Visualization of Marine Models: Water in Motion

The Water Center

October 13th 2009

Peter Oppenheimer
University of Washington
Human Interface Technology Lab
The Importance of Water

• Everyone knows that water is essential to human life.

• But what of the challenges to water quality, the need to protect it, and the underlying scientific principles?

• How do we impact water as a global community?

• How do we impact water as individuals?

• WHAT ? ...I have an impact ?
Global Warming
Climate Change
Water Crisis
Relevant Movies:

- An Inconvenient Truth
- The Age of Stupid
- Encounters at the Edge of the Word
- Rivers and Tides
Why Visualization?

A challenge to our understanding of nature is that we don’t always see the underlying processes.
Visualization of Marine Models:

- Increases our understanding of marine processes and the effect of human activity and policy on the environment.

- Facilitates the creation of scientific hypotheses.

- Extends our understanding to reach a larger audience including policy makers, students and the general public.
Visualization Demos
Earth Visualization Platforms

- Google Earth
- Microsoft Virtual Earth
- NASA Worldwind
- UW COVE
COVE is the thesis topic of Keith Grochow, a graduate student in the University of Washington Department of Computer Science and Engineering.

Image provided courtesy of the Ocean Observatories Initiative Regional Scale Nodes Program at the University of Washington
Visualization of Marine Models
Increases our understanding of marine processes and the effect of human activity and policy on the environment.
Facilitates the creation of scientific hypotheses.

Virtual Puget Sound 3D visualization package
Extends our understanding to reach a larger audience including policy makers, students and the general public.
For Further Info Contact

Peter Oppenheimer
University of Washington
Human Interface Technology Lab

(206)380-1336
peter@HITL.washington.edu
www.psmemc.org/projects/edvis
www.hitl.washington.edu