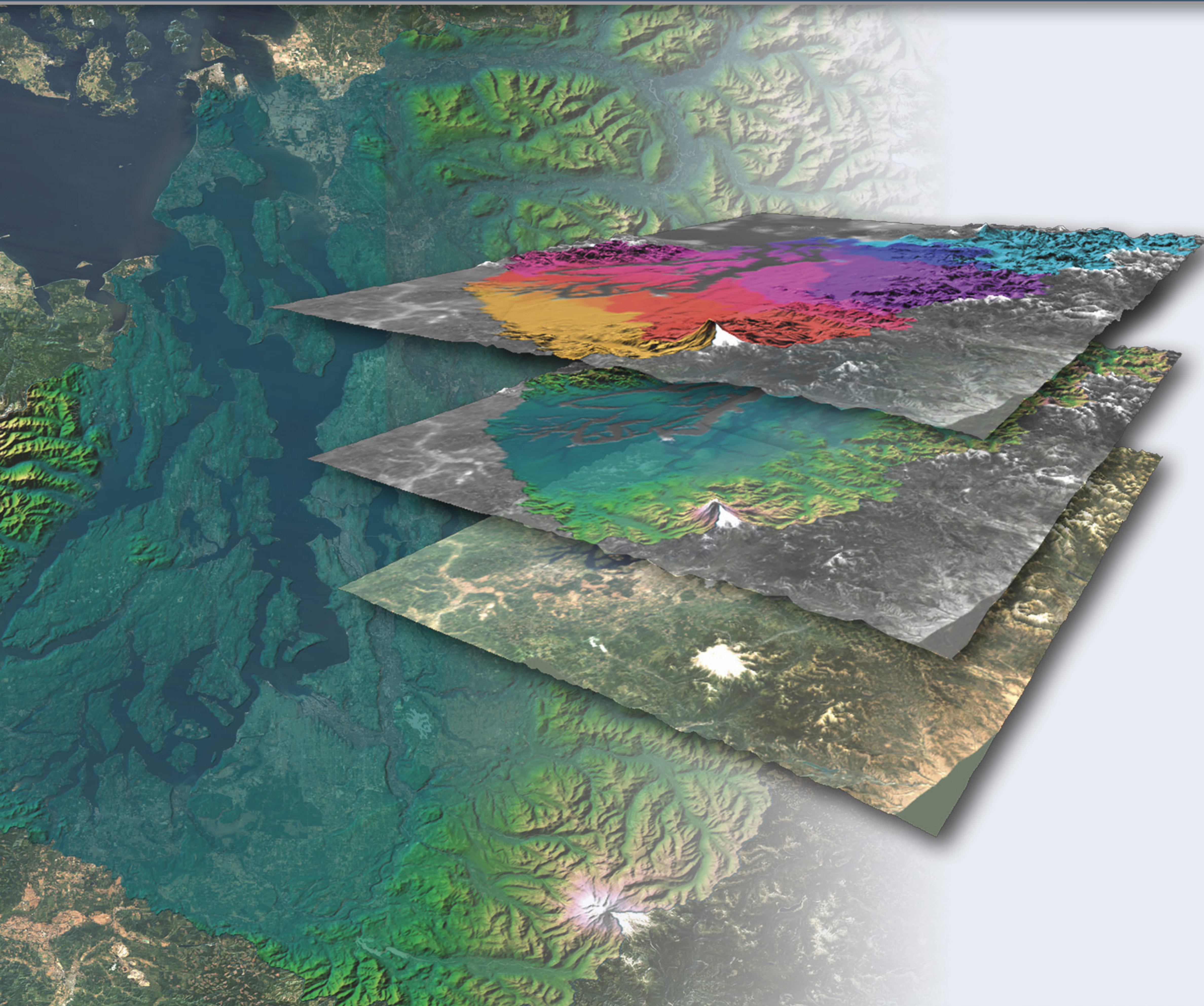




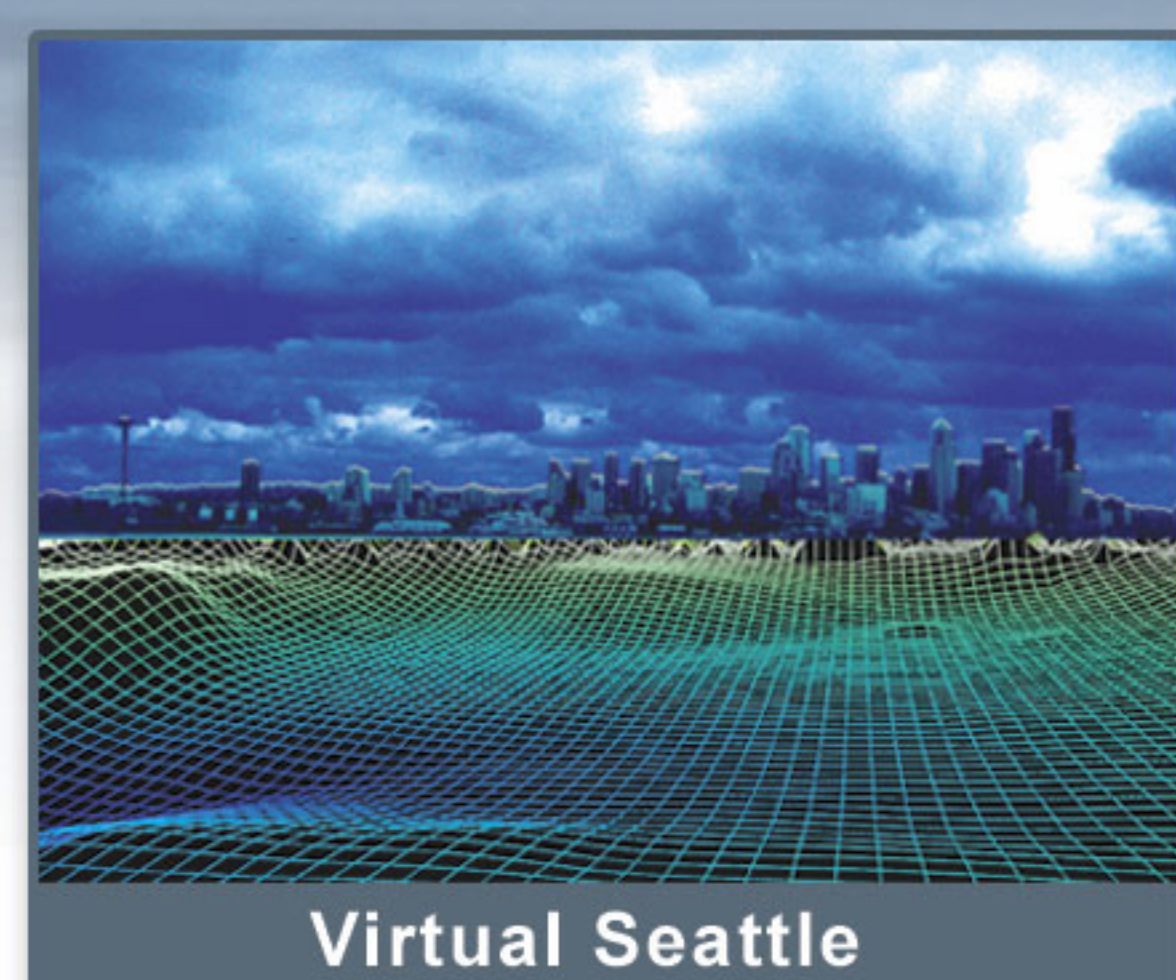
web services | data management | graphic arts | graphics programming | scientific visualization | collaboration & networking



