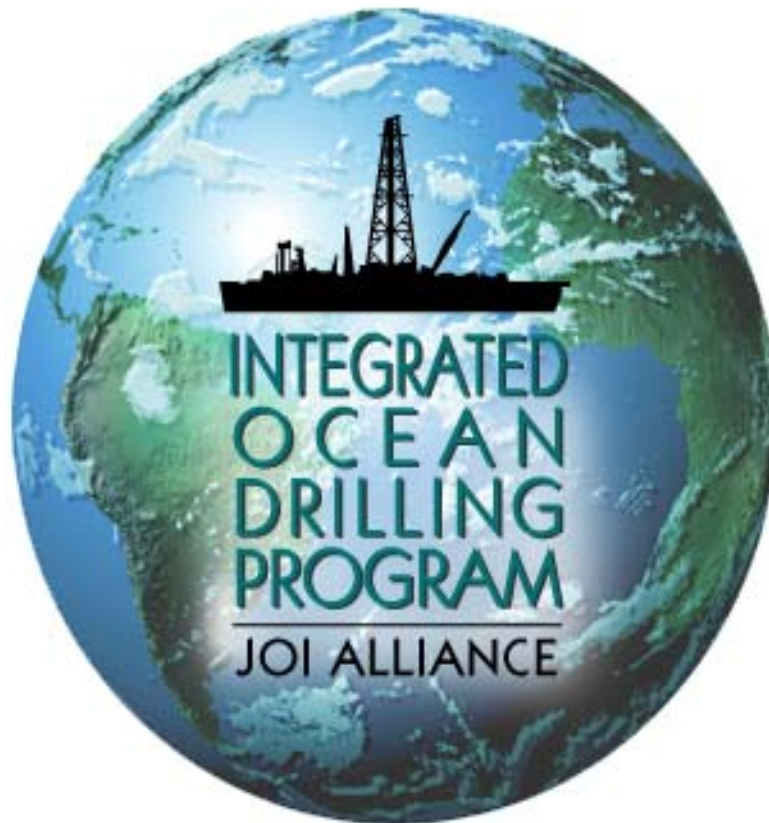


14 November 2005



1 July–30 September 2005

FY05 Quarterly Report 4

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**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 fourth quarter of FY05.

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 will be split with 2 days in Balboa, Panama, followed by 4 days in Astoria, Oregon. Scientists should embark vessel in Astoria on 15 September 2005.

⁶ Scientists scheduled to embark vessel in Acapulco, Mexico, on 15 November 2005.

⁷ Demobilization is scheduled to occur in Galveston, Texas.

EXPEDITION PLANNING AND IMPLEMENTATION ACTIVITIES

IODP-USIO EXPEDITION 308: GULF OF MEXICO HYDROGEOLOGY

Expedition Implementation: Almost all the scientific drilling activities for Expedition 308 took place during the third quarter and were reported in the FY05 Quarterly Report 3. Scientific drilling activities concluded on 2 July 2005, when the expedition completed the last site (U1322) in the Ursa Basin. The principal objectives of drilling Site U1322 were to document rock physical properties at the location of minimal overburden in Ursa Basin, measure in situ formation temperature and pressure, document geochemical composition of the pore water, and establish a preliminary age model leading to an estimate of sediment accumulation rates at this location. The ultimate goal of drilling in Ursa Basin was to explore fluid flow and fluid pressures in an overpressured basin.

Downhole measurements were an integral part in achieving all major scientific objectives and it was possible to integrate the core data and the logging-while-drilling (LWD)/measurement-while-drilling (MWD) results in a way that enabled reconstruction of basin dynamics and basin fill in space and time. Analyses show that the resolution of the LWD/MWD and wireline logging data is high enough to allow a bed-by-bed correlation of the basin fill and reconstruct facies distribution with unprecedented precision. MWD results also proved essential in real-time monitoring of potential hazardous shallow water flow and overpressure zones.

Postexpedition Activities: G. Iturrino (Supervisor of Science Operations) and G. Guerin (Senior Technical Analyst/Applications Developer), both of IODP-USIO Science Services, Lamont-Doherty Earth Observatory (LDEO) of Columbia University, attended a mini Environment Protection and Safety Panel (EPSP) meeting on 25 July 2005 in College Station, Texas, to present LWD/MWD results from Expedition 308 and to plan operational strategies for Expedition 311.

IODP-USIO EXPEDITIONS 309: SUPERFAST SPREADING RATE CRUST 2

Expedition Staffing: Expedition Project Manager/Staff Scientist: N. Banerjee; Co-Chief Scientists: D.A.H. Teagle, S. Umino; Logging Staff Scientist: F. Einaudi. Staffing commenced in late April 2005 and was completed in June 2005. Scientific staffing for the expedition (excluding Co-Chief Scientists) included the following IODP membership breakdown: seven United States Science Support Program (USSSP), four Japan Drilling Earth Science Consortium (J-DESC), and seven European Consortium for Ocean Research Drilling (ECORD) participants.

Expedition Implementation: Expedition 309 began when the *JOIDES Resolution* sailed from Panama on 12 July 2005. The implementation strategy was straightforward: logging at the start of the expedition to determine the condition of the hole, followed by continuous coring until the end of the expedition, when the deepened hole would again be logged before the ship departed for Panama. Expedition 309 successfully deepened Hole 1256D (6.736°N, 91.934°W) by 503 m to a total depth of 1255.1 meters below seafloor (mbsf), or 1005.1 m subbasement. The average rate of core recovery for the expedition was 36%. Much higher rates of recovery were experienced in the lowermost section of the hole (below 1200 mbsf = ~70% average). At the end of Expedition 309, Hole 1256D penetrated more than 800 m of extrusive lavas and entered a region dominated by intrusive rocks. Hole 1256D is now the fourth deepest hole drilled into oceanic basement since the inception of scientific ocean drilling in 1968 and the second deepest penetration into in situ ocean crust behind Deep Sea Drilling Project (DSDP)/Ocean Drilling Program (ODP) Hole 504B. At 1255 mbsf, Hole 1256D is tantalizingly close to the predicted minimum depth estimated for the frozen axial magma chambers (1275 mbsf). Following the

completion of a comprehensive wireline logging program, the hole was successfully exited and left clear of equipment with only minor unconsolidated fill at the bottom of the hole. Hole 1256D is in excellent condition and ready for further deepening planned for Expedition 312.

Technology: From an operational standpoint, Expedition 309 was a routine hard rock expedition. Although the penetration rate was slow (15 m/day) during Expedition 309, the hole remained stable, was deepened by 800 m using standard rotary core bits, and was left in excellent condition.

At the beginning of the expedition, Hole 1256D was logged using the triple combination (triple combo) and the Formation MicroScanner (FMS)/Sonic tools to determine the hole condition prior to beginning coring operations. The triple combo recovered excellent data in very good agreement with logs made at the end of ODP Leg 206. The maximum temperature measured by the Temperature/Acceleration/Pressure (TAP) tool was 68.7°C at 727 mbsf. Good quality FMS images and acoustic velocity data were recorded during a single pass of the FMS tool string, and the calipers indicated the hole was in excellent condition with similar shape to measurements from Leg 206. The FMS/Sonic tool string rotation provided an increase in coverage from Leg 206 and the acoustic velocity measurements (*P*-wave, *S*-wave and Stoneley wave) appear to be higher quality compared to the Leg 206 measurements.

Additional logging operations were conducted at the end of the cruise. The triple combo and the FMS/Sonic and Ultrasonic Borehole Imager (UBI) were all successfully deployed, although they were all unable to pass through a tight spot at ~1225 mbsf. The final deployment was the Well Seismic Tool (WST). After several attempts, the tool was unable to reenter the open hole and the deployment was abandoned. On deck, several kinks in the wireline were noted. The wireline was trimmed and a new head was made up. Because of the caliper problems with the initial deployment, it was decided to run the backup FMS, which was lowered to 1215.6 mbsf and logged to 304.6 mbsf. Caliper readings from both the triple combo and FMS/Sonic tool strings show generally good borehole conditions with a diameter typically between 11 and 14 inches. Comparison of the pre- and postdrilling hole caliper measurements in the upper 500 m of basement shows an enlargement of Hole 1256D caused by drilling, with a number of quite strongly eroded intervals. The borehole deviation measured at 1200 mbsf is 4.3°. Preliminary analyses of downhole geophysical measurements and images show a high degree of variation, reflecting different basement lithologies. A number of petrophysical intervals can be distinguished that closely match the subdivisions developed from core observations. Preliminary interpretation of FMS and UBI images indicate that subvertical dike margins in the sheeted intrusives have true dips toward the northeast, consistent with slight tilting of the lavas toward the paleoridge axis.

