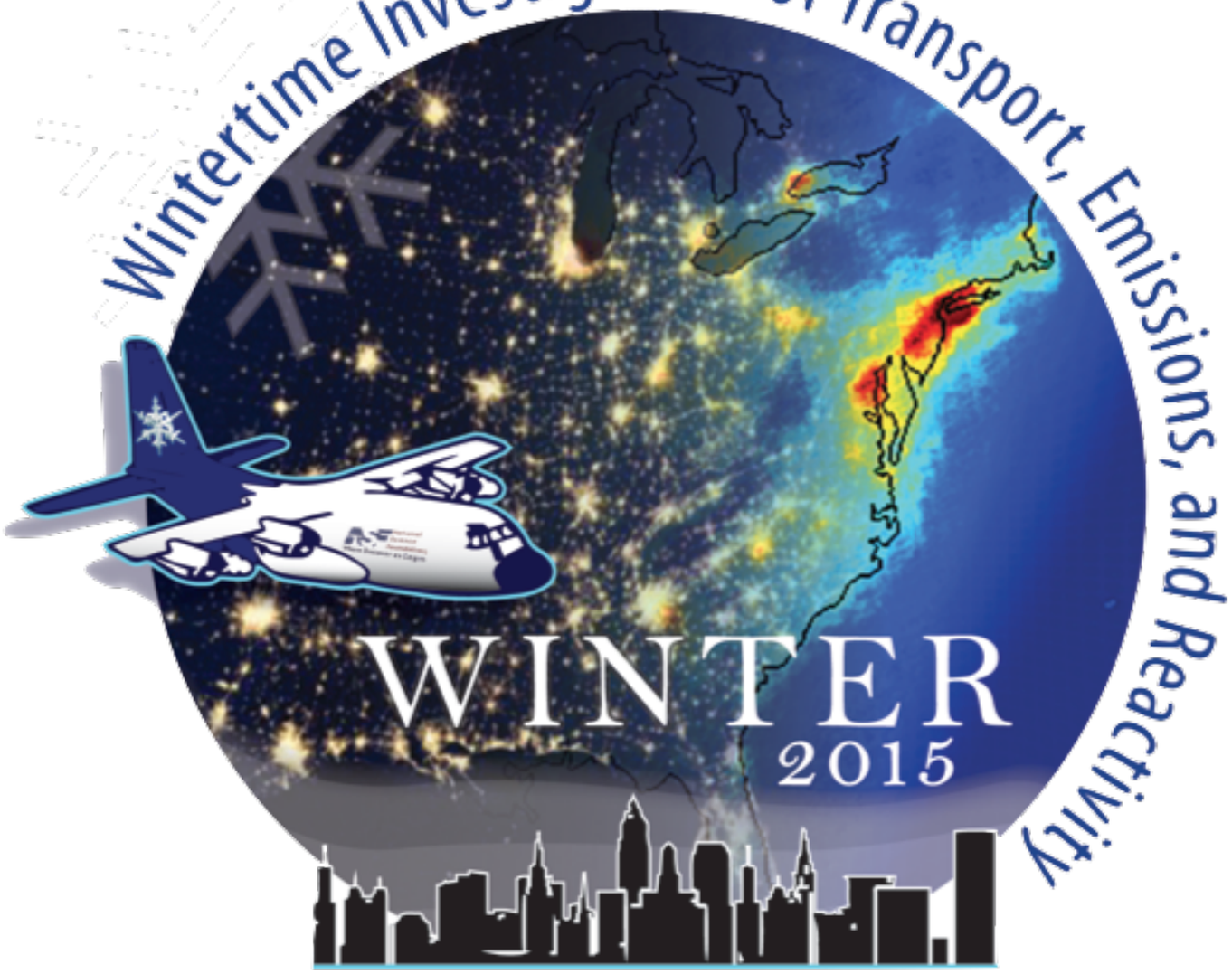

Alison Rockwell
EOL Public Engagement Specialist

EARTH OBSERVING LABORATORY

WINTER Education & Public Engagement

- School Visits
- Public Engagement
- Web Technologies
- Printed Material & Graphic Design
- Collaborations