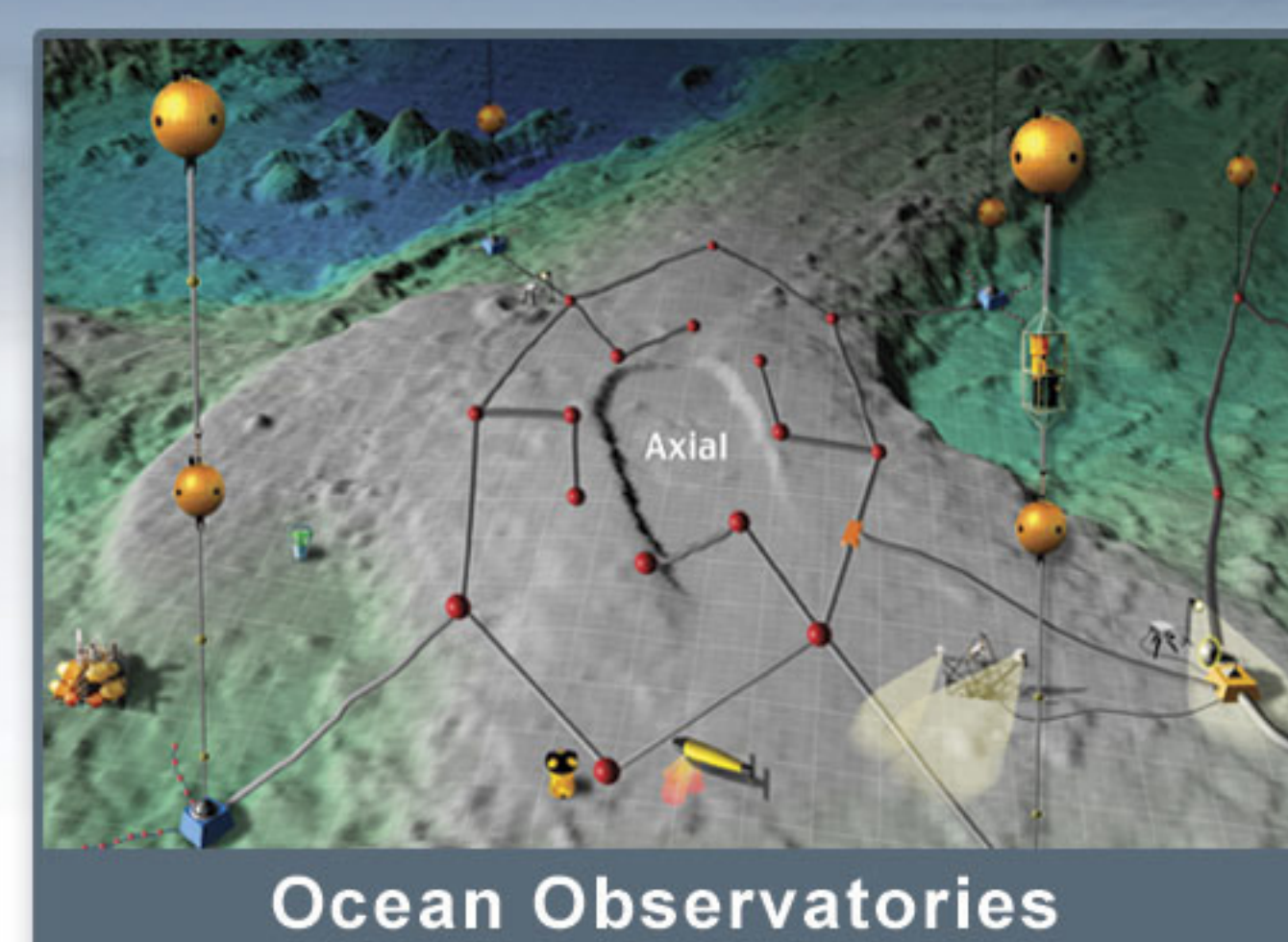
The Center for Environmental Visualization promotes new information technologies and advanced interfaces which integrate ocean research with geo-science education at the College of Ocean and Fishery Sciences, University of Washington, by combining environmental modeling with applied technologies such as scientific visualization, virtual reality, interactive multimedia and Web development.

Our efforts include innovative combinations of 4-D ocean maps, computer games, and networked GIS technologies that let learners interact with near real-time data using interfaces that produce highly visual, interactive exploration opportunities in the ocean sciences.

