPCC); greenhouse gases; climate change; global warming; geoengineering; air pollution; geoengineering governance.*

## 1. INTRODUCTION

For thirty years, the United Nations' Intergovernmental Panel on Climate Change (IPCC) and the climate science community (CSC) have made a fundamental error related to the nature of climate change, also known as global warming [1]. Specifically, it falsely claims that anthropogenic carbon dioxide (CO<sub>2</sub>), via the greenhouse effect, is causing global warming by trapping Earth's heat, that otherwise should be radiated into space [1].

There is evidence that scientific objectivity on weather and climate has been corrupted and powerfully influenced by globalist power politics, military needs, and corporate greed [2]. The highly publicized global warming 'debate' concentrates on two extreme positions, each strikingly deficient in respect to one crucial, overriding fact: Neither position takes into account, or even mentions, geoengineering – deliberate large-scale atmospheric manipulation that has taken place with increasing frequency and geographic range for decades [3].

One widely promoted extreme position is that global warming due to anthropogenic carbon dioxide is real and that serious consideration must be given to a global geoengineering technological fix to 'cool' planet Earth [4]. The other widely promoted extreme position holds that climate change is a natural phenomenon [5]. Neither, however, is correct. Air pollution, especially particulate pollution, including tropospheric particulate geoengineering pollution, is the principal cause of global warming [3].

The one commonality of each of the two widely-discussed positions is their systematic failure to mention the ongoing tropospheric particulate geoengineering that has been taking place with ever-increasing intensity and geographic range, becoming, since about 2010, a near-daily, near-global activity [6]. The particulate spray-trails

(Fig. 1) have been witnessed by, and are of serious concern to, many millions of people [7]. These concerns are justified, as the deliberately aerosolized particulate pollution is detrimental to the health of virtually all life on Earth [8-16].

The IPCC and CSC abrogate long-standing principles of science in making assumption-based computer models of Earth's radiation balance without taking into consideration the widespread tropospheric, jet-emplaced particulate geoengineering that is visibly-obvious (Fig. 1). Failure to consider ongoing tropospheric geoengineering renders those models and their interpretations invalid [1]. Concomitantly, ignorance of some of the underlying geophysical science, and eagerness to apply global technical solutions [17], may lead to unanticipated, adverse global catastrophes [18,19].

Neither the IPCC nor the CSC fully understands the science underlying the effects of pollution particulate matter in the atmosphere [1]. They typically maintain that the consequence of aerosolized particulates is to cool the Earth [20-22]. That lack of understanding is evident based on the following statement [22]: *"Strong aerosol cooling in the past and present would then imply that future global warming [due to pollution reduction] may proceed at or even above the upper extreme of the range projected by the Intergovernmental Panel on Climate Change."* Advocacy of aerosolized particulate geoengineering to 'cool the Earth' is based upon misunderstood climate science by the climate science community [1].

## 2. NATURE AND CONSEQUENCES OF AERIAL PARTICULATE SPRAYING

Although the specific compositions and purposes of the ongoing aerial particulate spraying are not publicly discussed, they can be deduced from knowledge of the chemical and physical behavior of the aerosolized particulates [8-16,23].



**Fig. 1. Climate geoengineering particulate trails, from [6]. With photographers' permission. Clockwise from upper left: Paris, France (Patrick Roddie); Karnak, Egypt (author JMH); London, England (author IB); Northern California, USA (Patrick Roddie); Geneva, Switzerland (Beatrice Wright); Yosemite, California USA (Patrick Roddie); Jaipur, India (author JMH)**

### **2.1 Evidence Consistent with Toxic Coal Fly Ash as the Main Geoengineering Aerosolized Particulate Pollution**

During formation, coal sequestered toxic chemical elements from the environment [24].

When coal is burned industrially, approximately 10% remains as ash, concentrating heavy metals and toxins in the ash [25]. While the heavy ash settles beneath the coal burner, the light ash, called coal fly ash (CFA), forms by condensing and accumulating, in the hot gases above the

burners [26,27]. Coal fly ash, newly formed above the burner, would exit smokestacks, if it were not trapped and sequestered, as required by many nations [28,29]. Coal fly ash is a major waste product [30] that requires little additional processing to be used as an ideally sized jet-sprayed aerosol, albeit a toxic aerosol [9]. Its particles form in sizes ranging from 0.01 – 50 microns ( $\mu\text{m}$ ) in diameter [31]. Moreover, CFA's chemical elements can be partially extracted in atmospheric moisture, thus making moisture droplets more electrically conducting and responsive to electromagnetic radiation [32].

