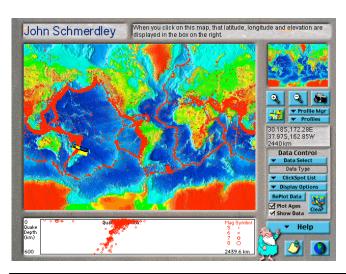
Our Dynamic Planet

"Inquiry into Plate Tectonics"

by William Prothero
Department of Geological Sciences,
University of California, Santa Barbara, Santa Barbara, CA. 93106
prothero@geol.ucsb.edu
http://EarthEdOnline.org/

Funded by NSF Division of Undergraduate Education and UCSB Office of Instructional Development

Companion Teacher's Manual Included on CD



Description:

This CD-ROM consists of tools to support investigations of data that support the theory of Plate Tectonics. A companion teacher's manual discusses elements of a science investigation, how to write a science paper, how to use the software, and gives examples of investigations that can be performed. Data are accessible through a point and click interface with extensive online help. This CD is used in W. Prothero's Introductory Oceanography course to engage students in the process of posing a research question, sampling and selecting data, making an interpretation, and writing up the results in science paper format.

Modules: Getting Started, Virtual Plate Tectonics Lecture (30 minute animated plate tectonics video), Geography Game, Profile Game, MAP data display, and Graphics Workshop image editing and printing tool.

Data on MAP: ETOPO5 elevations, seafloor and island ages, earthquakes, volcanos, oceanic heat flow, volcano and landform images and movies. Detailed DEM and magnetic data and images are available for selected East Pacific Rise (9N) and Mid-Atlantic Ridge study areas.

Display: Point and click on a scaleable, scrollable world map. Quakes may be plotted in map or section view, heat flow data are accessed by clicking, or as a profile. Images and movies are accessed by clicking. Elevations on an arbitrary student-selected great circle path are plotted on the map, and in a special profile window.

<u>Help functions:</u> Online "Guide", and special help screens make it extremely easy for students to master. The automatically scored geography and profile

games teach students to interpret and visualize the information they see on the screen. The help guide also points the student to examples of important tectonics features.

<u>Online Upgrades:</u> Convenient one click access to automatically installed upgrades.

Support at:

http://EarthEdOnline.org/

Teacher's Manual: included on the CD

To order the CDROM*: For information, visit: http://EarthEdOnline.org/