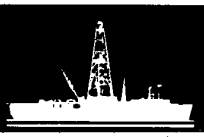
NEWS RELEASE
Ocean Drilling Program



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Leg 115.2

COLLEGE STATION, TX -- An international team of scientists completing a 7-week drilling expedition earlier this month now have the information they need to chart the movement of the Indian tectonic plate over millions of years. And for the first time in the Indian Ocean, they recovered a complete section of undisturbed deep-sea sediments that will enable them to reconstruct this region's environmental history during the past 60 million years.

The expedition of 25 earth scientists used JOIDES Resolution, deep-sea drill ship for the internationally funded Ocean Drilling Program (ODP), to conduct their research.

A 2,000-mile-trail of progressively younger volcanic islands stretches from Reunion Island in the Southwest Indian Ocean to the southern tip of India. These islands stand as submarine milestones that chronicle a tectonic plate's progression both through time and space. During the cruise, scientists recovered basalts from selected spots along this trail of volcanoes, enabling them to date when India passed over the Reunion hot spot on the way to its present geographic position.

Hot spots are punctures in the ocean's floors in which hot magma wells up, forming volcanoes. As a tectonic plate moves laterally over

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these fixed magma sources, it carries the volcanic formations with it, leaving the hot spot behind. The process creates a chain or ridge of volcanoes as the plate moves away from the hot spot, with the oldest formation heading the ridge furthest from the hot spot.

When India broke away from Antarctica and Australia more than 90 million years ago, it began making its way northward. As it moved over the stationary Reunion hot spot, it carried with it the chain of volcanoes formed at that spot. The still-active Reunion hot spot, therefore, serves as a reference point to the basalts in these ancient volcanoes which can now be dated to pinpoint India's position at any given time.

India to this day continues to push against Asia, and scientists hope that a more complete picture of the continent's past behavior will help them predict future geologic events.

The cruise's second objective was to recover complete sequences of sediment ooze containing the skeletons of millions of organisms deposited through time. Each layer of biologic ooze contains distinct chemical signatures that indicate the region's water depths, climate, ocean circulation and glacial cycles at any given time during the past 60 million years.

The recovery of nearly two miles of cored sediment reveals this region's ancient environmental regimes, which scientists can in turn correlate to past global events.

The 15th cruise of ODP marks the first of an 18-month expedition in the Indian Ocean. The ship left Port Louis, Mauritius on May 19, 1987, and arrived in Colombo, Sri Lanka, on July 2.

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Co-chief scientists for the cruise were Dr. Jan Backman, University of Stockholm, Sweden, and Dr. Robert A. Duncan, Oregon State University, Corvallis. ODP staff scientist was Dr. Andrew H. Macdonald, Texas A&M University, College Station.

"This cruise marks our first excursion into the Indian Ocean," said Dr. Philip D. Rabinowitz, director of ODP. "During the rest of 1987 and 1988, JOIDES Resolution will be drilling in what is the least scientifically explored of the world's oceans."

JOIDES Resolution, registered as SEDCO/BP 471, is the research vessel for ODP which is funded by the United States National Science Foundation, Canada, 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 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, provides logistical and technical support for shipboard scientific teams, manages post-cruise activities, is curator for the cores and of the scientific results.

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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.

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

Scientists on Leg 115 were: Jan Backman, co-chief scientist, University of Stockholm, Stockholm, Sweden; Robert Duncan, co-chief scientist, Oregon State University, Corvallis, Oregon; Andrew H. Macdonald, ODP staff scientist, Texas A&M University, College Station, Texas; Paul A. Baker, Duke University, Durham, North Carolina; Alistair N. Baxter, City of London Polytechnic, London, England; Anne Boersma, Stony Point, New York; James L. Cullen, Salem State College, Salem, Massachusetts; Andre W. Droxler, Rice University, Houston, Texas; Martin Fisk, Oregon State University, Corvallis, Oregon; John D. Greenough, St. Mary's University, Halifax, Nova Scotia, Canada; Robert B. Hargraves, Princeton University, Princeton, New Jersey; Peter Hempel, Geologisch-Palaontologisches Institut de Universitat, Kiel, Federal Republic of Germany; Michael T. Hurley, Institute of Oceanographic Sciences, Surrey, United Kingdom; David A. Johnson, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts; Naja Mikkelsen, Geological Survey of Denmark, Copenhagen, Denmark; Hisatake Okada, Ymagata University, Yamata, Japan; Larry C. Peterson, University of Miami, Miami, Florida; Domencio Rio, University di Parma, Parma, Italy; Simon G. Robinson, University of Liverpool, Liverpool, United Kingdom; David Schneider, Lamont-Doherty Geological Observatory, Palisades, New York; Peter K. Swart, University of Miami, Miami, Florida; Yshiyuki Tatsumi, Kyoto University, Kyoto, Japan; Didier Van Damme, Institut de Physique du Globe de Paris, Paris, France; Gustav Vilks, Bedford Institute of Oceanography, Dartmouth, Nova Scotia, Canada; Edith Vincent, Scripps Institution of Oceanography, La Jolla, California.