

ATS/CIRA Colloquium

Daniel Murphy

Visiting ATS from the NOAA ESRL Chemical Sciences Division

Using data sets to constrain aerosol sources and radiative forcing: from micro to macro

Hosted by Jeff Pierce

Friday, October 18, 2013

**ATS room 101; Discussion will begin at 11:15am
Refreshments will be served at 10:45am in the weather lab**

Aerosol radiative forcing is the difference between the radiative effect of aerosols now and during pre-industrial times. Calculating that difference requires understanding the sources of the particles. I will present how data sets as diverse as single particle analysis, the IMPROVE ground-based network, and satellite data can be used to constrain the sources and radiative forcing of aerosols. I will consider the sources of lead and soil dust in the United States and move to some satellite-derived estimates of global aerosol sources and how they are changing.

Link to colloquium videos and announcement page: <http://www.atmos.colostate.edu/dept/colloquia.php>