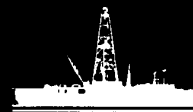


NEWS RELEASE

Ocean Drilling Program



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BREMERHAVEN, West Germany -- The drillship JOIDES Resolution arrived in port today after completing a two-month scientific cruise which revealed important information about when and how continents broke apart and ocean basins formed.

On this third cruise of the 10-year program, scientists sought to learn more about the history of today's continental margins, how they were formed and what the land mass looked like before it split apart.

Geologic evidence shows that the European, African and North American continents were joined together forming a huge supercontinent many millions of years ago. About 110 million years ago, the part of the supercontinent between Spain and Newfoundland began to tear apart, leaving behind what is now the North Atlantic Ocean. As the continents drifted apart, volcanic rocks welled up to fill the gap, forming the ocean floor.

To learn more about this dramatic geologic event, the ship drilled 12 holes off the coast of Spain. The deepest hole reached approximately 1600 feet or about one-third of a mile below the seafloor. It was drilled in approximately 15,500 feet -- almost three miles -- of water.

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Recovered cores of sediments and rocks revealed that about 150 million years ago, this area of the supercontinent was flooded by a shallow, muddy sea. Oysters, small snails and corals thrived during this ancient time, and as they died their shells were embedded in limestone at the bottom of the sea.

Scientists also learned that approximately 10 million years later, or 140 million years ago, the upper part of Earth's crust stretched and thinned as breakup and rifting began. Giant faults were formed. The seafloor sank along these faults to great depths below sea level, where few creatures can survive. Huge masses of sand, mud and plant fragments from the land sloughed off the edge of the continent, burying the limestone layer that had been deposited earlier in shallow water.

The seafloor continued to sink rapidly for about 25 million years after rifting began. Samples from the cores revealed that during the past 110 million years -- since the time ocean crust began to form in the North Atlantic -- the seafloor has subsided much more slowly and in the process has accumulated mud and ooze formed by the skeletons of microscopic organisms which live near the surface of the sea.

Results from this cruise have given oceanographers more pieces to the geologic puzzle of how and when continents broke apart and what the world looked like prior to this cataclysmic event.

Co-chief scientists were Dr. Gilbert Boillot from the University Pierre et Marie Curie, France, and Dr. Edward L.

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Winterer from the University of California, San Diego. Dr. Audrey Meyer was the ODP staff scientist from Texas A&M University.

JOIDES Resolution, registered as SEDCO BP/471, is the research vessel for the Ocean Drilling Program (ODP), a project funded by the United States, Canada, France, Japan and West Germany.

The 23 scientists aboard the ship were from the U. S., Canada, France, Italy, Japan, Spain and West Germany. In addition, 24 technicians and 65 drilling crew members participated in the cruise.

The 470-foot drill ship has a derrick that towers 200 feet above the waterline. The heart of the floating research center is a seven-story laboratory stack which provides space and equipment for on-board examination of sediment and hard-rock cores. Studies include chemical, gas and physical properties, paleontology, petrology, paleomagnetism and sedimentology. Marine geophysics research is conducted when the ship is underway.

Texas A&M is science operator for the program and is responsible for the ship's staffing and scientific operations, overseeing core collection and analysis, and disseminating results. Lamont-Doherty Geological Observatory of Columbia University is responsible for downhole logging.

The program is funded through the Joint Oceanographic

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Institutions (JOI, Inc.) which manages the project. JOI, Inc. is a nonprofit consortium of 10 major oceanographic institutions.

Joint Oceanographic Institutions for Deep Earth Sampling (JOIDES), an international group of scientists, provides overall planning and program advice.

Upcoming cruises include further high latitude drilling in the Labrador Sea and Baffin Bay, and drilling newly formed ocean crust on the Mid-Atlantic Ridge, announced Dr. Philip D. Rabinowitz, ODP director at Texas A&M.

In addition to the five member countries, it is anticipated that the United Kingdom and a consortium of countries within the European Science Foundation will soon join the program.

(Note: JOIDES institutions are the University of California, Columbia University, University of Hawaii, University of Miami, Oregon State University, University of Rhode Island, Texas A&M University, University of Texas, University of Washington and Woods Hole Oceanographic Institution.

Non-U. S. members are: Department of Energy, Mines and Resources, Earth Sciences Sector, Canada; Bundesanstalt fur Geowissenschaften und Rohstoffe, Federal Republic of Germany; Institute Francais de recherche pour l'exploitation de la mer (IFREMER), France; and University of Tokyo, Ocean Research Institute, Japan.)

Scientists participating in the cruise were:

Dr. Gilbert Boillot, Universitie Pierre et Marie Curie, France
Dr. Edward L. Winterer, Scripps Institution of Oceanography,
California
Dr. Audrey W. Meyer, Texas A&M University
Dr. Thomas A. Davies, University of Texas, Austin
Mr. Jeffrey A. Johnson, University of California, Los Angeles
Dr. Lubomir F. Jansa, Bedford Institute of Oceanography, Canada
Dr. Jean-Paul Loreau, Museum National D'Histoire Naturelle,
France
Dr. Massimo Sarti, Universita di Ferrara, Italy
Dr. M. C. Comas, Universidad de Granada, Spain
Mr. James A. Bergen, Florida State University
Mr. Joseph Applegate, Florida State University
Dr. Jurgen Thurow, Universitat Tuebingen, West Germany
Dr. Mark W. Williamson, Dalhousie University, Canada
Dr. Michel Moullade, Universite de Nice, France
Dr. Junzo Kasahara, University of Tokyo, Japan
Dr. Miriam Baltuck, Tulane University, Louisiana
Dr. James Ogg, Scripps Institution of Oceanography, California
Mr. Keith Dunham, University of Michigan
Dr. Janet Haggerty, University of Tulsa, Oklahoma
Dr. Jacques Girardeau, Laboratoire des Materiaux Terrestres,
France
Dr. Cynthia A. Evans, Colgate University, New York
Dr. David Goldberg, Lamont-Doherty Geological Observatory,
Columbia University
Dr. Emilio Luna, Hispanoi-Eniepsa, Madrid, Spain