IODP-USIO EXPEDITION 311: CASCADIA MARGIN GAS HYDRATES

Expedition Planning: Expedition 311 was designed to further constrain models for the formation of marine gas hydrate in subduction zone accretionary prisms. The objectives include characterizing the deep origin of the methane, its upward transport, its incorporation in gas hydrate, and its subsequent loss to the seafloor. The main focus of this expedition is on the widespread seafloor-parallel layer of dispersed gas hydrate located just above the base of the predicted stability field. The expedition includes coring and downhole measurements along a transect of five sites across the northern Cascadia accretionary prism. The sites will track the history of methane in an accretionary prism from (1) production by mainly microbiological processes over a thick sediment vertical extent, (2) upward transport through regional or locally focused fluid flow, (3) incorporation in the regional hydrate layer above the bottom-simulating

reflector (BSR) or in local concentrations at or near the seafloor, (4) methane loss from the hydrate by upward diffusion, and (5) methane oxidation and incorporation in seafloor carbonate, or expulsion to the ocean.

This expedition builds on the previous Cascadia margin gas hydrate drilling of ODP Leg 146 and the more recent ODP Leg 204 off the coast of Oregon. Important experiments for this proposal include (1) LWD, (2) wireline logging, (3) intensive coring and subsampling, and (4) pressure core sampling (pressure core sampler [PCS]/HYACINTH) of gas hydrate and fluid recovery under in situ conditions. For this expedition, we planned to conduct LWD/MWD operations prior to coring operations.

Expedition Staffing: Expedition Staff Scientist: M. Malone; Co-Chief Scientists: T.S. Collett, M. Riedel; Logging Staff Scientist: G. Guerin. Staffing was completed in early June 2005. Scientific staffing for the expedition (excluding Co-Chief Scientists) included the following IODP membership breakdown: six USSSP, six J-DESC, and seven ECORD participants and one IODP-China participant.

Clearance and Permitting Activities: Since the Expedition 311 sites fall in Canadian waters, a clearance request was submitted to Canada. The request was updated in June 2005 to reflect the change in the operations schedule, and Canadian authorities approved all the activities proposed for Expedition 311.

Expedition Implementation: LWD/MWD activities commenced after departing Astoria on 20 September 2005 and continued until 26 September 2005. The downhole logging program implemented during Expedition 311 was specifically designed to assess the presence and concentrations of gas hydrates on the Cascadia accretionary prism. For scientific and safety reasons, LWD/MWD operations were conducted prior to coring each site. The LWD/MWD tools measured in-situ formation properties with instruments located in the drill collars immediately above the drill bit. LWD/MWD logging tools deployed at five sites (Sites U1325–U1329) included the GeoVISION, EcoScope tool, TeleScope MWD tool, ProVISION Nuclear Magnetic Resonance (NMR) tool, and the Azimuth Density Neutron (ADN) VISION tool. The use of these tools prior to coring identified intervals of interest where special tools (e.g., PCS or HYACINTH pressure coring tools) could later be used in an attempt to recover gas hydrate samples. In addition to providing a large array of data required for the special tool deployment strategy, the LWD/MWD tools allowed the monitoring of drilling performance and the reaction of the formation as the drill string advanced. The Annular Pressure While Drilling (APWD) sensor on the EcoScope tool made it possible to monitor bottom-hole fluid pressure events, such as building formation pore pressures, liquid influx, or gas flows that would have required immediate action to guarantee the safety of the tools and operations. No significant pressure events were recorded, and the operations were considered a success.

One of the most notable characteristics of gas hydrate sedimentary sections on recorded downhole log data is the relatively high electrical resistivity nature of the gas hydrates. During Expedition 311, considerable effort was made to obtain high-quality resistivity log data from the LWD/MWD tool string. Both the GeoVISION and EcoScope tools yielded high-quality resistivity logs from all sites logged. The GeoVISION resistivity logs from most sites are characterized by distinct intervals of elevated resistivities that in most cases probably indicate the presence of gas hydrate. The potential occurrence of gas hydrates within the log-measured high-resistivity intervals will be further examined as Expedition 311 continues and postcruise.

After LWD/MWD logging operations completed the assessment of in situ conditions at all sites along the proposed transect, drilling operations commenced at Hole U1329B on 27 September 2005 and drilling continued, supplemented by wireline logging, at a series of holes at this site through the end of the reporting period (i.e., U1329B–U1329E). Excessive heave from large storm-generated swells made operations difficult and a number of times operations had to cease and wait on weather. Nevertheless, the scientific goals of site U1329 were achieved in this quarter.

Technology: Primary tools for this expedition (which extends into the first quarter of FY06) include advanced piston corer (APC) and extended core barrel (XCB) coring, pressure coring with both the IODP pressure core system and the HYACINTH pressure core systems (Fugro Pressure Corer [FPC] and Hydrate Autoclave Coring Equipment [HYACE] Rotary Corer [HRC]), LWD, and two zero-offset vertical seismic profiles (VSPs). Significant sampling for gas hydrates and microbiology was planned, for which we installed two temporary laboratory vans 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 is recovered on deck, it will be 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 reefer van on top of the lab stack.

IODP-USIO EXPEDITION 312: SUPERFAST SPREADING RATE CRUST 3

Expedition Planning: Expedition 312, scheduled in November and December 2005, shares with Expedition 309 the objective of deepening ODP Hole 1256B deep into the plutonic foundation of the oceanic crust. During this quarter, M. Reichow (Expedition 312 Logging Staff Scientist, IODP-USIO Science Services, LDEO) assembled information on the Göttingen Borehole Magnetometer tool to discuss a possible involvement in the logging operations during Expedition 312. Planning this quarter also included a VSP review, with a focus on the operations, source selections, and potential modification of the IODP marine mammal protocol, and use of the Vertical Seismic Imager (VSI) seismic tool instead of the WST-3 seismic tool. A preliminary logging event sheet with times estimates was sent to the Expedition 312 Staff Scientist and Co-Chief Scientists for review.

Expedition Staffing: Expedition Project Manager/Staff Scientist: N. Banerjee; Co-Chief Scientists: J. Alt, S. Miyashita; Logging Staff Scientist: M. Reichow. Staffing commenced in June 2005 and was completed in July 2005. Scientific staffing for the expedition (excluding Co-Chief Scientists) include the following IODP membership breakdown: eight USSSP, six J-DESC, and nine ECORD participants.

STATUS OF EQUIPMENT

IODP EQUIPMENT

Development of the new wireline heave compensator progressed with major improvements made to the unit in September 2005. Software improvements and wireline drum wrap sensor replacements were made during the Expedition 311 port call. Initial tests while in port indicated that the unit's depth measurement system had improved. During port call, a temporary cabling scheme was installed to allow the side-by-side testing of the LDEO heave compensator with the Schlumberger-supplied heave compensator. We had already determined previously that both units are compensating for heave at approximately the same effectiveness. Testing of the unit will be conducted at one or more sites during Expedition 311 as time permits.

TECHNOLOGY DEVELOPMENT

PROJECTS AND OTHER ACTIVITIES

IODP-USIO SCIENCE SERVICES, TAMU, ENGINEERING SERVICES

Drilling Sensor Sub (DSS) and Retrievable Memory Module (RMM): APS Technologies has repaired the DSS tools, which will be shipped back to College Station. Acceptance testing will be repeated at Schlumberger's test facility in Sugar Land, Texas.

Cold Containers: Engineering support was provided for the design of a cold container to be used for degassing and logging PCS cores during Expedition 311. Support was also provided for design and mounting of a tugger to lift PCS pressure barrels to the top of the downhole tools laboratory.

