

# CGD SEMINAR



**DATE:** Tuesday, 30 January 2018

**TIME:** 11 a.m.

**LOCATION:** NCAR, 1850 Table Mesa Drive  
Mesa Lab, Main Seminar Room

**TITLE:** The Community Emissions Data System  
(CEDS): data, emissions, and uncertainty  
estimates

**SPEAKER:** Rachel Hoesly, Pacific Northwest National  
Laboratory

## ABSTRACT:

The Community Emissions Database System (CEDS) is an open source data system scheduled for public release in early 2018 that produces global, historical (1750 - present) estimates of anthropogenic acidifying gases (NH<sub>3</sub>, NO<sub>x</sub>, SO<sub>2</sub>), carbonaceous gases (CO<sub>2</sub> and CO, CH<sub>4</sub>) and carbonaceous aerosols (BC and OC). Emissions are estimated annually and resolved by the country, sector, and fuel, then gridded by year and sector with monthly seasonality. CEDS estimates rely on existing energy consumption data sets and regional and country-specific inventories to produce emission trends over recent decades. The system provides a reproducible, consistent, and transparent means of quantifying uncertainty around emissions inventories.

This talk will compare CEDS emissions to existing inventories (CMPI5 and GAINS), highlighting primary differences, areas of interest, and identified issues within CEDS data. We will also discuss ongoing efforts to estimate uncertainty in the data, including uncertainty in recently estimated energy data as it relates to uncertainty in emissions data, as well as the plan forward for conducting comprehensive uncertainty analysis in CEDS data.

**Live webcast:** <http://www.fin.ucar.edu/it/mms/ml-live.htm> or <http://ucarconnect.ucar.edu/live>

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