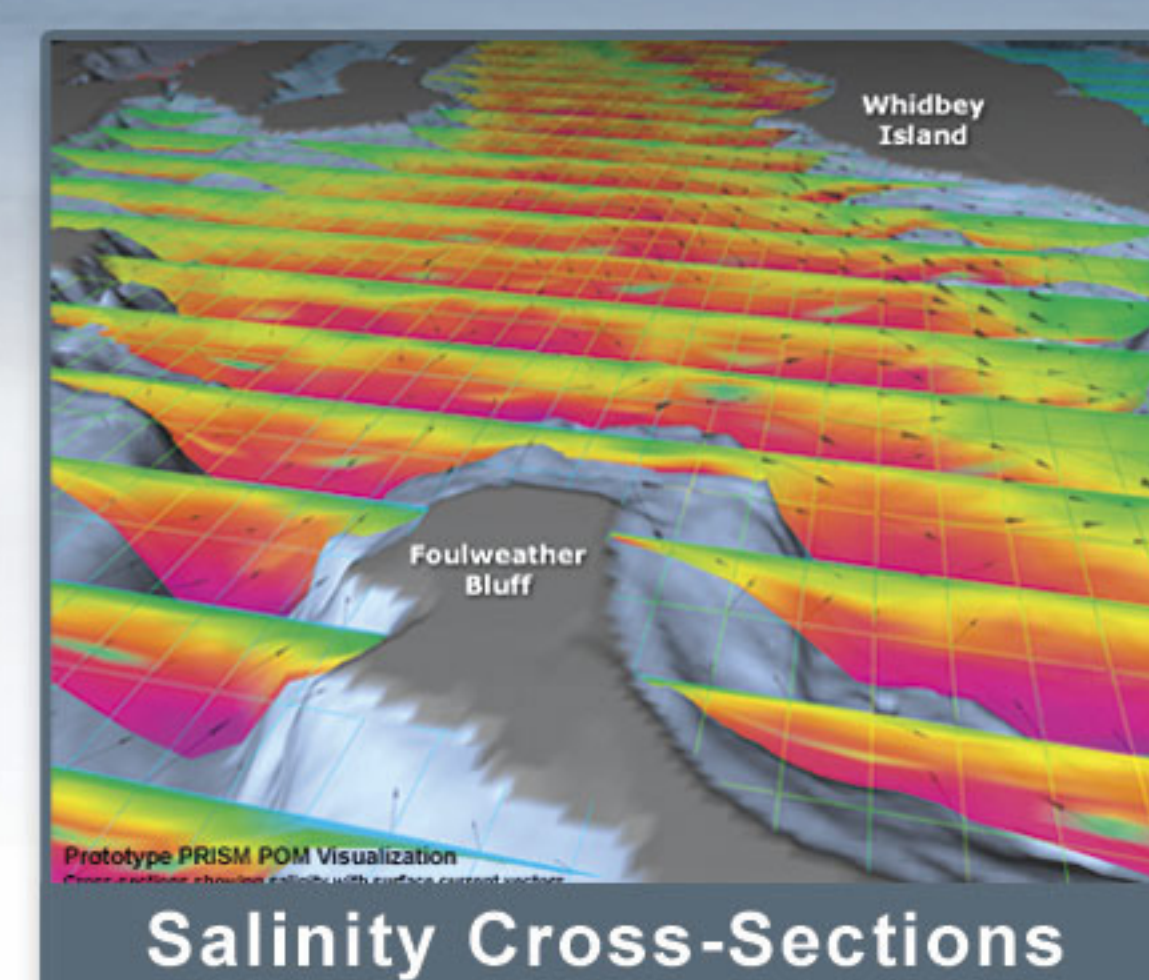
www.cev.washington.edu