Davis-Villinger Temperature Probe/Davis-Villinger Temperature-Pressure Probe (DVTP/DVTPP): Thermistors and pressure transducers were calibrated and tools were sent to the *JOIDES Resolution* for use during Expedition 311. Updated calibration data was provided to the ship during Expedition 311.

Pressure Core Sampler (PCS): The PCS was modified with an aluminum pressure barrel and inner core barrel so the core could be logged while degassing. The degassing manifold and monitoring system were updated to increase the accuracy of pressure readings during degassing.

D. Schroeder (Supervisor of Engineering Services) and R. Aduddell (Engineer), both of IODP-USIO Science Services, TAMU, sailed Expedition 311 in support of the PCS, DVTP/DVTPP, and the advanced piston corer methane (APCM) tools.

IODP-USIO SCIENCE SERVICES, TAMU, ANALYTICAL SERVICES

Shipboard Mass Measurement: A prototype application was tested with the new Mettler-Toledo balances, and the system was shown to perform at least as accurately and reliably as the current ScienTech system that is becoming unsupportable.

Modular Core Loggers: A conceptual plan was created for the development of modular core loggers based on common hardware and software architecture. SolidWorks drawings were created for some of the loggers to be developed.

IODP-USIO SCIENCE SERVICES, LDEO, ENGINEERING AND TECHNICAL SERVICES

Modular High-Temperature Tool (MTT): Enhancements to the LDEO temperature tool continued during the reporting period. Mechanical design of the system is completed and machining of all parts except the pressure housings is complete. The enhancement effort is now

focusing on the fabrication of the electronics and control software. The target deployment of Expedition 312 will not be met due to the late delivery of the flask required to house the electronics. This item is a long-lead item that was ordered with an appropriate time buffer but still has not been received.

CoreWall Consortium Project: A. Rao (Master's student and programmer at the Electronic Visualization Lab at University of Illinois-Chicago) visited USIO-IODP Science Services, LDEO, on 4–9 August 2005. The Electronic Visualization Lab is one of the leaders in the CoreWall Consortium Project that is focused on developing next-generation software tools for data visualization, visual core description, and stratigraphic correlation to the ocean and terrestrial drilling communities. The purpose of the visit was to demonstrate the latest version of CoreWall software to LDEO Borehole Research Group (BRG) members, as well as to K. Lehnert (PetDB) and B. Ryan (Geomap.App), among others. Rao received constructive feedback regarding issues related to managing depth scales, core annotations, incorporation of geophysical log data and FMS images, and so on. Rao also visited the JOI offices on 28 July through 3 August and on 10-12 August 2005 to conduct demonstrations of CoreWall prototype applications to and gather comments and suggestions for further developments.

REPORTS/PUBLICATIONS

IODP-USIO PROGRAM PLAN FOR IODP-MI AND NSF

On 1 September 2005, the JOI Alliance submitted the final version of the IODP-USIO FY06 Program Plan to IODP Management International, Inc., (IODP-MI) and the National Science Foundation (NSF). The FY06 Program Plan consists of two expeditions that constitute the remaining science operating costs (SOCs) and platform operating costs (POCs) of IODP Expeditions 311 (Cascadia Margin Gas Hydrates) and 312 (Superfast Spreading Rate Crust 3) as well as requests for continuing SOC shorebased activities during FY06. The IODP-USIO FY06 Program Plan budget totaled \$20,748,652, with \$10,966,327 requested in SOC (from IODP-MI) and \$9,782,325 requested in POCs (from NSF).

On 1 September 2005, the JOI Alliance submitted to NSF the final version of an appendix to the IODP-USIO FY06 Program Plan that outlines additional requests related to the IODP-USIO U.S. Systems Integration Contract (SIC), which include activities related to the demobilization of the *JOIDES Resolution* as well as other required tasks.

USIO-IODP FY05 IODP QUARTERLY REPORT

The report for the third quarter of FY05 (April–June 2005) was submitted to NSF on 18 August 2005.

IODP SCIENTIFIC PUBLICATIONS

SCIENTIFIC PROSPECTUS

Expedition 310 (Tahiti Sea Level Expedition): Edited and produced by the USIO and published by the ECORD Science Operator (ESO) on 29 September 2005 (see “Appendix H”).

Expedition 311 Addendum: Published on 8 July 2005 (see “Appendix H”).

PRELIMINARY REPORT

Expedition 307 (Porcupine Basin Carbonate Mounds): Published on 4 August 2005 (see “Appendix H”).

Expedition 308 (Gulf of Mexico Hydrogeology): Published on 8 September 2005 (see “Appendix H”).

PROCEEDINGS OF THE INTEGRATED OCEAN DRILLING PROGRAM

Publications Development: In the previous quarter, the USIO and IODP-MI began discussions about indexing options for the *Proceedings of the Integrated Ocean Drilling Program*. IODP-MI asked the USIO on 22 August 2005 to investigate whether classical (print) methods of indexing can be replaced or supported by new technology, and on 7 September 2005 IODP-MI requested that the USIO pursue conventional indexing of *IODP Proceedings* material to the extent possible within the FY05 budget. After evaluating the scope of the requests and looking at available resources, the USIO determined that it was not able to provide the supplementary efforts required to research electronic indexing in FY05 and would not proceed with conventional indexing efforts while alternative indexing options are being evaluated by IODP. The decision was based in part on the determination that the technical considerations of electronic indexing are interlinked with database issues that require interactions among IODP-MI and the other IODP implementing organizations (IOs). The USIO suggested that IODP-MI develop a process and a plan for electronic indexing of IODP electronic publications in the context of the entire IODP requirement.

A. Miller (Interim Publications Manager, IODP-USIO Science Services, TAMU) presented DVD package, package insert, and disc designs for the *Proceedings of the Integrated Ocean Drilling Program* to IODP-MI officials from the Sapporo, Japan, office at the IODP-MI offices in Washington, D.C., in early August 2005.

H.C. Larsen (Vice President of Science Operations for IODP-MI) asked for an update on the production schedule for the first two *IODP Proceedings* volumes, which should be published at the end of the one-year moratorium. Miller notified JOI on 26 September 2005 that the Expedition 301 moratorium ended in late August 2005 and that the volume was scheduled for release in October 2005. The publication delay was attributed to the need of the USIO to design new PDF and HTML versions for the *IODP Proceedings* series and to develop a new DVD product on behalf of the Program. The new publication products were developed in cooperation with IODP-MI and the Publications Task Force. Miller noted that Volume 302 was on track for a late November 2005 release to coincide with the end of the one-year moratorium.

OUTREACH

CONFERENCES

National Marine Educators Association: M. Niemitz (Program Assistant, JOI) attended the National Marine Educators Association annual meeting in Hawaii in July 2005, where he manned a booth and presented a session entitled, “1.31 Miles Below Seafloor—It isn’t Science Fiction.” Niemitz was also able to attend Earth and ocean science courses and build relationships with other marine science research programs.

MUSEUM PARTNERSHIPS

JAPAN/U.S. PUBLIC UNDERSTANDING OF RESEARCH PLANNING

Planning for the Japan/U.S. Public Understanding of Research (PUR) pilot project, initiated when IODP and JOI participated in the 4th Annual Japan/U.S. PUR delegation meeting last February, has continued throughout the fourth quarter of FY05. Berth space during Expedition 312 for one Japanese museum educator and one U.S. educator was secured through Transocean, and recruiting for museum educators was initiated. Ideas for paired communications to both

Japanese and U.S. museums are beginning to gel and may overlap with activities conducted during the School of Rock Expedition.

PUBLIC AFFAIRS

Emphasis this quarter was placed on laying the groundwork for media events and outreach opportunities that would be implemented in this quarter and beyond. Highlights include

- Initiating a program to communicate with IODP U.S. science party members to maximize their involvement in outreach for IODP and to draw on the resources (from home universities or past media experiences) they bring and
- Publicizing the 2005 U.S.-sponsored Teacher-at-Sea A. Gelatt's participation in IODP Expedition 309. A media advisory announcing Gelatt's involvement was distributed to more than 100 news organizations in the region surrounding his hometown of Romulus, New York, as well as to interested science and education publications.

