

SEMINAR

FRAPPÉ - Air Quality Research as a Key to Addressing Societal Needs

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High ozone pollution during summertime has been an issue for the Colorado Front Range for many years. Urban and industrial emissions with the addition of a rapidly expanding oil and natural gas sector create a highly reactive chemical mix, which is complicated by complex terrain driven meteorology and elevated ozone background levels. To characterize the main contributions to local ozone pollution, two large air quality studies involving four aircraft and extensive ground-based measurements were conducted in the area in the summer of 2014: the NCAR/NSF/State of Colorado Front Range Air Pollution and Photochemistry Experiment (FRAPPÉ) and the 4th deployment of the NASA DISCOVER-AQ. I will give an overview of the campaigns, and present a summary of the results which are focused around Front Range dynamics, ozone production and source attribution. The main findings suggest major contributions from the transportation sector as well as from the oil and gas extraction sector, with minor contributions from energy generation and industry. The meteorological conditions were also found to be critical in creating situations conducive to high ozone in the area.

Wednesday, January 22, 2019, 3:30 p.m

Refreshments 3:15 p.m

NCAR Foothills Laboratory

3450 Mitchell Lane, Boulder, CO 80301

FL2-1022, large seminar room

Live webcast: <http://ucarconnect.ucar.edu/live>

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The National Center for Atmospheric Research is operated by the University Corporation for Atmospheric Research under the sponsorship of the National Science Foundation