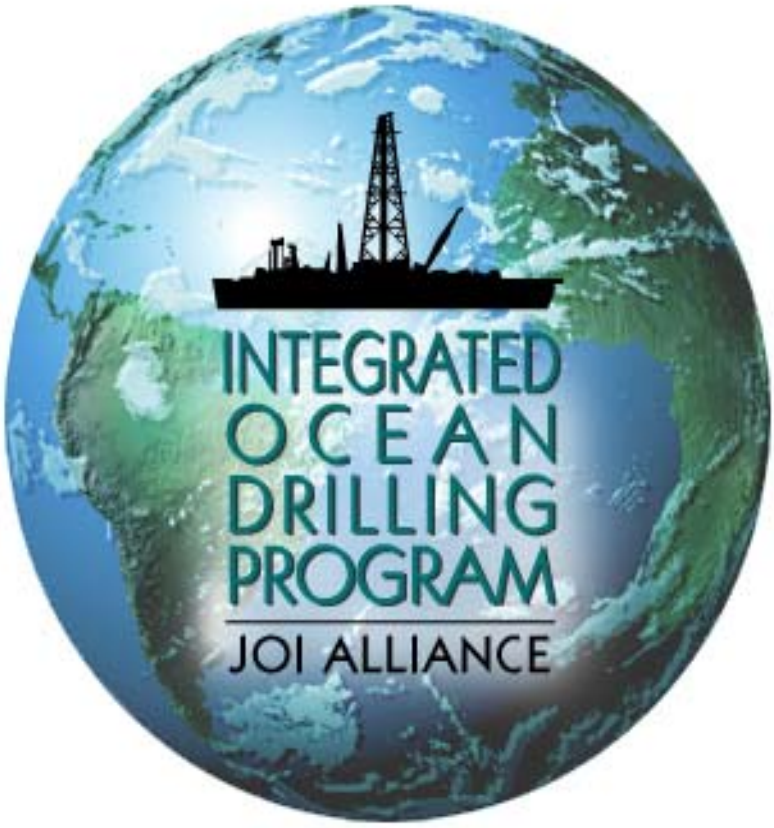
14 February 2006



1 October–31 December 2005

FY06 Quarterly Report 1

NSF Contract No. OCE-0352500

Submitted by the JOI Alliance to

The National Science Foundation

and

IODP Management International, Inc.

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INTRODUCTION

The organization of this quarterly report reflects activities and deliverables that are outlined in the Integrated Ocean Drilling Program U.S. Implementing Organization (IODP-USIO) Program Plan as implemented by the Joint Oceanographic Institutions, Inc. (JOI), Alliance during the first quarter of FY06.

PHASE 1 EXPEDITION OPERATIONS

IODP-USIO EXPEDITION SCHEDULE

The following IODP-USIO operational schedule was issued on 6 September 2005.

Cruise		Port (Origin)	Dates[1, 2]	Total Days (Port/Sea)	Days at Sea (Transit[3]/Ops[4])	Co-Chief Scientists	Alliance Contact(s)
Superfast Spreading Rate Crust 2	309	Cristobal	8 July–28 August 2005	51 (5/46)	6/40	D. Teagle S. Umino	TAMU: N. Banerjee LDEO: F. Einaudi
Cascadia Margin Gas Hydrates	311	Balboa	28 August–29 October 2005[5]	62 (6/56)	19/37	T. Collett M. Riedel	TAMU: M. Malone LDEO: G. Guerin
Superfast Spreading Rate Crust 3	312	Victoria	29 October–29 December 2005[6]	61 (5/56)	19/37	J. Alt S. Miyashita	TAMU: N. Banerjee LDEO: TBN
Demobilization		Cristobal[7]	29 December 2005–31 January 2006	33 (26/7)	7/0	NA	TAMU: M. Storms LDEO: G. Myers

Notes:

[1] Ship is scheduled to arrive 0600 hr on first day of port call.

[2] Initial cruise date reflects first day of port call; ship sails when ready.

[3] Transit = estimated time to/from port to the operating area.

[4] Ops = operations (includes both on-site and between-site time).

[5] The Expedition 311 port of call was split with 2 days in Balboa, Panama, followed by 4 days in Astoria, Oregon. Scientists embarked vessel in Astoria on 15 September 2005.

[6] Scientists embarked vessel in Acapulco, Mexico, on 12 November 2005.

[7] Demobilization is scheduled to occur in Galveston, Texas.

EXPEDITION PLANNING AND IMPLEMENTATION ACTIVITIES

IODP-USIO EXPEDITION 307: PORCUPINE CARBONATE MOUNDS

Postexpedition Activities: A core description party was held 4–8 October 2005 at the Bremen Core Repository (BCR) in Bremen, Germany, to describe cores from Holes U1317B, U1317C, and U1317E that had been frozen and split on the transit from Ponta Delgada, Portugal, to Mobile, Alabama, or at the Gulf Coast Repository (GCR) in College Station, Texas. The Expedition 307 sampling party was held 10–14 October 2005 at the BCR.

IODP-USIO EXPEDITION 311: CASCADIA MARGIN GAS HYDRATES

Expedition Staffing: Expedition Staff Scientist: M. Malone; Co-Chief Scientists: T.S. Collett, M. Riedel; Logging Staff Scientist: G. Guerin. Scientific staffing for the expedition (excluding Co-Chief Scientists) included the following IODP membership breakdown: six U.S. Science Support Program (USSSP), six Japan Drilling Earth Science Consortium (J-DESC), and seven European Consortium for Ocean Research Drilling (ECORD) participants and one IODP-China participant.

Expedition Implementation: A transect of five sites across the northern Cascadia margin was cored during Expedition 311 (which commenced in the last quarter of FY05).

Sites U1325, U1326, U1327, and U1329 represent different stages in the evolution of gas hydrate across the margin, from the earliest occurrence on the westernmost first accreted ridge (Site U1326) to its final stage at the eastward limit of gas hydrate occurrence in shallower water on the margin (Site U1329). These sites were targeted for the study of gas hydrate occurrences and formation models for accretionary complexes. Site U1328 represents a cold vent with active fluid and gas flow.

Hole A at each site was drilled and logging while drilling/measurement while drilling (LWD/MWD) was conducted at the start of the expedition (prior to coring), which provided a set of measurements that guided subsequent coring and special tool deployments at all five sites. Additional wireline logging at each site and two vertical seismic profiles (VSPs) at Sites U1327 and U1328 were completed. A total of 1217.76 m of sediment core was recovered using the advanced piston corer (APC) and extended core barrel systems, interspersed with 24 (16 successful) pressure core sampler (PCS) runs for onboard degassing experiments and 19 Fugro piston corer (FPC)/Hydrate Autoclave Coring Equipment (HYACE) rotary corer (HRC) deployments. Four of the pressure cores were stored under in situ pressure for subsequent shore-based studies.

