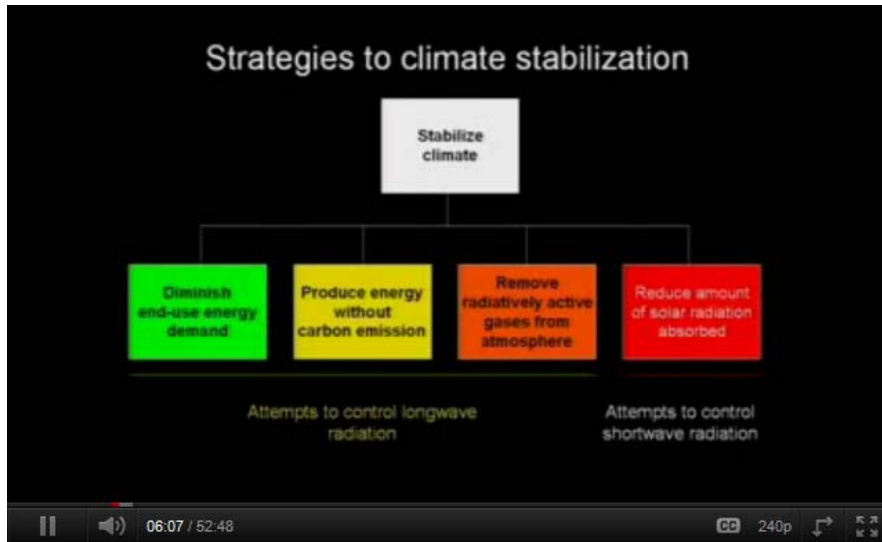


Geoengineering Earth's Climate

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Emergency preparedness is generally considered to be a good thing, yet there is no plan regarding what we might do should we be faced with a climate emergency. Such an emergency could take the form of a rapid shift in precipitation patterns, a collapse of the great ice sheets, the imminent triggering of strong climate system feedbacks, or perhaps the loss of valuable ecosystems.


Over the past decade, we have used climate models to investigate the potential to reverse some of the effects of greenhouse gases in the atmosphere by deflecting some incoming sunlight back to space. This would probably be most cost-effectively achieved with the placement of small particles in or above the stratosphere. Our model simulations indicate that such geoengineering approaches could potentially bring our climate closer to the state it was in prior to the introduction of greenhouse gases.


This talk will present much of what is known about such geoengineering approaches, and raise a range of issues likely to stimulate lively discussion.


Speaker: Ken Caldeira
 Ken Caldeira is a scientist at the Carnegie Institution Department of Global Ecology and a Professor (by courtesy) at the Stanford University Department of Environmental and Earth System Sciences. Previously, he worked for 12 years in the Energy and Environment Directorate at the Lawrence Livermore National Laboratory (Department of Energy). His research interests include the numerical simulation of Earth's climate, carbon, and biogeochemistry; ocean acidification; climate emergency response systems; evaluating approaches to supplying environmentally-friendly energy services; ocean carbon sequestration; long-term evolution of climate and geochemical cycles; and marine biogeochemical cycles. Caldeira has a B.A. in Philosophy from Rutgers College and an M.S. and Ph.D. in Atmospheric Sciences from New York University.


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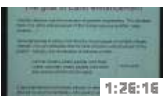
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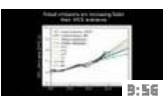
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Your reaction?

Booooo. the whole solar system is heating up dummy. cant stand these global warming douches.

BestZaros 3 months ago

Well somebody has been funding it for about 2 decades.....This has been overhead since the 1990's..Thanks for asking the rest of us how we felt about it..

adrifingspiral2 4 months ago

Fuck you google and fuck geoengineering fans. fuck you dolphin and fuck you whale

meushubris 5 months ago

Hmmm... let's think. What is the most environmentally sensitive thing to do?

Risk the arctic,

or

risk the planet?

The planet..... the arctic. The PLANET!>the arctic.

Technoscribe 6 months ago

O.O "&£*(^&!&^%£%&!&^&!!!!!!

If a human gets insufficient sunlight it causes vitamin D deficiencies which in turn lead to clinical depression. Humans are organisms. Humans are not among the MOST sensitive organisms to sunlight. If one artificially alters the amount of sunlight that hits the entire earth that CANNOT be good for a large number of organisms. The harm to biodiversity is potentially catastrophic! >.< Bloody Hell.

Technoscribe 6 months ago

Putting chemicals in the sky contaminates the air we breathe & the water we drink. There are other power resources that we could use on this planet but the corporations/governments are not pushing these. Instead they want to add more taxes, keep the fear machine spinning and keep us enslaved. No more!

BlueBloodTasty 7 months ago

google - the times chemical tests wiltshire

Do you really think things change?? If so I call that bloody naive

I have the patents for geo-engineering on my channel (welsbach cloud seeding)

I live in Wiltshire and the summer just gone I was sun bathing in my garden when 2 planes flew above me deposited spray then 5-10 minutes later a different type of plane flew through the trails and let 2 yellow weather balloons out the back 1 moved rather rapidly and other far slower I call that a test

honestTom333 11 months ago

Geo-engineering experiments are contaminating Mt. Shasta with aluminum. Not cool.

