

Risks of Solar Radiation Modification (SRM)

SRM is supposed to mask global warming by enhancing the earth's albedo, for example by stratospheric aerosol injection. Thus altering the whole climate system, SRM would impact most areas of life.

Geopolitical Tensions

Difficulties in reaching a political consensus on SRM, up to the risk of unilateral deployment, could lead to international conflicts.

Increased inequality

An unjust distribution of negative impacts could exacerbate inequalities between and within nations, while the risk of a termination shock and technological dependency might impose burdens on future generations.

Threatened Marine Ecosystems

Undiminished ocean acidification could adversely impact marine biodiversity and fisheries.

Food Security Threats

Changes in precipitation and monsoon patterns could disrupt agricultural production, threatening food supply stability.

Mitigation Deterrence

Relying on SRM to supposedly counteract climate change may weaken mitigation efforts, including the phaseout of fossil fuels, hindering the transition towards renewable energy.

Water Cycle Alteration

Unpredictable changes could affect the availability and quality of freshwater and compromise water security.

Ecosystem Disruption

Altered climate patterns can destroy habitats and food webs, contributing to biodiversity loss.