

## NOAA COOPERATIVE INSTITUTES



### COOPERATIVE INSTITUTE FOR GREAT LAKES RESEARCH

CIGLR is hosted by the University of Michigan and consists of a Research Institute that is co-located with the NOAA Great Lakes Environmental Research Laboratory (GLERL) and a regional consortium of ten universities, three businesses, and two NGOs that work together to achieve environmental, economic, and social sustainability in the Great Lakes. CIGLR's research themes complement those of GLERL and include hydrometeorological and ecosystem forecasting, observing systems and advanced technology, invasive species and food web ecology, and protection and restoration of resources.



### COOPERATIVE INSTITUTE FOR SATELLITE EARTH SYSTEM STUDIES

CISESS, a consortium led by the University of Maryland and North Carolina State University, advances NOAA's mission through integrated research, education, and workforce development. Its work focuses on improving satellite observation capabilities, using remote sensing and modeling to study Earth system processes, and developing new satellite techniques to monitor and predict weather. CISESS also fosters future scientific talent through programs like its annual Summer Intern Program for high school and undergraduate students.



### COOPERATIVE INSTITUTE OF THE NORTH ATLANTIC REGION

Located at the Woods Hole Oceanographic Institution in Massachusetts, CINAR is a regional consortium of eight partner institutions spanning the Northeast U.S. Shelf Large Marine Ecosystem (NES LME). CINAR offers a broad range of world-class capabilities in ocean observing, fisheries management, and ecosystem research to support NOAA's mission goals. Research underway by CINAR advances understanding of physical and biological processes in the NES LME, supporting effective and sustainable management of the region's habitats and resources.



Photo: CINAR



### OCEAN EXPLORATION COOPERATIVE INSTITUTE

The OECI brings together a world-class collection of engineering and science expertise to explore and characterize the U.S. Exclusive Economic Zone. The OECI is led by the University of Rhode Island with affiliates including the University of New Hampshire, Woods Hole Oceanographic Institution, University of Southern Mississippi, and the Ocean Exploration Trust. Together, these institutions work to accelerate ocean exploration through the development of new technology and exploration approaches and by training a skilled blue economy workforce.



### COOPERATIVE INSTITUTE FOR MARINE AND ATMOSPHERIC STUDIES

CIMAS, based at the University of Miami, conducts research in terrestrial, oceanic, and atmospheric environments. CIMAS characterizes physical, chemical, and biological interactions and processes, studies human-environment interactions, investigates the impacts of change on societies and economies, and builds formal education and training programs. Research examples include hurricane prediction and monitoring, fish stock assessments, marine mammals studies, ocean observations, and coastal resilience.



### COOPERATIVE INSTITUTE FOR SEVERE AND HIGH-IMPACT WEATHER RESEARCH AND OPERATIONS

CIWRO, located at the University of Oklahoma, connects the scientific and technical resources of its consortium partners at Texas Tech University, Howard University, Penn State University, and the University at Albany with NOAA to advance understanding of severe and high-impact weather to engineer state-of-the-art U.S. technology leading to superior forecasts that save lives and property. CIWRO's work concentrates on five themes: weather radar and observations; mesoscale and storm scale modeling; forecast applications improvement; subseasonal to seasonal forecasting; and societal impacts of high-impact weather.



Photo: CIWRO

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Photo: CIRA

Photo: CIGLR

Photo: CIMAR

Cooperative Institutes are academic and non-profit research organizations that are sponsored by and partner with one or more line offices of the National Oceanic and Atmospheric Administration (NOAA). To support NOAA's mission, Cooperative Institutes advance scientific discovery through collaborative research, develop outreach and education programs to train the next generation of scientists and decision makers, and provide broad access to scientific information and data for Federal employees and the general public. NOAA sponsors 16 Cooperative Institutes across the country whose membership includes over 100 universities and research institutions across 38 states, two U.S. Territories, Washington, DC, and Canada.

Cooperative Institutes may comprise one university with employees working at NOAA labs or a collection of universities, institutes, and/or private companies. Many partner NOAA laboratories are staffed with over 50 percent Cooperative Institute employees. Additional faculty, research scientists, engineers, postdoctoral scholars, graduate students, and support staff work on consortium university campuses across the country.



Photo: CIMSS

Together, the Cooperative Institutes—each with a mandate focused on specific regions or research areas, such as satellites, extreme weather, fisheries management, tsunamis, ocean acidification, wildfires, aquaculture, and polar studies—strengthen NOAA's research and operational capabilities, ensuring U.S. leadership across critical sectors and improving the lives and safety of all Americans.

**16**  
Cooperative  
Institutes

**100+**  
Universities  
& Research  
Institutions

**38**  
States +  
Two Territories,  
DC, & Canada



### COOPERATIVE INSTITUTE FOR CLIMATE, OCEAN, AND ECOSYSTEM STUDIES

CICOES, building on its near 50-year history, is a consortium that includes the University of Washington, the University of Alaska Fairbanks, and the College of Earth, Ocean, and Atmospheric Sciences at Oregon State University. CICOES' scientists investigate climate impacts, ocean and ecosystem structure, resource management, and tsunami forecasting. CICOES partners with NOAA's Pacific Marine Environmental Laboratory, the Alaska Fisheries Science Center, the Northwest Fisheries Science Center and works with the National Weather Service and the National Environmental Satellite, Data, and Information Service.