Virtual Seattle



Ocean Observatories



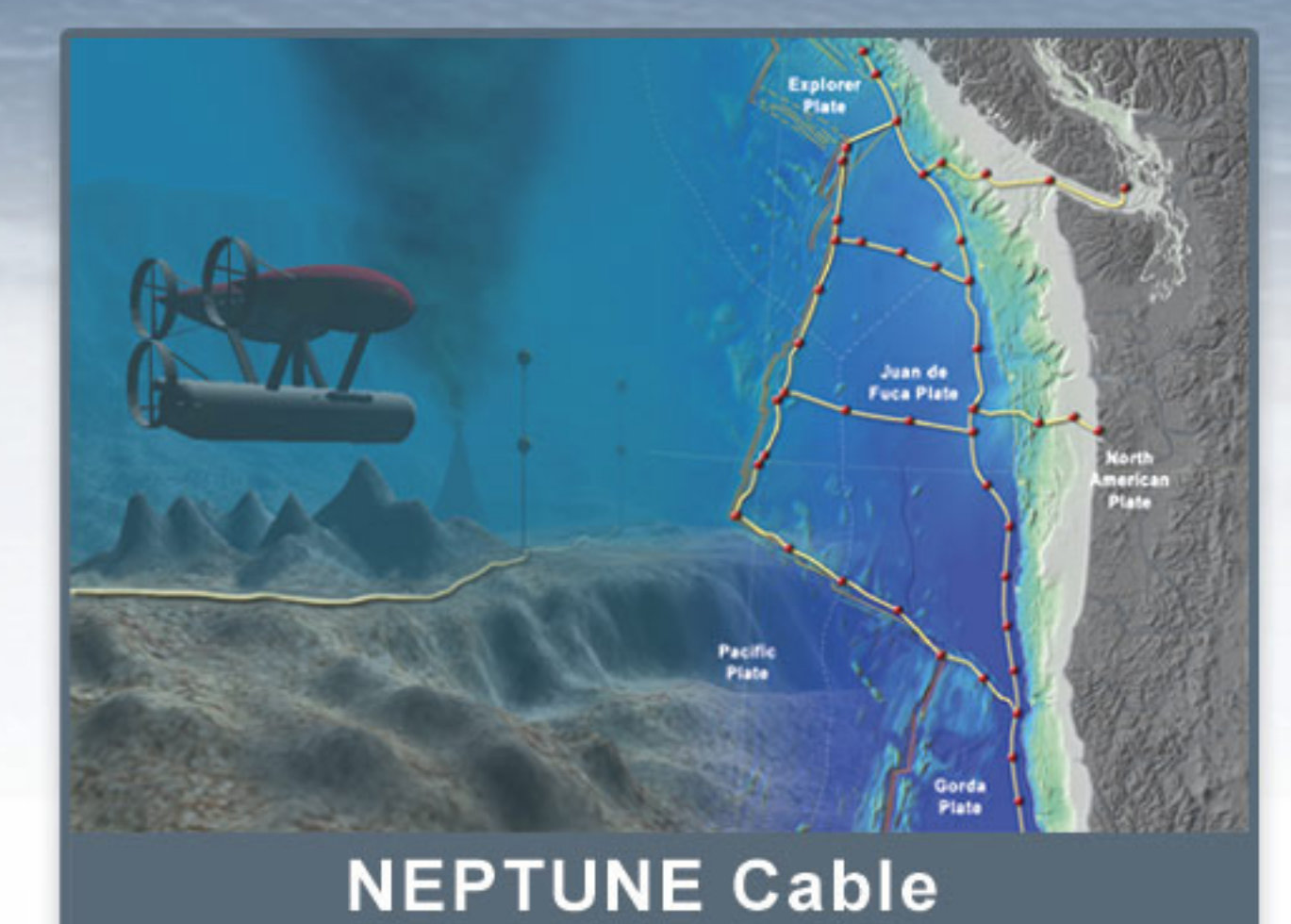