Indirect evidence of the presence of gas hydrate included increased electrical resistivities and *P*-wave velocities on downhole logs and low-salinity interstitial water anomalies, numerous infrared cold spots, decreases in void gas C1/C2 ratios, and gas hydrate–related sedimentological moussy/soupy textures in recovered cores. Gas hydrate was also directly observed in the recovered cores, and >30 gas hydrate samples were preserved in liquid nitrogen for shore-based studies. The combined observations show that gas hydrate mainly occurs within coarser-grained turbidite sands and silts.

The occurrence of gas hydrate appears to be controlled by several key factors, and the concentration of gas hydrate changes significantly as those factors vary in the sediments along the margin. The key controlling factors are (1) local methane solubility linked with pore water salinity, (2) fluid/gas advection rates, and (3) availability of suitable host material (coarse-

grained sediments). In the previous model for gas hydrate formation in an accretionary margin, the highest concentrations of gas hydrate were expected to occur localized near the base of the gas hydrate stability zone above the bottom-simulating reflector (BSR), with concentrations gradually decreasing upward as a result of pervasive fluid advection from overall tectonically driven fluid expulsion. However, the results of Expedition 311 show that this model is too simple and that there are additional overprinting factors. Although evidence for widespread gas hydrate–related BSRs was observed in the data, by far the largest concentrations of gas hydrate were observed at the top of the gas hydrate occurrence zone, at a point where the amount of methane in the pore fluid exceeds the local methane solubility threshold. This was especially observed at Sites U1326 and U1327, where gas hydrate deposits several tens of meters thick occur at a shallow depth of ~100 meters below seafloor (mbsf), with concentrations locally exceeding 80% of the pore volume. Another site of very large gas hydrate concentrations was found at cold vent Site U1328, where beds of massive gas hydrate occur within the top ~40 mbsf, with concentrations exceeding 80% of the pore space as a result of focused fluid/gas migration from underneath.

Technology: Primary tools for this expedition included APC and extended core barrel (XCB) coring, pressure coring with both the IODP pressure core system and the HYACINTH pressure core systems (FPC and HRC), LWD, and two zero-offset VSPs. Significant sampling for gas hydrates and microbiology was planned, for which two temporary laboratory vans were installed on the *JOIDES Resolution*. Funding for the use and deployment of the HYACINTH tool systems and the deployment of temporary laboratory vans was provided through the JOI Cooperative Agreement with the U.S. Department of Energy's National Energy Technology Laboratory (DOE-NETL).

Expedition 311 required the following special adaptations for pressure coring tools to meet science objectives:

1. A 3 m vertical ice bath that was designed, mounted in the moonpool, and positioned in-line with the core barrel shucks. The bath, consisting of an ice-filled, insulated 10¾ inch casing, was mounted on tracks welded to the moonpool doors. When a pressurized core barrel was recovered on deck, it was stowed in the ice bath shuck.
2. Special aluminum core barrels and pressure housings that were fabricated for the IODP PCS to allow X-ray logging under pressure.
3. A special boom crane that was acquired to quickly and safely lift pressurized cores from the rig floor to the refrigerated van on top of the lab stack.

IODP-USIO Expedition 312: Superfast Spreading Rate Crust 3

Expedition Planning: Prior to the expedition, three possible logging scenarios including time estimates were prepared in detail, the check shot survey operation was discussed in detail with the Physical Properties Specialist, and data from Ocean Drilling Program (ODP) Leg 206 and IODP Expedition 309 were studied and analyzed.

Expedition Staffing: Expedition Project Manager/Staff Scientist: N. Banerjee; Co-Chief Scientists: J. Alt, S. Miyashita; Logging Staff Scientist: M. Reichow. Scientific staffing for the expedition (excluding Co-Chief Scientists) included the following IODP membership breakdown: eight USSSP, six J-DESC, and nine ECORD participants.

Expedition Implementation: IODP Expedition 312 (Superfast Spreading Rate Crust 3) was the third cruise in a multi-phase drilling project to ODP Site 1256 in the eastern equatorial Pacific

(6.736°N, 91.934°W). The main goal of recovering a complete section of upper oceanic crust from lavas through underlying dikes and into uppermost gabbros was successfully accomplished. Hole 1256D was deepened during Expedition 312 by 250.2 m to a total depth of 1507.1 mbsf (1257.1 meters sub-basement [msb]), passing through the sheeted dikes (345 m thick) and 100.5 m into plutonic rocks consisting of gabbros with dike screens. Gabbros were first encountered at 1406.6 mbsf, near the middle of the depth range predicted from geophysical observations.

During the expedition, the logging operation plan was refined and scheduled to take place at the end of the expedition after drilling and coring were completed. A total of six tool strings were deployed and high-quality data were obtained during each run. The logged sequences represent sheeted dikes and gabbros, and the maximum depth reached 1440 mbsf, which was 67 m above the total cored depth of 1507 mbsf. Each tool string included a gamma ray tool to enable later depth matching between each logging run. In addition, the decision was made to use the air gun in "harmonic mode" for the check shot survey. This modification of the air gun and the deployment at 7 meters below sea level (mbsl) during the check shot survey enabled the collection of a high-quality VSP. The deepest station for the survey was at 1382 mbsf.

No unusual operational problems were encountered during Expedition 312, although the rate of penetration was very slow. Hole 1256D, now the fourth-deepest hole drilled into oceanic basement and the second-deepest penetration into in situ ocean crust (after Hole 504B), is open and ready for further drilling into the plutonic foundation of oceanic crust.

Status of Equipment

IODP Equipment

IODP-USIO Science Services, Texas A&M University (TAMU), and Texas A&M Research Foundation (TAMRF), based on approval from the National Science Foundation (NSF) and JOI, initiated negotiations with Overseas Drilling Limited (ODL) to loan equipment from NSF and TAMRF to ODL for use during tentative India/China hydrate drilling programs after demobilization in Galveston, Texas. The ODL request for equipment also included components from IODP-USIO Science Services, Lamont-Doherty Earth Observatory (LDEO) of Columbia University.

TECHNOLOGY DEVELOPMENT

Projects and Other Activities

IODP-USIO Science Services, TAMU, Engineering Services

Simulated Borehole Test Facility: All remaining mechanical parts to the Simulated Borehole Test Facility (SBTF) were received and assembled. A Davis-Villinger Temperature Pressure Probe (DVTP-P) mock-up was installed into the system and the linear motion was tested using shop air to move the piston. The linear actuator was installed and data were collected to in order to create a program to monitor the velocity of tools when fired in the SBTF.

The TAMU Civil Engineering Department was contacted to help with the design of sediments to be used in the SBTF, and subsequent discussions were very beneficial in selecting the type of clay to be used and methods of consolidating the sediment.

