



INTEGRATED OCEAN DRILLING PROGRAM
United States Implementing Organization

FY09 Quarterly Report 1

1 October–31 December 2008

NSF Contract OCE-0352500

Submitted by the USIO

to

The National Science Foundation

and

IODP Management International, Inc.



Integrated Ocean Drilling Program
United States Implementing Organization.

13 February 2009

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INTRODUCTION

The organization of this quarterly report reflects activities and deliverables that are outlined in the Integrated Ocean Drilling Program (IODP) U.S. Implementing Organization (USIO) FY08 Annual Program Plan as implemented by the USIO, which comprises the Consortium for Ocean Leadership, Inc. (Ocean Leadership), and its partners, Texas A&M University (TAMU) and Lamont-Doherty Earth Observatory (LDEO) of Columbia University.¹

MANAGEMENT AND ADMINISTRATION

Contractual Activities

Ocean Leadership

NSF Contract OCE-0352500 with Ocean Leadership

Ocean Leadership received the following modifications from the National Science Foundation (NSF) during the reporting period:

- Modification 35: Approved the FY09 Annual Program Plan at the revised amount of \$57,733,423 (from \$60,000,000) and provided \$15,000,000 of incremental funding for the approved FY09 Annual Program Plan.

IODP-MI Subcontract IODP-MI-05-03 with Ocean Leadership

Ocean Leadership received the following modification from IODP Management International, Inc. (IODP-MI) during the reporting period:

- Modification 16: Provided \$1,000,000 of incremental funding for the preliminary FY09 science operating costs (SOC) budget to support subcontract activity through 8 December 2008.

Ocean Leadership Subcontract JSC 4-03 with LDEO

Ocean Leadership issued the following modifications during the reporting period:

- Modification 24: Approved FY07 carryforward of \$175,797, approved the 2 May 2008 FY09 Annual Program Plan of \$5,980,256 (not including the SOC Nonoperations component), and provided incremental funding of \$991,985 toward FY09 activities.
- Modification 25: Added the preliminary FY09 SOC Nonoperations budget of \$720,564 to the FY09 Annual Program Plan and provided incremental funding of \$176,626 toward the preliminary SOC Nonoperations budget.

Ocean Leadership Subcontract JSC 4-02 with TAMRF

Ocean Leadership issued the following modifications during the reporting period:

- Modification 32: Approved the FY09 Annual Program Plan of \$52,436,941 (not including the SOC Nonoperations component), provided incremental funding of \$8,698,064 toward FY09 activities, and incorporated the requirement for subcontractor to provide backup documentation to the Ocean Leadership Chief Financial Officer (CFO) for each Advance Request Payment effective 1 August 2008.

¹ In this document, references to TAMU include Texas A&M Research Foundation (TAMRF).

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- Modification 33: Added the preliminary FY09 SOC Nonoperations of \$2,949,705 to the FY09 Annual Program Plan and provided incremental funding of \$723,036 toward the preliminary FY09 SOC Nonoperations budget.

LDEO

LDEO Subcontract with Leicester University

LDEO issued the following modification during the reporting period:

Modification 9: Provided the first FY09 funding increment in the amount of \$45,839.

LDEO Subcontract with Schlumberger

LDEO issued the following modifications during the reporting period:

Modification 5: Provided the final FY08 funding increment in the amount of \$150,939.

Modification 6: Provided the first FY09 funding increment in the amount of \$530,000.

TAMRF

Miscellaneous Activity

- 14 October 2008: Submitted the Small and Disadvantaged Business SF294 Report to Ocean Leadership.
- 17 October 2008: Submitted the FY08 Annual Property Reports to Ocean Leadership.
- 20 October 2008: Submitted the SF295 Summary Subcontract Report for Small and Disadvantaged Businesses to Ocean Leadership.
- 22 October 2008: Entered and submitted required data into the Federal Automotive Statistical Tool (FAST) system and notified Ocean Leadership that the information was ready for their review.
- 4 November 2008: Submitted a request for prior approval to loan government-owned property (2 overshot tools) to the University of Alaska—Fairbanks to pull the dummy logger out of the circulation obviation retrofit kit (CORK) at Ocean Drilling Program (ODP) Hole 1200C. This work is funded by NSF under a collaborative agreement.

Health, Safety, and Environment Activities

TAMU Projects and Activities

Crisis Management Plan

The final draft of the Crisis Management Plan was accepted and plans were made to schedule a minimal “tabletop” exercise of the plan after deployment.

Personnel Status

Ocean Leadership

There were no positions vacated, opened, advertised, or filled during the quarter.

