

## Global warming 'solution' could backfire

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PALO ALTO, Calif., June 29 (UPI) -- A cloud-seeding scheme proposed to combat global warming could change global rainfall patterns and result increased monsoonal rains, researchers say.

Whitening clouds over the world's oceans to reflect more sunlight and reduce global warming could in fact increase monsoonal rains causing wetter conditions on land, a Carnegie Institution study released Monday said.

Seeding could make clouds whiter by reducing the size of water droplets making up the clouds, a researcher says.

"Rain clouds, which have big droplets, tend to be gray and absorb sunlight, whereas clouds with smaller droplets tend to be white and fluffy and reflect more sunlight to space," says study co-author Ken Caldeira of the Carnegie's Department of Global Ecology.

In computer simulations, whiter clouds reflected more solar radiation and offset the warming effect of the high carbon dioxide levels, Caldeira said.

But in the simulations, the reflective oceanic clouds preferentially cooled the air over the oceans relative to land, setting up a monsoonal air flow that changed existing rainfall patterns, the study said.

"Our basic result calls into question previous assumptions about the impact of this geoengineering scheme," Caldeira said. "It merits further investigation."

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