IODP-USIO Science Services, TAMU, Analytical Services

Helium pycnometers: Plans were discussed with the TAMU Oceanography Department for building pycnometers to replace the ailing Quantachrome instruments. Micromeritics provided

one of the company's instruments, which was taken apart and successfully wired to the LabVIEW program. A decision will be made in spring 2006 on whether to go with the Micromeritics or TAMU product for Phase 2.

Kappa Bridge: The latest model instrument was received to replace the old model. An AGICO technician trained staff on the new instrument in College Station, Texas, on 13–18 December 2005. The instrument will be deployed in Phase 2.

Data Analysis Tools Planning: Strategies were developed for implementing data capture and analysis tools for core description, stratigraphy, age-depth modeling, temperature and pressure data reduction, etc., with members of other data management groups including CHRONOS, Australian Commonwealth Scientific and Research Organization (CSIRO), The Geosciences Network (GEON), University of Bremen, and the Corewall Consortium. P. Blum (Supervisor of Analytical Services, IODP-USIO Science Services, TAMU) participated in and presented a talk at the Center for Deep Earth Exploration (CDEX) Core-Log-Seismic Integration Workshop held 5 and 6 October 2005 in Tokyo, Japan.

IODP-USIO Science Services, LDEO, Engineering and Technical Services

Modular High-Temperature Tool: The modular high-temperature tool (MTT) development progressed well during the reporting period. The long-lead items were received and successfully fitted. The tool was assembled and subjected to 250°C temperatures at the LDEO facility for 6 hr, and the internal temperatures did not exceed 70ºC. It is expected that the tool will be able to handle even higher temperatures or longer durations at 250ºC. All components were also successfully pressure tested to 10,000 psi in the LDEO pressure vessel.

REPORTS/PUBLICATIONS

IODP-USIO Program Plan for IODP-MI and NSF

On 5 December 2005, IODP Management International, Inc. (IODP-MI), requested that the USIO provide an initial FY07 science operating cost (SOC) budget estimate by 6 January 2006 in order to better evaluate SOC needs for FY07. IODP-MI intended to share this preliminary SOC activity estimate with the Lead Agencies, with the goal of enabling IODP-MI to give more realistic budget guidance to its subcontractors upon receipt of Lead Agency budget guidance. USIO staff worked on completion of this request during the remainder of the quarter.

USIO-IODP FY05 IODP Quarterly Report

The report for the fourth quarter of FY05 (July–September 2005) was submitted to NSF on 18 November 2005.

IODP Scientific Publications

Preliminary Reports

Expedition 309 (Superfast Spreading Rate Crust 2): Published on 26 October 2005 (see "Appendix H").

Expedition 311 (Cascadia Margin Gas Hydrates): Published on 19 December 2005 (see "Appendix H").

FIRST POSTCRUISE MEETINGS

Expeditions 303 and 306 (North Atlantic Climate 1 and 2): Held 28 November–2 December 2005 at IODP-USIO Science Services, TAMU.

Expedition 307 (Porcupine Carbonate Mounds): Held 7–11 November 2005 at IODP-USIO Science Services, TAMU.

Expeditions 308 (Gulf of Mexico Hydrogeology): Held 14–18 November 2005 at IODP-USIO Science Services, TAMU.

PROCEEDINGS OF THE INTEGRATED OCEAN DRILLING PROGRAM

Volume 301 (Juan de Fuca Hydrogeology): Published on 31 October 2005 (see "Appendix H").

Volume 302 (Arctic Coring Expedition [ACEX]): Publication of this volume, which was originally scheduled to coincide with the end of the Expedition 302 moratorium on 21 November 2005, was delayed. At the end of the reporting period, publication was expected to occur in February 2006. The delay was attributed to the late scheduling of the first postcruise meeting, which was held 27–30 June 2005, and to delays in the submission of the final manuscript and the return of galley proofs.

OUTREACH

MUSEUM PARTNERSHIPS

JAPAN/U.S. PUBLIC UNDERSTANDING OF RESEARCH PLANNING

S. O'Connell sailed on Expedition 312 as an informal science educator and worked with B. Kennedy, School of Rock Expedition participant from the Science Museum of Minnesota, to provide updates about Expedition 312 for the general public on the museum's Science Buzz Web page (http://ltc.smm.org/buzz/museum/ocean_drilling). This activity was part of a Japan/US Public Understanding of Research (PUR) pilot program to sail pairs of American and Japanese museum educators to facilitate real-time education and outreach activities. H. Sakurai, of Japan's National Museum of Emerging Science and Innovation, also sailed and reported to his museum's Web site (http://www.miraikan.jst.go.jp/j/sp/jr312/index.html).

PUBLIC AFFAIRS

The JOI Alliance continued to focus attention this quarter on laying the groundwork for media events and outreach opportunities in FY06 and beyond. Highlights included:

- Submission of an article for *Sea Technology* magazine's January 2006 annual "Review & Forecast" issue. The article reviewed the significant events and changes in 2005 that affected IODP-USIO and the scientific ocean drilling community.
- Design and execution of a communications plan for JOI Learning's School of Rock Expedition. Outreach staff promoted to freelance journalists the opportunity to join teachers onboard to report on the expedition firsthand. Customized media advisories were distributed to more than 200 local news media organizations in the hometowns of participating educators. Several interviews with the educators and organizers of the expedition were arranged for interested journalists.

- Participation in the IODP-MI Education and Outreach Task Force 2005 meeting in Hachinohe, Japan. Significant progress was made toward unifying the IODP implementing organizations' (IOs) messages and consistently explaining IODP accurately.
- Drafting of an all-purpose communications planning template for IODP expeditions and *JOIDES Resolution* port calls that can be adapted to specifically targeted opportunities for outreach activities.
- Continuation of work on developing a coherent visual identity for outreach materials (brochures, fact sheets, press kits, etc.).

PUBLIC RELATIONS MATERIALS

News releases were distributed to more than 250 science journalists worldwide, as well as member country offices. News releases distributed during this quarter included the following:

- Scientists Gain New Insights into "Frozen" Methane from Beneath Ocean Floor (31 October 2005).
- Joint Oceanographic Institutions (JOI) Alliance Plans Extreme Makeover for Revered Scientific Drilling Ship (21 December 2005).

