U.K. Geoengineering Tests Delayed until Spring

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by Sarah Fecht (Scientific American)

Controversial tests of geoengineering hardware, initially set to start in October, have been delayed. The British government agency that provides funding to the project <u>issued the delay</u> on September 29, in order "to allow time for more engagement with stakeholders."

In mid-September, a team of U.K. researchers leading a project called Stratospheric Particle Injection for Climate Engineering (SPICE) <u>announced its plans</u> to begin small-scale equipment tests. The tests would attempt to spray a few bathtubs full of water one kilometer into the sky, by way of a helium-filled balloon, a hose and a pressure washer pump. The balloon-and-hose method has been proposed as one way to deliver sunlight-reflecting particles to the sky, potentially easing the worst effects of climate change. The October experiments would have tested whether such a delivery method might be possible. While the research council's delay was not intended to be long, the coming winter months will make it difficult to fly the balloon before springtime, says SPICE engineer Hugh Hunt.

The decision to delay came after 60 organizations from around the world signed apetition that called on the British secretary for energy and climate to cancel the tests. The petition was promoted by ETC Group, a Canada-based environmental organization that advocates socially responsible technology development. In a press release, ETC called the project "the Trojan Hose" and said that the test will "send the wrong signal to the international community, which adopted a moratorium on geoengineering activities last October at the [United Nations] Convention on Biological Diversity."

In fact, the decision never uses the word "moratorium," says Jason Blackstock, a science-policy mediator with Canada's Center for International Governance Innovation. Instead, the agreement is a recommendation that no large-scale geoengineering activities should take place without considering impacts on biodiversity, economies and cultures. The agreement makes an exception for "small scale scientific research studies that would be conducted in a controlled setting...and only if they are justified by the need to gather specific scientific data and are subject to a thorough prior assessment of the potential impacts on the environment." (The exact wording in the agreement can be found here in Section 8w of the decision.)

The proposed SPICE tests do not appear to violate international legal agreements, but debate continues about whether such a project would be socially acceptable. The petition demands confirmation that the UK government and its research councils "will not grant permission for, or fund, any other field trials of [geoengineering] equipment in the absence of an international consensus."

Although the SPICE tests planned for this month were expected to be environmentally benign, other geoengineering efforts do have the potential to throw off weather patterns and endanger ecosystems and food supplies around the world, according to the <u>Royal Society for Solar Radiation Management Governance</u>. For that reason, any large-scale geoengineering project, if it is to go forward in an ethical way, will need to arise from international cooperation, says Blackstock.

The SPICE researchers acknowledge the controversial nature of geoengineering. "This is a controversial and potentially alarming subject, and we understand that," said project leader Matthew Watson in a press briefing three weeks ago. For this reason, the team said, "we are fully committed to openness and transparency."

Prior to the <u>United Nations Conference on Sustainable Development</u> in June 2012, representatives in the European Parliament (a legislative body of the European Union) must determine the EU's official stance on several environmental issues. On September 29, the same day that U.K. officials announced the delay of SPICE, the European Parliament passed a resolution including an expression of its "<u>opposition</u> to proposals for large scale geoengineering." If other bodies of the European Union approve the resolution, the E.U.'s official stance during the United Nations negotiations could be anti-geoengineering.

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