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Sulfur Geoengineering 2006

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## Bomb Earth's atmosphere with sulphur, researcher says

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By [Thomas C Greene in Washington](#)  
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Firing artillery shells into the stratosphere to release sulphur particles could defeat global warming, climate researcher Paul Crutzen says.

In a paper to be published in the journal *Climatic Change* in August, the professor will explain his scheme in greater detail.

So far we have learned, from this [press release](http://www.springer-sbm.com/index.php?id=291&backPID=132&L=0&tx_tnc_news=2646) ([http://www.springer-sbm.com/index.php?id=291&backPID=132&L=0&tx\\_tnc\\_news=2646](http://www.springer-sbm.com/index.php?id=291&backPID=132&L=0&tx_tnc_news=2646)), that sulphur particles can reflect sunlight well enough to lower the Earth's temperature, if that ever becomes necessary.

Crutzen reckons that the effect would last about two years. He bases this on observations of the Mount Pinatubo eruption in 1991, which released significant

quantities of sulphur into the atmosphere and may have lowered the Earth's average temperature by 0.5 degrees Celsius. Or not.

Crutzen says he doesn't think of "climate engineering" as a first-line response to global warming, but if governments fail to enact the proper controls for greenhouse gas emissions, it might become a necessary emergency measure.

What could possibly go wrong? Oh, heaps of things. Very little is known about how sunlight affects weather patterns, so fiddling with it could result in anything from minor changes to catastrophic droughts throughout the world's most fertile regions.

On the other hand, we might already have come to depend on "global dimming" from air pollution to keep global warming at bay, so this artificial volcano idea might be the way back from disaster.

There is evidence suggesting that recent efforts to reduce greenhouse gas emissions has caused a spike in global temperatures over the past decade. Without our protective layer of industrial pollutants, the Earth's atmosphere is now reflecting less solar radiation, and temperatures are rising. We could be rendering the planet uninhabitable just because we're afraid of a little shmutz in the air.

The message, then, that air pollution is good for the Earth, will no doubt resonate deeply with the Bush administration. And while the Bushies have been hostile toward the idea of global warming, certainly the idea of attacking a complicated problem with heavy artillery will appeal to them so strongly that we might see some action soon. ®

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