PUBLIC RELATIONS MATERIALS

News releases are distributed to more than 200 science journalists worldwide, as well as member country offices. News releases distributed during this quarter included the following:

- Underwater Sand Avalanches Linked to Sea-Level Changes in Gulf of Mexico (8 July 2005)
- Chester, VT, Science Teacher Speaks to National Educators' Group (22 August 2005)
- Romulus, NY, Science Teacher Returns from Ocean Expedition (27 September 2005)

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

- New Scientist, 2005. Ancient glimpse of seas' bleak future. *New Scientist*, 18 June 2005.
- About.com, 2005. The greatest science program in history. *About.com—Geology*. Available from World Wide Web at: <http://geology.about.com/cs/escibasics/a/aa101203a.htm>.
- Alumni CLASnotes, 2005. Getting to the Core of Climate Change. *University of Florida Alumni CLASnotes Fall 2005*, 23 August 2005. Available from World Wide Web at: <http://clasnews.clas.ufl.edu/news/alumninotes/05fall/climate.shtml>.
- The Miami Herald, 2005. Slabs of lava on sea floor may explain global warming. *The Miami Herald*, 23 August 2005.
- The Daily Astorian, 2005. Familiar research vessel back in Astoria. *The Daily Astorian*, 19 September 2005.
- Scientific American, 2005. The biggest dig: Japan builds a ship to drill to the Earth's mantle. *Scientific American*, 26 September 2005.
- Smith, M., 2005. Beyond the crust: journey (closer) to the centre of the earth. *New Technology Magazine*, September 2005, 7–10.

CONGRESSIONAL OUTREACH

On 13 and 14 September 2005, W. Sager (TAMU Professor of Oceanography and member of member of Ocean Drilling and Sustainable Earth Science [ODASES]) and L. Randel (Washington Representative, Meyers and Associates) represented IODP at the Coalition for National Science Funding Fall Congressional Visits Day. For meetings with members of

Congress and staff, groups were divided into interdisciplinary teams of between two and four people who spoke on behalf of NSF as a whole.

IODP-USIO BROCHURE

A second edition of the IODP-USIO Phase 1 brochure was published in May 2005. Designed to highlight the extended expedition schedule for nonscientist audiences (public, media, and students), the brochure was distributed at the Expedition 308 port call and will be used through December 2005.

PORT CALL OUTREACH

Expedition 311: A media advisory alerting journalists to the pending announcement of initial science findings at the port call ending IODP Cascadia Margin Gas Hydrates Expedition 311 was distributed to more than 200 reporters, editors, and producers. The advisory was posted to EurekAlert and ran on the UPI wire service.

IODP-USIO WEB SITE

EXPEDITION MAPS

Expedition-specific maps were created during this quarter with drill site locations and contoured, colored bathymetry based on the ETOPO2 data set. Maps for Expeditions 301–312 can be accessed at iodp.tamu.edu/scienceops/maps/exp/.

IODP DATABASES

Janus Database: Data from Expedition 301 are available online. Data from Expeditions 302–307 are available online under moratorium.

Log Database: Data from Expeditions 301 are available online. Data from Expeditions 302–309 are available online under moratorium. The online presentation mimics the ODP presentation in the general format, with some changes in the documentation templates such as the inclusion of summary tables and active links.

Processed Logs: Log data have been processed and put online under moratorium (with accompanying documentation) for the following holes:

- Hole 1256D (reentry): Expedition 309 (standard logs, SWF, and FMS logs)

The following IODP holes were processed:

- Hole U1325A: Expedition 311 (LWD logs).
- Hole U1326A: Expedition 311 (LWD logs).
- Hole U1327A: Expedition 311 (LWD logs).
- Hole U1328A: Expedition 311 (LWD logs).
- Hole U1329A: Expedition 311 (LWD logs).

IODP-USIO SUPPORT ACTIVITIES

INTERACTIONS WITH IODP-MI AND IODP IMPLEMENTING ORGANIZATIONS SCIENTIFIC TECHNOLOGY PANEL MEETING

The first meeting of the Scientific Technology Panel (STP) (formerly the Scientific Measurements Panel [SciMP]) of IODP was held on 11–13 July 2005 in Bremen, Germany. P. Blum (Supervisor of Analytical Services, IODP-USIO Science Services, TAMU), S. Higgins (Logging Staff Scientist, IODP-USIO Science Services, LDEO), and K. Kryc (Assistant Director of Ocean Drilling Programs, JOI) attended as regular STP liaisons. The panel received presentations on recent operations and planning activities from all IOs and IODP-MI.

Recommendations were made for additions to the STP Mandate, standards for core description, evaluation of quality assurance/quality control issues, analysis of the standard reference materials aboard the JOIDES Resolution, assignment of a pool of four representatives to the Observatory Task Force, inclusion of the Science Steering and Evaluation Panel (SSEP) review for proposals forwarded to STP and delivery of proposals at least two weeks prior to an STP meeting, integration of microbiological sampling into expedition sampling plans, development of a paleontologic taxonomic/stratigraphic reference standard to ensure continued effective use of DSDP/ODP legacy sites and to improve IODP's paleo data resolution and reproducibility, and development of software that would allow the inclusion of depth correlation data in the IODP databases to support interhole composite depth sections of recovered cores and core-log seismic integration.

Action items were generated for exploration of laser ablation inductively coupled plasma–mass spectrometry (ICP-MS) as a shipboard analytical facility, consensus response to proposals submitted for review, development of a list of specialties the panel needs in order to efficiently and effectively discharge its mandate, definition of a set of minimum measurements for IODP, study of available methods to measure V_p and V_s under pressure, study of the importance of velocity anisotropy in IODP samples and examination of the possible methods to measure shear wave anisotropy, completion of the SciMP petrophysics working group and IOs report on downhole temperature and pressure tools and provision of input to the Center for Deep Earth Exploration (CDEX) on downhole pressure and temperature acquisitions, scheduling of a Core-Log-Seismic Integration (CLSI) workshop to be held by CDEX, and a third party tools policy to be developed and voted on at the next meeting.

SITE SURVEY PANEL MEETING

The IODP Science Advisory Structure (SAS) Site Survey Panel (SSP) met on 12–14 September 2005 at Scripps Institution of Oceanography (La Jolla, California). Adam Klaus (IODP-USIO Science Services, TAMU, Expedition Project Manager/Staff Scientist) attended as the regular USIO liaison. D. Quidbach (IODP-USIO Science Services, LDEO, Manager of Information Services) also attended the meeting to help assess the functionality of the new all-digital Site Survey Data Bank (SSDB) and how it will impact USIO expedition planning and operations. USIO liaisons presented (1) the status of recently completed and remaining Phase 1 activities and operations, (2) Phase 2 U.S. Scientific Ocean Drilling Vessel (SODV) status and schedule, and (3) a brief outline of how the USIO uses data supplied by the SSDB. In addition to normal site survey data review, the primary focus of the meeting was to familiarize the SSP with the all-digital data bank. The SSDB is not fully functional at this time. To ensure smooth science

delivery, the USIO will need to assess changes required based on implementation of SSDB and IODP-MI site survey data activities.

ENGINEERING DEVELOPMENT PANEL MEETING

The first meeting of the Engineering Development Panel (EDP) of IODP was held on 26–28 September 2005 in Boston, Massachusetts. F. Rack (Director, Ocean Drilling Programs, JOI) and K. Kryc (Assistant Director, Ocean Drilling Programs, JOI) attended as IODP-USIO representatives. EDP defined a four-stage classification system (concept, design, fabrication, and implementation) for IODP engineering development projects and the requirements to be submitted for each stage. A consensus statement was made in support of IODP-MI acquiring the pulsed telemetry module as described in the proposal presented by the USIO. However, EDP determined that there was not enough information provided in the proposal to move forward with the USIO common bottom-hole assembly proposal at this time. EDP also requested that the USIO provide a summary and performance report on the DSS and RMM at the next EDP meeting. Finally, with respect to USIO SODV planning, EDP will work with the SODV team to formulate a plan for interaction that allows EDP to influence the design draft plans for the hull and machinery and the drilling and coring technologies.