Salinity Cross-Sections



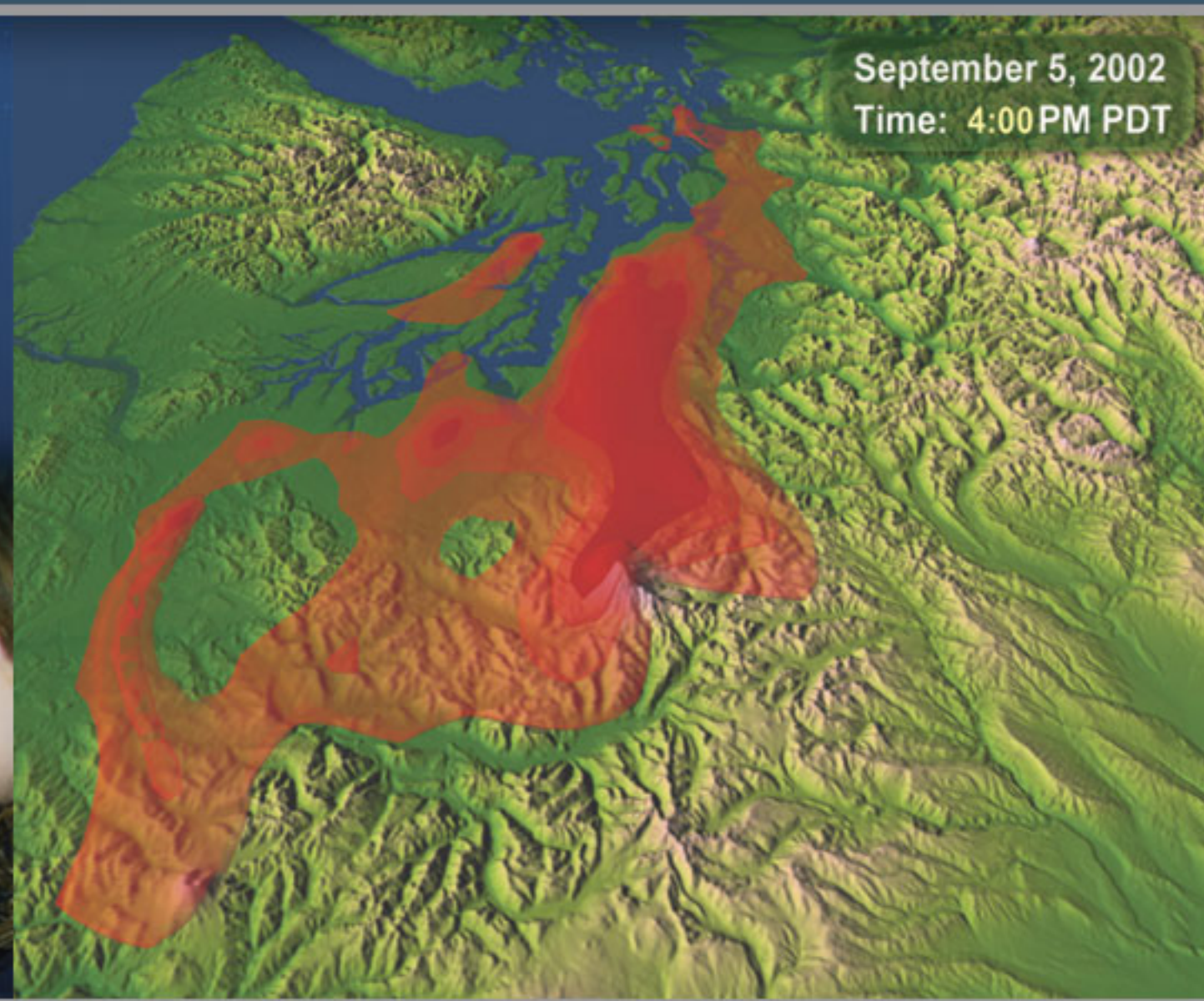