LDEO

There were no positions vacated, opened, advertised, or filled during the quarter.

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TAMU

The following positions were vacated during the quarter:

- Superintendent, West Coast Repository (WCR)(Steve Prinz): 1 November 2008
- Operations Engineer (Eugene Pollard): 8 November 2008
- Temporary Research Assistant (Helene Gould): 11 November 2008
- Marine Logistics Coordinator (Larry Obee): 19 November 2008
- Marine Laboratory Specialist IV (Roy Davis): 8 December 2008

There were no positions opened or advertised during the quarter.

The following positions were filled during the quarter:

- Publications Specialist II (Jamie Smidt): 1 October 2008
- Graphics Specialist II (Kelly VonDrehle): 1 October 2008
- Applications Developer II (Algie Morgan): 28 October 2008
- Curatorial Specialist III (Steve Prinz): 1 November 2008
- Laboratory Officer (Roy Davis): 8 December 2008

USIO Web Services

Main activities during this quarter included updating USIO Web site pages, creating photo profiles for the Expedition 320/321 Science Parties, development of Program photo metadata, posting weekly U.S. scientific ocean drilling vessel (SODV) photos on the intranet, updating online SODV conversion PowerPoint and YouTube content, and working with subcontractor velocity7 to create the new *JOIDES Resolution* Web portal (joidesresolution.org).

Web Site Statistics

Where possible, visits by USIO employees and search engine spiders were filtered out. Page statistics are inflated because the software does not differentiate pages viewed by search engines.

USIO Web Site

The USIO Web site is hosted at TAMU, LDEO, and Ocean Leadership.

FY09 Q1 USIO Web Site				
Parameter	www.iodp-usio.org	iodp.ldeo.columbia.edu	iodp.tamu.edu	Total
Page views	13,103	9,509	203,729	226,341
Site visits	8,281	1,370	40,459	50,110

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New and Updated Web Pages	Release Date	URL
<i>JOIDES Resolution</i> Web site	October 2008	http://ship.iodp.tamu.edu/
News: SODV conversion	October 2008	http://iodp.tamu.edu/publicinfo/gallery.html
Expeditions: expedition schedule	October 2008	http://iodp.tamu.edu/scienceops/
Participant information: before an expedition	October–December 2008	http://iodp.tamu.edu/participants/before_exp.html
Participant information: merchandise	November 2008	http://iodp.tamu.edu/participants/merchandise.html
News: 320 profiles	December 2008	http://iodp.tamu.edu/publicinfo/gallery/exp320
News: 321 profiles	December 2008	http://iodp.tamu.edu/publicinfo/gallery/exp321

IODP Publications Web Site

The IODP Publications Web site is hosted at TAMU. New online publications are shown in the “Publications” section of this report.

FY09 Q1 IODP Publications Web Site	
Parameter	publications.iodp.org
Page views	50,611
Site visits	16,159

U.S. IODP Educational Web Sites

Web domain	www.joilearning.org	www.oceanleadership.org/learning
Page views	4,795	8,771

*Ocean Leadership’s educational Web sites are funded jointly by the USIO and USSSP.

Legacy Web Sites

The ODP Science Operator Web site and the Deep Sea Drilling Project (DSDP) Publications Web site are hosted at TAMU. The ODP Legacy Web site is hosted at Ocean Leadership.

Parameter	FY09 Q1 ODP Web Site			FY09 Q1 DSDP Web Site
	www-odp.tamu.edu	www.odplegacy.org	Total ODP	www.deepseadrilling.org
Page views	1,085,715	9,384	1,095,099	46,081
Site visits	234,035	3,761	237,796	15,360

TECHNICAL, ENGINEERING, AND SCIENCE SUPPORT

USIO Expedition Schedule

The Operations Task Force (OTF) developed a new schedule based on a revised delivery date of 25 January 2009 from the shipyard, with international operations commencing in March 2009. The revised schedule retained the four previously scheduled expeditions (Canterbury Basin, Wilkes Land, Pacific Equatorial Age Transect [PEAT], and PEAT/Juan de Fuca Remedial Cementing), returned an expedition that was removed in a previous schedule revision (Bering Sea), and added a new expedition (Shatsky Rise). Because of operational weather constraints, the Canterbury Basin and Wilkes Land expeditions had to be deferred one year.