J-CORES TEST, EXPEDITION 311 TRANSIT

The J-CORES test took place on the *JOIDES Resolution* as part of the transit from Balboa to Astoria from 28 August to 14 September 2005. Participants in the test included P. Blum (Supervisor of Analytical Services), D. Fackler (Applications Developer IV), P. Foster (Applications Developer Administrator), J. Firth (Curator), R. Mithal (Supervisor of Databases and Archives), and J. Miller (Expedition 311 Staff Scientist), all of IODP-USIO Science Services, TAMU. The goal of the test was to provide CDEX with the opportunity to demonstrate and complete the first sea trial of their J-CORES database and applications, including Operation, Curation, Sample; Uploader; Stratigraphy; Visual Core Description (VCD); Composite Log Viewer (CLV); and D-Tunes (partial test).

The tests provided the USIO with an opportunity to become familiar with the J-CORES tools, and many interesting discussions evolved among participants. Participants and technicians, drawing on many years of seagoing experience, were also able to provide CDEX with information on the *JOIDES Resolution* workflow and how scientists and technicians conduct their work.

The J-CORES tools were generally user friendly and most test participants were able to use them with a minimum of help. Some of the user manuals need technical editing in order to be useful. The tools generally did what they were designed to do but that did not always match what the test participants were expecting. The VCD application was the most complex tool. The participants determined that this was a core summary tool and not, as expected, a description tool. The CLV application proved to be a useful tool to immediately view the data after being entered into J-CORES. Export capabilities were limited; a publication-quality output does not exist at this time. There were also some significant concerns with performance of the VCD and CLV applications as they worked too slowly for real-time use.

The participants viewed the J-CORES database and the code itself as being clean and easy to administer. The IODP-USIO Science Services, TAMU, Analytical Services Section is considering using some of the code related to the J-CORES user interfaces for their own future development of shipboard tools. CDEX is planning to have the J-CORES source code available as open source in the near future. CDEX hopes to have similar tests onboard the R/V *Chikyu* in

the future to test additional modules and to follow up on updated versions of the modules tested on the *JOIDES Resolution*.

In addition to the J-CORES test, participants followed up on other Data Management Coordination Group activities, including the preparation of draft requirements for the future IODP Curation Management System (ICMS) and Information Portal for IODP (IPI). Overall, the Expedition 311 transit event was a great success, not only for the testing of J-CORES, but also for the general knowledge sharing and collaborative discussions among CDEX, IODP-MI, and IODP-USIO Science Services, TAMU, participants. Visa issues prevented ESO participation.

The detailed J-CORES test reports are available on the Data Management Coordination Group Web site at http://turonian.cris.hokudai.ac.jp/dmzg/index.php?m=tasks&a=view&task_id=13&tab=2 [Username: guest; Password: metadata1].

IODP-MI/IO PUBLICATIONS TASK FORCE INTERACTIONS

IODP Sample, Data, and Obligations Policy: During the fourth quarter of FY05, USIO representatives of IODP-MI's Publications Task Force contributed to revisions to the draft Integrated Ocean Drilling Program Sample, Data, and Obligations Policy. The policy was in near-final form in late September 2005. IODP-MI officials planned to post the policy in October 2005 on the IODP Web site.

Scientific Drilling Journal: At the request of H.C. Larsen (Vice President of Science Operations for IODP-MI) the USIO's Publication Services Department provided editorial review comments in early August on the inaugural edition of IODP's new program journal *Scientific Drilling*.

IODP-MI EXPEDITIONS 304/305 REVIEW TASK FORCE MEETING

The IODP-MI Expedition 304/305 Review Task Force Meeting (REVCOM) met 28 and 29 July 2005 at IODP-MI Headquarters in Washington, D.C., to review the operational and science delivery aspects of these two expeditions investigating Oceanic Core Complex Formation at Atlantis Massif. Our review briefly examined the many positive outcomes of this program, but the focus of the meeting was on improvement of science delivery during future expeditions. The review was based on confidential reports submitted by the USIO and the Co-Chief Scientists of these expeditions (D. Blackman and B. John, Expedition 304; B. Ildefonse and Y. Ohara, Expedition 305). Oral summaries of these reports were presented by Blackman and J. Miller (Expedition 304/305 Project Manager and Staff Scientist). The first day of the meeting encompassed these presentations, as well as discussions on key issues and development of relevant recommendations for future operations. During the second day of the meeting, the committee reviewed the recommendations developed and reached consensus on each.

The IODP-MI Expedition 304/305 REVCOM participants were M. Talwani (President and CEO) and T. Janecek (Vice President of Science Operations), both of IODP-MI; J. Allan (Program Director, NSF), F. Rack (Director of Ocean Drilling Programs, JOI); J. Baldauf (Deputy Director of Science Services), M. Storms (Supervisor of Operational Support), and J. Miller (Staff Scientist), all of IODP-USIO Science Services, TAMU; D. Blackman (Scripps Institution of Oceanography); B. John (University of Wyoming); B. Ildefonse (Université Montpellier II); C. Mével (Director of ECORD Management Agency [EMA]); D. Evans (British Geological Survey [BGS]); J. Pierce (Cardiff University); and J. Natland (University of Miami).

COMMUNICATIONS INTERACTIONS WITH IODP-MI

JOI and IODP-MI communications staff continued discussions to define roles and responsibilities for outreach at port calls and after expeditions and came up with an initial policy

on IODP press releases. IODP-MI will serve as the central facilitator for press releases concerning IODP expeditions and will be responsible for the actual release of “official” IODP press releases. IODP-MI will work with and facilitate the release of press releases concerning IODP activities from the lead agencies (NSF and the Japanese Ministry of Education, Culture, Sports, Science and Technology [MEXT]) and the appropriate IOs (JOI, CDEX, and BGS). It is understood that the lead agencies and the IOs may choose to issue independent press releases with differing bylines, illustrations, and information contacts. However, press releases from all of these organizations will be coordinated, in that a common embargo will be employed to allow independent press releases by the differing organizations for a given expedition to be released simultaneously. Details of this coordination are still under discussion.

APPENDIX A: CONTRACTUAL ACTIVITIES

JOI

NSF CONTRACT OCE-0352500 WITH JOI

JOI received the following modifications during the report period:

- Modification 12: provided incremental funding through 30 September 2005.

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

IODP-MI issued the following subcontract and modification during the report period.

- Modification 2: decreased the estimated costs for CLIN 0001A from \$11,085,464 to \$9,814,642 and withdrew associated funding.

JOI SUBCONTRACT JSC 4-02 WITH TAMRF

JOI issued the following modifications during the report period:

- Modification 9: divided the entire subcontract between SOC and POC and established separate estimated costs for both retroactive to 1 April 2005.
- Modification 10: reduced the FY05 estimated costs for SOC, increased the FY05 estimated costs for POC, and provided incremental funding through 30 September 2005.

JOI SUBCONTRACT JSC 4-03 WITH LDEO

JOI issued the following modification during the report period:

- Modification 7: approved the FY05 Program Plan in the amount of \$7,307,170 and FY04 carryforward and provided incremental funding through 30 August 2005.
- Modification 8: removed POC funding, increased SOC funding, and established the FY05 operating budget at \$7,995,166.
- Modification 9: divided the entire subcontract between SOC and POC and established separate estimated costs for both retroactive to 1 April 2005. Still under review by LDEO.

TAMRF/TAMU

TAMRF SUBCONTRACT WITH ODL

- Amendment 6: issued on 9 September 2005 for additional funding, termination clarification, catering and day rate changes.

CONTRACTS/PROCUREMENT ACTIVITY (\$100,000 OR GREATER)

TAMRF made the following requests for approval to JOI:

- Submitted prior approvals for the purchase of shrinkwrap film on 27 September 2005 and for the purchase of the KLY-4S Spinner KappaBridge on 28 September 2005.

