

The **Cooperative Research Program (CoRP)** of NESDIS' Office of Research and Applications (ORA) facilitates access to the resources of federal and academic scientists and engineers with expertise in satellite remote sensing to:

- **Conduct Research with Satellite Observations**
- **Design Satellite Observing Systems**
- **Develop Algorithms, Applications and Products**
- **Simulate New Satellite Observations**
- **Calibrate New and Inter-Satellite Data**
- **Design Processing Systems (Data Compression)**
- **Conduct Field and Satellite Validation Studies**

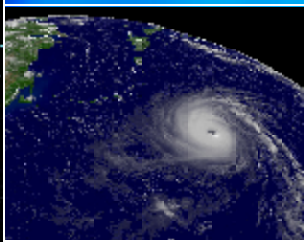
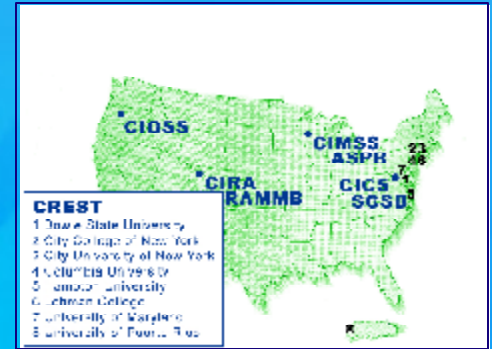
CoRP Branches and Cooperative Institutes

Three of CoRP's branches are collocated with Cooperative Institutes. Staff of these Branches serve as co-investigators or facilitators. The expertise of each group follows.

Working with the Cooperative Institutes

Further information can be found on the webpages listed on the back cover. The Director of CoRP is available to assist you in developing a research program or task in support of your program requirements. Contact us at **301-763-8282**.

The resources of CoRP reach coast-to-coast and include three federal branches and four Cooperative Institutes and one Cooperative Center (which is a consortium of seven colleges and universities), as shown .



For More Information on these programs, please visit the following links:

- | | |
|----------|---|
| ORA CoRP | http://www.orbit.nesdis.noaa.gov/star/ |
| CIRA | http://www.cira.colostate.edu/index.html |
| CIMSS | http://cimss.ssec.wisc.edu/ |
| CICS | http://essic.umd.edu/fram/cics/ |
| CIOSS | http://cioss.coas.oregonstate.edu/CIOSS/index.html/ |
| CREST | http://icerd.engr.cuny.cuny.edu/noaa/ |

The NESDIS
Cooperative Research Program

**A Research and
Development
Resource**

Building on the past

Creating the future

Sustaining the present



Research and Development Capabilities of NESDIS Cooperative Institutes

Madison, WI
University of Wisconsin

The ORA **Advanced Satellite Products Branch (ASPB)** conducts research in new satellite systems and develops advanced products for weather forecasting. This includes:

- Geostationary and Polar Satellite Products
- Polar Region and Cloud Climatology Assessments
- Satellite Data Model Impact Studies
- Next Generation Geostationary Satellites, Sensors, and Products
- NPOESS Sensor Evaluation and Product Development

The Cooperative Institute for **Meteorological Satellite Studies (CIMSS)** research capabilities include the following:

- Use of Real-time Data from Polar and Geostationary Satellites for Weather Forecasting
- Validation with Ground-based Measurements
- Satellite Product Algorithm Development
- Clouds and Radiation
- Global Hydrological Cycle
- Environmental Trends and Climate
- Satellite Training and Outreach

Ft. Collins, CO
Colorado State University

The ORA **Regional and Mesoscale Meteorology Branch (RAMMB)** conducts research on the use of satellite data to improve analysis, forecasts, and warnings for regional and mesoscale meteorological events. Research areas include:

- Tropical Cyclones
- Mesoscale and Severe Weather
- Satellite Training and Outreach

The Cooperative Institute for Research in the Atmosphere (CIRA) research areas are:

- Applications of Satellite Observations
- Local and Mesoscale Weather Forecasting
- Cloud Physics
- Air Quality and Visibility
- Societal and Economic Impacts
- Numerical Modeling and Data Assimilation
- Global and Regional Climate Studies
- Education, Training, and Outreach

College Park, MD
University of Maryland

The ORA **Satellite Climate Studies Branch (SCSB)** conducts research on the use of environmental satellite data to assess regional and global climate variability. Research topics include:

- Advanced Precipitation Algorithm and Product Development
- Oceanic Biomass and Productivity Monitoring, Prediction, and Climatology
- Environmental Hazard Mapping and Monitoring
- Applications to Oceanic and Human Health Issues
- Algorithm Development for Climate Assessment
- Global Precipitation Climatology
- Product Validation and Quality Control
- Long-term Stable, Accurate Data Set Generation and Analysis

The Cooperative Institute for Climate Studies (CICS) research capabilities include:

- Climate Diagnostics and Prediction
- Atmospheric Chemistry
- Global Energy and Water Cycle
- Land-surface Classification
- Precipitation
- Satellite Algorithm and Product Development

Corvallis, OR
Oregon State University

The Cooperative Institute for **Oceanographic Satellite Studies (CIOSS)** is the newest Institute, formed in 2003. It does not have a collocated ORA branch. Research capabilities include:

- Satellite Sensors and Techniques
- Ocean-atmosphere Fields and Fluxes
- Ocean-atmosphere Models and Data Assimilation
- Ocean-atmosphere Analyses
- Outreach, Education, and Training

New York, NY
City University of New York with University Partners in the Mid-Atlantic States and Puerto Rico

The Cooperative **Remote Sensing Science and Technology Center (CREST)** is a Cooperative Center established in 2001 by NOAA's Educational Partnership Program to develop NOAA-related skills amongst under-represented students for our future workforce. CREST is a consortium of several Minority-Serving Institutions: City College of the City University of New York (CUNY), the consortium lead; Bronx Community College; Bowie State University; Columbia University; Hampton University; Lehman College; University of Maryland (Baltimore); and the University of Puerto Rico (Mayaguez). Joint CREST and ORA research is underway in:

- Atmospheric Remote Sensing and Air Quality Monitoring
- Estuarine, Coastal, and Marine Remote Sensing and Water Quality Monitoring
- Remote Sensing Applications for Environmental Assessment and Forecasting