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Expedition		Port (Origin)	Dates ^{1,2}	Total Days (Port/Sea)	Days at Sea (Transit ³ /Ops)	Co-Chief Scientists	USIO Contacts ⁴
Deployment, mobilization, sea trials, transit ⁵	NA	Singapore	25 January–5 March 2009	39 (1/38)	27/11	NA	TAMU: J. Miller*
Pacific Equatorial Age Transect (PEAT)	320	Honolulu, Hawaii	5 March–5 May 2009	61 (5/56)	12/44	H. Pälike, N. Nishi	TAMU: A. Klaus* LDEO: H. Evans^
PEAT/Juan de Fuca Remedial Cementing Operations ⁶	321	Honolulu, Hawaii	5 May–5 July 2009	61 (5/56)	20/36	M. Lyle, I. Raffi/ A. Fisher ⁶	TAMU: K. Gamage* LDEO: A. Malinverno^
Bering Sea	323	Victoria, British Columbia	5 July–4 September 2009	61 (5/56)	17/39	K. Takahashi, C. Ravelo	TAMU: C. Alvarez Zarikian* LDEO: G. Guerin^
Shatsky Rise	324	Yokohama, Japan	4 September–4 November 2009	61 (5/56)	17/39	W. Sager, T. Sano	TAMU: J. Geldmacher* LDEO: G. Iturrino^
Canterbury Basin	317	Townsville, Queensland	4 November 2009–4 January 2010	61 (5/56)	10/46	C. Fulthorpe, K. Hoyanagi	TAMU: J. Miller* LDEO: A. Slagle^
Wilkes Land ⁷	318	Wellington, New Zealand	4 January–9 March 2010	64 (5/59)	16/43	C. Escutia, H. Brinkhuis	TAMU: A. Klaus* LDEO: T. Williams^

Notes:

¹ Dates for expeditions may be adjusted pending final vessel delivery date from shipyard or non-IODP activities.

² The start date reflects the initial port call day. The vessel will sail when ready.

³ Transit total is the transit to and from port call and does not include transit between sites.

⁴ The USIO contact list includes both the Expedition Project Manager (*), the primary contact for the expedition, and the Logging Staff Scientist (^). In addition, further expedition information is available at www.iodp-usio.org.

⁵ An intermediate Guam port call is targeted for approximately 5 February 2009. Sea trials will be conducted at ODP Site 807.

⁶ Expedition consists of operations in both the Equatorial Pacific and Juan de Fuca Ridge. PEAT scientists are tentatively scheduled to disembark the vessel in San Diego, California, on approximately 23 June 2009. Lyle and Raffi are Co-Chief Scientists on the PEAT Expedition; Fisher is Chief Scientist on Juan de Fuca Cementing Operations.

⁷ Wilkes Land activities include operations at Adelie Drift (638 APL).

Expedition Planning and Implementation Activities

USIO Pacific Equatorial Age Transect Expeditions

Expedition Planning: There is an increase in operations time for the PEAT program because of the new starting port call for the first PEAT expedition, which resulted in a revision to the operational plans. An addendum to the *Scientific Prospectus* was published

reflecting the changes. Planning continued with submitting and initiating the review of sample and data requests, finalizing technical support requirements, and initiating logistical support planning for the first port call.

Expedition Staffing: One Co-Chief Scientist withdrew and was replaced with a member of the Science Party. The USIO worked with the Program Member Offices (PMOs) and Co-Chief Scientists to fill vacant Science Party positions.

USIO Juan de Fuca Hydrogeology (Remedial Cementing Operations)

Expedition Staffing: A Co-Chief Scientist was invited to participate in planning and to sail during cementing operations.

Clearance and Permitting Activities: A new application was submitted for clearance to operate in Canadian waters.

USIO Bering Sea Expedition

Expedition Planning: Revision of the draft *Scientific Prospectus* was initiated based on the new schedule.

Expedition Staffing: After discussion with the PMOs, it was determined that attempting to reassemble the previous Science Party was the fairest and most effective way to re-staff the expedition. Both previous Co-Chief Scientists and all but five Science Party members accepted the invitation to sail with the new schedule.

Clearance and Permitting Activities: An application to operate in Russian waters for two primary sites and one alternate site was submitted to the State Department. Two additional sites in U.S. waters are under consideration in case Russian clearance is not granted.

USIO Shatsky Rise Expedition

Expedition Planning: The Pre-expedition Meeting was held 11 and 12 December 2008 at TAMU. Five primary and seven alternate sites were identified within the operational time constraints. It was also determined that all sites are still pending Environmental Protection and Safety Panel (EPSP) review, which will take place at the June 2009 EPSP meeting.