Comparing 11 elements analyzed in post-spraying rainwater to corresponding elements measured in laboratory water-extract analyses of this likely aerosol provided scientific forensic evidence that CFA is consistent with the main particulate-pollutant substance being jet-sprayed into the atmosphere [9,23]. Further consistency was demonstrated by comparing CFA elemental analyses to 14 elements measured in air-filter-trapped outdoor aerosol particles [33] and to 23 elements measured in aerosol particles precipitated during a snowfall and released upon melting [8,9,16].

Other substances may occasionally be used for specific purposes or added to the CFA, for example, to minimize clumping caused by van der Waals forces [34,35]. The ubiquitous presence of CFA-extractable elements found in post-spraying rainwater around the world indicates that the main substance sprayed into the regions where clouds form is consistent with CFA [8-16,23]. Coal fly ash – inexpensive, widely available, and with useful properties – is thus an ideal geoengineering aerosol, only if no consideration is given for human and environmental health consequences [12-16].

## **2.2 Environmental Health Consequences of Tropospheric Particulate Pollution**

Aerosolized CFA sprayed into the region where clouds form, for climate and weather manipulation or other military purposes, mixes with the air we breathe and: (1) puts populations at risk for respiratory disease [14], lung cancer [12], neurodegenerative disease [13] and potentially other health problems [8]; (2) poses a previously unrecognized factor in worldwide forest die-offs [11]; bee and insect die-offs [15]; bird die-offs [16], and (3) contaminates the biosphere with mercury [9], destroys atmospheric ozone that protects us from the sun's deadly

ultraviolet radiation [36], and ultimately may cause death and destruction on a global scale [6,10,33].

## **2.3 Tropospheric Particulate Pollution Inhibits Rainfall**

Aerosol particles, jet-sprayed into the regions where clouds form, are in fact pollution particles [1]. Pollution particles are known to inhibit the fall of rain and snow by effectively keeping droplets and ice-crystals from coalescing to become sufficiently massive to fall to the ground [37,38]. Intensive applications of jet-sprayed particulates can thus artificially-induce drought in some areas and concomitant downpours, storms, and flooding in other areas, disrupting natural hydrological cycles and causing unnatural climate chaos [6].

## **2.4 Tropospheric Particulate Pollution Heats the Surface and Changes Surface Albedo**

Aerosol particles, jet-sprayed into the atmosphere, are circulated by atmospheric convection and winds, eventually settling to ground where they absorb solar radiation [39]. If they happen to land on ice or snow they change the reflective properties (albedo), causing less light to be reflected and more to be absorbed, thus adding to global warming [40,41].

## **2.5 Tropospheric Particulate Pollution Heats the Atmosphere**

Pollution particles, including those sprayed into the region where clouds form, reflect some solar radiation, but they also absorb radiation, both long-wave and short-wave [39], become heated, and then transfer that heat to the atmosphere by collisions with atmospheric molecules [42]. Monsoonal convection can loft particulates into the stratosphere where they remain suspended for long periods of time and absorb both direct solar radiation and solar radiation reflected from cloud tops [43]. Coal fly ash is known to be an efficient radiation absorber [44-46].

According to Hunt [47]: *“A dispersion of small absorbing particles forms an ideal system to collect radiant energy, transform it to heat, and efficiently transfer the heat to a surrounding fluid.... If the characteristic absorption length for light passing through the material comprising the particles is greater than the particle diameter, the entire volume of the particles is active as the absorber. When the particles have absorbed the*

*sunlight and their temperature begins to rise they quickly give up this heat to the surrounding gas...."*

Aerosolized particulate pollution is heated by absorbed radiation [42]. That heat is transferred to the surrounding atmospheric gases which increases their temperature. That temperature increase results in loss of heat-transfer efficiency from Earth's surface, and concomitant reduction of Earth's heat loss as described below.

