



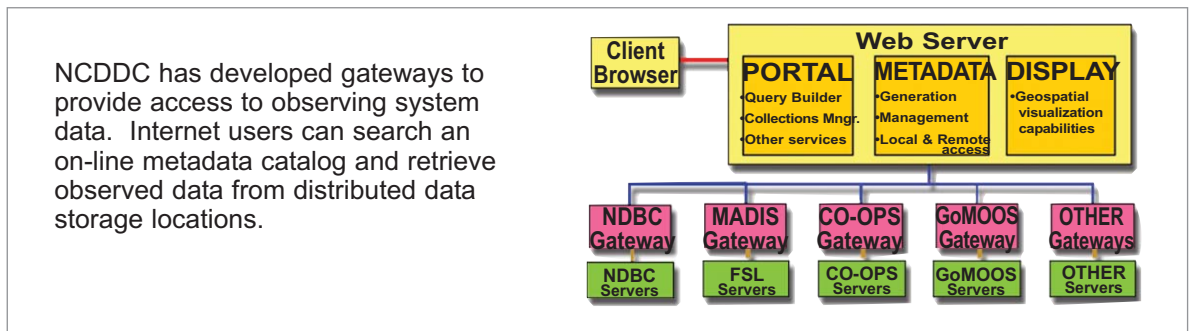
# Integrated Coastal Observing System

There are a variety of observing systems that routinely monitor the coastal environment. These include federally operated or managed observing systems that are national in scope. Examples are the array of moored buoys and fixed coastal stations managed by the National Data Buoy Center, the National Water Level Observing Network operated by the National Ocean Service, U. S. Geological Survey network of stream gages, and land surface weather observations. In addition there are systems that focus only on a particular coastal region, port, or estuary, and may be operated by universities, the private sector, or federal, state or local agencies.

The Integrated Ocean Observing System (IOOS) will integrate existing systems with an increased number of regionally managed in situ and remote observing systems to improve public safety, monitor the health of our ecosystems, and enhance our understanding of long term climate trends. The IOOS will be developed jointly among federal agencies (coordinated via the Ocean.US Office) and a National Federation of Regional Associations. These Regional Associations will manage the regional coastal observing systems based on regional priorities.

The screenshot shows the 'Integrated Coastal Observing System' web interface. It features a map of the Gulf of Mexico with various data overlays. On the right side, there is a list of 'In-Situ Observations' including Station ID, Air Temp, Dewpoint Temp, Winds, Mean Sea Level Pressure, Pressure, Water Temp, Significant Wave Height, Gage Height, Precipitation, and Velocity. Below the map is a table of 'Weather Data - Marine' with columns for Real, Station, Source, Date, Hour, and various weather parameters like Wind, Wind Dir, Wind Speed, Air Temp, Dew Point, Relative Humidity, and Cloud.

The Integrated Coastal Observing System provides a common, geospatially referenced view of real-time and recent coastal and ocean observations. The site includes marine and land surface weather observations, oceanographic observations and models, and stream gage observations. These observations can be combined with MODIS satellite Aqua and Terra sensor products developed at the Naval Research Lab/Stennis detachment.



NCDDC has developed gateways to provide access to observing system data. Internet users can search an on-line metadata catalog and retrieve observed data from distributed data storage locations.

## Support of IOOS Data Management and Communication (DMAC) Subsystem:

- Data Description (FGDC metadata development)
- Data Discovery (NCDDC Metadata Catalog)
- Interoperable access of data from client applications (NCDDC Middleware)
- Data Visualization (ArcIMS Map Service)
- Data archival and retrieval (facilitate archival at National Centers)

### For more information:

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- Please visit our web site: <http://www.ncddc.noaa.gov/COOS>

National Coastal Data Development Center  
www.ncddc.noaa.gov