APPENDIX B: FINANCE REPORT

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

APPENDIX C: PERSONNEL STATUS

LDEO

The following positions were opened and advertised during the quarter:

- Logging Scientist
- Mechanical Engineer

TAMU/TAMRF

The following positions were opened and advertised during the quarter:

- Publications Manager
- Research Scientist
- Software Applications Developer (2)
- Senior Systems Administrator
- Production Editor II
- Assistant Research Specialist
- Senior Project Accountant
- Administrative Coordinator
- Assistant Editor

The following positions were filled or canceled during the quarter:

- Associate Director for Health, Safety, and Environment (Doug Johnson) 1 July 2005
- Research Specialist (Frank Williford) 1 July 2005
- Chief Software Applications Developer (Paul Foster) 1 July 2005
- Assistant Research Specialist (Neil Banerjee) 8 July 2005
- Research Assistant (Klayton Curtis) 8 July 2005
- Research Assistant (Keith Gentry) 20 July 2005
- Research Assistant (Rachel Culberson) 8 August 2005
- Research Assistant (Lisa Hawkins) 26 August 2005
- Project Supervisor (Stacy Greer) 28 August 2005

APPENDIX D: CONFERENCE AND MEETING SCHEDULE*

Conference/Meeting	Date	Location
Science Technology Panel (STP) (formerly SciMP)	11–13 July 2005	Bremen, Germany
Mini Environmental Protection and Safety Panel (EPSP)	25 July 2005	College Station, TX
Site Survey Panel (SSP)	12–14 September 2005	San Diego, CA
Engineering Development Panel (EDP) (formerly TAP)	26–28 September 2005	Boston, MA

* External meetings and conferences.

APPENDIX E: TRAVEL*

Institution	Personnel	Purpose	Date	Location
JOI	K. Kryc	STP Meeting	13–20 July 2005	College Station, TX
JOI	F. Rack	Dynamic Planet Conference	21–28 August 2005	Cairns, Queensland, Australia
JOI	F. Rack	IODP/TAMU Meetings	10–14 September 2005	College Station, TX
JOI	J. Corsiglia, F. Rack	Expedition 311 Port Call	14–17 September 2005	Astoria, OR
JOI	K. Kryc, F. Rack	EDP Meeting	25–28 September 2005	Boston, MA
LDEO	S. Higgins	STP Meeting	13–20 July 2005	Bremen, Germany
LDEO	G. Guerin, G. Iturrino	EPSP Meeting	25 July 2005	College Station, TX
LDEO	W. Keogh	National Instruments Conference	5–9 August 2005	Austin, TX
LDEO	T. Baker, G. Myers, D. Quoidbach	Document Management Software Introduction	11 August 2005	Washington, DC
LDEO	G. Myers	Demobilization Meeting	24 August 2005	College Station, TX
LDEO	D. Goldberg	JSMT and SODV Meetings	8–9 September 2005	Washington, DC
LDEO (Aachen)	M. Linek	GeoFrame Training	8–9 September 2005	Paris, France
LDEO	D. Quoidbach	Site Survey Panel Meeting	12–14 September 2005	La Jolla, CA
LDEO	S. Higgins, G. Iturrino	EDP/STP Liaison and J-CORES Transit Briefing Meetings	13–19 September 2005	Astoria, OR
LDEO	D. Goldberg	JSMT Meeting	14–16 September 2005	Astoria, OR
LDEO	D. Goldberg	EDP Meeting	26–27 September 2005	Boston, MA
TAMU	L. Obee	Expedition 309 Port Call	5–16 July 2005	Balboa, Panama
TAMU	B. Julson	Expedition 309 Port Call	7–15 July 2005	Balboa, Panama
TAMU	C. Flores	Expedition 309 Port Call	8–12 July 2005	Balboa, Panama
TAMRF	M. P. Thraen	Expedition 309 Port Call	8–15 July 2005	Balboa, Panama
TAMU	P. Blum	STP Meeting	9–14 July 2005	Bremen, Germany
TAMU	J. Fox	Expedition 309 Port Call	9–14 July 2005	Balboa, Panama
TAMU	B. Aduddell, R. Dixon, D. Schroeder	SolidWorks Training	10–15 July 2005	Houston, TX
TAMU	Adam Klaus	NanTroSEIZE Long-term Monitoring Meeting	14–20 July 2005	San Jose, CA
TAMRF	A. Brown	wInsight Training and User Group Conference	17–22 July 2005	Seattle, WA
TAMU	G. Pollard	Excel Class	20–21 July 2005	Austin, TX
TAMU	S. Dillard	Facility Inspection (Homeland Security)	25–26 July 2005	Humble, TX
TAMU	K. Johnston	STCW Safety Training	25–29 July 2005	San Diego, CA
TAMU	R. Mitchell	Visit to Houston Panalpina Agent (Homeland Security)	25–26 July 2005	Humble, TX
TAMU	E. Pollard	Unconventional Gas Conference–Panel/Speaker	25–27 July 2005	Houston, TX
TAMU	J. Baldauf, J. Miller	Expedition 304/305 REVCOM Meeting	27–30 July 2005	Washington, DC

Institution	Personnel	Purpose	Date	Location
TAMU	M. Storms	Expedition 304/305 REVCOM Meeting	27–29 July 2005	Washington, DC
TAMU	A. Miller	IODP/IO Publications Meeting	28 July–4 August 2005	Washington, DC
TAMU	J. Fox	To deliver talk to Natl. Conv. of Science Teachers	3–5 August 2005	Minneapolis, MN
TAMRF	K. Lee	Training Class for Legal Aspects of Purchasing	7–9 August 2005	Houston, TX
TAMU	R. Goll	Learning Tree Influence Skills Training	8–13 August 2005	New York, NY
TAMU	D. Hornbacher	Learning Tree Influence Skills Training	8–12 August 2005	Atlanta, GA
TAMRF	R. Watkins	Improving Purchasing Performance Training	9–11 August 2005	Houston, TX
TAMRF	R. McPherson	Demob Meeting with Port Authority and Agent	10–11 August 2005	Galveston, TX
TAMU	R. Mitchell, M. Storms	Demob Meeting with Port Authority and Agent	10–11 August 2005	Galveston, TX
TAMU	B. Julson	Expedition 311 Port Call	12–18 August 2005	Astoria, OR
TAMU	C. Bennight, P. Blum, W. Chen, D. Ferrell, P. Foster, M. Hastedt, D. Hornbacher, D. Houpt	NIWeek Conference	15–18 August 2005	Austin, TX
TAMU	T. Bronk, B. Julson	To Accept 20' Container	19 August 2005	Houston, TX
TAMU	L. Obee	Expedition 311 Port Call	23 August–1 September 2005	Balboa, Panama
TAMRF	O. Berka	FMLA Seminar	24–27 August 2005	Little Rock, AR
TAMRF	M. P. Thraen	Property Education Seminar	24 August–3 September 2005	Nashville, TN
TAMU	B. Julson	Expedition 311 Port Call	25–30 August 2005	Balboa, Panama
TAMU	J. Baldauf, J. Beck	Expedition 311 Port Call	26–30 August 2005	Balboa, Panama
TAMRF	R. McPherson	Expedition 311 Port Call	26–30 August 2005	Balboa, Panama
TAMU	P. Blum, J. Miller	Expedition 311 Port Call and J-CORES Testing	26 August–18 September 2005	Balboa, Panama
TAMU	J. Firth, P. Foster, R. Mithal	Expedition 311 Port Call and J-CORES Testing	26 August–16 September 2005	Balboa, Panama
TAMU	Adam Klaus	IODP NanTroSEIZE Project Meeting	27 August 2005	Honolulu, HI
TAMRF	D. DeShetler	Sabre Training	29 August–1 September 2005	Westlake, TX
TAMU	R. Dixon	Repair of (DVTP-P) Parts for Expedition 311	31 August 2005	Houston, TX
TAMU	C. Alvarez Zarikian	Expedition 306 Sampling Party and Intl. Ostracoda Symposium	3–18 September 2005	Berlin, Germany
TAMU	N. Banerjee	Relocation to College Station, TX	4–18 September 2005	College Station, TX
TAMU	E. Jackson	Hazmat Training in College Station, TX	4–10 September 2005	College Station, TX
TAMU	P. Gates, M. Petersen	Work at WCR	5–8 September 2005	San Diego, CA
TAMU	D. Johnson	HSE Visit to Transocean Office	6 September 2005	Houston, TX
TAMU	J. Fox	Meetings at JOI	7–9 September 2005	Washington, DC
TAMU	J. Hutchinson, M. Mefferd	Storage Area Network Training	10–17 September 2005	Cupertino, CA
TAMU	T. Cobine	LabView Training	11–16 September 2005	Austin, TX
TAMU	Adam Klaus	Site Survey Panel Meeting	11–15 September 2005	San Diego, CA
TAMU	J. Baldauf	Expedition 311 Port Call	12–19 September 2005	Astoria, OR