News articles, programs, media citations, or public commentary related to IODP expeditions involving the riserless platform published during this quarter included

- Message for the Week, 2005. GMUHS teacher speaks to national educators group. *Message for the Week* (Chester, VT), 5–11 October 2005.
- Times Colonist, 2005. Expedition drills deep in study of climate issues. *Times Colonist* (Victoria, British Columbia, Canada), 17 October 2005.
- Gazette-Times, 2005. Corvallis teacher goes to sea. *Gazette-Times* (Corvallis, OR), 29 October 2005.
- Anchorage Daily News, 2005. Arctic Ocean ridge yields clues that tell of warm past. *Anchorage Daily News* (Anchorage, AK), 30 October 2005.
- Daily Barometer, 2005. Oregon State University-area teacher is sent to sea on scientific drilling vessel. *Daily Barometer* (Oregon State University), 31 October 2005.
- A-Channel, 31 October 2005. A-Channel News at 5 (Victoria, British Columbia, Canada).
- James Madison University News, 2005. Follow science professor as she sails 'School of Rock.' *James Madison University News* (Harrisonburg, Virginia), 1 November 2005.
- Times Colonist, 2005. Scientists to study drill cores. *Times Colonist* (Victoria, British Columbia, Canada), 1 November 2005.
- Victoria News, 2005. Ocean floor explorers make port in Victoria. *Victoria News* (Victoria, British Columbia, Canada), 2 November 2005.
- Potomac Almanac, 2005. Ocean drilling takes teacher to new depths; Hoover science teacher spends two weeks at sea. *Potomac Almanac* (Virginia), 2 November 2005
- ScienceDaily.com, 2005. Scientists gain new insights into "frozen" methane beneath ocean floor. *ScienceDaily.com,* 7 November 2005. Available from World Wide Web: http://www.sciencedaily.com/releases/2005/11/051107083255.htm.

- Taipei Times, 2005. Taiwan before the flood. *Taipei Times* (Taiwan), 13 November 2005.
- Nature, 2005. Unearthing records of past climates from deep beneath the sea. *Nature,* 24 November 2005, 438:xiii.
- Oilweek, 2005. Bursting at the seams; gas hydrate research is targeting production tests and global warming. *Oilweek,* December 2005.
- Kerr, R.A., 2005. Deep-sea drilling: scientific drill ship to be reborn. *Science,* 310(5756):1890. doi:10.1126/science.310.5756.1890b.

PORT CALL OUTREACH

Expedition 311: The USIO coordinated with IODP-MI, the Canadian Consortium for Ocean Drilling, and Natural Resources Canada to plan and execute port call activities in Victoria, British Columbia, Canada, 29 October–1 November 2005 at the conclusion of Expedition 311. Nearly 100 national, regional, and local media outlets were contacted and invited to see the *JOIDES Resolution* and to interview scientists completing the Cascadia Margin Gas Hydrates expedition during the last North American port call for Phase 1. Journalists from seven news organizations participated and conducted interviews. Ship tours were arranged for 11 VIPs, including the University of Victoria President and Canadian Ministers of Energy and Mines and Advanced Education. Resulting coverage is detailed above.

Expedition 312: Communications staff consulted with the Expedition 312 Staff Scientist and Co-Chief Scientists, as well as communications officers at NSF and IODP-MI, as they received news of the science party's drilling accomplishments. Per the science party's agreement with *Science,* which has given initial favorable indications that it will publish the scientists' manuscript, a joint IODP-USIO/IODP-MI/NSF news release will be distributed under embargoed conditions for publication on the date of the paper's appearance in *Science.*

IODP-USIO WEB SITE

PUBLICATIONS

This quarter saw the publication of the first volume of the *Proceedings of the Integrated Ocean Drilling Program.* Volume 301 includes chapters in HTML and PDF format, data, maps, supplementary material, and an expedition-related bibliography.

In addition, because of IODP's obligation as a member of CrossRef, all references in published chapters and in the expedition-related bibliography must be linked, where possible, via digital object identifiers (DOIs) to other publishers' online abstracts. The use of DOIs has eliminated the requirement for the IODP-USIO Science Services, TAMU, Web Administrator to obtain publishers' permission to reproduce abstracts, and has also expanded our access to previously unavailable abstracts, such as those in *Nature*.

IODP DATABASES

Janus Database: Data from Expedition 301 are available to the public online. Coring summary data, site trivia, and sampling data from Expedition 302 are available to the public online. Data from Expeditions 303–311 are under moratorium and therefore only available to the Scientific Party.

Log Database: Data from Expedition 301 are available to the public online. Data from Expeditions 303 to 311 are under moratorium and therefore only available to the Scientific Party.

The online presentation mirrors the ODP presentation in the general format, with some changes in the documentation templates such as the inclusion of summary tables and active links. The online database has been updated to include borehole seismic and temperature data. It now includes

- standard data (non-image)
- high-resolution data (non-image)
- image data
- sonic waveforms data
- borehole seismic data
- temperature data
- any related documentation

The page layout of the IODP Log Database has been redesigned to compartmentalize each data section into its own page, making the long lists of available data more manageable.

Processed Logs: Logging data have been processed and put online under moratorium (with accompanying documentation) for the following holes: Hole 642E, Expedition 306 (temperature); Hole 1256D, Expedition 309 (temperature); Hole U1305C, Expedition 303 (temperature); Hole U1309D, Expedition 305 (temperature); Hole U1317D, Expedition 307 (temperature); Hole U1325C, Expedition 311 (standard data, temperature); Hole U1326C, Expedition 311 (standard data); Hole U1327D, Expedition 311 (standard data, temperature); Hole U1327E, Expedition 311 (standard data); Hole U1328C, Expedition 311 (standard and image data); Hole U1329D, Expedition 311 (standard and image data, temperature).

The seismic data from the following holes was converted from DLIS to SEGY format and made available online: Hole U1301B, Expedition 301; Hole U1309D, Expedition 304; Hole U1317D, Expedition 307; Hole U1320A, Expedition 308; Hole U1324A, Expedition 308; Hole U1327D, Expedition 311; Hole U1328C, Expedition 311.

Other:

- The Expedition 311 VSP data were converted to SEGY.
- VSP transit-time data were updated for all IODP expeditions.
- Discussions were initiated between IODP-USIO Science Services, LDEO, and the ECORD Science Operator (ESO) regarding archiving of logging data collected on mission-specific expeditions. ESO will provide data files and metadata that adhere as closely as possible to those used by the USIO. This will allow for the reuse of existing data management scripts and a common Web interface for both the USIO and ESO data sets.

IODP-USIO SUPPORT ACTIVITIES

INTERACTIONS WITH IODP-MI AND IODP IMPLEMENTING ORGANIZATIONS

SCIENCE PLANNING COMMITTEE

The Science Planning Committee (SPC) meeting was held 24–28 October 2005 in Kyoto, Japan. (See Appendix E for list of USIO attendees.) The meeting included policy development discussions; an environmental protection and biodiversity presentation concerning marine protected areas; science assessments for Expeditions 301, 304, and 305; proposal review; and a

review of panel liaisons. A temporary third-party tool policy was approved, and SPC procedures and protocols were reviewed.

The IODP expedition schedule was discussed and riser, riserless, and mission-specific platform (MSP) operations were considered for FY07 and FY08. Discussions covered a broad range of topics, and IODP-MI and the IOs requested SPC to begin the planning process and extend it to a three-year process with the identification of a fixed schedule for Y+2, targeted possible expeditions for Y+3, and the identification of complex programs for Y+4. During the meeting the riser schedule was endorsed.