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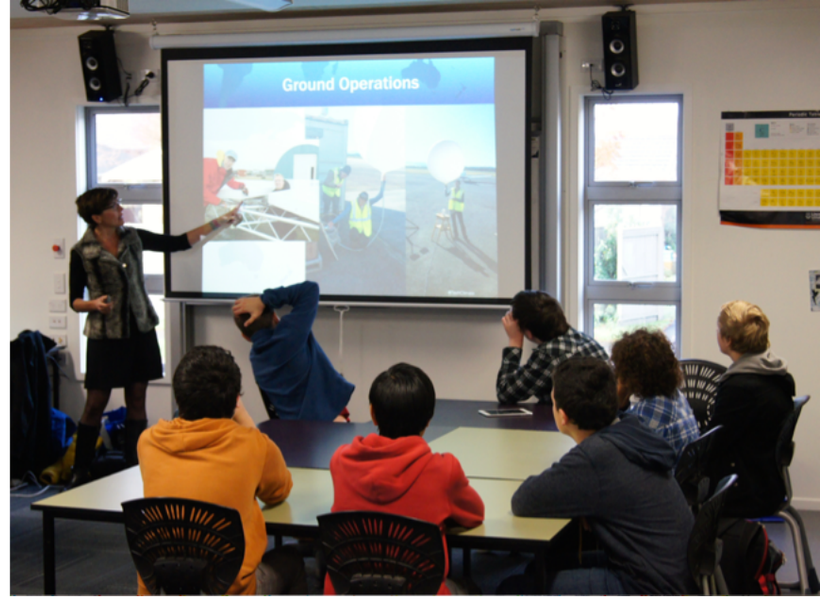

School Visits in Virginia

- 3 UCAR Member Universities
- 6 Historically Black Colleges and Universities
- Many Community Colleges
- Endless K-12

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WINTER Public Engagement

- Coordinate media interviews - radio , TV, & print
- Open House?

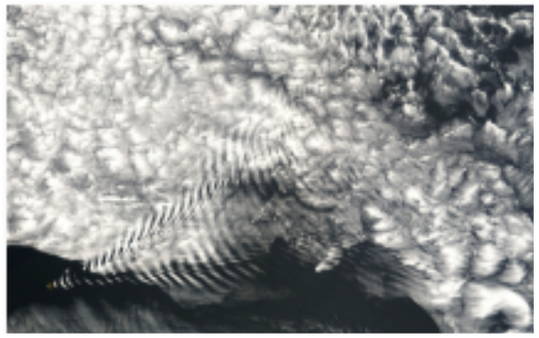
Quick Questions for DEEPWAVE PIs

Can you tell us a bit about DEEPAWAVE and all of the organizations that are involved?

DEEPWAVE is an atmospheric science research project studying the dynamics of gravity wave from the surface of the Earth to the upper reaches of the atmosphere. DEEPWAVE is funded b the National Science Foundation (NSF), Office of Naval Research, and Naval Research Laboratory (NRL), and operated by the National Center for Atmospheric Research (NCAR), in collaboration with the German Aerospace Center DLR, NIWA, UK Met Office, NZ MetService, NRL, and Australian Antarctic Division. The project is led by Principal Investigators from severa US universities and research centers as well as international colleagues from New Zealand, Germany, Australia, and the UK. DEEPWAVE aircraft operations will be based in Christchurch, with six ground-sites on the South Island and one in Wellington from June-July 2014.

Gravity waves are not a commonly discussed term, can you explain what they are how might they be recognized?

A gravity wave is a disturbance in which buoyancy acts as the restoring force on parcels displaced from hydrostatic equilibrium. Waves on the ocean are examples of gravity waves, they can also be seen as ripples in clouds. Gravity waves are widely recognized to play central roles in a broad range of thermal, chemical, and physical processes extending upward from Earth's surface to the upper atmosphere.



WINTER SOCIAL MEDIA

Like us on **Facebook**

Watch us on **YouTube**

Follow us on **Twitter**

Follow us on **LinkedIn**

FRAPPÉ in the News

Ozone in Colorado mountains surprises researchers
The Daily Camera | 28 August 2014

Researchers who examined air pollution along northern Colorado's Front Range said were surprised by how much harmful ozone and ozone-causing chemicals are drifting mountains from urban and rural areas below.
>> Read more

Scientists Launch Far-Ranging Campaign to Detail Front Range Air Pollution
Lab Manager | 19 August 2014

Scientists at the National Center for Atmospheric Research (NCAR) and partner organ launched a major field project across the northern Front Range of Colorado last month

WINTER Web Technologies

- ~6 WINTER public-friendly pages
- EOL Social Media Posts

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Cool Air

Decreased sunlight results in fewer photochemical reactions (oxidation).

Decrease in temperature keeps cool air near the Earth's surface trapping pollutants produced near the ground close to communities and the environment.