Institution	Personnel	Purpose	Date	Location
TAMU	R. Mitchell	Expedition 311 Port Call and Ren Dezoas Support	12–28 September 2005	Astoria, OR
TAMRF	S. Rogers	Microsoft Access Training	12–15 September 2005	Washington, DC
TAMU	J. Fox, D. Johnson, D. Partain	Expedition 311 Port Call	13–16 September 2005	Portland, OR
TAMU	J. King	Visit to ECR to Set Up Core Wrapping Machine	16–19 September 2005	Newark, NJ
TAMU	L. Westover	Oracle 10g XML Fundamentals Course	25–29 September 2005	Chicago, IL
TAMU	J. Fox	Review of Core Repository	27 September–2 October 2005	Newark, NJ
TAMU	G. Lowe	Yeoperson Training for Expedition 312	30 September–7 October 2005	College Station, 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	13,080
2	Unknown origin	778
3	Germany	381
4	Japan	194
5	United Kingdom	191
6	Italy	118
7	United States	92
8	Netherlands	62
9	Australia	49
10	Spain	38
	All others	300
	Total	15,337

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

Top 20 Janus Web Queries*		
Rank	Query	Uploads
1	Sample report	1,517
2	Depth point calculator	910
3	Core photos	619
4	Hole trivia	525
5	Site hole summary	471
6	Sample totals	394
7	Leg summary	278
8	Core section summary	244
9	Sample requests	231
10	Bulk density (GRA)	223
11	Magnetic susceptibility	206
12	Age model	166
13	Color reflectance (RSC)	156
14	Sampling codes	142
15	Moisture and density (MAD)	140
16	Prime data images	137
17	Hole core summary	131
18	Cryomagnetometer	128
19	Close-up photos	103
20	Carbonates	102
	Database overview and others	1,707
	Total	8,530

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

Data Requests To Data Librarian*	
Requests	Total
Country:	
United States	29
Australia	4
Germany	4
Brazil	3
United Kingdom	3
Chile	1
Denmark	1
Italy	1
Japan	1
Netherlands	1
New Zealand	1
Spain	1
Total	52
Data:	
Data request	15
Data question	15
Photo request	10
DB query problem	7
Moratorium login problem	3
Photocopies	1
Sampling question	1
Total	52

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

Other Web Janus Database Statistics*	Total
Database Query Hits:	
Entire site (successful)	35,505
Average per day	385
Visitor Sessions:	
Visitor sessions	15,337
Average per day	166
Average visitor session length	00:13:07
International visitor sessions	9.64%
Visitor sessions of unknown origin	5.07%
Visitor sessions from United States	85.28%
Visitors:	
Unique visitors	2,945
Visitors who visited once	1,898
Visitors who visited more than once	1,047
Average visits per visitor	5.21

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
308	U1302A, Pirmez, Shell Int.	WST, D
308	U1324A, Pirmez, Shell Int.	WST, D
309	1256D, Reichow, Univ Leicester, U.K.	WST, D

APPENDIX G: SAMPLE REQUESTS

IODP Expedition/ Repository	Visitors	Request Number, Name, Country	Number of Samples
East Coast Repository:			
ECR		18701B, Horst, USA	249
ECR		18887A, Lawrence/Herbert/Cleveland, USA	314
ECR		20089B, Diester-Haass/Billups/Emeis, Germany	140
ECR		20166A, Nielsen/Kelly, USA	282
ECR		20169A, Ghosh, USA	48
ECR		20197B, Bohaty/John, USA	25
ECR		20197C, Bohaty/John, USA	71
ECR		20216A, Schwarz/Rendle-Buhring, Germany	490
ECR		20231A, Nunez Gimeno/Rosell Mele, Spain	32
ECR		20346A, Abiraman, India	57
ECR		20401A, Spiegel, Germany	10
ECR		20451A, Cool/Thomas, USA	40
ECR		20594A, Young/De Schepper, U.K.	18
ECR	1	20611A, Goldberg/Matter/Speyer, USA	20
ECR		20663A, Kendrick/Thunell, USA	10
ECR	1	20700A, Raymo/Costanza, USA	255
ECR		20715A, Johnson/Webb, USA	153
ECR		20723A, Macleod, USA	20
ECR		20729A, Huber/Georgescu, USA	16
ECR		20730A, Huber/Georgescu, USA	21
ECR		20731A, Moore, USA	1
Total science	2	21	2,272
Total education	0		
Total PR	0		
Total:	2	21	2,272
Gulf Coast Repository:			
GCR		20514A, Emeis, Germany	112
GCR		20277B, Tejada, Japan	14
GCR		20327A, Beld, Germany	12

IODP Expedition/ Repository	Visitors	Request Number, Name, Country	Number of Samples
GCR		20546A, Jaccard, Switzerland	30
GCR		20469B, DePaolo, USA	28
GCR		20479A, Swann, UK	133
GCR		20575A, Elderfield, UK	149
GCR		20500A, Price, UK	3
GCR		20554A, Cacho, Spain	60
GCR		20428A, John, USA	120
GCR		20183C, Drouin, France	98
GCR		20440A, Hellebrand, Germany	19
GCR		20441A, Hellebrand, Germany	42
GCR		20137A, Hellebrand, Germany	42
GCR		20109A, Yamasaki, Japan	113
GCR		20119A, Christie, USA	91
GCR		20079B, Delacour, Switzerland	108
GCR		20075B, Beard, USA	79
GCR		20183C, Ildefonse, France	98
GCR		20094A, Searle, UK	95
GCR		20126B, Hirth, USA	41
GCR		20097B, Suhr, Germany	17
GCR		20097D, Suhr, Germany	87
GCR		20102A, Morris, UK	131
GCR		20103A, Maeda, Japan	106
GCR		20145C, Brunelli, France	44
GCR		20486A, Miller, USA	34
GCR		20231B, Nunez, Spain	113
GCR		20380B, Titschack, Germany	12
GCR		20158A, Abe, Japan	88
GCR		20161B, Tamura, Japan	196
GCR		20428A, John, USA	123
GCR		20114B, Awaji, Japan	56
GCR		20073C, Abratis, Germany	81
GCR		20076A, Hirose, Japan	36
GCR		20643A, Gourlan, France	352
GCR		20631A, Masago, Japan	3
GCR		20112A, Gee, USA	121
GCR		20392A, Andal, Japan	98
GCR		20438A, Ohara, Japan	73
GCR		20113A, Hayman, USA	69
GCR		20308A, Ishii, Japan	77
GCR		20098B, Andreani, France	44
GCR		20188B, Grimes, USA	55
GCR		20139B, Hansen, Norway	108
GCR		20105A, Früh-Green, Switzerland	89
GCR		20470A, Lyle, USA	261
GCR	2	20082B, Shimamoto, Japan	55
GCR	1	20605A, Baines, USA	43
GCR	1	20553A, Thomas, USA	0
GCR		20426A, Rosner, USA	6
GCR		20423A, Rosner, USA	2
GCR		20152B, Rosner, USA	20
GCR		20151A, Rosner, USA	46
GCR		20422A, Harris, USA	42
GCR		20144B, Halfpenny, UK	41
GCR		20181A, Fryer, USA	57
GCR		20401A, Spiegel, Germany	22
GCR		20092B, Tominaga, USA	29
GCR		20143A, Zhao, USA	211
GCR		20452A, Agnihotri, USA	2
GCR		20573A, Clarke, UK	90
GCR		20146B, Johnson, USA	69
GCR		20101B, McCaig, UK	49
GCR		20398A, Von der Handt, Germany	86
GCR		20362A, Michibayashi, Japan	61
GCR		20227B, Frost, USA	56
GCR		20544A, Fang, China	473
GCR		20401B, Spiegel, Germany	13

