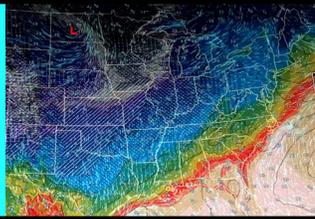


# State of the Art Data Visualizations

UNH - Center for Coastal and Ocean Mapping/Joint Hydrographic Center - Data Visualization Research Lab

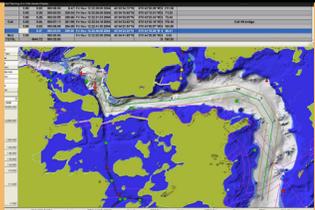
## WindVis2



WindVis2 is a weather visualization package designed to show the latest weather forecast model data from NOAA. It can either be used as a tool for individuals to check on the current forecast, or it can be configured as a public display, which automatically updates forecasts every six hours.

<http://ccom.unh.edu/vislab/projects/windvis.html>

## GeoNav3D

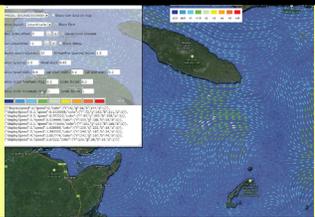


GeoNav3D makes the following possible:

- \*Real-time updating of water levels based on predictions and readings from tide gauges.
- \*The ability to make plans using predictions about tides and currents.

[http://ccom.unh.edu/vislab/projects/chart\\_of\\_the\\_future.html](http://ccom.unh.edu/vislab/projects/chart_of_the_future.html)

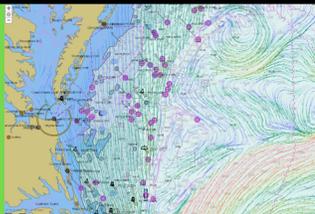
## Streamline Flow



The Streamline Flow interface is a JavaScript application that is designed to see the difference between gridded and streamline representation of surface currents as well as help to customize the appearance of the arrows used, the separation of the streamlines and the density of the arrows on each streamline.

<http://vislab-ccom.unh.edu/~roland/currents/slgo.html>

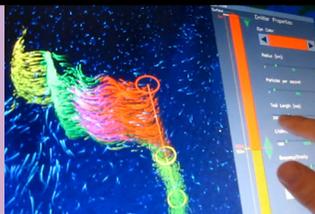
## Animated Flow



Animating the flow of surface currents is a technique being researched at the lab that is designed to help solve the issue of occluding nautical chart data.

<https://www.youtube.com/channel/UCAdLNgCv3x1d5rPf4dWfVw>

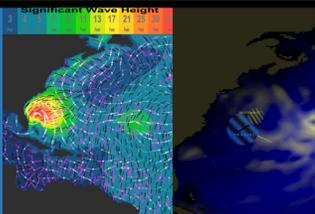
## Flow-Touch3D



Flow Touch 3D is a system that employs a combination of stereoscopic rendering, to best reveal and illustrate 3D structures and patterns, and multi-touch interaction, to allow for natural and efficient navigation and manipulation within the 3D environment.

[http://ccom.unh.edu/vislab/projects/2d\\_flow\\_vis.html](http://ccom.unh.edu/vislab/projects/2d_flow_vis.html)

## WWIII



Wave Watch III data is a topic of interest in a Navy project currently underway at the lab. The goal is to combine wind speed/direction, wave heights/direction/period and surface currents into a mission planning tool to help submariners with their decision making process.

<https://www.youtube.com/channel/UCAdLNgCv3x1d5rPf4dWfVw>

## Partnerships



The Industrial Associates Program allows CCOM to establish collaborative arrangements with the private sector and other government organizations. The Associate will have access to UNH-authored, non-patented software code and algorithms. They will receive early notice of workshops, seminars, and publications and collaborate with CCOM researchers through formal and informal exchanges of ideas.



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