Slower reactivity and oxidation allows primary pollutants to persist and spread geographically, impacting a broader region.

NSF/NCAR C-130 Research Aircraft

Pollution sources and constituents are different in summer than in winter months, being more industrial than agricultural in the winter.

SO_2

NO_x

VOC

SO_2

NO_x

SO_2

VOC

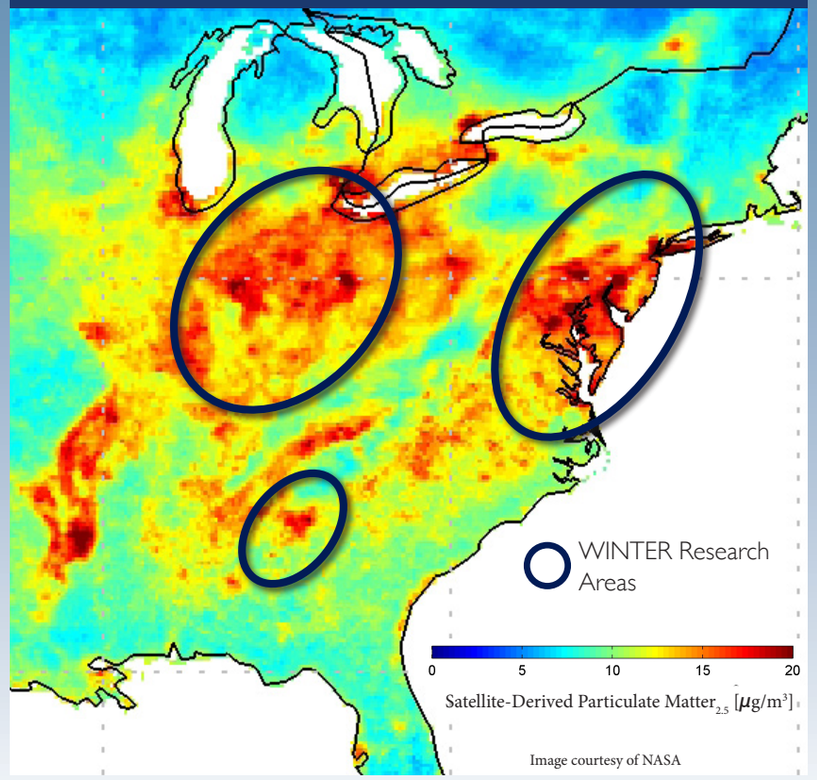
WINTER 2015

Wintertime Investigation of Transmission, Emissions, and Reactivity

1 February - 15 March 2015

WINTER is investigating the rate of which primary pollutants, such as sulfur dioxide (SO_2), nitrogen oxides (NO_x), and volatile organic compounds (VOC), oxidize and move throughout the region during the winter that ultimately affect air quality and climate.

WINTER is using the NSF/NCAR C-130 research aircraft to conduct research flights in the Northeast Metropolitan Corridor, the Ohio River Valley, and the Southeast Mid-Atlantic region.



Graphic by Alison Rockwell NCAR/EOL

Printed Material & Graphic Design

- WINTER Infocard
- WINTER Schematic

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UCAR CENTER FOR SCIENCE EDUCATION

Berkeley
UNIVERSITY OF CALIFORNIA

MetEd

UNIVERSITY OF WASHINGTON · LVX · SIT · 1861

University of Colorado Boulder

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NOAA
U.S. DEPARTMENT OF COMMERCE

