

Jasper Kirkby, PhD is a particle physicist engaged in the <u>Cloud Project</u> - an investigation into cloud physics research at CERN – the European Organization for Nuclear Research. (Wiki)

In this video clip, Dr. Kirkby elevates the discussion of covert aerosol geoengineering from the denigration of "conspiracy theory" into the appropriate realm of scientific observation as he explicitly acknowledges the deployment of "aerosol dumps" into the upper atmosphere by jet aircraft.

"These are clouds which are seeded by jets dumping aerosols into the upper atmosphere".

In his 2009 presentation - "Cosmic Rays And Climate" - Kirkby suggests that manipulation of rainfall and the resulting modification of Earth's climate is being carried out with jet aircraft that are "dumping aerosols into the upper atmosphere."

It's understandable that a multitude of economic stakeholders could be desperate to maintain aerosol geoengineering as an undisclosed operation – even as these dumps are increasingly revealed as happening in plain sight.

If aerosol climate manipulation were made public knowledge, the IPCC initiative could lose all credibility as *climate change* suddenly becomes suspected as an engineered event made possible by two decades of jet aircraft aerosol dumps.

Dr. Kirkby's complete "Cosmic Rays and Climate" video presentation is available at CERN

Abstract: Cosmic Rays and Climate (2009)

The current understanding of climate change in the industrial age is that it is predominantly caused by anthropogenic greenhouse gases, with relatively small natural contributions due to solar irradiance and volcanoes. However, palaeoclimatic reconstructions show that the climate has frequently varied on 100-year time scales during the Holocene (last 10 kyr) by amounts comparable to the present warming - and yet the mechanism or mechanisms are not understood. Some of these reconstructions show clear associations with solar variability, which is recorded in the light radioisotope archives that measure past variations of cosmic ray intensity. However, despite the increasing evidence of its importance, solar-climate variability is likely to remain controversial until a physical mechanism is established. Estimated changes of solar irradiance on these time scales appear to be too small to account for the climate observations. This raises the question of whether cosmic rays may directly affect the climate, providing an effective indirect solar forcing mechanism. Indeed recent satellite observations - although disputed - suggest that cosmic rays may affect clouds. This talk presents an overview of the palaeoclimatic evidence for solar/cosmic ray forcing of the climate, and reviews the possible physical mechanisms. These will be investigated in the CLOUD experiment which begins to take data at the CERN PS later this year.

Stratospheric Aerosol Geoengineering (SAG)

The *aerosol dumps* pointed out by Dr. Kirkby are likely attributed to compounds described in the US Patent 5003186: "**Stratospheric Welsbach Seeding for Reduction of Global Warming**" (Link). Historic references to the discoveries of **Carl Auer von Welsbach** can be found at Wikipedia.

The Welsbach patent is consistent with Dr. Kirkby's description of atmospheric seeding using jet aircraft aerosols that appears, to observers, to be unusual jet *contrails*.

Of interest to environmentalists is that Welsbach seeding requires jet aircraft deployment of the toxic metal oxides: **Aluminum oxide and Thorium oxide.** The Welsbach patent discloses that these toxic environmental particulates will eventually settle into the planet's breathable air supply before contaminating the environment.

Brief Summary of Welsbach patent 5003183:

"A method of reducing atmospheric warming due to the greenhouse effect resulting from a layer of gases in the atmosphere which absorb strongly near infrared wavelength radiation, comprising the step of dispersing tiny particles of a material within the gases' layer, the particle material characterized by wavelength-dependent emissivity or reflectivity, in that said material has high emissivities with respect to radiation in the visible and far infrared wavelength spectra, and low emissivity in the near infrared wavelength spectrum, whereby said tiny particles provide a means for converting infrared heat energy into far infrared radiation which is radiated into space."

The method of claim includes one or more of the <u>oxides of metals including aluminum</u> <u>oxide and thorium oxide</u> "wherein said particles are dispersed by seeding the stratosphere with a quantity of said particles at altitudes in the range of seven to thirteen kilometers [23,000 to 43,000 feet] above the earth's surface."

"The size of these metallic oxides is prescribed to be in "the range of ten to one hundred microns".

Surprising Disclaimer: Welsbach patent could increase Global Warming.

"While this method would increase the reflection of visible light incident from space, the metallic particles would trap the long wavelength blackbody radiation released from the earth. This could result in net increase in global warming."

