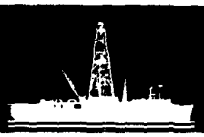
NEWS RELEASE
Ocean Drilling Program



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Leg 123.2

COLLEGE STATION -- Scientists are one step closer to learning how crustal plate movement in the Indian Ocean, sea-floor subduction and the rise and fall of global sea levels have shaped the planet's geologic history.

During deep-sea drilling off the northwest margin of Australia, scientists for the Ocean Drilling Program (ODP)

--discovered that the Indian Ocean was 20 million years younger than previously thought

--learned more about the chemical composition of the ocean crust at junctures where one crustal plate slides beneath another, enabling them to compare this site with others around the world

--obtained evidence of global sea-level changes in the Southern Hemisphere

The crew recovered more than three-quarters of a mile of sediment and volcanic rock, the oldest more than 140 million years. They also set the longest length of casing -- steel pipe lowered down the drill hole to prevent the sides from caving in -- ever set in the ocean floor. The half mile of casing, set in almost four miles of water, establishes a permanent underseas laboratory to which the ship can

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return and drill deeper.

The story behind the ODP's 24th cruise began 200 million years ago when continents in the Southern Hemisphere made up a megacontinent. North of this continent lay an ancient sea called the Tethys, which shifting crustal plates began to destroy. Remnants of the Tethys are scattered over a wide area of the globe; parts are found high in the Himalayas, while other fragments are located off the northwest margin of Australia.

Until this cruise, scientists had believed that the Indian Ocean began forming when the southern continents of Australia, India and Antarctica began splitting apart about 160 million year ago. Evidence from the sediments and volcanic rocks, however, puts the ocean's incipient formation at no later than 140 million years ago.

By discovering that the Indian Ocean is 20 million years younger than previously thought, scientists will have to revise their assumptions about the ocean's origin, evolution and spreading history.

Scientists also drilled a hole to determine the chemical composition of ocean crust near the five-mile-deep Java Trench, where an edge of the Indian Ocean plate is being consumed. Millions of years later, this material will bubble back up as volcanic material piercing ocean crust to build island arcs such as Indonesia. Scientists will compare the data from this drill site with other subduction zones to learn more about what happens when one crustal plate slides beneath another.

By lowering sensitive instruments down the drill hole, scientists were able to record the physical and chemical signatures in each layer

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of rock. They found the presence of the radioactive elements, uranium and thorium, which become highly concentrated when sedimentation rates are extremely low. These episodes of low sedimentation may correlate with global catastrophes such as huge volcanic eruptions or meteorite impacts.

Scientists on this and the previous cruise also looked at changes in sea levels off Northwest Australia. They can now document what happened from the continental margin to the deep-ocean environment when sea-level fluctuations changed the distribution of sediments on the shelves, slopes and ocean floor. By correlating what they learned about sea-level changes in this region with results from around the globe, scientists will have the data to pinpoint more accurately the frequency of glacial events through time.

The cruise, Leg 123, departed Singapore Sept. 1 and returned to Singapore, Nov. 1. Thirty scientists sailed on the cruise, representing the following countries: Australia, Canada, Federal Republic of Germany, France, Japan, Norway, Switzerland, the United Kingdom and the United States.

JOIDES Resolution, registered as SEDCO/BP 471, is the research vessel for ODP, which is funded by the United States National Science Foundation, Canada and Australia, the European Science Foundation Consortium for the Ocean Drilling Program, France, Japan, West Germany and the United Kingdom.

The 470-foot-long drill ship's derrick towers 200 feet above the waterline. A seven-story laboratory stack provides facilities for on board examination of sediment and hard-rock cores. Laboratories

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contain space and equipment for studies in chemical, gas and physical properties, paleontology, petrology, paleomagnetics and sedimentology. Marine geophysics research is conducted while the ship is under way.

Texas A&M University, as science operator, operates and staffs the drill ship and retrieves cores from strategic sites around the world. The science operator also ensures that adequate scientific analyses are performed on the cores. To do this, Texas A&M maintains shipboard scientific labs and provides logistical and technical support for shipboard scientific teams. On shore, in the Texas A&M University Research Park, the science operator manages post-cruise activities, curates the cores and publishes the scientific results.