Expedition Staffing: Two Co-Chief Scientists accepted invitations to sail. A timeline for science staffing was established with the PMOs and a call for applications was issued, with application review to begin during the next quarter.

USIO Canterbury Basin Expedition

Expedition Planning: Official notification of the schedule change was forwarded to New Zealand via the State Department. The schedule change will not require modification of the operations plan.

Expedition Staffing: All scientists were informed that the expedition was deferred approximately one year, and all but three scientists agreed to participate with the new schedule.

USIO Wilkes Land Expedition

Expedition Planning: The schedule change will not require modification of the operations plan.

Expedition Staffing: All scientists were informed that the expedition was deferred approximately one year, and all scientists but one agreed to participate with the new schedule.

Projects and Other Activities

Advanced Piston Corer Temperature Tool Model 3

Three advanced piston corer temperature tool model 3 (APCT3) electronics sections were calibrated and sent to Japan for use on the *Chikyu*. Two other APCT3 tools were calibrated and sent to Singapore for use during the shakedown cruise of the *JOIDES Resolution* and the first IODP Phase 2 expeditions.

Common Downhole Data Acquisition System/Sediment Temperature Tool

Common downhole acquisition (CDAQ) systems were installed in two sediment temperature (SET) tools, which were calibrated and sent to Singapore for use in the *JOIDES Resolution* shakedown cruise and the first IODP Phase 2 expeditions. Parts for three additional SET tools were purchased and three CDAQ systems were assembled for use in SET tools to be deployed during upcoming expeditions on the *Chikyu*. The SET tools are being assembled and calibrated and will be shipped to Japan Agency for Marine-Earth Science and Technology (JAMSTEC) next quarter.

Geosciences Laboratory (ODASES)

TAMU collaborated with the Texas A&M University College of Geosciences in selecting an X-ray fluorescence (XRF) core logger for the Ocean Drilling and Sustainable Earth Science (ODASES) Geosciences Laboratory at TAMU. The College of Geosciences will purchase this core logger, which will be available for use in mid-2009.

Lockable Flapper Valve Project

Work progressed on a new design of the flapper portion of the lockable flapper valve (LFV). New engineering drawings were completed, materials were purchased, and plans were made for machining a test model during the second quarter of FY09.

Metrology Laboratory (Calibration Laboratory)

The Metrology Laboratory was used to perform calibrations for five APCT3 tools and two SET tools. A problem with maintaining constant temperatures was fixed by recharging the temperature bath cooling system.

Schlumberger Telemetry Project

The Multifunction Telemetry Module, the first component of the USIO's next-generation wireline telemetry system, was completed and plans were made for testing during the *JOIDES Resolution's* sea trial logging operations. This module will allow all USIO tools to run in a Schlumberger logging string, with data collected on the Schlumberger telemetry system.

ENGINEERING DEVELOPMENT

There are no Engineering Development deliverables scheduled for FY09.

DATA MANAGEMENT

Projects and Other Activities

With the exception of items specified below, data management activities are currently supported by the SODV Project and are therefore not reported here.

Inventory Asset Management System

The Property module of the Inventory Asset Management System (AMS) was successfully deployed on shore. Work began to prepare for shipboard deployment of the AMS.

Log Database Upgrade

USIO and Center for Deep Earth Exploration (CDEX) staff continued discussions on reformatting CDEX data files to enable searches from the LogDB tools. A shipboard clone of the LogDB system was developed and sent to the *JOIDES Resolution* for installation. The shipboard clone contains a subset of nonmoratorium DSDP, ODP, and IODP log data.

IODP Databases

Log Database

Expedition 302 processed data were put online in October 2008. The data inventory now includes data from Expeditions 301–312, including European Consortium for Ocean Research Drilling (ECORD) Science Operator (ESO) Expeditions 302 and 310.

IODP Database Data Requests

Janus Database

Top 10 Countries Accessing Janus Web Database*		
Rank	Country	Visitor Sessions
1	United States	1,108
2	Germany	531
3	Japan	355
4	United Kingdom	331
5	Spain	124
6	China	111
7	Italy	90
8	France	89
9	Norway	81
10	Denmark	76
	All others	573
	Total	3,469

*Excluding access from TAMU.