The patent goes on to suggest that Welsbach aerosols would be most effectively deployed at altitudes of approximately 33,000 feet. (10 km). These altitudes happen to be most frequently FAA assigned flight levels for commercial – passenger carrying aircraft and could explain why observers repeatedly document aerosol dumps originating from aircraft painted with the corporate logos of airlines like United, America, Jet Blue, Air Berlin,

The greenhouse gases are typically in the earth's stratosphere at an altitude of seven to thirteen kilometers. This suggests that the particle seeding should be done at an altitude on the order of **10** kilometers.[33,000 ft.] The particles may be seeded by dispersal from seeding aircraft; one exemplary technique may be via the <u>jet fuel</u> as suggested by prior work regarding the metallic particles.

Particles eventually fall to earth after "up to one year" and descend through the breathable atmosphere where the aluminum and thorium oxide toxins are inhaled by the unsuspecting public. Most of the toxic metal oxides ultimately land to contaminate environmental resources like water, soil, crops and food chain.

"Once the tiny particles have been dispersed into the atmosphere, the particles may remain in suspension for up to one year."

The ultimate and astonishing disclaimer allows modest to radical departures from the entire embodiment of the Welsbach seeding as described in the patent, providing these innovations do not *depart "from the scope and spirit of the invention."*

"It is understood that the above-described embodiment is merely illustrative of the possible specific embodiments which may represent principles of the present invention. Other arrangements may readily be devised in accordance with these principles by those skilled in the art without departing from the scope and spirit of the invention."

Flood or Drought: How Do Aerosols Affect Precipitation? - This 2008 paper explores the role of cloud condensation nuclei (CCN) in producing floods and drought. (AAAS)

Climate scientist, Dr. Joyce Penner contributed to the 1999 Climate Change Publication – "IPCC SPECIAL REPORT ON AVIATION AND THE GLOBAL ATMOSPHERE" (PDF). Page 17 of the report suggests that artificial contrails and clouds produced by jet aircraft "aerosol dumps" could force surface warming to aggravate global warming:

"Contrails tend to warm the Earth's surface, similar to thin high clouds".

The photograph Dr. Kirkby selected to demonstrate "jets dumping aerosols into the upper atmosphere" is not a rare occurrence. A sky full of "aerosol dumps" is an increasingly familiar sight, often captured in photographs and videos by observers in North America and almost every habitable location on the planet since the mid-1990's.

2/21/2015: Aerosol Dumps Over Alachua County, Florida



The skies over Gainesville and Alachua County, Florida demonstrate the aerosol dumps represented in Dr. Kirkby's video presentation at CERN.

On Feb 21, 2015, jet aerosol dumps were spotted over Gainesville, Alachua County and a large area of North Florida.

Although this was a particularly heavy aerosol day, these dumps are witnessed and photographed by experienced spotters and the general public nearly every day. Many citizens are fully aware that the skies are being sprayed by jets and express concern about how the fallout of aerosols are affecting the environment.

The pattern of spraying is consistent with a military operation although aircraft with passenger jet markings have been documented more frequently in that past several years.

Military involvement is the most likely source in this case, since the side-by-side trails and "X' patterns reveal headings and dangerous proximity of aircraft that are strictly forbidden by FAA regulations.

Even if these aerosols were somehow considered normal jet contrails, the reckless patterns and dangerous proximities appear more like an aerial stunt show. This is an issue unto itself that requires an explanation.

Of course, the big question everyone always asks is "why is this a secret?"

More to the point: **Why is it a secret in plain sight?.** Why does the FAA seem to be sworn to secrecy on this operation? How can anyone think these massive aerosol dumps can be sustained as a "secret" when anyone can look up to see the obvious for themselves.?

Does this have something to do with Global warming? If so, why is the government not telling the public about the benefits of aerosol spraying.?

As a Sierra Club member, I want to know how these aerosols are damaging the environment and human health.

Can they affect rainfall patterns? Can they - in fact - change the climate?

Coming from climate scientist, Joyce Penner - The answer to the last question is "Yes".

A quote from the <u>"IPCC SPECIAL REPORT ON AVIATION AND THE GLOBAL ATMOSPHERE"</u> says:

"Contrails tend to warm the Earth's surface, similar to thin high clouds".

It's public knowledge that Geoengineers like <u>David Keith</u> have been promoting jet aircraft releases of Aerosols into the Stratosphere for years in case we need to cool the planet against the worst effects of global warming.

So, any reasonable person could suspect that the past 20 years of secret aerosol dumps have been producing the very surface warming and climate change that the IPCC has been blaming on CO2.

Could it be that the climate modification and surface heating consequences of these aerosol dumps are the reason the government has failed to acknowledge the existence of this geoengineering program?