Science Steering and Evaluation Panel

The Science Steering and Evaluation Panel (SSEP) meeting was held 15–18 November 2005 in Kahuku, Hawaii. (See Appendix E for list of USIO attendees.) A microbiology focus group met first to discuss the proposal submission rate from the microbiology community. The consensus was that there is appropriate interest within this discipline. Following presentations from liaisons, the SSEP evaluated 33 proposals that had been grouped in three themes: ocean history and climate, igneous lithosphere and instrumentation, and sedimentary margins and SEISmogenic Zone Experiments (SEIZE). Three working groups were also convened to provide comments to SPC on improving written reviews and communication with proponents, the SSEP role in implementation of a mission concept, and the SSEP role in long-range planning. Thirteen proposals were forwarded to SPC.

Environmental Protection and Safety Panel

The Environmental Protection and Safety Panel (EPSP) meeting was held 12–14 December 2005 in Honolulu, Hawaii. (See Appendix E for list of USIO attendees.) Topics of discussion included remotely operated vehicle (ROV) capabilities; election of Vice Chair; specific proposal reviews; updates from SPC and the Site Survey Panel (SSP); and an IODP-MI report on the site survey databank, database, and status of active proposals.

Recommendations were developed for protocol documents regarding EPSP. Developments during Expeditions 308 and 311 and derivative recommendations were also discussed.

APPENDIX A: CONTRACTUAL ACTIVITIES

JOI

NSF CONTRACT OCE-0352500 WITH JOI

JOI received the following modifications during the report period:

- Modification 13: Approved the FY06 Program Plan at $18,792,764 and provided $10,000,000 of incremental funding for IODP.
- Modification 14: Provided $7,000,000 of incremental funding for FY06 Management and platform operating cost (POC) activities.

IODP-MI SUBCONTRACT IODP-MI-05-03 WITH JOI

JOI received the following modifications from IODP-MI during the report period.

- Modification 3: Approved and fully funded JOI's FY 2006 SOC budget at $10,541,327 and conditionally approved $175,000 for the JOI Alliance Pulsed Telemetry Module project, pending receipt of the Engineering Development Panel's (EDP's) recommendations.

JOI SUBCONTRACT JSC 4-02 WITH TAMRF

JOI issued the following modifications during the report period:

- Modification 11: Approved the FY06 Program Plan in the amount of $24,052,488 and provided incremental funding of $8,437,295 for POC and U.S. systems integration contractor (SIC) costs and $7,440,193 to SOC.
- Modification 12: Provided incremental funding of $1,347,489 to POC, $3,584,489 to SIC demobilization, and $853,545 to SIC nondemobilization. This modification also restricted any transfer of funding between these three budget areas.

JOI SUBCONTRACT JSC 4-03 WITH LDEO

JOI issued the following modification during the report period:

- Modification 9: Approved the FY06 Program Plan in the amount of $3,389,889 and funded $600,496 to POC and SIC and $2,289,393 to SOC.

TAMRF/TAMU

TAMRF SUBCONTRACT WITH ODL

- 25 November 2005: Amendment 7 was issued for incremental funding.

MISCELLANEOUS ACTIVITY

- 21 October 2005: Submitted the FY05 Annual Inventory Report for Contract JSC4-02.
- 29 December 2005: Approval received for the loan of equipment to ODL.

APPENDIX B: FINANCE REPORT

Please contact info@joiscience.org for hard copies of financial pages.

APPENDIX C: PERSONNEL STATUS

JOI

The following positions were vacated during the quarter:

- IODP-USIO Assistant Director (Kelly Kryc): 31 October 2005

The following positions were opened and advertised during the quarter:

- IODP-USIO Associate Director
- Accounting Manager

LDEO

The following positions were opened and advertised during the quarter:

- Project Coordinator

TAMU/TAMRF

The following positions were vacated during the quarter:

- Assistant Laboratory Officer (Paul Teniere): 1 November 2005
- Microcomputer Specialist (Tariq Ayyub): 7 November 2005
- Marine Laboratory Specialist (Dennis Graham): 15 November 2005
- Marine Laboratory Specialist (Jason Deardorff): 1 December 2005
- Applications Developer II (John Eastlund): 15 December 2005

The following positions were opened and advertised during the quarter:

- Assistant Laboratory Officer
- Applications Developer I (3)
- Staff Scientist
- Assistant Editor
- Imaging Specialist
- Production Specialist II
- Applications Developer II (2)

The following positions were filled or cancelled during the quarter:

- Production Specialist II (Patrick Edwards): 10 October 2005
- Marine Computer Specialist (Andrew Trefethen): 21 November 2005
- Manager of Publication Services (Angie Miller): 15 December 2005
- Manager of Tools and Analytical Services: canceled

APPENDIX D: CONFERENCE AND MEETING SCHEDULE*

Conference/Meeting	Date	Location
Science Planning Committee (SPC)	24–28 October 2005	Kyoto, Japan
Science Steering and Evaluation Panel (SSEP)	15–18 November 2005	Kahuku, Hawaii
Environmental Protection and Safety Panel (EPSP)	12–14 December 2005	Honolulu, Hawaii

* External meetings and conferences.

APPENDIX E: TRAVEL*

Institution	Personnel	Purpose	Date	Location
JOI	F. Rack	Managers' Meeting	12–15 October 2005	College Station, TX
JOI	A. Castner, A. Edwards, M. Niemitz, F. Rack	Geological Society of America Annual Meeting	16–23 October 2005	Salt Lake City, UT
JOI	F. Rack	Programmatic Environmental Impact Statement Meeting	19–26 October 2005	College Station, TX
JOI	J. Corsiglia, D. Herr, F. Rack	Expedition 312 Port Call	28 October–2 November 2005	Victoria, BC, Canada
JOI	A. Jung, F. Rack	Monterey Bay Area Research Institute Meeting	3–4 November 2005	Monterey, CA
JOI	J. Corsiglia	IODP-MI Education and Outreach Task Force Meeting	14–15 November 2005	Hachinohe, Japan
JOI	F. Rack	Cyberinfrastructure Meeting	19–23 November 2005	College Station, TX
JOI	J. Corsiglia, J. Farver, M. Niemitz, L. Peart, F. Rack	American Geophysical Union (AGU) Meeting	3–9 December 2005	San Francisco, CA
LDEO	D. Goldberg	Schlumberger Meeting	3 October 2005	Ridgefield, CT
LDEO	G. Myers	Society of Professional Engineers Lake Washington Chapter Meeting	9–12 October 2005	Richardson, TX
LDEO-Aachen	M. Linek	Bremen Core Repository visit	31 October 2005	Bremen, Germany
LDEO	G. Iturrino	Scientific Steering Engineering Panels (SSEP) Meeting	12–19 November 2005	Honolulu, HI
LDEO	D Quoidbach	Cyberinfrastructure Meeting	21–22 November 2005	College Station, TX
LDEO	S Higgins	Expedition 306 Postcruise Meeting	28–30 November 2005	College Station, TX
LDEO-LGHF	J. Gastambide	Administration Meeting at Naturalia et Biologia (NEB)	2–6 December 2005	Paris, France
LDEO-Leicester	T. Brewer, J. Inwood	AGU Meeting	3–11 December 2005	San Francisco, CA
LDEO	A. Cook, D. Goldberg, G. Iturrino, D. Quoidbach, M. Reagan, T. Williams	AGU Meeting	4–9 December 2005	San Francisco, CA
LDEO-ORI	Y. Nakamura, T. Tsuji	AGU Meeting	4–10 December 2005	San Francisco, CA
LDEO-Aachen	C. Clauser, M. Linek	AGU Meeting	5–9 December 2005	San Francisco, CA
LDEO	A. Malinverno	Environmental Protection and Safety Panel Meeting	11–14 December 2005	Honolulu, HI
TAMU	P. Blum	Core-Log Integration Workshop	1–5 October 2005	Tokyo, Japan
TAMU	T. Williams	Expedition 307 Description and Sample Party	2–15 October 2005	Bremen, Germany
TAMU	D. Johnson	Campus Safety Conference	10–12 October 2005	Galveston, TX
TAMU	M. Petersen	Acquisition of passport	14 October 2005	Houston, TX

