

CGD SEMINAR



DATE: Tuesday, 27 March 2018
TIME: 11 a.m.
LOCATION: NCAR, 1850 Table Mesa Drive
Mesa Lab, Main Seminar Room
TITLE: Why has the tropical lower stratosphere
stopped cooling for the last 20 years?
SPEAKER: Lorenzo Polvani, Columbia University

ABSTRACT:

The cooling of the stratosphere is an important fingerprint of CO₂ on the climate system. This stratospheric signature of CO₂, however, is confounded by the presence of ozone-depleting substances (ODS). The talk will summarize the latest observations and, with simple arguments and with the help of ensembles of chemistry-climate model integrations, demonstrate the crucial role of ODS not only on stratospheric temperature trends, but also on the entire large-scale circulation of the stratosphere. The impact of the Montreal Protocol on the detection of the vertical fingerprint of anthropogenic forcing of atmospheric temperatures will be also be discussed.

Seminar will not be webcast

For more information, contact Barbara Middlebrook, email bmiddleb@ucar.edu, phone: 303.497.1366