IODP Expedition/ Repository	Visitors	Request Number, Name, Country	Number of Samples
GCR		20606A, Mix, USA	34
GCR		20482A, Kamikuri, Japan	175
GCR		20674A, Dutton, Australia	71
GCR		20610A, Moore, USA	20
GCR		20544A, Watanabe, Japan	362
GCR		20246A, Faul, USA	200
GCR		20544A, Torgersen, USA	11
GCR		20460A, Cleaveland, USA	858
GCR		20588A, DePaolo, USA	7
GCR		20523A, Godard, France	669
GCR		20601A, D'Hondt, USA	32
GCR		20500B, Price, UK	1
GCR		20725A, Schmidt, UK	2
GCR		20718A, Schmidt, UK	2
GCR		20671A, Bohaty, USA	60
GCR		20630A, Medina, USA	483
GCR		20665A, Hayward, New Zealand	20
GCR		20709A, Averyt, USA	36
GCR		20753A, Barron, USA	56
GCR		20736A, Loubere, USA	7
GCR		20723A, MacLeod, USA	20
GCR		20080B, Nozaka, Japan	21
GCR		20550A, Rashid, USA	1,500
GCR		20520A, Donders, Netherlands	19
GCR		20317B, Martin, USA	22
GCR		20719A, Mii, Taiwan	154
GCR		20607A, Flores, Spain	75
GCR		20728A, Schneider, USA	136
GCR		20644A, Holbourn, Germany	89
Total science	4	98	10,576
Total education:	0		
Total PR:	0		
Total:	4	98	10,576
West Coast Repository:			
WCR		20665A, Hayward, New Zealand	9
WCR		20692A, Bao, USA	8
WCR		20723A, Macleod, USA	10
WCR		20717A, Neal, USA	29
WCR		20732A, Wade, USA	173
WCR		20748A, Murray, USA	5
WCR	15	20751A, Gray, USA, Educational visit	
WCR	20	20752A, Rathburn, USA, Educational visit	
WCR	125	20629A, Trujillo, USA, Educational visits over 5 day period	
WCR	20	20626A, Symons, USA, Educational visit	
WCR		20636A, Carter, Australia, Core scanning instruments	scanning only
WCR		20563A, Clark, UK, Core scanning instruments	scanning only
Total science:	0	6	234
Total education:	180		
Total PR:	0		
Total:	180	6	234
309		20515A, Geldmacher, Germany	25
309		20532A, Crispini, Italy	52
309		20535A, Sano, Japan	55
309		20537A, Umino, Japan	107
309		20539A, Veloso, Japan	157
309		20541A, Cordier, France	32
309		20549A, Laverne, France	125
309		20557A, Tartarotti/Crispini/Campari, Italy	80
309		20561A, Sakuyama, Japan	86

IODP Expedition/ Repository	Visitors	Request Number, Name, Country	Number of Samples
309		20562A, Gilbert, USA	78
309		20577A, Gao/Casey, USA	64
309		20586A, Smith-Duque, UK	161
309		20567A, Lledo, USA	83
309		20592A, Gelatt, USA	13
309		20632A, Teagle/Banerjee/Alt, UK	18
309		20634A, Einaudi/Belghoul/Pezard, France	61
309		20635A, Herrero-Bervera, USA	154
Total science:	0	17	1,351
Total:	0	44	3,007

APPENDIX H: PUBLICATIONS

Publication	Release Date	URL
Scientific Prospectus:		
Expedition 310 (Tahiti Sea Level Expedition)*	29 September 2005	http://www.ecord.org/exp/tahiti/310SP.html
Expedition 311 Addendum	8 July 2005	http://iodp.tamu.edu/publications/SP/311SP/311_ADD/311_ADD.html
Preliminary Report:		
Expedition 307 (Porcupine Basin Carbonate Mounds)	4 August 2005	http://iodp.tamu.edu/publications/PR/307PR/307PR.html
Expedition 308 (Gulf of Mexico Hydrogeology)	8 September 2005	http://iodp.tamu.edu/publications/PR/308PR/308PR.html

*Report was edited and produced by the USIO for ESO.

APPENDIX I: WEB

Comparison of Web access statistics averages between FY05 Q3 and Q4 indicates a 5% increase in Web site traffic.

USIO

iodp.tamu.edu	FY05 Q4			
	JOI	LDEO	TAMU	Totals
Parameter				
Page views	23,141	8,016	295,790	326,947
Site visits*	13,707	4,858	48,564	67,129

*Visits by local USIO employee and search engine spiders have been filtered out.

New Web Pages	Release Date	URL
Expedition 311 Weekly Reports	Sep 2005	http://iodp.tamu.edu/scienceops/sitesumm.html
Expedition 311 Photos	Sep 2005	http://iodp.tamu.edu/publicinfo/gallery/exp311/
Expedition Maps	Sep 2005	http://iodp.tamu.edu/scienceops/maps/exp/
Expedition 308 Preliminary Report	8 Sep 2005	http://iodp.tamu.edu/publications/PR/308PR/308PR.html
Expedition 312 Port Call Information	Sep 2005	http://iodp.tamu.edu/travel/portcall.html
Expedition 306 Postcruise Information	Sep 2005	http://iodp.tamu.edu/travel/meetings.html
Expedition 307 Postcruise Information	Sep 2005	http://iodp.tamu.edu/travel/meetings.html
Expedition 308 Postcruise Information	Sep 2005	http://iodp.tamu.edu/travel/meetings.html
Expedition 307 Core Description/Sampling Information	Sep 2005	http://iodp.tamu.edu/travel/meetings.html
Expedition 309 Weekly Reports	Jul-Aug 2005	http://iodp.tamu.edu/scienceops/sitesumm.html
Expedition 309 Weekly Photos	Jul-Aug 2005	http://iodp.tamu.edu/publicinfo/gallery/exp309/
Expedition 309 Teacher at Sea Journal	Jul-Aug 2005	http://iodp.ldeo.columbia.edu/EDU/TAS/309/
Careers in Scientific Ocean Drilling	Aug 2005	http://www.iodp-usio.org/Education/Careers.html
Expedition 307 Preliminary Report	4 Aug 2005	http://iodp.tamu.edu/publications/PR/307PR/307PR.html
Search Engine		http://clay.iodp.tamu.edu/NSearch/SearchServlet?server=search.www.iodp-usio.org
Expedition 312 "School of Rock" Teacher Workshop	Jul 2005	http://www.iodp-usio.org/Education/workshop.html
Shipboard Lab Briefs	Jul 2005	http://www.iodp-usio.org/Education/lab_briefs.html
Expedition 311 Scientific Prospectus Addendum	8 Jul 2005	http://iodp.tamu.edu/publications/SP/311SP/311_ADD/311_ADD.html
Logging Summaries for Expedition 301, 303, 304/305, and 307	Jul-Aug 2005	http://iodp.ldeo.columbia.edu/LOG_SUM/index.html
Expedition 312 Physical Exam Forms	Jul 2005	http://iodp.tamu.edu/participants/before_exp.html
Expedition 311 Port Call Information	Jul 2005	http://iodp.tamu.edu/travel/portcall.html
Leicester Logging Staff Photos	Jul 2005	http://iodp.tamu.edu/staffdir/ldeo_uk.html

APPENDIX J: CORE REPOSITORY CONSOLIDATION

With approval from IODP-MI, \$195,948.24 was encumbered for the purchase of supplies for the DSDP/ODP Core Repository Redistribution Project. This purchase initiated the project, which was originally planned to begin in FY06.

- ECR packed up Leg 150X cores to be shipped to Rutgers in the first quarter of FY06.

- Curator ordered ~\$197K of supplies for core packing of East Coast Repository (ECR), Gulf Coast Repository (GCR), and West Coast Repository (WCR) cores using available FY05 funds.

APPENDIX K: IODP-USIO QUARTERLY REPORT DISTRIBUTION LIST

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