Institution	Personnel	Purpose	Date	Location
TAMU	D. Becker	Gartner Information Technology XFO Symposium	15–23 October 2005	Orlando, FL
TAMU	J. Firth	West Coast Repository Visit	17–19 October 2005	San Diego, CA
TAMU	P. Blum, T. Cobine, M. Hastedt, D. Houpt	Gulf Coast Conference for Analytical Chemistry Laboratory Instruments	17–20 October 2005	Galveston, TX
TAMU	J. Fox	JASMT Meeting	19–23 October 2005	Palisades, NY
TAMU	J. Baldauf	Science Planning Committee, Operations Task Force, and Implementing Organization Meetings; Expedition 312 Port Call; Monterey Bay Area Research Institute Meeting	20 October–6 November 2005	Kyoto, Japan; Victoria, BC, Canada; Monterey, CA
TAMU	B. Julson	Gulf Coast Analytical Show (Conference)	20 October 2005	Galveston, TX
TAMU	C. Peng	Gulf Coast Training	21 October 2005	Galveston, TX
TAMU	D. Hornbacher	Java Language Conference	22–29 October 2005	Keystone, CO
TAMU	J. Hutchinson, M. Mefferd	HP Enterprise Virtual Array Training	24–29 October 2005	Seattle, WA
TAMU	R. Mitchell	Expedition 312 Port Call	26 October–3 November 2005	Victoria, BC, Canada
TAMU	B. Julson	Expedition 312 Port Call	27 October–3 November	Victoria, BC, Canada
TAMU	D. Partain	Expedition 312 Port Call	27 October–1 November	Victoria, BC, Canada
TAMU	J. Fox	Expedition 312 Port Call	28 October–2 November 2005	Victoria, BC, Canada
TAMU	L. Obee	Expedition 312 Port Call Work at University of Victoria	1–6 November 2005	Victoria, BC, Canada
TAMU	D. Becker, C. Flores	Offshore Communications Conference	2–4 November 2005	Houston, TX
TAMU	J. Fox	International Coast Drilling Program Meeting	6–10 November 2005	London, England
TAMU	C. John	Expedition 308 Postcruise Meeting	6–18 November 2005	College Station, TX
TAMU	T. Williams	Expedition 307 Postcruise Meeting	6–11 November 20005	College Station, TX
TAMU	P. Thompson	Expedition 312 Port Call	9–15 November 2005	Acapulco, Mexico
TAMU	C. Alvarez Zarikian, J. Miller	SSEP Meeting	13–20 November 2005	Oahu, HI
TAMU	K. Petronotis	Search Committee Interviews for USIO Publications Manager	26 November–3 December 2005	College Station, TX
TAMU	J. Fox	JASMT Meeting, AGU Meeting	30 November–8 December 2005	Washington, DC; San Francisco, CA
TAMU	A. Miller, J. Miller	AGU Meeting	3–10 December 2005	San Francisco, CA
TAMU	T. Davies, M. Malone	AGU Meeting	4–9 December 2005	San Francisco, CA
TAMU	Adam Klaus	AGU Meeting	4–10 December 2005	San Francisco, CA
TAMU	R. Dixon, K. Grigar, D. Schroeder	Meeting with Langham Creek Machine Shop	7 December 2005	Houston, TX
TAMU	M. Hovland	EPSP Meeting	10–14 December 2005	Honolulu, HI
TAMU	P. Gates	Cybersecurity Summit 2005 for NSF Large Research Facilities	11–13 December 2005	Washington, DC
TAMU	B. Slone	Oracle Training	11–17 December 2005	Washington, DC
TAMU	M. Storms	EPSP Meeting	11–15 December 2005	Honolulu, HI
TAMU	L. Brandt	Agilent GC Training Course: Gas Chromatography	12–17 December 2005	Atlanta, GA

Institution	Personnel	Purpose	Date	Location
TAMU	L. Obee	Demobilization Port Call	25 December 2005–3 January 2006	Balboa, Panama
TAMU	J. Baldauf	Demobilization Port Call	27–31 December 2005	Balboa, Panama
TAMU	B. Julson	Demobilization Port Call	27 December 2005–1 January 2006	Balboa, Panama
TAMRF	K. Lee, R. Watkins	Purchasing/Procurement Training	14–16 November 2005	Clear Lake, TX

*Travel associated with meetings, conferences, port call work, and nonroutine sailing activities.

APPENDIX F: DATA REQUESTS

Top 10 Countries Accessing Janus Web Database*		
Rank	**Country**	**Visitor Sessions**
1	United States	8,180
2	Unknown origin	972
3	Germany	533
4	Japan	242
5	United Kingdom	208
6	Italy	92
7	France	86
8	Netherlands	82
9	Canada	56
10	Norway	34
	All others	193
	Total	**10,678**

Note: * = Excluding access from IODP-USIO Science Services, TAMU.

Top 20 Janus Web Queries*		
Rank	**Query**	**Uploads**
1	Sample report	1,720
2	Core photos	951
3	Hole trivia	700
4	Site hole summary	387
5	Core section summary	321
6	Moisture and density (MAD)	296
7	Leg summary	286
8	Point calculator	268
9	Sample totals	255
10	Carbonates	241
11	Rock eval	238
12	Hole core summary	237
13	Prime data images	232
14	Bulk density (GRA)	223
15	Site details	220
16	Magnetic susceptibility	183
17	Cryomagnetometer	181
18	Range table	167
19	Age profile	162
20	Age model	153
	Database overview and others	2,488
	Total	**9,909**

Note: * = Excluding access from IODP-USIO Science Services, TAMU.

