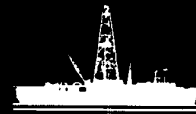


NEWS RELEASE

Ocean Drilling Program



For information:

Karen Riedel
Ocean Drilling Program
Texas A&M University
College Station, TX 77840
(409) 845-9322

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Leg 119.2

COLLEGE STATION, Tx -- Thirty scientists from 10 countries have returned from exploring the major factors affecting the evolution of the Southern Ocean and its climatic conditions through time.

The international scientific team was on board JOIDES Resolution, drilling vessel for the Ocean Drilling Program (ODP), the world's largest research effort in scientific ocean drilling.

Scientists have become increasingly interested in the Southern Ocean because of its critical role in controlling the world's climate and its effect on global sea level through time.

Drilling at five sites in Prydz Bay in the Eastern Antarctic and six sites at Kerguelen Plateau has enabled scientists to map the climatic and oceanographic evolution of the Southern Ocean.

Critical findings to date include:

--evidence of coals 40 to 55 million years old indicating warm, sub-tropical conditions prevailing in Antarctica during the early stages of the break up of Antarctica and Australia

--an indication that glaciation was existing by 35 million years ago and possibly as early as 42 million years ago, signaling a dramatic change in climate, with profound effects on global sea level

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and ocean circulation

--recovery of a sample with a high-resolution signal at the Cretaceous-Tertiary boundary which will allow scientists to define more precisely the mechanisms of mass biological extinctions occurring about 65 million years ago in many parts of the world

--a record of abrupt transition in the sedimentary sequences which, when combined with results from drilling on the next cruise will enable scientists to define the evolution of the Kerguelen Plateau and its relationship to the Broken Ridge in the Indian Ocean

--an indication that the Antarctic Convergence, which separates polar and temperate waters, was established about 5 million years ago.

The ship has returned to the central region of the Kerguelen Plateau where it will drill during March and April. Results from these two cruises will enable scientists to reconstruct the history of the Kerguelen Plateau--its origin and development from approximately 100 million years ago to the present.

During the past year, ODP has been drilling in the Indian Ocean, the world's least scientifically explored body of water. The Indian Ocean results, combined with earlier 1987 drilling in the Weddell Sea and the sub-Antarctic Atlantic will give scientists a complete picture of the history of Antarctica, its separation from Australia and Africa, the onset of glaciation and the origin and evolution of the Antarctic Convergence.

Co-chief scientists for the cruise were Dr. John Barron of the U.S. Geological Survey, Menlo Park, Calif., and Dr. Birger Larsen, Technical University of Denmark, Lyngby, Denmark. Dr. Jack Baldauf of

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Texas A&M University, College Station, Texas, was staff scientist.

Scientists on the cruise were from Australia, Canada, Denmark, Japan, Federal Republic of Germany, France, Norway, Switzerland, the United Kingdom and the United States.

The ship departed Port Louis, Mauritius, on Dec. 18, 1987, and arrived in Fremantle, Australia, on Feb. 21, 1988.

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, paleomagnetism 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

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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.

"The Ocean Drilling Program completes its 18-month campaign in the Indian Ocean at the end of 1988," said Dr. Philip D. Rabinowitz.

"We will be exploring the eastern and central Pacific regions through 1990," he said.

(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.)

The scientific party for Leg 119 were: John Barron, co-chief scientist, U.S. Geological Survey, Menlo Park, Calif.; Birger Larsen, Technical University of Denmark, Lyngby; Jack Baldauf, Ocean Drilling Program, Texas A&M University, College Station; Chantal Alibert, C.R.P.G., Vandoeuvre, France; Stephen P. Berkowitz, Texas A&M University, College Station; Jean-Pierre Caulet, Laboratoire de Geologie, Paris, France; Steven R. Chambers, Stanford University, Stanford, Calif.; Alan Cooper, U.S. Geological Survey, Menlo Park, Calif.; Ray Cranston, Bedford Institute of Oceanography, Dartmouth, Nova Scotia, Canada; Wolfgang Dorn, Hawaii Institute of Geophysics, Honolulu; Werner U. Ehrmann, Institute for Polar and Marine Research, Bremerhaven, Federal Republic of Germany; Richard Fox, Texas A&M University, College Station; Greta Fryxell, Texas A&M University, College Station; Michael J. Hambrey, University of Cambridge, United Kingdom; Brian T. Huber, Ohio State University, Columbus; Christopher J. Jenkins, University of Sydney, New South Wales, Australia; Sung-Ho Kang, Texas A&M University, College Station; Barbara Keating, University of Hawaii at Manoa, Honolulu; Klaus W. Mehl, Ruhr-Universitat Bochum, Federal Republic of Germany; Il Noh, Texas A&M University, College Station; Gielles Ollier, Lamont-Doherty Geological Observatory, Palisades, N.Y.; Alan Pittenger, Texas A&M University, College Station; Hideo Sakai, Toyama University, Toyama City, Japan; Claudia J. Schroder, Dalhousie University, Halifax, Nova Scotia; Anders Solheim, Norwegian Polar Research, Oslo, Norway; Dean Stockwell, University of Texas, Port Aransas; Hans R. Thierstein, ETH-Zentrum, Zurich, Switzerland; Bruce A. Tocher, Plymouth Polytechnic, Plymouth, United Kingdom; Brian Turner, The University, Newcastle upon Tyne, United Kingdom; and Wuchang Wei, Florida State University, Tallahassee.