ATS/CIRA Colloquium

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Hosted by Emily Fischer

3 p.m. Thursday, October 5
ATS 101 and Zoom

Quantifying the Impact of Tropospheric Chlorine

Gas phase oxidants control the concentrations of important climate and air pollutants such as methane, ozone and particles. Accurate representation of this oxidation chemistry in computational models is paramount to our ability to predict and understand past, present and future changes to the Earth system. Over recent decades there have been continual suggestions that the chlorine atom may be a significant tropospheric oxidant, but a lack of observations capable of constraining its chemistry mean that its role remains highly uncertain. In this talk I will discuss recent modelling work exploring some of the differences between chlorine and the dominant tropospheric oxidant, the hydroxyl radical, and also present developments in measurement technologies that will increase the observational constraints available on the role of chlorine in tropospheric oxidation chemistry.

Colloquia page: atmos.colostate.edu/colloquia