ATS/CIRA Colloquium

Eben Thoma

United States Environmental Protection Agency

Next Generation Air Measurements for Fugitive, Area Source, and Fence Line Applications

Hosted by Arsineh Hecobian

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

Next generation air measurements (NGAM) is an EPA term for the rapidly advancing field of air pollutant sensor technologies, data integration concepts, and associated geospatial modeling strategies. Ranging from personal sensors to satellite remote sensing, future NGAM systems promise revolutionary new capability for air quality and exposure science. NGAM tools may be particularly useful in understanding emissions from fugitive and area sources of air pollution and greenhouses gases. Whereas the knowledge base for emissions from point sources (stacks) and mobiles sources (tailpipes) is relatively mature, non-point such as landfills, waste water, and agricultural operations, and fugitive sources in industrial facilities and energy production is less well-developed. The reason for this lies in the complexity of these sources that can be of significant spatial extent or distributed over large areas with uncertain emission locations. Emissions can be temporally variable and profoundly affected by environmental factors and operational conditions. The stochastic and site-specific nature of these sources make them difficult to both measure and model. NGAM concepts such as mobile measurements and passive and active fence line monitoring are providing new ways to both study and mitigate non-point emissions. This talk provides a brief overview of some NGAM concepts in the in fugitive and area source space.

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