

Study evaluates geo-engineering to reduce global warming by increasing aerosol levels

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For those who lower their stress levels with the hope that we will be able to [geo-engineer](#) our way out of any impending global warming crises, here is another bit of sobering news.

The suggestion has been made that increasing aerosol levels in the atmosphere cools the earth. It does work: for example, after a volcanic eruption, the aerosol particles in the stratosphere reflect solar radiation back into space. In the troposphere, aerosols promote cloud formation and whiter clouds, which also reflect more solar warmth away from the planet. The unfortunate events following the attacks of 9-11 gave scientists a unique opportunity to improve modeling of the effects of contrails, by comparing the before (normal trans-Atlantic air traffic) and after (reduced flight frequencies) situations.

This has led people to suggest options like increasing the levels of sulfur compounds in jet fuels, so that the air transport industry would cool the globe while circling it. The possibility drives [chemtrail](#) conspiracy theories, although there is no evidence that anyone has taken these suggestions seriously so far.

Now a study by Anton Laakso of the Finnish Meteorological Institute proves that even if a proposal so wrought with potential unintended consequences could get approved, it can't fix our global warming problem. The more aerosols added to the atmosphere, the less effective the cooling.

So yet another extreme alternative bites the dust. We have to go back to plan A: reduce climate change by reducing emissions of greenhouse gases.

Read the full study here: [Modelling radiative and climate effects of aerosols: from Anthropogenic emissions to geoengineering](#)