Data Requests To Data Librarian*	
Requests	**Total**
Country:	
United States	33
Germany	4
Japan	4
France	2
Netherlands	2
Spain	2
Belgium	1
Brazil	1
Canada	1
Panama	1
Total	**51**
Data:	
Data request	19
Photo request	9
Database query problem	8
Moratorium login problem	6
Data question	5
Software question	2
Publications information	1
Sampling question	1
Total	**51**

Note: * = Excluding access from IODP-USIO Science Services, TAMU.

Other Web Janus Database Statistics*	Total
Database Query Hits:	
Entire site (successful)	31,490
Average per day	342
Visitor Sessions:	
Visitor sessions	10,783
Average per day	117
Average visitor session length	00:12:45
International visitor sessions	15.13%
Visitor sessions of unknown origin	9.01%
Visitor sessions from United States	75.86%
Visitors:	
Unique visitors	2,813
Visitors who visited once	1,712
Visitors who visited more than once	1,101
Average visits per visitor	3.83

Note: * = Excluding access from IODP-USIO Science Services, TAMU.

IODP-USIO Science Services, LDEO, Logging Data Requests		
Expedition	**Request Number, Name, Affiliation, Country**	**Type of Data**
	There were no data requests for this period.	

APPENDIX G: SAMPLE REQUESTS

IODP Expedition/ Repository	Visitors	Request Number, Name, Country	Number of Samples
East Coast Repository:			
		20089B, Diester-Haass/Billups/Emeis, Germany	212
		20167B, Harding/Eldrett, UK	30
		20179A, Sluijs/Brinkhuis, Netherlands	46
		20197D, Bohaty, USA	127
		20517A, Bralower/Roehl, USA	*
	1	20611B, Goldberg/Matter, USA	6
		20703A, Kendrick/Thunell, USA	10
		20715A, Johnson/Webb, USA	163
		20726A, Lawrence/Herbert, USA	176
		20734A, Martin, USA	19
		20737A, Bohaty/Kyte, USA	60
		20758A, Roters/Henrich, Germany	75
		20762A, Deringer/Martin, USA	2
		20771A, Godfrey, USA	33
		20775A, Strogen/Jolley, UK	13
	1	20803A, Lyman, USA	313
		20815A, Spezzaferri, Switzerland	11
	10	20820A, Christie-Blick, Educational Visit, USA	No samples
		20828A, Wanderley/Koutsoukos/Alves, Brazil	20
		20830A, Firth/Detro, USA	*
Total science	2		
Total education	10		
Total PR			
Total:	**12**	**20**	**1316**
		*archive sections shipped for scanning/physical properties measurements	
Gulf Coast Repository:			
		20664A, Holbourn, Germany	120
		20728A, Schneider, USA	136
		20762A, Deringer, USA	1
	1	20590A, Neal, USA	33
		20507A, House, USA	2
		20470B, Lyle, USA	123
	2	20757A, Ninnemann	488
		20753A, Hurtgen, USA	37
		20580A, Heusser, USA	177
		20770A, Abbot, USA	49
		20470C, Lyle, USA	98
		20607A, Flores, Spain	310
		20778A, Pearson, UK	10
		20779A, Dultz, Germany	17
		20791A, Liu, USA	76
		20787A, Healey, USA	15
		20790A, Altabet, USA	181
		20550A, Yang, Taiwan	85
		20761A, Hurtgen, USA	130
		20318A, Rafter, USA	786
	1	20804A, Frank, USA	89
		20771A, Godfrey, USA	353
		20794A, Leckie, USA	15
		20470D, Lyle, USA	98
		20431A, Pirmez, USA	71
		20754A, Roberts, UK	8
		20674B, Dutton, Australia	41
		20470F, Lyle, USA	78
		20603A, Dwyer, USA	75
		20839A, Dickens, USA	106
		20798A, Streng, Sweden	18
		20664B, Holbourn, Germany	4
		20777A, Yang, Taiwan	84

IODP Expedition/ Repository	Visitors	Request Number, Name, Country	Number of Samples
		204705, Lyle, USA	95
Total science	4		
Total education:			
Total PR:			
Total:	**4**	**34**	**4005**
West Coast Repository:			
		20762A, Deringer, USA	3
		20230B, Ando, Japan	14
		20692B, Bao, USA	35
		20806A, Lebel, USA	4
		20832A, Turchyn,USA	12
		20837A, Suavet, France	12
		20833A, Oda, Japan	75
	15	20811A, Gonzalez, Educational Visit, Mexico	No samples
	15	20813A, Norris, Educational Visit, USA	No samples
Total science:			
Total education:	30		
Total PR:			
Total:	**30**	**9**	**155**
Expedition 311:			
		20429B, Jiang, China	6
		20463A, Joye/Samarkin, USA	85
		20485A, Winters, USA	22
		20521A, Wang, China	657
		20522A, Blanc, France	619
		20527A, Bartlett/Palekar, USA	385
		20560A, Whiticar/Pohlman, Canada	100
		20581A, Scholten, USA	12
		20608A, Wortmann, Canada	323
		20609A, Kim/Lee/Lee, South Korea	412
		20613A, Yoshioka, Japan	594
		20614A, Pohlman, USA	1313
		20615A, Higashi, Japan	497
		20616A, Kastner, USA	1442
		20617A, Kaneko/Naraoka, Japan	97
		20617B, Kaneko, Japan	61
		20618A, Conly, Canada	34
		20621A, Heuer/Hinrichs, Germany	1469
		20622A, Kitajima, USA	27
		20624A, Teichert/Bohrmann, Germany	450
		20625A, Grozic/Dalimore, Canada	30
		20633A, Enkin/Lowe/Riedel, Canada	1692
		20638A, Torres, USA	711
		20641A, Jackson/Lovell/Rochelle, UK	10
		20649A, Akiba, Japan	648
		20668A, Long/McGrail. USA	18
		20670A, Trehu/Fisher/Villinger, USA	17
		20707A, Wright/Dallimore, Canada	13
		20713A, Dworkin/Shuman/Malinverno/Young/Goldberg, USA	127
		20727A, Parkes, UK	55
		20739A, Hashimoto, Japan	23
		20786A, Ellis, UK	6
Total:		**32**	**12266**
Expedition 312:			
		20532A, Crispini, Italy	52
		20535A, Sano, Japan	55
		20537B, Umino, Japan	15
		20541A, Cordier, France	32

