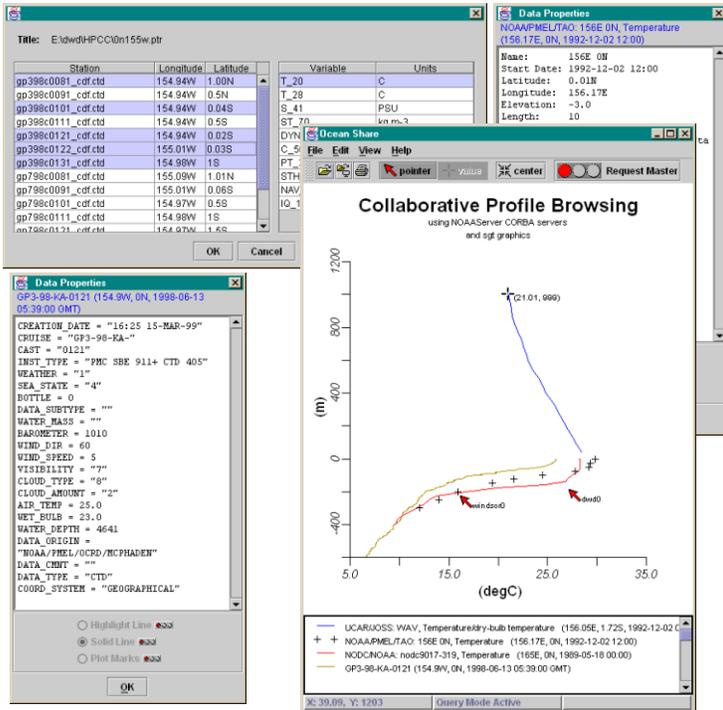




OceanShare

Collaborative Tool for Integrated Browse of Data from Multiple Archives



What is OceanShare?

OceanShare is a collaborative tool for integrated browsing of oceanographic and meteorological data from multiple geographically distributed archives. It combines uniform Java access to distributed data archives, interactive Java graphics, Java RMI/CORBA networking middleware, NCSA Habanero framework for a fully collaborative environment and platform independence (Mac, PC, Unix). Thus creating networked access to distributed data sets in a collaborative tool environment for oceanographers or meteorologists.

Why OceanShare?

Inter-institutional collaborations are awkward between observational scientists. *Distance is a barrier to collaboration!* Lack of uniformity between data sites is a barrier to data exploration and data integration activities. *Need uniform, centralized access to distributed data archives!* Traditional techniques for remote collaborations involving environmental data are inflexible and static. *Faxing or e-mailing or posting on the Web provides limited interactions between scientists!*

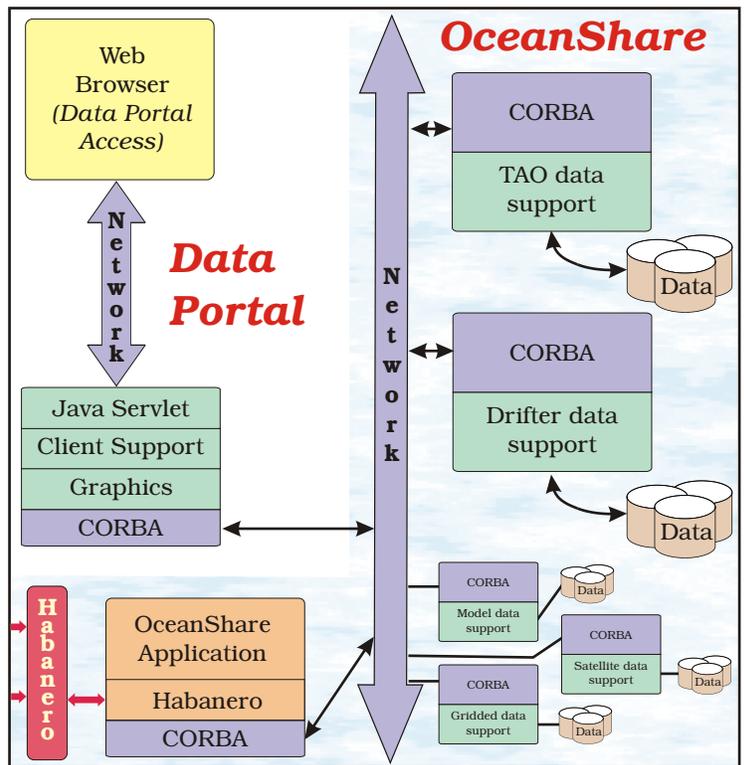
OceanShare in action. OceanShare displays temperature profiles from radiosonde data at UCAR/JOSS in Boulder, CO; TAO buoy data at NOAA/PMEL/TAO in Seattle, WA; CTD data at NOAA/NODC in Silver Spring, MD; and CTD data read from a local disk.

Approach.

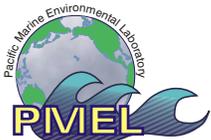
OceanShare leverages heavily from successful developments:
 NCSA Habanero: distributed interpersonal communications framework supporting multi-user, collaborative work environments. <http://www.ncsa.uiuc.edu/SDG/Software/Habanero>
 NOAA Server2: centralized and unified view of geographically distributed, networked NOAA environmental data and information servers. <http://www.joss.ucar.edu/NOAA Server>

OceanShare's future.

OceanShare is a collaborative "Portal" to distributed data and allows scientists to use networks not airplanes for collaboration. Proposed collaborative environments that will use OceanShare as a major component include the Climate Data Portal (distributed NOAA El Niño observing system data and NODC archives), Hazardous Materials Response Data Portal (distributed hazardous materials data and information to support spill response efforts), and the Collaborative Problem Solving Environment for Fisheries Oceanography Combined Investigations (FOCI) (fisheries biologists and physical oceanographers in Seattle and Fairbanks, secure document repository). OceanShare provides an important building block for these efforts.



Data Portal Architecture. OceanShare is an important component of the Data Portal architecture. It provides desktop access to distributed data in a collaborative environment (the shaded area denotes those components of the Data Portal used by OceanShare). Web access to the distributed data is an essential component of the Data Portal.



Funded by NOAA's HPCP program.
 Additional information is available at
<http://www.epic.noaa.gov/collab>
<http://www.pmel.noaa.gov/~nns/talks/dot>

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