Danish Hydrographic Office COASTMAP Services

CLIENT:

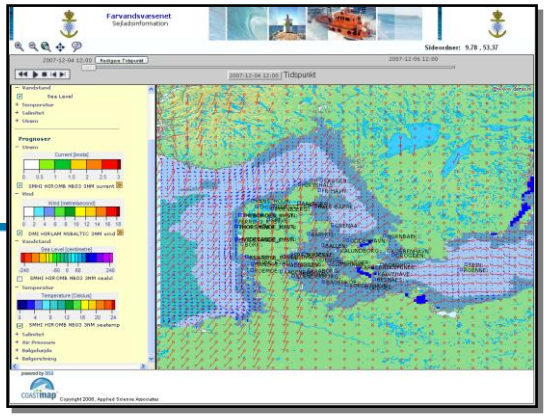
Royal Danish Administration of Navigation and Hydrography (RDANH)

PROJECT #:

2007-269

PROJECT ELEMENTS:

- Coastal Management and Response
- Thin Client Application Design
- Real-Time Environmental Data Server
- GIS



PROBLEM. PURPOSE.

The Royal Danish Administration of Navigation and Hydrography (RDANH) manages a wide variety of oceanographic and meteorological observation and model data. As part of an initiative to streamline publication of their data to a public web site, RDANH contracted ASA to implement COASTMAP components to integrate the data with their ESRI GIS servers. The integration allows visitors to the web site to view the time varying data from models and observations in an interactive map environment.

SCIENCE. SERVICES. SOLUTIONS.

The Thin (web browser) COASTMAP Client has been designed to reach a large audience. The COASTMAP thin client is easily configurable and extensible. It features a GIS based interface that seamlessly integrates time series (point source and gridded data) and GIS data served by traditional map servers (ArcIMS/ArcGIS, Minnesota Map Server, Demis, Yahoo Maps, Google). The web-based thin client allows the user to visualize spatial data and real-time observations in a map-based environment and use analysis tools to support decision making in the coastal and marine environments.

The COASTMAP Map Server, which provides spatial and observation data to the thin client, is based on a series of web services conforming to the Open Geospatial Consortium's (OGC) standard protocols for request and response. The layers provided by the server can be combined with other map servers including ArcIMS, ArcGIS Server, and Minnesota Map Server, as well as commercial maps such as Yahoo Maps.

PRODUCTS. RESULTS.

This open standard web service implementation allows for the integration of meteorological and oceanographic data (file-based formats including NetCDF, GRIB, OPeNDAP, and Oracle/SQL Server database query responses) with the GIS. As opposed to most approaches that require the conversion of metocean to GIS formats, the COASTMAP server can access and render the metocean data from multiple native formats.