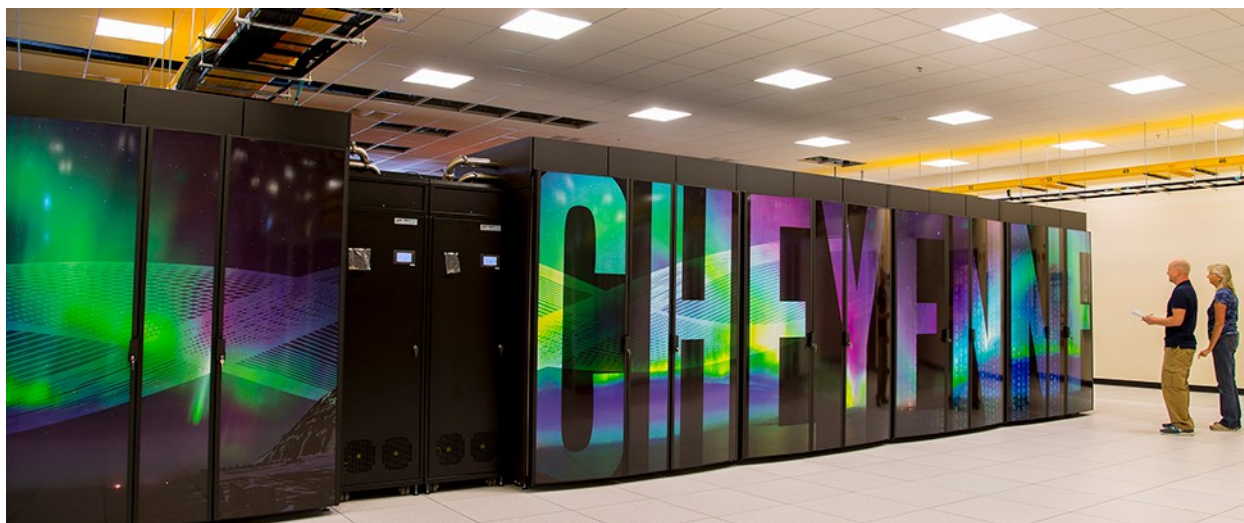


# NCAR | COMPUTATIONAL & INFORMATION SYSTEMS LAB

*The National Center for Atmospheric Research (NCAR) Computational & Information Systems Lab (CISL) supports the geosciences with world-class computing, data management, and research in computational science, data assimilation, and machine learning.*



*CISL operates Cheyenne, a 5.34-petaflop supercomputer, at the NCAR-Wyoming Supercomputing Center (NWSC). Cheyenne enables NCAR, UCAR, and the research community to perform numerical modeling of the Earth's atmosphere, the oceans, and the Sun.*

## OPPORTUNITIES- Learn, Engage, Collaborate

Summer Internships in Parallel Computational Science (SIParCS) offers graduate and undergraduate students significant hands-on research and development opportunities in the computational sciences. [www2.cisl.ucar.edu/siparcs](http://www2.cisl.ucar.edu/siparcs)

CISL Visitor Program (CVP) supports the scientific and technical collaboration central to CISL's mission, providing financial support for professional and student visits ranging from days to months. [www2.cisl.ucar.edu/cisl-visitor-program](http://www2.cisl.ucar.edu/cisl-visitor-program)

NWSC Visitor Center provides free, guided and self-guided tours that offer an informative view of weather, climate, supercomputing, and the broad spectrum of atmospheric research at a world-class science laboratory. Our online resources describe our research in action for adults and young learners. [nwsc.ucar.edu](http://nwsc.ucar.edu)



*Thousands of people have visited the NWSC Visitor Center since it opened in October 2012. In FY 2019, 2,468 visitors toured the facility.*

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## COMMUNITY RESOURCES

CISL offers high-performance computing and data services and support to over 1,800 users at more than 300 institutions. Through its computing infrastructure and services, the laboratory serves four communities of researchers in addition to NCAR:

- [University Community](#) – CISL provides supercomputing services to university researchers working in the Earth system sciences, with allocations ranging from large research grants to student projects. Contact [alloc@ucar.edu](mailto:alloc@ucar.edu) for information.
- [University of Wyoming Researchers](#) – As part of the collaboration between NCAR and the state and University of Wyoming, a portion of the Cheyenne system is dedicated to Wyoming-led projects in the atmospheric, Earth system, geological, and related sciences.
- [Climate Simulation Laboratory \(CSL\)](#) – Established in 1995, this National Science Foundation facility provides resources to support large-scale coupled climate simulations.
- [Extreme Science and Engineering Discovery Environment \(XSEDE\)](#) – Sponsored by the National Science Foundation, XSEDE provides a virtual system to share supercomputing resources on a national scale. CISL's data services are integrated with XSEDE, allowing users to easily move data to and from other sites.



*The NCAR-Wyoming Supercomputing Center (NWSC) in Cheyenne, Wyoming is a state-of-the-art, energy-efficient supercomputing facility serving the Earth system sciences.*

Besides infrastructure, CISL provides valuable tools and services, including:

- [Research Data Archive \(RDA\)](#) – [rda.ucar.edu](http://rda.ucar.edu)
- [Geoscience Community Analysis Toolkit \(GeoCAT\)](#) – [geocat.ucar.edu](http://geocat.ucar.edu)
- [VAPOR Visualization System](#) – [vapor.ucar.edu](http://vapor.ucar.edu)
- [Data Assimilation Research Testbed \(DART\)](#) – [dart.ucar.edu](http://dart.ucar.edu)

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## CONTACT

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