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Top 20 Janus Web Queries*		
Rank	Query	Uploads
1	Sample report	1,477
2	Photo	910
3	Core summary	586
4	Sample requests	494
5	Site summary	468
6	Hole trivia	453
7	Age model	451
8	Moisture and density (MAD)	353
9	Chemistry (IW)	318
10	Bulk density (GRA)	303
11	Chemistry gas	280
12	Depth point calculator	276
13	Magnetic susceptibility	269
14	Shear strength (AVS/PEN/TOR)	232
15	Age profile	229
16	P-wave velocity (PWS)	224
17	Chemistry-carbonates	205
18	P-wave velocity (PWL)	198
19	Hole summary	198
20	Rock eval	189
	Others	2,720
	Total	10,833

*Excluding access from TAMU.

Other Web Statistics*		
Database query hits:		
	Entire site (successful)	34,998
	Average per day	380
Visitor sessions:		
	Total number of visitor sessions	3,469
	Average per day	37
	Average length of visit	00:19:19
	International visitor sessions	67.97%
	Visitor sessions of unknown origin	0.09%
	Visitor sessions from United States	31.94%
Visitors:		
	Unique visitors	1,823
	Visitors who only visited once	1,347
	Visitors who visited more than once	476

*Excluding access from TAMU.

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Data Requests to Data Librarian*	
Requests	Total
Country:	
United Kingdom	6
United States	3
Germany	2
Argentina	1
Canada	1
China	1
Denmark	1
Norway	1
Taipei	1
Total	18
Data:	
General information/usage	3
Photo/images	2
Seismic	2
Velocity	2
DSDP data	1
Bulk density	1
Color reflectance	1
Heat flow/thermal conductivity	1
Magnetic susceptibility	1
Splice	1
Depth	1
Water temperature	1
Repository visits	1
Total	18

*Excluding access from TAMU.

Log Database

Top 10 Countries Accessing Log Web Database*		
Rank	Country	Visitor Sessions
1	United States	757
2	United Kingdom	112
3	China	87
4	Germany	64
5	Japan	50
6	France	34
7	Norway	30
8	Italy	18
9	India	15
10	Poland	10
	All others	168
	Total	1,345

*Excluding access from LDEO.

Other Log Web Statistics*		
Database query hits:		
	Entire site (successful)	9,509
	Average per day	132
Visitor sessions:		
	Total number of visitor sessions	1,370
	Average per day	15
	Average length of visit	00:07:50
	International visitor sessions	31.23%
	Visitor sessions of unknown origin	12.49%
	Visitor sessions from United States	56.28%
Visitors:		
	Unique visitors	681
	Visitors who only visited once	598
	Visitors who visited more than once	772

*Excluding access from LDEO.

Data Requests to Log Data Supervisor		
Expedition	Request Number, Name, Affiliation, Country	Type of Data
	There were no data requests for this period.	

CORE CURATION

Sample Requests

IODP Expedition/ Repository	Visitors	Request Number, Name, Country	Number of Samples
<i>Gulf Coast Repository:</i>			
		21622A/Duggen/Germany	146
		21548A/Fluegeman/USA	107
		21640A/Paytan/USA	151
		21004C/Bralower/USA	123
		21628A/Baldauf/USA	361
		21634A/Bradbury/USA	353
		21586A/Hendry/United Kingdom	77
		21435B/Girault/Switzerland	117
		21560A/Stott/USA	36
		21668A/Mortimer/New Zealand	1
		21588A/Cardenas/USA	14
		21662A/Raffi/Italy	93
	1	21685A/Tuzzi/USA	67
	1	21690A/Thomas/USA	58
		21648A/Schmidt/United Kingdom	43
		21640A/Paytan/USA	289
	2	21677A/Robinson/USA	68
		21623A/Pichevin/United Kingdom	249
		20708C/Banerjee/USA	27
		21683A/Fantle/USA	39
		21700A/Herrmann/USA	5
		21635A/Schulte/Germany	50
		21635B/Schulte/Germany	48
		21650A/Filipelli/USA	113
		21696A/Wortmann/Canada	5
		21664A/Kuroda/Japan	28
		21667A/Straub/USA	10
		21697A/Arning/Germany	30
		21660A/Kender/United Kingdom	34
		21682A/Etourneau/Germany	33
		21355F/Deister-Haas/Germany	236
		21637B/Rickaby/United Kingdom	3
		21705A/Twiney/United Kingdom	150
		21132F/Tripati/United Kingdom	58
		21710A/Miyashima/Japan	86
	28	21617A/Olszewski/USA [Educational Course]	No samples
Total science	32	36	3,308
Total education:	35	Educational Tours (2)	0
Total PR:	5	Public Relations Tours (2)	0
Total:	72	36	3,308

DSDP/ODP Core Redistribution Project

The Gulf Coast Repository (GCR) received the final core shipments from the West Coast Repository (WCR) and East Coast Repository (ECR) on 2 and 3 October 2008, respectively, and began rearranging and racking the entire GCR collection.

