



Making a Broader Impact at the Cooperative Institute for Research in Environmental Sciences (CIRES), a NOAA Joint Institute



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Education and Outreach at CIRES

NSF defines broader impacts as activities that:

- Advance discovery and understanding while promoting teaching, training, and learning,
- Broaden participation of under-represented groups,
- Enhance infrastructure for research and education,
- Broaden dissemination to enhance scientific and technological understanding,
- Provide benefits to society.

NASA and NOAA desire similar engagement. These activities benefit researchers as well.

"If science is going to fully serve its societal mission..., we need to both encourage and equip the next generation of scientists to effectively engage with the broader society..." Alan Leshner (AAAS).



About CIRES

CIRES is a NOAA joint institute at the University of Colorado Boulder (UCB). We have over 650 employees at four locations across the NOAA Boulder Laboratories and the University.



Mission & Vision

As a world leader in Environmental Sciences CIRES is committed to identifying and pursuing innovative research in Earth System Science and fostering public awareness of these processes to ensure a sustainable future environment.

CIRES is dedicated to fundamental and interdisciplinary research targeted at all aspects of Earth System Science and to communicating these findings to the global scientific community, to decision-makers, and to the public. - See more at: <http://cires.colorado.edu/about/> #sthash.0JoV683s.dpuf



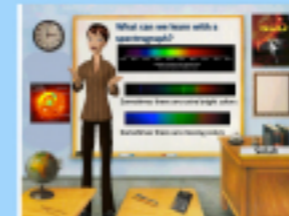
CIRES and NOAA Researchers in the Community

Some current examples:
Water Spotters: Diverse student-scientists in an after-school environment (Noone)



Extreme Ultraviolet Variability Experiment: Teacher professional development, classroom kits, Smart Board lessons. (LASP, SWPC)

NOAA Coral Reef Task Force: Evaluation support to identify user needs, inform product development.



Arctic Terrestrial Sites: Online data-rich modules for teachers (Grachev, Persson)

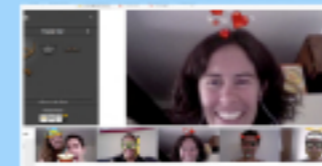
Climate Education Online Course: NASA funded materials and webinars for educators (included Dilling, Nerem, Meier, Tans, Herring, Viereck, and CIRES grad students)



Reviewing Climate and Energy educational materials

Webinars on climate impact topics

GK-12 STEM graduate students in middle school classrooms



From top: WaterSpotters, Space Weather training resource, CLEAN reviewed collection, Informal Education in coastal Google Hangout.

Air quality educator workshops and public engagement for NASA and Colorado Department of Health summer field campaign.

REU in Critical Zone Observatory science for diverse community college students.

Need for models and best practices

energy workshop for community college faculty



- Inreach: Engaging our researchers
- Broadening audiences: Working with stakeholders outside of education.
- Program evaluation: Existing models and metrics
- Information systems: Customer relationship management and project management.

Engagement opportunities

There are lots of ways to engage with CIRES EO:

Review a resource

Participate in an online course (\$=pays stipend)

Participate in a CLEAN review panel (\$)

Host a brown bag for your research group

Volunteer for National Ocean Sciences Bowl

Get feedback on a presentation

Get resources for a course or classroom visit

Sign up to visit a classroom or present a webinar.



More information



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