GimmeSomeTruth1971 1 year ago

Good job to Google for reviewing what many others are claiming will be the last ditch effort if reducing the population, its consumption, and finding new energy sources fail.

rudeasp 1 year ago

their is no delicate balance? Please let me know of the other planets you know of with abundant life and I'll reconsider my thoughts. The multitude of conditions required to have eventually led us here, two people communicating over the net are staggering. I'm not trying to start an argument here i just don't agree with you and think we have a totally different picture of the world

toez100 1 year ago

right i can't get to the net often so don't have time to debate here! Why would my mentioning of the weather lead you to think i was talking LONG term? I was simply making a point. Climate and weather are two different things, agreed, but they are comparable for obvious reasons

toez100 1 year ago

There is no "delicate balance", no garden of Eden but for the intereference of man."

Any critical look at natural history reveals that life and the Earth is fundamentally "anti-gaian".

Algae killed most life on Earth with toxic oxygen gas. Sulfur bacteria did it again several times with hydrogen sulfide. Rocks absorbed most of the CO2, causing ice-sheets to spread all the way to the equator. Comets obliterated most life several times.

Things are adapted because things which are not, die.

soylentgreenb 1 year ago

Weather is a chaotic system. Tiny perturbations grow up to dominate the system over longer time scales. Give it a couple of months and a cow fart can move a hurricane. Wait long enough and quantum effects rise up to dominate the system.

It is not just difficult to make long-term predictions of weather, it is impossible even with perfect knowledge and infinite computing power.



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Climate is not like weather, it is not chaotic although it might still be difficult to predict.

[soylentgreenb](#) 1 year ago

wrong. you are a idiot.

read some fucking science fo gods balls sacks.

you are a idiot and stop trying to debate.

that video was stupid they didnt even allow for comments. you people and you ignorance and lying shit, makes me sick.

you dont even have the balls to debate without lying.

comments disabled, hahahahaha

EPIC FAIL

[thesparitan](#) 1 year ago

glad we have smart people working on this. we need geoengineering and reduction in pollution.

save the planet and save mankind.

[thesparitan](#) 1 year ago

Treating the symptom and not the source. Comparable to so many great issues of today. How many people out there actually believe that we have sufficient knowledge of this beautiful planet and it's systems to start trying to control the delicate balance between the earth and the sun's energy when we can't even accurately predict the weather! This planet is not our slave and we are not it's master. We may still learn to live in harmony but i fear we will pay for this arrogance. Good vibes 2 all :-)

[toez100](#) 1 year ago

if it were fifty years ago they'd all be prominent SS scientists with a no-holes barred, carte blanc to destroy humanity, their enthusiasm to impose their drastic ignorance upon us all makes me sick!

lest we forget, what those ss scientists were free to do it will happen again.

thats why we say 'lest we forget'

and how forgetful is humanity?

[WellSightedGentleman](#) 1 year ago

these guys have absolutely no ethics whatsoever to be qualified to go ahead and poison the planet. IPCC you tards!

that organisation is a total book cooking load of bullshit, time will prove it!

[WellSightedGentleman](#) 1 year ago

Totally bogus!

[hd625b](#) 1 year ago

So smart, yet such an idiot...no wonder nothing grows.

Keep polluting the skies to save us from the climate

Can u say brainwashed, mind-controlled ninny?

[yoyocd](#) 1 year ago

momentum or short time data isn't useful in making a prognosis. it's a multi-feedback system. at least a few decades is needed.

[Macovic](#) 1 year ago

Give me historical examples where large-scale environmental engineering were long-term successes - are there any that did not turn into a catastrophe for the generation that followed? Please learn to be humble, or the arrogance and self-righteousness of scientists will ruin us - financially and physically. By the way: psychology shows that optimists ("it will work!") are not very susceptible to doubts. That's why they should do business, not politics. And not geo-engineering!

[TARNOLDable](#) 2 years ago

Please stop lobbying for paid liars.

Climate models predicted a cooling STRATOSPHERE, satellites confirmed the prediction was correct, astroturfers claims this proves Earth is cooling?

Also the video you point to is dishonestly conflating shrinking Artic sea ice with expanding Antarctic icebergs.

Nobody seems to want to take credit for producing the video you point to, I assume it was made by the lobbyists at the heartland institute or one of their front groups, Bob Carter perhaps?

[Tapecutter59](#) 2 years ago

According to NOAA data, earth is now cooling. Good news for taxpayers who will be severely penalized if cap & trade is passed. Data compilation demonstrating ice recovery

watch?v=q9KGT3ZfJQ

Min 17:07

"High-altitude transport aircraft

Condor/Global Hawk with a cargo bay

B747 10+ tonnes/yr of ENGINEERED AEROSOL.

Acid rain & other PM in our immediate breathing atmosphere are bad enough w/out adding engineered aerosols

[Yoetah](#) 2 years ago 2

lol.. indeed.

I think my only criticism of this sort of thing is that there are those out there who would use it as an excuse to continue to bugger up the environment.. and would say.. "its okay, we have ways of fixing things.. so now its okay if we mess it up" ... as their justifying chant.

The beauty of the Earth's system is that it will adapt & respond differently to different conditions.. this is why Lovelock said Gaia was like a living self-regulating system.
ejbh3160 2 years ago

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