### **3. REASONS FOR REDUCTION OF EARTH'S SURFACE HEAT LOSS**

Generally, heat is transported by conduction, convection, and radiation [48]. Each of these modes of heat transport is operant in removing heat from Earth's surface [49]. Specifically, heat loss from Earth's surface occurs via (1) conduction of energy through the interactions of atoms and molecules; (2) mass-transport of energy by massive atmospheric convection; and (3) infrared radiation from the surface. Additional heat removal results from phase changes, namely, the latent heat required to melt ice and to evaporate water. As described below, the near-daily, near-global geoengineering emplacement of particulates reduces heat loss from Earth's surface by several mechanisms.

#### **3.1 Reduction of Surface Heat Loss Caused by Reduced Atmospheric Heat Transfer by Convection**

Of the three principal modes of heat transfer, thermal convection has been misunderstood by both the IPCC and CSC, and by the geophysics community (in other contexts).

Chandrasekhar described convection in the following, easy-to-understand way [50]: *The simplest example of thermally induced convection arises when a horizontal layer of fluid is heated from below and an adverse temperature gradient is maintained. The adjective 'adverse' is used to qualify the prevailing temperature gradient, since, on account of thermal expansion, the fluid at the bottom becomes lighter than the fluid at the top; and this is a top-heavy arrangement which is potentially unstable. Under these circumstances the fluid will try to redistribute itself to redress this weakness in its arrangement. This is how thermal convection originates: It represents the efforts of the fluid to restore to itself some degree of stability.*

In 1939, Elsasser initiated a series of publications proposing that the geomagnetic field is derived from convection-driven dynamo action in the Earth's fluid core [51-53]. Ever since, numerous computer models of convection in the Earth's fluid core have been produced, indicating that many in the geoscience community believe in Elsasser's Earth-core convection-dynamo hypothesis 80 years later [54-56].

Sustained thermal convection in Earth's fluid core is physically impossible [57], and requires a different site for the convection-driven dynamo origin of the geomagnetic field to work [58-61]. One of the reasons why sustained Earth-core convection is physically impossible is that it requires an adverse temperature gradient [50] to be sustained for millions of years [57]. The core-top must be continually kept cooler than the core-bottom [57]. Heat transported from the core-bottom by mass-flow must be efficiently removed from the core-top, to maintain the adverse temperature gradient, but that is not possible because the core is surrounded by a thermally insulating blanket, Earth's silicate mantle [62].

The concept of adverse temperature gradient and its effect on convection efficiency is important to understand, and easy to visualize by classroom demonstration [63], but it is difficult to quantify explicitly for the troposphere because of the multifold complexities involved. If a system is capable of convection, the convection efficiency (heat transport efficiency) decreases with reduction of the adverse temperature gradient. Heating the upper convective-regions of the atmosphere, via pollution-aerosol radiation absorption, perturbs the temperature structure of the atmosphere [42], decreases the adverse temperature gradient, and, concomitantly, *leads to reduced convective heat transport from Earth's surface.*

The IPCC and CSC seem to be unaware of the geophysical-behavior differences of particulate matter placed (1) into the stratosphere where convection does not take place, and (2) into the troposphere where atmospheric convection takes place, tacitly assuming that each cool the Earth [22,64].

Particulate matter in the stratosphere absorbs incoming solar radiation as well as some of the radiation that is reflected back into space. Particulate matter in the convecting portion of the atmosphere, as described here, not only blocks sunlight, it also absorbs radiation both from in-

coming solar radiation and from out-going terrestrial radiation, heats the atmosphere, and concomitantly reduces convective heat transport from the surface.

**3.2 Other Potential Reductions of Earth’s Surface Heat Loss by Tropospheric Particulate Geoengineering**

In addition to tropospheric aerosolized particulate matter reducing the adverse temperature gradient, which then diminishes convective heat transfer efficiency, there are, as one might expect for this complex thermal system, other potential ways in which particulate matter, jet-sprayed into the region where clouds form, might lead to reductions in Earth’s surface heat loss. These are briefly described below, and should be further investigated.

