More than 1,400 UCAR staff carry out research, education, and support activities at several locations, including NCAR’s iconic Mesa Laboratory.
National Center for Atmospheric Research (NCAR)  www.ncar.ucar.edu

Computational and Information Systems Laboratory (CISL)  www.cisl.ucar.edu
Provides supercomputing resources, comprehensive data sets, scientific visualization tools and facilities, high-speed networks, and associated data-processing capabilities. Assists the atmospheric science community through the development of domain-specific software cyberinfrastructure and a broad research program in computer science. IMAGe brings mathematical tools to bear on fundamental geoscience problems and serves as a center of activity and integrator for the mathematical and geophysical communities.

- Operations and Services Division (OSD)
- Technology Development Division (TDD)
- Institute for Mathematics Applied to Geosciences (IMAGe)

Earth and Sun Systems Laboratory (ESSL)  www.essl.ucar.edu
Performs fundamental studies of the dynamics of the Earth and Sun systems across spatial and temporal scales. Assesses how natural forcing (such as solar variability) and human-driven perturbations (such as chemical emissions and land-use changes) affect the evolution of the Earth system and ultimately the habitability of our planet. Research within ESSL is highly collaborative, with specialties focused in four major research divisions and one institute that organizes collaborative projects.

- Atmospheric Chemistry Division (ACD)
- Climate and Global Dynamics Division (CGD)
- High Altitude Observatory (HAO)
- Mesoscale and Microscale Meteorology Division (MMM)
- The Institute for Integrative and Multidisciplinary Earth Studies (TIIMES)

Earth Observing Laboratory (EOL)  www.eol.ucar.edu
Provides observing facilities and instrumentation, including advanced radars, research aircraft, flux measurement systems, optical instrumentation for trace-gas measurement, and integrated sounding systems, to researchers in the atmospheric and related sciences. These facilities allow investigators around the globe to gather data required for their research programs.

- Computing, Data and Software Facility (CDS)
- Design and Fabrication Services (DFS)
- Field Project Services (FPS)
- In-Situ Sensing Facility (ISF)
- Research Aviation Facility (RAF)
- Remote Sensing Facility (RSF)
- Technology Development Facility (TDF)

Research Applications Laboratory (RAL)  www.ral.ucar.edu
Conducts a comprehensive program of research, development and technology transfer in areas that currently include aviation, national security, numerical weather prediction, hydrometeorology, surface transportation, verification, and societal impacts. The JNT provides a testing and evaluation framework for new weather prediction model configurations and data assimilation methods and techniques before they are moved into operational use.

- Aviation Applications Program (AAP)
- Joint Numerical Testbed (JNT)
- Hydrometeorological Applications Program (HAP)
- National Security Applications Program (NSAP)
- Weather Systems and Assessment Program (WSAP)

Societal-Environmental Research and Education Laboratory (SERE)  www.sere.ucar.edu
Conducts multidisciplinary and interdisciplinary research designed to support decision makers in their judicious use of climate, water, and weather data and information; brokers partnerships between NCAR scientists and their colleagues in the national and international university, government, and private sectors; invests in the 21st-century work force by supporting undergraduate, graduate, and postgraduate career development; and provides leadership in (a) definition, planning, and execution of NCAR efforts in education, (b) development of appropriate social science components for NCAR research activities, and (c) research in the science of coupled natural and human environmental systems.

- Advanced Study Program (ASP)
- Center for Capacity Building (CCB)
- Institute for the Study of Society and Environment (ISSE)
**UCAR Office of Programs (UOP)** [www.uop.ucar.edu](http://www.uop.ucar.edu)

**Constellation Observing System for Meteorology, Ionosphere and Climate (COSMIC)**
[www.cosmic.ucar.edu](http://www.cosmic.ucar.edu)

Conducts a science project between the United States and Taiwan involving a constellation of six microsatellites. Launched in 2006, COSMIC satellites collect atmospheric remote-sensing data for weather prediction, climate, and ionospheric and gravity research.

