

Climate impacts of short-lived forcing agents

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3:00 p.m. – Refreshments & Socializing

Foothills Lab 2, Room 1022

Abstract

Short-lived climate forcers (SLCFs) are defined as greenhouse gases and aerosols that affect climate through radiation and cloud interactions but have atmospheric residence times from a few days (aerosols) to several years (methane). In this seminar, we will first review the various processes affecting the distribution of SLCFs in the atmosphere. We will discuss the observed and modeled changes since pre-industrial conditions and as projected under a variety of scenarios. We will then identify and quantify the various ways such agents have forced and are projected to force climate. We will finally define specific climate responses associated with those forcings.