The Kochi Core Center (KCC) racked the final shipment of core from the GCR on 28 October 2008 and held a formal ceremony to celebrate completion of the DSDP/ODP legacy core redistribution project

PUBLICATIONS

USIO Reports

FY08 Q4 IODP Quarterly Report

The USIO report for the fourth quarter of FY08 (July–September 2008) was submitted to NSF and IODP-MI on 12 December 2008.

FY08 Annual Report

Production of the USIO FY08 Annual Report continued with development, review, and revision.

FY09 Annual Program Plan

On 31 October 2008, the USIO submitted to IODP-MI and NSF for review and evaluation a revised version of the IODP-USIO FY09 Annual Program Plan for SOC and platform operating costs (POC). The IODP-USIO FY09 Annual Program Plan consists of requests for SOC Nonoperations and POC costs of non-SODV mobilization activities; SOC Operations costs; PEAT Expedition 1/Juan de Fuca Remedial Cementing, PEAT Expedition 2, Bering Sea Expedition, and Shatsky Rise Expedition; long-lead time planning costs for expeditions proposed for FY10; and continuing SOC shore-based activities during FY09. The IODP-USIO FY09 Annual Program Plan budget totals \$60,764,108, with \$3,905,487 in SOC Nonoperations requested from IODP-MI and \$7,515,422 in SOC Operations and \$49,343,199 in POC requested from NSF.

On 31 October 2008, the USIO submitted to NSF a revised version of the Appendix to the FY08 Annual Program Plan for U.S. systems integration contract costs (SIC). The Appendix to the IODP-USIO FY09 Annual Program Plan outlines requests related to the IODP-USIO U.S. Systems Integration Contract, which include costs that cover USIO efforts for education and outreach and associated management and administrative support. The FY09 Annual Program Plan Appendix to NSF includes a SIC budget totaling \$874,802 and also provides SOC Operations, SOC Nonoperations, and POC budget details.

IODP Scientific Publications

Publication	Release Date	Digital Object Identifier	Comments
Scientific Prospectus:			
Expeditions 320/321 (Pacific Equatorial Age Transect) Addendum	December 2008	doi:10.2204/iodp.sp.320321add.2008	
Proceedings of the Integrated Ocean Drilling Program:			
Volume 301			
Data report: Pb isotope compositions of sediment from the eastern flank of Juan de Fuca Ridge	27 October 2008	doi:10.2204/iodp.proc.301.203.2008	
Volume 308			
Data report: penetrometer measurements of in situ temperature and pressure, IODP Expedition 308	29 October 2008	doi:10.2204/iodp.proc.308.203.2008	
Data report: particle size analysis of sediments in the Ursa Basin, IODP Expedition 308 Sites U1324 and U1322, northern Gulf of Mexico	13 November 2008	doi:10.2204/iodp.proc.308.205.2008	
Volume 309/312			
Data report: petrography and phase analyses in lavas and dikes from Hole 1256D (ODP Leg 206 and IODP Expedition 309, East Pacific Rise)	6 October 2008	doi:10.2204/iodp.proc.309312.201.2008	
Volume 311			
Data report: $\delta^{34}\text{S}$ and $\delta^{18}\text{O}$ measurements of dissolved sulfate from interstitial water samples, IODP Expedition 311	5 November 2008	doi:10.2204/iodp.proc.311.209.2008	
Data report: a downhole electrical resistivity study of northern Cascadia marine gas hydrate	21 November 2008	doi:10.2204/iodp.proc.311.203.2008	

IODP Scientific Publication Deadline Extension Requests

The IODP Sample, Data, and Obligations Policy requires all Science Party members to conduct research and publish the results of their work. To fulfill this obligation, scientists must have their papers published in a peer-reviewed scientific journal or book that publishes in English, or as a peer-reviewed data report in the *Proceedings of the Integrated Ocean Drilling Program*. Manuscripts must be submitted within 20 months postmoratorium (26 months for synthesis papers). Science Party members may request a deadline extension of up to one year. The Platform Curator reviews and approves these extension requests, and IODP Publication Services monitors fulfillment of the publishing obligation. The tables below show extensions requested during the quarter and the status of all deadline extensions approved during the life of each volume.