Lamont-Doherty Geological Observatory of Columbia University is responsible for downhole logging.

Joint Oceanographic Institutions for Deep Earth Sampling (JOIDES), an international group of scientists, provides scientific planning and program advice. Joint Oceanographic Institutions (JOI, Inc.), a nonprofit consortium of 10 major U.S. oceanographic institutions, manages the program.

"During the next two years, JOIDES Resolution will drill in the western Pacific," said Dr. Philip D. Rabinowitz, director of the ODP. "We will address a wide range of scientific problems relating to the origin and evolution of the ocean crust in this region."

(Note: JOIDES institutions are: University of California at San Diego, Scripps Institution of Oceanography; Columbia University, Lamont-Doherty Geological Observatory; University of Hawaii, Hawaii Institute of Geophysics; University of Miami, Rosenstiel School of Marine and Atmospheric Science; Oregon State University, College of Oceanography; University of Rhode Island, Graduate School of Oceanography; Texas A&M University, College of Geosciences; University of Texas at Austin, Institute of Geophysics; University of Washington, College of Ocean and Fishery Sciences; and Woods Hole Oceanographic Institution.

Non-U.S. members are Canada and Australia, Department of Energy, Mines, and Resources and Bureau of Mineral Resources; European Science Foundation Consortium for the Ocean Drilling Program: Belgium, Denmark, Finland, Iceland, Italy, Greece, the Netherlands, Norway, Spain, Sweden, Switzerland and Turkey; Federal Republic of Germany, Bundesanstalt fur Geowissenschaften und Rohstoffe; France, Institut Francais de Recherche pour l'Exploitation de la Mer; Japan, University of Tokyo, Ocean Research Institute; and United Kingdom, Natural Environment Research Council.)

The scientific party aboard JOIDES Resolution for Leg 123 of the Ocean Drilling Program were: Felix Gradstein, co-chief scientist, Institute of Oceanography, Dartmouth, Nova Scotia, Canada; John Ludden, co-chief scientist, University of Montreal, Quebec, Canada; Andrew C. Adamson, staff scientist, Ocean Drilling Program, Texas A&M University, College Station; Peter Baumgartner, Institut de Geologie, Lausanne, Switzerland; Roland Beaussillon, Centre de Recherches Geophysiques, Pouilly Sur Loire, France; Tom Bolmer, Woods Hole Oceanographic Institution, Woods Hole, Mass.; Paul Bown, University College, London, United Kingdom; Robin Brereton, British Geological Survey, Keyworth, Nottingham, United Kingdom; Dick Buffler, University of Texas at Austin; David Castillo, Stanford University, Stanford, Calif.; John Compton, University of South Florida, St. Petersburg; Julie Dumoulin, University of California, Santa Cruz; Cedric Griffiths University of Trondheim, Norway; David Haig, University of Western Australia, Nedlands; David Heggie, Bureau of Mineral Resources, Canberra; Akira Ishiwatari, Kanazawa University, Japan; Michael Kaminski, Dalhousie University, Halifax, Nova Scotia, Canada; Kazuto Kodama, Kochi University, Japan; David Kopaska-Merkel, Northeastern Science Foundation, Troy, N.Y.; Jean Philippe Marcoux, Universite Paris, France; Andrew McMinn, University of New South Wales, Australia; Michael Moran, University of Nebraska, Lincoln; Jorg Mutterlose, Universitat Hannover, Federal Republic of Germany; Brennan O'Neill, U.S. Geological Survey, Menlo Park, Calif.; James Ogg, Purdue University, West Lafayette, Ind.; Terry Plank, Lamont-Doherty Geological Observatory, Palisades, N.Y.; Michael Riggins, Colorado School of Mines, Golden, Colo.; Michael Schott, Institut fr Palontologie und Historische Geologie, Munchen, Federal Republic of Germany; Gregory Simmons, Texas A&M University, College Station; Jurgen Thurow, Institut und Museum fr Geologie und Palontologie der Universitat, Tubingen, Federal Republic of Germany.