

# Fears for geoengineering experiment

A planned balloon test flight is under fire from environmentalists who fear it is a step towards solar radiation management that could see particles released into the atmosphere to reduce global warming

**Stratospheric Controlled Perturbation Experiment:** Following balloon test flight, second experiment would scatter particles to mimic effect of volcanic eruption

**High altitude balloon**

Sun

Altitude:  
**20km**

**Calcium carbonate:**  
Around **2kg** scattered into atmosphere, creating cloud about **1km** long

If some solar radiation is successfully deflected away, it could pave way for larger experiments using substances like **sulphur dioxide**

**Swedish Space Corporation,**

**Kiruna:** Harvard scientists want to test fly high-altitude balloon to see if it can carry equipment for future solar radiation management experiments



Ash rises **35km** into stratosphere

Satellites track ash cloud several times around world

**June 15, 1991:**  
**Mount Pinatubo** erupts, ejecting **5km<sup>3</sup>** of material

Sulphurous debris spewed into atmosphere from Pinatubo volcano cools global temperatures by around **0.6°C** for **15 months**

**PHILIPPINES**

500km  
300 miles

