



Climate and global change education at the National Center for Atmospheric Research in Boulder, Colorado: opportunities for collaboration

R. Johnson, S. Foster, L. Carbone, T. Eastburn, L. Gardiner, R. Russell, D. Ward, J. Bergman, S. Henderson, and M. LaGrave

Office of Education and Outreach, University Corporation for Atmospheric Research, Boulder, Colorado, 80305-3000, USA (rmjohnsn@ucar.edu / Fax: 303-497-2598)

The National Center for Atmospheric Research (NCAR) in Boulder, Colorado offers a number of programs and resources focused climate and global change education. These include our new on-line course sequence, *Climate Discovery*, targeting middle- and high-school educators, which is based on our successful in-person Climate and Global Change Workshop (which was offered from 2002-2004). The on-line format allows additional enrichment, beyond that possible during the in-person workshop format, through a more prolonged 6-week experience that includes readings, interactives, discussion forums, and assignments that provide opportunities to assess participant progress.

In addition to our on-line course sequence, NCAR offers extensive content on climate and global change through our web interfaces, targeting both the K-12 classroom and informal learners. The *Windows to the Universe* website, which reaches ~16 million visitors per year around the world in English and Spanish, is our most high-impact vehicle for reaching the public, students, and teachers, and includes hundreds of pages of content on climate and global change topics. On March 1, we opened a new section on the site named “Earth’s Polar Regions”, in support of the International Polar Year. The website also offers a monthly newsletter that reaches thousands of teachers around the world (over 6,100 to date in 133 countries), and a “Postcards from the Field” communication venue for scientists to use while on field campaigns.

Finally, we have developed and installed an exhibit (also called “*Climate Discovery*”) within the Mesa Laboratory of NCAR which describes climate processes, a timeline

of climate change, and a section on climate future. We developed a Teacher's Guide to this exhibit, and the classroom activities that support the exhibit are available online for educators. The exhibit itself is also available for duplication in appropriate institutional settings.

All of the resources described above are available for collaborators to use and build upon. We are excited about the opportunity to collaborate with our international colleagues with the goal of improving education and science literacy in the geosciences, with a particular emphasis on climate and global change. We look forward to the opportunity to discuss ways we can work together in this endeavor.