**Cooperative Program for Operational Meteorology, Education and Training (COMET)**
[www.comet.ucar.edu](http://www.comet.ucar.edu)

Serves the geosciences community by providing a wealth of high-quality multimedia education on a wide range of atmospheric, hydrologic, and oceanographic-related topics, aimed at a broad audience of users and available at no cost via its MetEd Web site, [www.meted.ucar.edu](http://www.meted.ucar.edu). COMET also offers residence courses and workshops, and supports applied research through its Outreach Program.

**Digital Learning Sciences (DLS)**
[www.dlsciences.org](http://www.dlsciences.org)

Develops systems and services that enable scientific and educational organizations—universities, school districts, libraries, and publishers—to organize, manage, comprehend, and enrich online resources to improve learning outcomes and learner engagement. DLS is a collaboration between UOP and the Institute of Cognitive Science at the University of Colorado at Boulder.

**Global Learning and Observations to Benefit the Environment (GLOBE)**
[www.globe.gov](http://www.globe.gov)

In partnership with NASA and NSF, works with over a million students in more than 20,000 schools located in 109 countries. More than 40,000 teachers worldwide guide students in taking scientific measurements, using the Internet to report and analyze scientific data, and creating partnerships between students and international scientists.

**Joint Office for Science Support (JOSS)**
[www.joss.ucar.edu](http://www.joss.ucar.edu)

Collaborates closely with scientists and research managers to plan, organize, and conduct scientific programs in the most productive, efficient, and cost-effective ways. Supports planning efforts, research programs, and field experiments worldwide.

**National Science Digital Library (NSDL)**
[nsdl.org](http://nsdl.org)

Provides high-quality online materials for students, teachers, and professionals at all levels across the full range of disciplines in science, technology, engineering, and mathematics (STEM). NSDL’s core integration activities are housed in UOP; other parts of the NSF-funded effort are distributed among several institutions, including primary partners Columbia and Cornell universities. NSDL serves as the digital library for NSF’s STEM education programs.

**Unidata Program Center**
[www.unidata.ucar.edu](http://www.unidata.ucar.edu)

Provides data, tools, and community leadership for enhanced Earth system education and research. Unidata is a diverse community of academic institutions vested in the common goal of sharing data, as well as tools to access, analyze, and visualize that data.

**Visiting Scientist Programs (VSP)**
[www.vsp.ucar.edu](http://www.vsp.ucar.edu)

Operates programs designed to support and broaden education and research in the atmospheric, oceanic, and related sciences through fellowships to researchers at graduate, postgraduate, and more advanced levels. VSP also supports advisory panels and review teams, workshops, and summer institutes for the university community and federal-agency sponsors.
**University Corporation for Atmospheric Research (UCAR)**

**Corporate Affairs**

www.ucar.edu/governance/ca

Cultivates dialogue and facilitates relations among UCAR, its member institutions, policymakers and lawmakers, and the media.

**Communications**

www.ucar.edu/news

**Governance**

www.ucar.edu/governance

**Office of Government Affairs (OGA)**

www.ucar.edu/oga

**Education and Outreach (EO)**

eo.ucar.edu

Bridges the worlds of scientific research and education through exhibits, public visitor programs, workshops and professional development for Earth science educators, Web sites designed for learners of varied backgrounds, and diversity programs. SOARS works to increase the diversity of students pursuing careers in the atmospheric and related sciences through a four-year undergraduate and graduate mentoring program and learning community.

Significant Opportunities in Atmospheric Research and Science (SOARS)

www.soars.ucar.edu

**Finance and Administration (F&A)**

www.fin.ucar.edu

Conducts activities related to the planning, management, and accountability of the business, financial, human, and physical resources of UCAR.