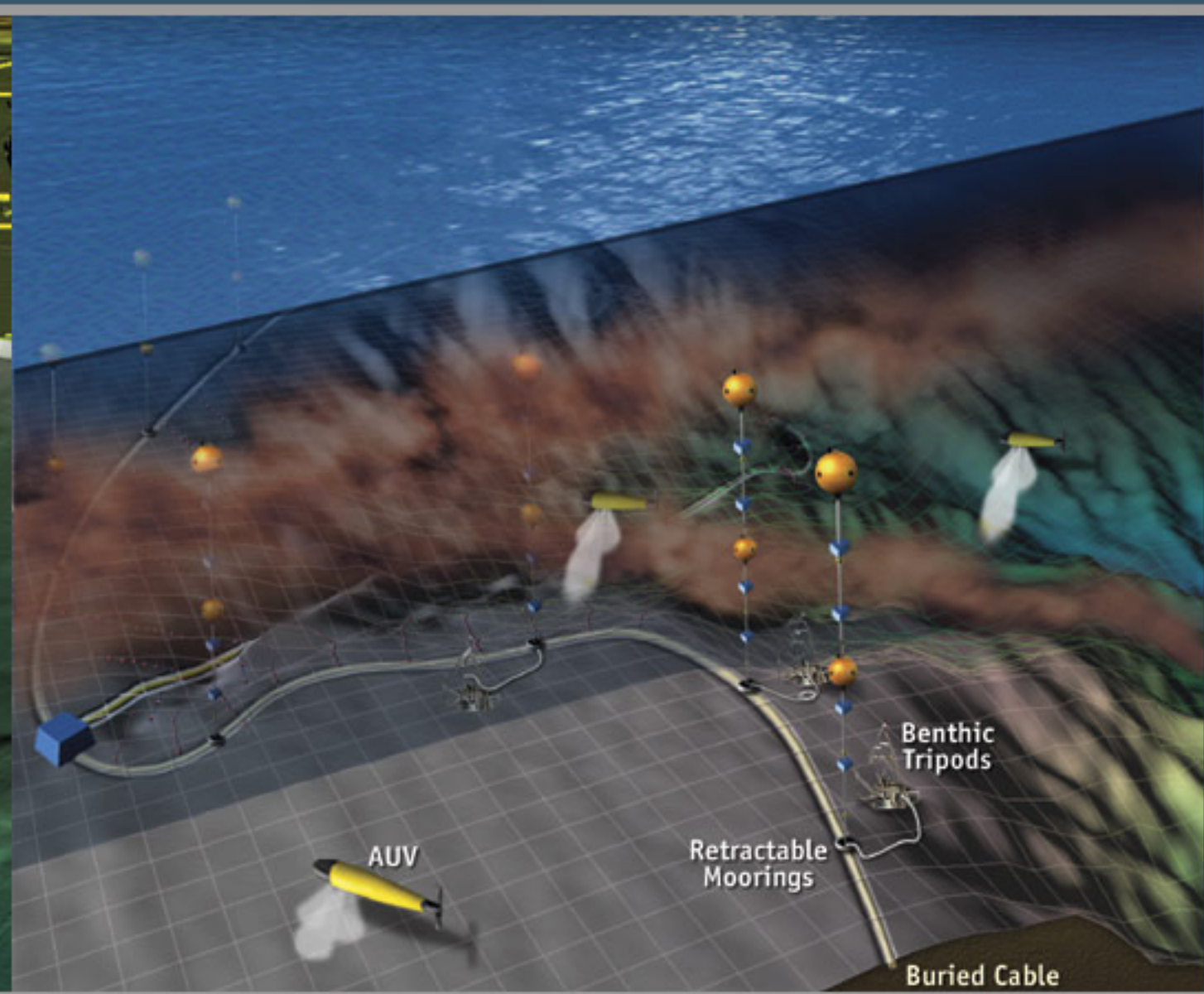
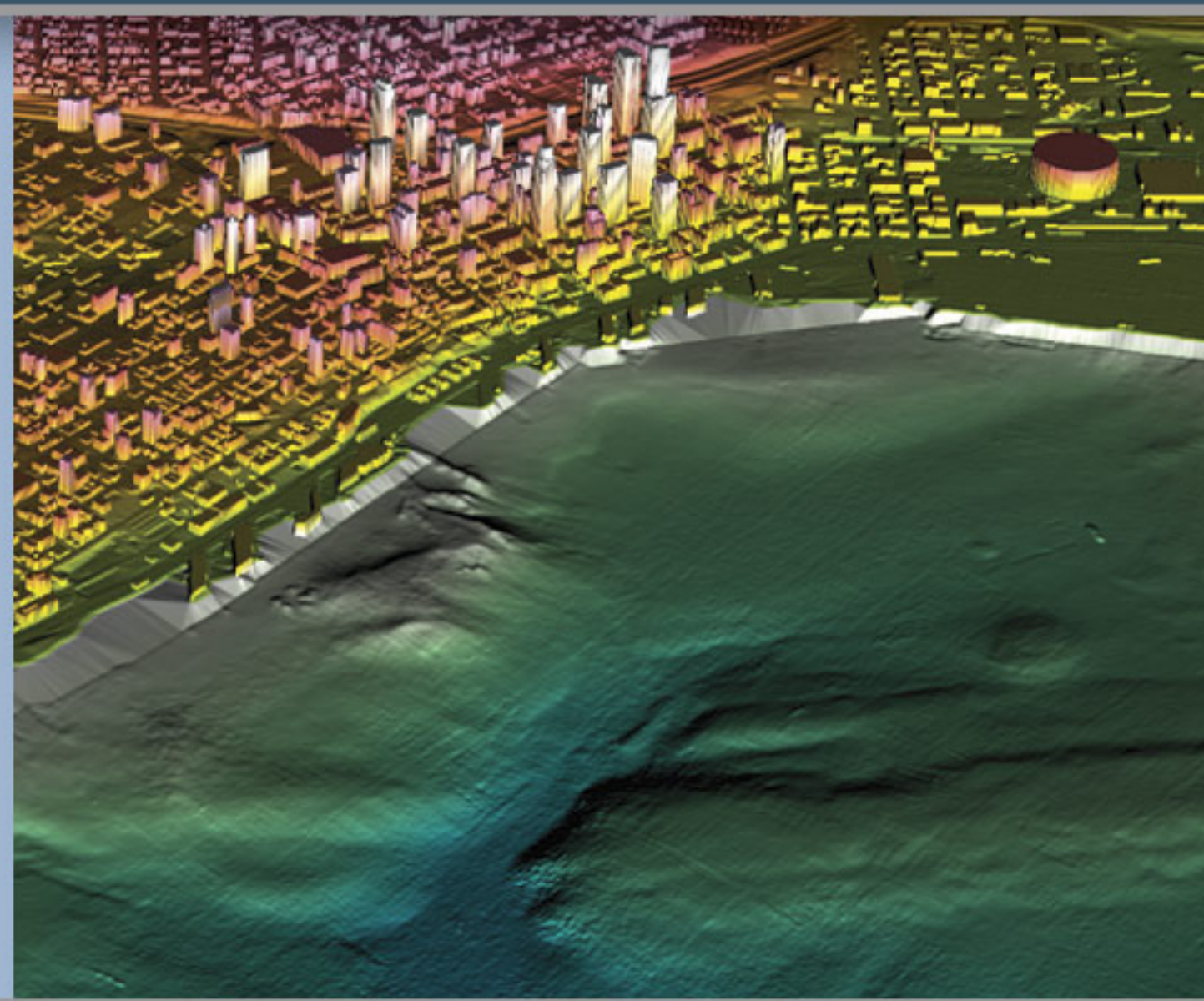
