



## Next-Generation, Shared-Use Facility for Collaborative Research

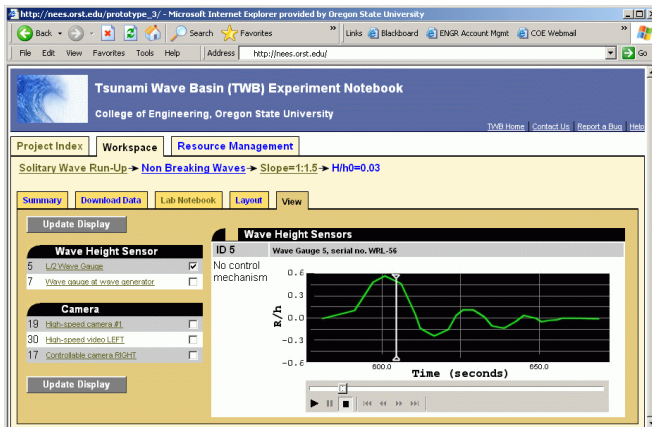
This project broadens the community of researchers, educators, and practitioners who will benefit from a large-scale coastal facility by providing

- Tele-observation capabilities with video streaming
- Experiment notebook for on-line data access
- Virtual fly-throughs with instrument placement

All of this in near real-time and all over the internet using standard web browsers.

The unique combination of a large-scale facility, comprehensive system to support remote users, and on-line data exemplifies the shared-use vision to enhance collaborative research.

### On-line Experiment Notebook



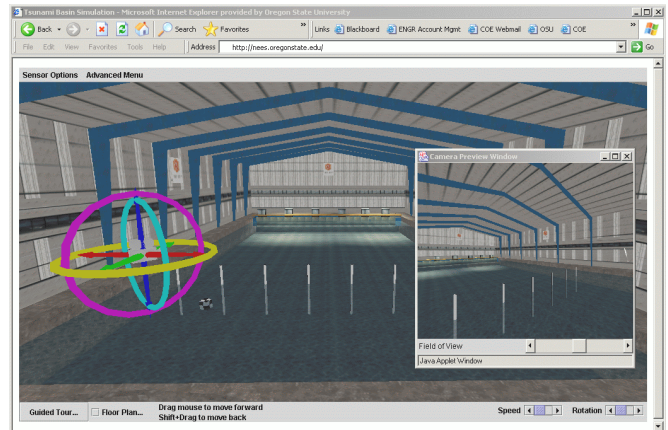
The e-notebook uses advances in information technology and user-centered design to give you convenient access to

- previous, current, and planned projects
- live data and video streaming
- experiment replay (shown above)
- project reporting

The system also includes graphic layouts of experimental set-up, sensor information, data downloads, and a workspace for logging text and graphics similar to conventional lab notebooks.

Using relational database technology, the e-notebook maintains the relationships among projects, people, experiments, equipment, and results in a way that is familiar and flexible. The e-book means you have more time to look at your data because you spend less time trying to manage it.

### Virtual Wave Research Laboratory



This Java-3D visualization has been developed and implemented for the entire laboratory with user-controlled fly-throughs and instrument placement. Camera set-up (shown above) with simultaneous camera views improves experimental planning. Embedded information kiosks support K-12 education and outreach activities.

### Tele-observation with Wave-Cam



Using any web browser, you can control the camera's pan-tilt-and-zoom (shown above) in real-time to view live experiments.



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