

## **ACOM Seminar**

# **Stratospheric aerosol intervention and its potential effect on the stratospheric ozone layer**

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Links: <https://operations.ucar.edu/live-acom>

### **ABSTRACT**

Stratospheric aerosol intervention (SAI) has been proposed to counter anthropogenic greenhouse gas induced warming, using stratospheric aerosols to reflect some of the incoming shortwave radiation. One of the side effects of SAI is the impact on stratospheric composition and ozone. Simulated SAI-induced changes in ozone concentrations in the future depend on the assumed future baseline scenario, the SAI injection strategy, and are model dependent. Combined changes in chemistry, stratospheric dynamics and transport further depend on the considered region and season and can result in both increasing and decreasing total column ozone (TCO) values. The seminar will present the current understanding of the effects of SAI on stratospheric ozone and outline the complexity and uncertainty based on current studies, requiring more focused research in this area.