**UCAR Member Universities**

University of Alabama in Huntsville
University of Alaska
University at Albany, State University of New York
University of Arizona
Arizona State University
California Institute of Technology
University of California, Berkeley
University of California, Davis
University of California, Irvine
University of California, Los Angeles
University of Chicago
Colorado State University
University of Colorado at Boulder
Columbia University
Cornell University
University of Denver
Drexel University
Florida State University
Georgia Institute of Technology
Harvard University
University of Hawai’i
University of Houston
Howard University
University of Illinois at Urbana-Champaign
University of Iowa
Iowa State University
Johns Hopkins University
University of Maryland
Massachusetts Institute of Technology
McGill University
University of Miami
University of Michigan–Ann Arbor
University of Minnesota
University of Missouri
Naval Postgraduate School
University of Nebraska–Lincoln
Nevada System of Higher Education
University of New Hampshire
New Mexico Institute of Mining and Technology
New York University
North Carolina State University
Ohio State University
University of Oklahoma
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Oregon State University
Pennsylvania State University
Princeton University
Purdue University
University of Rhode Island
Rice University
Rutgers University
Saint Louis University
 Scripps Institution of Oceanography at the University of California, San Diego
Stanford University
Stony Brook University, State University of New York
Texas A&M University
University of Texas at Austin
Texas Tech University
University of Toronto
Utah State University
University of Utah
University of Virginia
University of Washington
Washington State University
University of Wisconsin-Madison
University of Wisconsin-Milwaukee
Woods Hole Oceanographic Institution
University of Wyoming
Yale University
Yale University

**UCAR International Affiliate Institutions**

Australian National University, Canberra
Atmospheric Environment Service, Downview, Ontario, Canada
Bureau of Meteorology Research Centre, Melbourne, Australia
Central Weather Bureau, Taipei, Taiwan
Centro de Ciencias de la Atmósfera, Mexico
Centro del Agua del Trópico Húmedo Para América Latina y El Caribe, Panama
City University of Hong Kong
Deutsche Forschungsanstalt für Luft und Raumfahrt, Oberpfaffenhofen, Germany
Forschungszentrum Julich GmbH, Germany
Federal University of Technology, Akure, Nigeria
Hong Kong Observatory
Hong Kong University of Science and Technology
Instituto de Astrofísica de Canarias, Tenerife, Spain
Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing
Instituto Nacional de Pesquisas Espaciais (INPE), São José dos Campos, Brazil
International Meteorological Institute, Stockholm, Sweden
Instituto Geofísico del Perú, Lima
Instituto Nacional de Meteorología, Madrid, Spain
Istituto di Metodologie per l’Analisi Ambientale of the National Research Council, Italy
Johannes Gutenberg-Universität, Mainz, Germany
Korea Meteorological Administration, Seoul
Lanzhou Institute of Plateau Atmospheric Physics, China
Macquarie University, North Ryde, Australia
Malaysian Meteorological Service, Kuala Lumpur
Manda Observatory, Philippines
Max Planck Institute for Meteorology, Hamburg, Germany
Meteorological Research Institute, Ibaraki, Japan
Meteorological Service of Catalonia, Barcelona, Spain
Monash University, Clayton, Australia
National Central University, Chung-Li, Taiwan
National Centre for Medium Range Forecasting, New Delhi, India
National Taiwan University, Taipei
Peking University, Beijing, China
Rice National Laboratory, Roskilde, Denmark
Russian Academy of Sciences, Moscow
Seoul National University, Korea
State Hydrometeorological University of the Russian Federation, St. Petersburg
Tel Aviv University, Israel
Universidad de Buenos Aires, Argentina
Universidad Complutense de Madrid, Spain
Universidad degli Studi dell’Aquila, Italy
Universität Hamburg, Germany
Universität Köln, Germany
University of Cape Coast, Ghana
University of Manchester, England
University of Nairobi, Kenya
University of Tokyo, Japan

**UCAR Academic Affiliate Universities**

College of Charleston
Clark Atlanta University
Florida Institute of Technology
Jackson State University
University of Kansas
University of Louisiana at Monroe
Lyndon State College
Universidad Metropolitana
Millsaps College
State University of New York College at Brockport
University of North Dakota
Plymouth State University
Saint Cloud State University
San Francisco State University
San José State University
South Dakota School of Mines and Technology
United States Naval Academy