

January 17, 2005

**IODP EXPEDITION 305:
OCEAN CORE COMPLEX FORMATION, ATLANTIS MASSIF
WEEK 1 REPORT**

OPERATIONS

PORTCALL: Expedition 305 began when the first line was placed ashore at Pier 12 in Ponta Delgada on the island of Sao Miguel, Azores at 2120 hours on 7 January 2005. The USIO and Transocean personnel crossover took place on the morning of 8 January. In addition to the routine freight transfer and the loading of fuel (999.6 MT), there were three pacing items for this portcall: an American Bureau of Shipping (ABS) Annual and Statutory survey (completed on 11 January), an overhaul of the drawworks transmission (customs clearance delayed arrival of parts until ~1530 hr on 12 January), and the replacement of the Active Heave Compensator (AHC) hydraulic hose bundle (not completed due to faulty return hose). At 1715 hr, 12 January, the last line was released from the dock and after clearing the harbor entrance, the vessel began the journey to Hole U1309D. The portcall required 116 hours or 4.8 days.

TRANSIT TO HOLE U1309D (ATLANTIS MASSIF): The transit to Hole U1309D was made at an average speed of 10.7 knots and covered 1002 nmi. The voyage was uneventful except for moderate rolling caused by a large swell (~15 feet maximum) from the NW. The Captain made several adjustments to the ship's course during the transit to minimize the roll that occasionally reached 10°. During the transit, the ship's clocks were set back two hours to -3 hours UTC. There was a 17.8 nmi magnetic survey near the site prior to reentry and coring. The survey line began at 30° 4.7' N, 041° 47.0' W and extended WNW to 30° 07.9' N, 042° 07.1' W. The survey was conducted at 10.3 knots and after the magnetometer was recovered, the vessel proceeded directly to Hole U1309D. The vessel was positioning over Hole U1309D at 1600 hr on 16 January using the beacon that was deployed during Expedition 304. The drill crew made up a 10-collar RCB bottom hole assembly affixed with a new C-7 RBI rotary bit and deployed same to 1638 mbsf. By midnight, the vessel was positioning over Hole U1309D in preparation for reentry.

SCIENCE SUMMARY

The Expedition 305 Shipboard Science Party arrived on board 9 January. Most of the science party enjoyed a guided tour of the central part of Sao Miguel on Monday 10 January. The Captain led a safety indoctrination meeting on 11 January. Lab tours were held and cores from X304 were laid out for orientation of the X305 shipboard scientists. After departure from Ponta Delgada, the science staff were involved in establishing core description and laboratory analytical protocols during the transit to Site U1309. Magnetics data were collected along a spreading flowline over ≤ 2 Myr crust from the east flank of the Mid-Atlantic Ridge to the drill site. These data fill a gap left by prior, widely-spaced survey tracks. We began tripping pipe for the reoccupation of Hole U1309D at ~1700 hr on 16 January.

LABORATORY STATUS

The Expedition 305 technical staff boarded the vessel at 0900 hrs on 7 January 2005 and crossed over with the off going X304 technical staff. The technicians began loading freight and preparing the labs for sea on 8 January. All freight was loaded by the end of day on 11 January except for a box from DHL that was delivered on 12 January with the vessel sailing for Site U1309 at 1715 hrs that day. All trash was collected and offloaded before departure.

Equipment and laboratory spaces were secured for sea. During the port call the DIS was worked on by the ETs. The technicians attended classes on hard rock curation given by the Marine Curatorial Specialist and the Assistant Lab Officers.

During the transit to the first site the technical crew prepared the shipboard laboratories for the commencement of coring. The scientific staffs were introduced to the labs and technical staff. Underway watches were manned. The vessel has an ETA at the Site in the afternoon of 16 January.

HSE

While in port, the *R/V JOIDES Resolution* continued to operate under a security level of MARSEC Level 1 (Yellow) and appropriate security measures were in effect. All personnel were required to register with the ship's staff before being allowed on the ship. All personnel were also required to wear proper identification while the vessel was in port. A fire and boat drill was held on January 13 for the entire ship's complement.