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Initial Papers/Data Reports				
Expedition	Original Submission Deadline	FY09 Q1 Extension Requests	Overall Extension Status	
			Number Approved	Number Fulfilled
301	20 April 2007			
302	23 July 2007			
304/305	4 February 2008		14	6
308	7 March 2008		8	6
303/306	9 May 2008		11	3
307	13 June 2008		4	2
311	27 June 2008		12	2
309/312	28 August 2008		9	3
310	4 November 2008	16	16	4

Synthesis Papers				
Expedition	Original Submission Deadline	FY09 Q1 Extension Requests	Overall Extension Status	
			Number Approved	Number Fulfilled
301	22 October 2007		1	1
302	21 January 2008		1	1
304/305	4 August 2008		1	
308	8 September 2008		1	
303/306	10 November 2008			
307	15 December 2008			
311	29 December 2008			
309/312	27 February 2009			
310	4 May 2009			

Scientific Publication Distribution

Publication	Number Distributed
IODP Publications:	
<i>Proceedings of the Integrated Ocean Drilling Program Expedition Report DVDs</i>	19
ODP Publications:	
<i>Proceedings of the Ocean Drilling Program, Initial Reports</i>	10
<i>Proceedings of the Ocean Drilling Program, Initial Reports (CDs only)</i>	48
<i>Proceedings of the Ocean Drilling Program, Scientific Results</i>	7

IODP Digital Object Identifiers

IODP is a member of CrossRef, the official digital object identifier (DOI) registration agency for scholarly and professional publications. All IODP scientific reports and publications are registered with CrossRef and assigned a unique DOI that facilitates online access. DOIs have also been assigned to ODP and DSDP scientific reports and publications. CrossRef tracks the number of times a publication is accessed, or resolved, through the DOI system. Statistics for the first quarter are shown in the table below.

Reports and Publications	DOI Prefix	Number of Resolutions			
		October 2008	November 2008	December 2008	FY09 Q1 Total
IODP	10.2204	2,363	3,159	2,636	8,158
ODP/DSDP	10.2973	4,836	7,409	3,969	16,214

Projects and Other Activities

NanTroSEIZE Stage 1 *Proceedings* volume

In December 2008, A. Miller (TAMU Publication Services Manager) notified Ocean Leadership and the IODP-MI Sapporo office that publication of *Proceedings of the Ocean Drilling Program* Volume 314/315/316 would be delayed until at least early March 2009. The expedition reports from CDEX Expeditions 314–316 were initially scheduled to be published in early February 2009 in a combined *Proceedings* volume. Failure of the Nankai Trough Seismogenic Zone Experiment (NanTroSEIZE) Chief Project Scientists to coordinate and complete editorial reviews on schedule and submit a required NanTroSEIZE Stage 1 summary paper caused the publication delay. Submission of the synthesis paper was pending at the end of the quarter.

EDUCATION

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

Deep Earth Academy

Education Visual Identity—Deep Earth Academy Web Site

Deep Earth Academy continued to make improvements to its Web site and added new Activities of the Month for October and November 2008 (www.oceanleadership.org/learning/activityofthemonth/home).

Work continued on preparing the new *JOIDES Resolution* Web portal (joidesresolution.org) for launch in the second quarter of FY09. USIO staff worked with contractor velocity7 on reviewing new Flash games, photos, video, text, and design templates for the site and developed new educational content.

Educational Materials Distribution

Deep Earth Academy distributed 2,370 posters and 280 DVDs at conferences and outreach activities and in response to requests received through their Web site. Materials were distributed at the following meetings.

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Conference/Meeting/Workshop	Date	Location
Geological Society of America Joint Annual Meeting	5–9 October 2008	Houston, Texas
LaPorte Science Teacher Workshop	1 November 2008	LaPorte, Texas
American Geophysical Union Fall Meeting	15–20 December 2008	San Francisco, California

Materials Development and Education Programs

Materials Development

USIO staff developed a graphic novel–style comic book about the *JOIDES Resolution* that features an introduction to the ship, its work, and its scientists. The comic book will be featured on the joidesresolution.org Web page and new editions will be produced regularly.

Ocean Leadership staff developed a papercraft model of the *JOIDES Resolution* that users can cut out and assemble. The model will be available for use at family events and museum programs and will be featured on the joidesresolution.org Web page.

The Earth Science Week calendar, sent out to more than 12,000 educators prior to Earth Science Week (12–18 October 2008), featured a Deep Earth Academy classroom activity on measurement (www.earthsciweek.org/calendar/index.html).

Plans were initiated to sail a videographer on the PEAT 2 Expedition in May 2009 to gather a library of video footage that can be used for the joidesresolution.org Web page, a new educational DVD, promotional programming, and other educational and outreach purposes. This new video production will focus on the ship and its capabilities, core flow, life at sea and expedition science themes.

