IODP Expedition 360: SW Indian Ridge Lower Crust and Moho

Week 2 Report (6–12 December 2015)

Operations

Week 2 of Expedition 360 (Southwest Indian Ridge Lower Crust and Moho) began while underway from Colombo, Sri Lanka, to Site U1473 (proposed site AtBk-6), with 39 nmi out of the 2817 nmi total distance completed.

Ship time was changed by -0.5 h on 6 December and by -1.0 h on 7 December, resulting in UTC + 4 h, which will be our time zone for the remainder of Expedition 360.

An operational reentry deployment meeting was held to finalize plans for the reentry installation. All reentry hardware was located and inspected. Ship tours were given to the science party. The hydraulic release tool (HRT) was assembled in preparation for running the drill-in casing system. Appropriate space-out drawings were completed, defining the drill-in casing program. The dual elevator handler was overhauled and all other drilling and coring equipment had the prespud maintenance checks completed.

At the end of Week 2, the vessel had completed 1960 nmi of the 2817 nmi total transit distance at an average speed of 11.3 kt.

Science Results

During the transit towards the first Site U1473 (proposed site AtBk-6), IODP personnel provided training on sampling procedures and tools, microscopy and imaging, the DESClogik core description application, and other laboratory tools and procedures. Readiness reviews were held with the microbiology and downhole logging laboratory groups. Scientists received a presentation on Expedition 360 operations, followed by ship tours, and held daily science presentation meetings.

The scientists also reviewed samples and descriptions of legacy cores from Hole 118-735B, in preparation for a formal redescription of cores from Hole 179-1105A in the upcoming days. These activities prepare the science party for the description and measurement of material likely to be recovered during the upcoming drilling, provide a test of the envisioned description methodology, and will generate an equivalent database for comparison of the stratigraphies of legacy Hole 1105A and the new hole.

Education and Outreach

Interactions

- Held a total of 14 broadcasts (six to the US, one to Canada, and seven to France).
 - o Total students reached: 543
 - o Total scientists engaged: 12
- Some interactive sessions were overlapped to decrease the total time per day spent broadcasting.
- Potential future broadcasts in preparation include multiple interactions with France, including "Science on tourne!" and the Natural History Museum in Paris.

Social Media

- Five Facebook (https://www.facebook.com/joidesresolution) posts, five JOIDES

 Resolution blog (http://instagram.com/joides_resolution) posts, and five Twitter (https://twitter.com/TheJR) posts.
- First podcast episode was published; currently at 300+ listeners.

Media

- Xinhua News Agency: four news reports and 32 photos were published, and 5000 visits to Xinhua News Agency Website registered.
- Updated media files on the LAN server with the BBC radio and TV interviews as well as the Jimmy Fallon monologue joke.
- Our BBC online article received 800,000+ views.
- Article in Le Monde, Passeur de Sciences.
- Held phone interviews with BBC World Service (both radio and TV) and the Boston Globe.

Technical Support and HSE Activities

Laboratories

- New 360° image line scan logger tested and operational.
- Positive pressure with filtered air enclosure constructed in biology cold room.

Miscellaneous

• Inventory update of stores is ongoing.

HSE Activities

- Fire and Boat Drill held on 6 November.
- Secure Area Drill held on 7 November.
- Conducted chemical hood air flow survey.