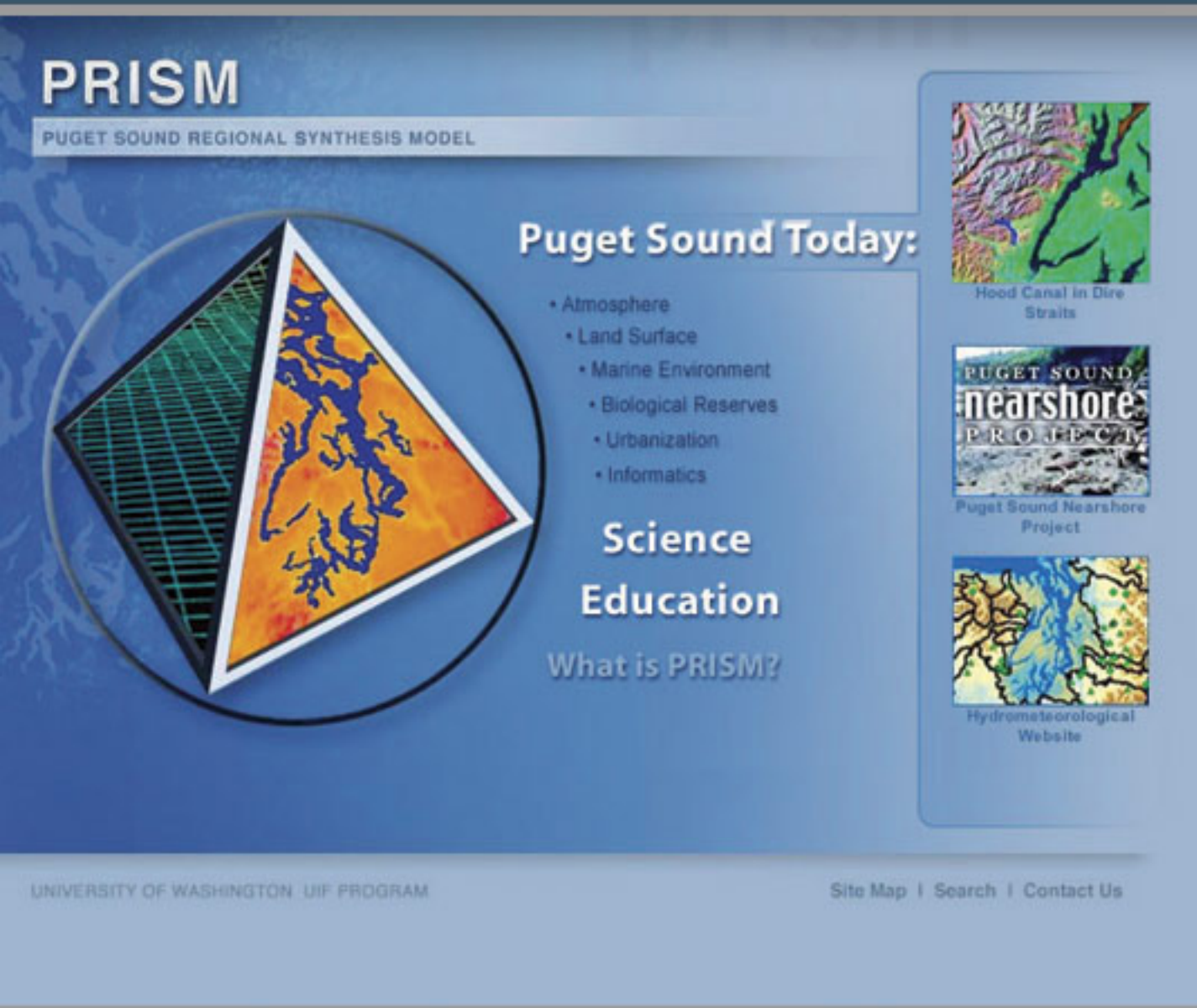
Nearshore Processes