### COOPERATIVE INSTITUTE FOR MARINE ECOSYSTEM AND RESOURCES STUDIES

CIMERS, based at Oregon State University, is co-located with NOAA's Alaska and Northwest Fisheries Science Centers and the Pacific Marine Environmental Laboratory. This partnership connects NOAA with OSU's cutting-edge marine research and supercomputing capabilities to advance ocean, seafloor, fisheries, aquaculture, and ecosystem science. CIMERS links scientists, industry, tribes, and communities to co-develop practical, solutions-oriented knowledge that supports resilient marine resources and productive coastal and blue tech economies.



### COOPERATIVE INSTITUTE FOR METEOROLOGICAL SATELLITE STUDIES

Located at the birthplace of satellite meteorology, the University of Wisconsin-Madison, CIMSS conducts research that maximizes the value of NOAA weather satellites for meeting the nation's weather and climate needs. CIMSS subject matter experts conduct research in: satellite meteorology research and applications, satellite sensors and measurement techniques, and environmental models and data assimilation, and provide associated training, outreach, and education to users, stakeholders, and students at all levels.



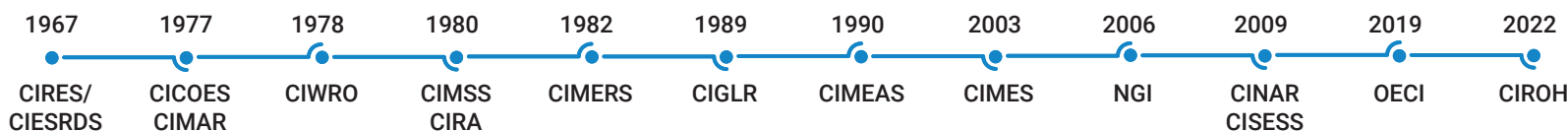
### COOPERATIVE INSTITUTE FOR MARINE AND ATMOSPHERIC RESEARCH

Located at the University of Hawaii (UH), CIMAR supports research, technology development and stakeholder training needed for understanding environmental change in the Pacific Islands Region, for managing coastal and marine resources in island environments, notably Hawai'i and the US-Affiliated Pacific Islands, and for supporting the Nation's economic, social, and environmental needs in the region. This mission is pursued with collaborations between scientists, engineers, economists, sociologists and educators at UH and the NOAA Laboratories, primarily the Pacific Islands Fisheries Science Center in Honolulu and Pacific Marine Environmental Laboratory in Seattle.

## COOPERATIVE INSTITUTES & CONSORTIUM PARTNERS



### FOUNDING TIMELINE



### COOPERATIVE INSTITUTE FOR MODELING THE EARTH SYSTEM

CIMES is a world leader in understanding and predicting the earth system, across time scales from days to decades, and from local to global spatial scales, with particular focus on extreme events, and integrating physical, chemical, and biological components.



### NORTHERN GULF INSTITUTE

NGI is composed of six academic institutions: Mississippi State University (lead), University of Southern Mississippi, Florida State University, Louisiana State University, University of Alabama in Huntsville, and Dauphin Island Sea Laboratory. It focuses on four research themes: climate change and climate variability effects on regional ecosystems; coastal hazards; ecosystem management; and effective and efficient data management systems supporting a data-driven economy.



### COOPERATIVE INSTITUTE FOR RESEARCH TO OPERATIONS IN HYDROLOGY

Hosted at The University of Alabama and supported by the National Weather Service, CIROH unites 28 partner institutions across academia, government, and the private sector to advance operational water prediction and decision support. Through interdisciplinary research, education, and outreach, CIROH transforms scientific innovations into practical tools that enhance flood and drought forecasting, improve water management, and strengthen community resilience.



Photo: CIRES



### COOPERATIVE INSTITUTE FOR MARINE, EARTH, AND ATMOSPHERIC SYSTEMS

CIMEAS supports NOAA's comprehensive observation, modeling, and management programs. CIMEAS' goals are to: understand, predict changes in, and share knowledge about climate, weather, oceans, and coasts; and conserve and manage coastal and marine ecosystems and resources. CIMEAS focuses on physical and ecological variability in the coupled ocean-atmosphere-land system, globally and in four focus regions: the California Current System; the U.S. West Coast and Western US; the Pacific; and the Southern Ocean. Emphasis is on analysis and prediction of physical and biogeochemical parameters, ecosystems, and societal welfare, aligned with NOAA's foci on resilient communities and ecosystem-based management.



### COOPERATIVE INSTITUTE FOR RESEARCH IN THE ATMOSPHERE

Located at Colorado State University, CIRA conducts cutting-edge research in the atmospheric sciences. CIRA research includes satellite remote sensing applications, tropical storms, severe weather, fires and fire-weather products, air quality research including smoke and dust storms, artificial intelligence and machine learning models, aviation weather hazards, weather modeling, data assimilation, data distribution, and more. CIRA offers professional satellite product training modules, model evaluation and display tool development. CIRA contributes to socio-economic and societal benefits research, and education and outreach to communicate the practical value and positive impacts of science to the Nation.

EXPLORE THE FULL NETWORK



### COOPERATIVE INSTITUTE FOR EARTH SYSTEMS RESEARCH AND DATA SCIENCE

CIESRDS, the NOAA-funded portion of CIRES at the University of Colorado Boulder, conducts Earth systems research that advances NOAA's mission, drives economic growth, enhances quality of life, and strengthens community resilience. Through expertise in weather, climate, wildfires, water, polar processes, space weather, air quality, and solid Earth sciences, CIESRDS leverages public-private partnerships, AI-enhanced forecasting, and publicly accessible data to empower stakeholders—from America's heartland to polar regions—to make informed decisions to benefit society.