IODP Expedition/ Repository	Visitors	Request Number, Name, Country	Number of Samples
		20551A, Tominaga, USA	78
		20551B, Tominaga, USA	18
		20556A, Morgan, UK	3
		20556B, Morgan, UK	9
		20557A, Tartarotti/Crispini/Galli, Italy	89
		20561A, Sakuyama, Japan	86
		20562A, Gilbert, USA	78
		20562B, Gilbert, USA	14
		20585B, Teagle/Smith-Duque, UK	15
		20586A, Smith-Duque, UK	161
		20593A, Durand, USA	40
		20597a, Banerjee, USA	20
		20602A, Galli/Tartarotti/Crispini, Italy	88
		20602B, Galli/Tartarotti/Crispini, Italy	22
		20604B, Coggon/Teagle, UK	24
		20634B, Ildefonse/Einaudi/Belgoul, France	23
		20635B, Herrero-Bervera, USA	38
		20708B, Teagle/Alt/Banerjee, UK	172
		20738B , Veloso-Espinosa/Anma, Japan	90
		20740A, Laverne, France	61
		20742A, Maclennan, UK	5
		20749A, Yamasaki/Maeda, Japan	22
		20750A, Ingle/Sano, USA	22
		20756A, Hayman, USA	34
		20766C, Hirano/Tsuchiya, Japan	16
		20767A, Miyashita/Neo/Yamazaki, Japan	84
		20776A, Park, South Korea	20
		20780A, Koepke, Germany	80
		20781A, Swift/Stephen, USA	15
		20788B, Tikku, USA	51
		20789A, Christie, USA	16
		20797A, Scheibner/Stosch, Germany	67
		20799A, Wilson, USA	32
		20801B, Carlut, France	48
		20840A, Moreira, France	15
Total:		**39**	**1810**

APPENDIX H: PUBLICATIONS

Publication	Release Date	URL
Preliminary Report:		
Expedition 309 (Superfast Spreading Rate Crust 2)	26 October 2005	http://iodp.tamu.edu/publications/PR/309PR/309PR.html
Expedition 311 (Cascadia Margin Gas Hydrates)	19 December 2005	http://iodp.tamu.edu/publications/PR/311PR/311PR.html
Proceedings of the Integrated Ocean Drilling Program:		
Volume 301 (Juan de Fuca Hydrogeology)	31 October 2005	http://iodp.tamu.edu/publications/exp301/301toc.htm

APPENDIX I: WEB

Comparison of Web access statistics averages between FY05 Q4 and FY06 Q1 indicates an increase in downloaded pages but a decrease in visitors. The drop in December 2005 visits can be attributed to community scientists attending the American Geophysical Union (AGU) Meeting and the December holiday break.

USIO

iodp.tamu.edu	FY05 Q4			
Parameter	**JOI**	**LDEO**	**TAMU**	**Totals**
Page views	21,148	5,369	341,397	367,910
Site visits*	12,076	4,431	46,938	62,900

*Where possible, visits by USIO employees and search engine spiders and robots have been filtered out.

New Web Pages	Release Date	URL
Expedition 311 Preliminary Report	Dec 2005	http://iodp.tamu.edu/publications/PR/311PR/311PR.html
Draft expedition schedule for 2007–2008	Dec 2005	http://iodp.tamu.edu/scienceops/
Expedition-related bibliography	Dec 2005	http://iodp.tamu.edu/publications/citations.html
IODP maps through Expedition 312	Nov 2005	http://iodp.tamu.edu/scienceops/maps.html
Expedition 312 School of Rock	Nov 2005	http://www.joilearning.org/schoolofrock/
Expedition 312 Photos	Nov–Dec 2005	http://iodp.tamu.edu/publicinfo/gallery/exp312/
Expedition 312 weekly reports	Nov–Dec 2005	http://iodp.tamu.edu/scienceops/sitesumm.html
Expedition 301 Proceedings	Oct 2005	http://iodp.tamu.edu/publications/exp301/301toc.htm
Expedition 309 Preliminary Report	Oct 2005	http://iodp.tamu.edu/publications/PR/309PR/309PR.html
Multiserver search engine	Oct 2005	http://clay.iodp.tamu.edu/qfsearch/SearchServlet?server=search.www.iodp-usio.org

APPENDIX J: CORE REPOSITORY CONSOLIDATION

In October 2005, the Leg 150X cores were shipped from the East Coast Repository to Rutgers University/New Jersey Geological Survey (Project 1, Task 1 of the "Timeline for DSDP/ODP Core Redistribution Project" outlined in the FY06 Program Plan).

APPENDIX K: EDUCATION

U.S. education activities are supported by NSF through SIC funding. These activities are not included in the POC and SOC budgets.

SCHOOL OF ROCK EXPEDITION

The pilot program *School of Rock: An Ocean-going, Hands-on Expedition for Earth and Ocean Science Educators*, took place from 28 October–12 November 2005, during the transit portion of Expedition 312. The program participants included 10 Earth science teachers (representing Grades 5–12), 2 museum educators (Science Museum of Minnesota and the Smithsonian Institution's National Museum of Natural History), and a textbook consultant from Macmillan-McGraw Hill Publishers.

The teachers replicated lab analyses with cores from previous expeditions, under the mentorship of IODP-USIO shipboard laboratory technicians, JOI education staff, drilling program scientists/professors M. Leckie and K. St. John. Ten new college-level activities were developed by Leckie and St. John and the teachers created 15 precollege activities and 25 career profiles. All content will be disseminated through the School of Rock Web page (www.joilearning.org/schoolofrock) and more than 20 workshops that the teachers plan to conduct during 2006. The program Web page facilitated daily communication between participants and their shore-based students through the Expedition Blog and Video Question & Answer features. A poster about the School of Rock Expedition was presented at the December 2005 AGU meeting.

Early evaluations suggest the program was hugely successful and could impact as many as 300,000 students over the next 5 years. It is our hope that this pilot program will continue with assistance from a variety of funding sources and will serve as a template for future educator-focused expeditions aboard the IODP-USIO Phase 2 riserless vessel and also at the IODP-USIO repositories.

Laboratory Briefs

PDF versions of the Microbiology, Physical Properties, Chemistry, and Paleomagnetism laboratory briefs were posted on the Web at http://www.iodpusio.org/Education/lab_briefs.html. Drafts of the Underway, Downhole Measurements, Core, and Paleontology laboratory briefs are undergoing scientific review by USIO staff.

Historically Black Colleges and Universities Fellowship

In late December 2005, the 2006 Historically Black Colleges and Universities (HBCU) Fellowship Fact Sheet was finalized. The document will be submitted for printing in January 2006.

The first semester of Q. Conyers' (Howard University) fellowship was dedicated to supporting the USIO communications and diversity activities, including media outreach at port calls and preparing for 2006 HBCU Fellowship recruiting activities that will commence in January 2006.

Inventory and Evaluation

USIO and USSSP worked collaboratively on a comprehensive search for drilling program related materials and classroom activities produced outside the JOI umbrella. The resulting database may (1) provide examples for JOI Learning, (2) be linked to our Web page (by permission), and (3) provide direction for the production of new materials when coupled with information from the strategic evaluation.

APPENDIX L: IODP-USIO QUARTERLY REPORT DISTRIBUTION LIST

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