As noted in Section 2.3, one principal consequence of aerosolized pollution is prevention of rainfall and snow by effectively keeping droplets and ice-crystals from coalescing to become sufficiently massive to fall to the ground [37,38], causing artificial, but very real drought conditions [6,33]. Eventually, the geoengineered-clouds become overburdened with moisture and discharge their moisture in downpours, torrents, and storms, typically separated geographically from the regions of geoengineered drought [11].

For several years, California has been subjected to artificial drought conditions by near-daily tropospheric jet-sprayed particulates, while downpours and floods have occurred in the Midwest and Eastern United States [10]. Although difficult to quantify, it is reasonable to assume that natural, frequent, widely-spread precipitation will have greater proclivity for latent-heat phase changes than the fewer, heavy

downpours and storms resulting from atmospheric particulate-geoengineering [11].

Aerosolized coal fly ash tropospheric geoengineering not only causes drought, which damages and desiccates forests and plant-life, but the moisture-extracted CFA toxins, especially aluminum in a chemically mobile form, weakens trees and aids in their demise [10,11]. One consequence of forest die-offs is the reduction of transpired water, which thus reduces the latent-heat phase changes that serve to reduce Earth’s surface heat loss.

As noted previously [1], the IPCC and CSC recognize that clouds block incoming solar radiation but underestimate the role of clouds in retaining Earth’s heat that should otherwise be radiated into space [65-68]. The possibility should be considered that additional cloud formation caused by aerosolized particulates or overt actions to inject massive quantities of water into the atmosphere may lead to further reductions of Earth’s surface heat loss.

**3.3 Tabulated Summary of Earth-Surface Heat-Loss Consequences of Tropospheric Pollution Particulates**

The IPCC and the CSC failed to correctly realize the consequences of aerosolized particulates. Table 1 summarizes the effects of tropospheric particulates on heat loss from Earth’s surface.

**4. GEOSCIENCE PAWNS IN POLITICAL MALFEASANCE**

As described here and previously reported [1], the IPCC evaluations and conclusions are without merit [69]. Since its inception the IPCC has promoted the idea of ‘future’ geoengineering

**Table 1. Earth’s surface heat loss efficiency caused by particulate pollution geoengineering**

<b>Heat loss mode</b>	<b>Manner of surface heat loss efficiency</b>
Convection	Pollution particulates heat the atmosphere where the upper portions of convection cells occur, thus lowering convection heat transfer efficiency from Earth’s surface.
Conduction	Not determined here.
Radiation	Pollution particulates upon falling to ground may absorb solar radiation and become heated. Falling upon ice or snow they may also lower albedo, thus reducing reflected solar radiation.
Latent Heat	Further investigation is required to ascertain the extent that particulate-geoengineered drought may be reducing cooling by aqueous phase-change latent heat.

to compensate for alleged CO<sub>2</sub> global warming [69]. A massive media campaign was launched to convince citizens of the alleged CO<sub>2</sub> global warming planetary threat [70,71]. Then, without public comment, without informed consent, and buttressed by misinformation [72-75], militaries and their contractors from around the world began to jet-spray particulate matter into the region where clouds form on a near-daily, near-global basis, presumably through secret agreement(s) [2,6]. Simultaneously, concerted efforts were initiated to encourage 'governance' to legalize geoengineering so that non-military organizations might participate in geoengineering activities as well [76,77].

Actual and proposed geoengineering have no sound scientific substance: Air pollution, especially particulate pollution, is our planet's real enemy, not carbon dioxide [1,3]. The intense, widespread tropospheric geoengineering activity is not only causing and exacerbating global warming through mechanisms described here but is causing human and environmental destruction on a planetary scale [3,6,8-16,23,33,36,78].

The apparently well-coordinated, continuous media-blast, public misinformation, military co-opting, etc. is indicative of politically-based direction and motivation. Geoscientists worldwide and the institutions they serve have provided pseudo-scientific justification for political operations whose consequences represent a massive assault on humanity and on the planetary environment. There is historical precedent: German laws in the 1930s, under which Nazi crimes against humanity were perpetrated, were enacted based upon pseudo-scientific justification by physicians and scientists [79].