Georgia Institute of Technology

Collaborations

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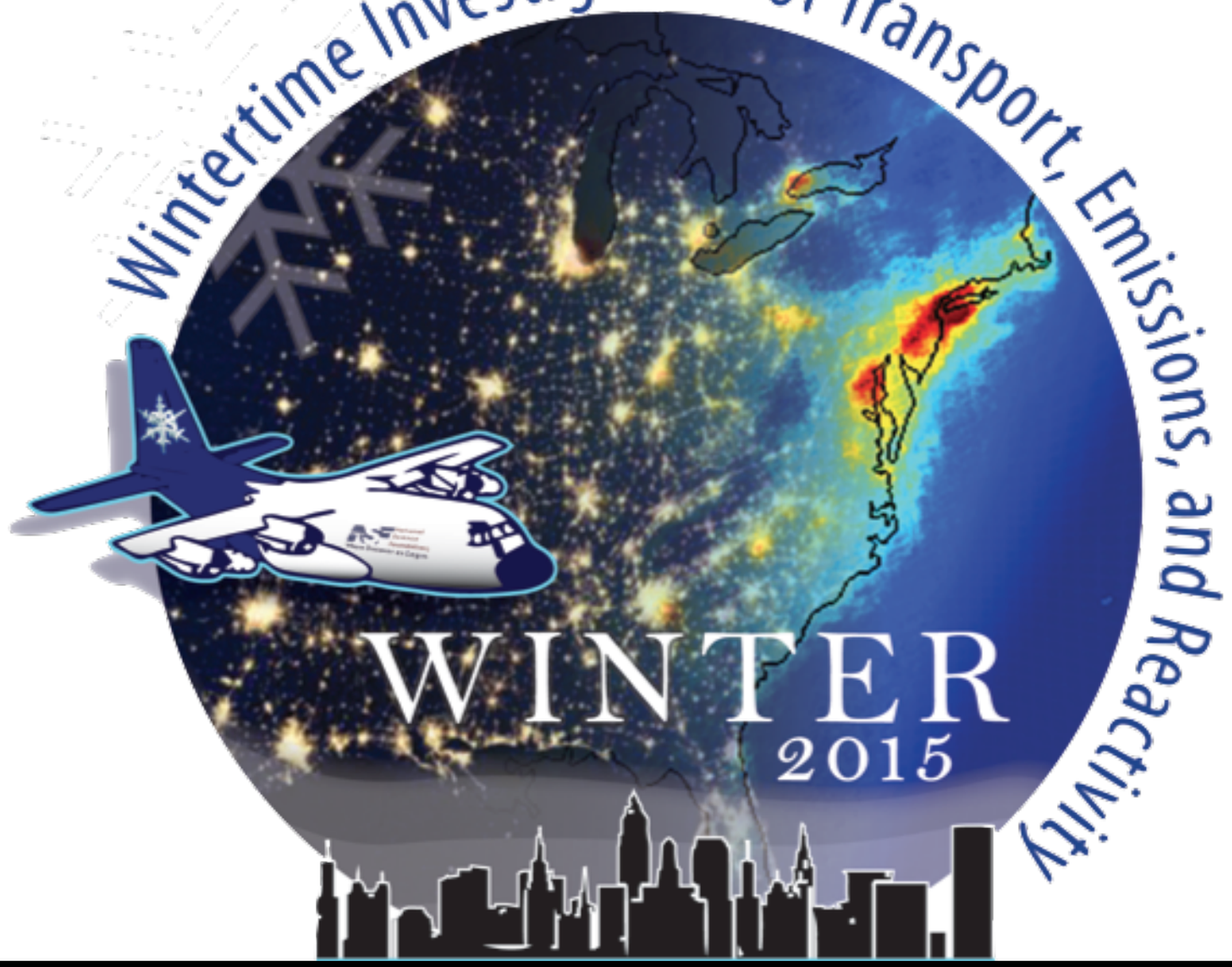

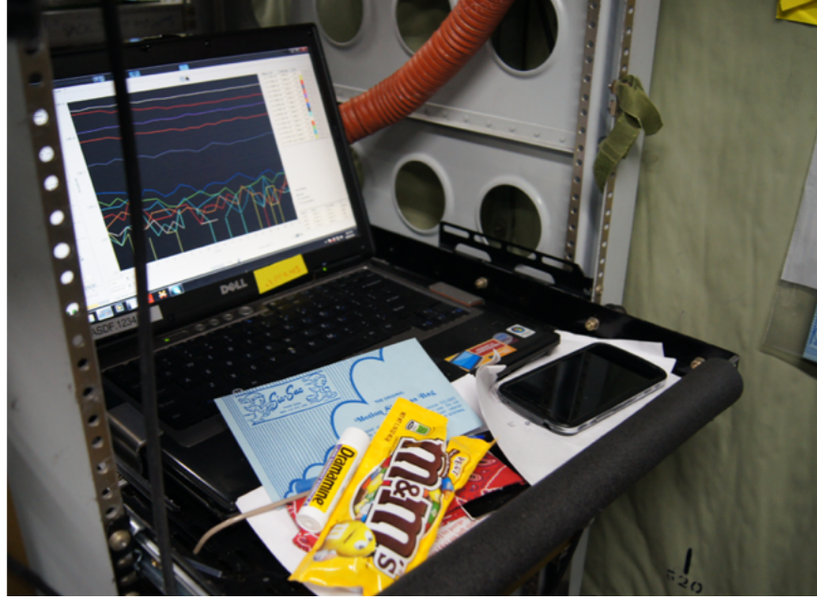

Any questions?

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