Lost City Web Site



NEPTUNE Cable



Web Services

CEV Web services effectively deliver earth science information via well designed interfaces using high-resolution graphics. These services utilize many of the latest Web technologies available, such as SOAP and XML, to develop robust applications that enable scientists and students to learn and collaborate more effectively.

CEV Web services include automated publishing, relational database management, dynamic Web page generation and distributed content management.

Data Management

The CEV visualization pipeline begins with the receipt of earth science data from sensor networks and observational science. Data management is no easy task with today's labyrinth of meta-data standards, retention standards and physical storage device alternatives.

CEV aims to store content in a cost-effective repository hierarchy that can deliver intelligible indexing and querying services in conjunction with worldwide partnerships.

Graphic Arts

CEV Graphic Services provide critical visual communication elements for interface development and scientific visualization. Modern graphic arts services require a foundation in design principles, color theory, typography, illustration and the advanced application of the latest computer graphic technologies.

CEV has extensive experience in software packages providing: image manipulation, 3D modeling, multimedia authoring, and web design.

Graphics Programming

CEV continues to architect the best possible solutions through presentation techniques targeted at earth science content. Whether growing an in-house graphics engine named 'blue', or developing applications with other available graphics engines, CEV continues to gain experience in visualization techniques specific to interacting with earth science data.

CEV specializes in today's latest computer gaming technologies and graphics engines.

Scientific Visualization

CEV scientific visualizations provide valuable insights to researchers and students exploring ocean and earth science data.

As data streams in from strategically placed sensors in our oceans, landscapes, and atmosphere, CEV believes there is a need for a new generation of scientific visualization products. Automating the visualization pipeline requires careful definition, design, and development at each step in the process.

Collaboration & Networking

The CEV suggests that the World Wide Web has matured as an infrastructure for multi-point messaging and yet most Web content is served under a broadcast model.

Unidirectional content is readily consumed by end-point devices. CEV applications aim at unleashing this latent connectedness by allowing multiple participants to use our tools collaboratively over the Web. CEV collaboration and networking services make it possible.



College of Ocean & Fishery Sciences



Human Interface Technology Lab



Regional Cabled Observatory



Puget Sound Regional Synthesis Model



Spatial Analysis Lab



University of Washington