## **5. CAN IT BE BETTER? CAN IT BE WORSE?**

Particle lifetimes in the troposphere are short, days to weeks [80,81]. If all tropospheric geoengineering were halted, and if all particulate pollution activities were likewise halted, including the massive commercial jet traffic that exacerbates global warming [82], our planet's surface would almost immediately begin to approach its natural state of thermal equilibrium; days would be sunnier, but nights would cool off more quickly, restoring temperature equilibrium. Ocean cooling and biota re-establishment, however, might take years or decades.

But if the geoengineering activities driven by political actors supported by IPCC pseudoscience, and put into practice by militaries and their contractors, continue unabated, life on Earth will progress towards the first anthropogenic mass extinction [6]. If those entities decided to put highly reflective matter high into the stratosphere, where convection does not take place and particles' airborne lifetimes are measured in years, such a geoengineering approach may radically cool Earth to an unnatural extent, and perhaps usher in a new anthropogenic-caused ice age. Such a speculation may not be unwarranted, as the entire climate science community has lacked the courage and/or the understanding and/or the integrity to speak out against the ongoing covert, tropospheric, particulate geoengineering activity that is causing global warming and imperiling life on Earth [3,6,8-16,23,33,36,78].

## **6. POLICY PROPOSALS**

The primal right of all human beings is to breathe clean air, air that has not been deliberately tainted with toxic substances. That right has been violated, systematically, covertly, and deceitfully on a global scale, concomitantly, threatening all human and environmental health [8-16,23].

The purported basis for geoengineering (global warming caused by anthropogenic carbon dioxide) is a hoax, justified on the basis of incorrect climate science [1,3,6]. The ongoing particulate geoengineering, as described here, does not counteract global warming, but instead causes and exacerbates global warming.

Adverse health consequences of particulate air pollution are staggering. We know from epidemiological studies that air pollution particulates (approximately the same size-range as the aerosolized geoengineering particulates) are associated with: Alzheimer's disease [83,84], lung cancer [85], risk for stroke [86], risk for cardiovascular disease [87], lung inflammation and diabetes [88], reduced renal function in older males [89], morbidity and premature mortality [90-92], cognitive decline in older women [93], decreased male fertility [94], low birth weight [95], onset of asthma [96], and increased hospital admissions [97]. Additionally, as noted above, aerosolized coal fly ash, used as geoengineering pollution particulates, puts populations at risk for respiratory disease [14], lung cancer [12],

neurodegenerative disease [13] and potentially causes serious environmental health problems [9,11,15,16,36].

Recently, the Director General of the World Health Organization warned of the dangers of air pollution, saying the simple act of breathing is killing 7 million people a year and harming billions more [98]. Those numbers will certainly escalate if covert geoengineering continues.

Every sovereign nation has the right and the obligation to protect the health and welfare of its citizens. The deliberate aerial spraying of pollution particulates constitutes an attack, not only on a nation's citizens, but an attack on the sovereign nation itself, whether that attack originates from treasonous activities within the sovereign nation or from outside it. I propose the following policies that are applicable to all sovereign nations.

- Order immediate cessation without exception of any and all activities that deliberately place pollutant substances into the atmosphere.
- Order full and complete declassification, without redaction, of any and all documents pertaining to atmospheric modification, and make these documents readily available to citizenry so as to facilitate potential criminal prosecutions and civil litigation.
- Recognize that in matters of protecting sovereign nations' citizenry, national sovereignty supersedes multi-national alliances, such as the British Commonwealth, the European Union, the North Atlantic Treaty Organization, and the United Nations, to name a few.
- Enact sanctions against any and all sovereign nations and multi-national alliances that continue or begin to deliberately place pollutant substances into the atmosphere because atmospheric mobility does not recognize political boundaries.
- Enact legislation to prevent atmospheric modification now and in the future.

## 7. CONCLUSIONS

For thirty years, the climate science community (CSC) has misrepresented the nature of climate change, falsely claiming that carbon dioxide is causing global warming by trapping Earth's heat that should otherwise be radiated into space. The

CSC has abrogated long-standing principles of science by making assumption-based computer models of Earth's radiation balance without considering the consequences of tropospheric particulate geoengineering that has been taking place with ever-increasing intensity and geographic scope for decades, thus rendering those models and their interpretations invalid.

## COMPETING INTERESTS

Author has declared that no competing interests exist.

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