

Geoengineering plan is criticized

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U.S. scientists criticized a geoengineering proposal that would emulate volcanic eruptions as a means of combating global warming.

Global warming occurs when greenhouse gases, such as carbon dioxide, build up in the atmosphere and alter outgoing longwave radiation. Some scientists have proposed mitigating global warming by emulating a volcanic eruption, since volcanic aerosols scatter incoming sunlight, reducing outgoing radiation.

But Kevin Trenberth and Aiguo Dai of the U.S. National Center for Atmospheric Research cautioned against the mitigation proposal.

The scientists examined precipitation and streamflow records from 1950 to 2004 to document the effects of volcanic eruptions from Mexico's El Chichon in 1982 and the Philippines' Mount Pinatubo in 1991.

They found that following the Pinatubo eruption there was a substantial global decrease in precipitation over land, a record decrease in runoff and river discharge into the oceans and widespread drying over land during the following year.

Thus, the authors conclude, major adverse effects, including drought, could arise from geoengineering solutions to global warming.

Their study is reported in the journal *Geophysical Research Letters*.

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