School of Rock

Planning began for the 2009 School of Rock workshop to be conducted aboard the newly refurbished *JOIDES Resolution* during the PEAT 2 Expedition transit (San Diego, California; 23 June–5 July 2009). This year’s workshop will focus on cores, CORKS, and hydrology on the Juan de Fuca Ridge and will feature a new instructional team.

Teacher-at-Sea Program

Previously selected Teacher-at-Sea J. Pollard (Birdville Independent School District, Texas) agreed to sail on the rescheduled Canterbury Basin Expedition in the fall of 2009.

Teacher-in-Residence Program

Though funded through the U.S. Science Support Program (USSSP), new Teacher Fellow J. Collins worked on both USSSP- and IODP-funded projects, including reviewing new curricular activities and materials, planning upcoming workshops and programs, and working on museum outreach and Web site updates. In addition, Collins began working to link the USIO and Deep Earth Academy to The Year of Science (www.yearofscience2009.org/home/) and special events at the Smithsonian’s Sant Ocean Hall.

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Teacher Workshops

Workshop*	Date	Location
Connecticut Science Educators' Day—L. McMinn (School of Rock 2008 Alumnus)	27 October 2008	New Britain, Connecticut
2008 California Science Education Conference—J. Monaco (School of Rock 2007 Alumnus)	30 October 2008	San Jose, California
Tennessee Teacher's Association Meeting—T. King (School of Rock 2007 Alumnus)	1 November 2008	Tennessee
University of Texas Medical Branch (UTMB) Regional Science Conference—M. Keelan (School of Rock 2008 Alumnus)	15 November 2008	Galveston, Texas
GeoFORCE Texas Workshop—L. Peart (Director of Education, Ocean Leadership)	12 November 2008	Port Aransas, Texas
New Jersey Science Olympiad—P. Donohue (School of Rock 2008 Alumnus)	November 2008	Metuchen, New Jersey
Virginia Science Teachers Association 2008 Professional Development Institute—C. Kaznosky (School of Rock 2008 Alumnus)	15 November 2008	Hampton, Virginia

*Teacher workshops that were conducted by representatives of the Deep Earth Academy or at which Deep Earth Academy gave presentations.

Educational Outreach

Meeting/Lecture/Presentation*	Target Audience	Date	Location
Earth Science Day at Cypress Grove Intermediate School—C. Alvarez Zarikian, K. Gamage, J. Geldmacher (TAMU Staff Scientists); C. Broyles (TAMU Curatorial Specialist); C. Peng (TAMU Laboratory Officer); B. Weymer (TAMU Marine Laboratory Specialist)	6th grade students	27 October 2008	College Station, Texas
Allen Academy Earth Science Workshop at TAMU—Ann Klaus (TAMU Deputy Director of Data Services), Adam Klaus (TAMU Supervisor of Science Support)	3rd grade students	28 October 2008	College Station, Texas
Aggie Polar Palooza—L. Crowder (TAMU Laboratory Officer), J. Geldmacher (TAMU Staff Scientist), Ann Klaus (TAMU Deputy Director of Data Services), Adam Klaus (TAMU Supervisor of Science Support), M. Malone (TAMU Manager of Science Operations), K. Petronotis (TAMU Web Administrator)	Middle- and high-school students	5 November 2008	College Station, Texas

*Educational presentations that were conducted by representatives of the USIO or at which the USIO gave presentations.

Diversity Support Activities

Historically Black Colleges and Universities Fellowship

In December 2008, the USIO released the second FY09 Historically Black Colleges and Universities (HBCU) fellowship payment of \$7,500 to S. Compton, an undergraduate student in the Marine Science Program at Savannah State University (SSU), Georgia. Working under the guidance of C. Pride (Assistant Professor of Marine Sciences, SSU), Compton is researching the density, distribution, and stable isotopic composition of live benthic foraminifera in estuarine to outer-shelf waters of the South Atlantic Bight in Georgia.

The USIO continues to explore mechanisms that will improve the recruitment of faculty/research mentors and students in the USIO HBCU Fellowship initiative.

National Collaborations

In October, Deep Earth Academy staff met with staff at the American Meteorological Society (AMS) to discuss the possibility of placing IODP data and Deep Earth Academy curriculum in a new AMS textbook focused on climate change. Deep Earth Academy also began discussions with Micropaleontology Press regarding a partnership targeting K–12 audiences.

OUTREACH

Public Affairs

USIO communications and outreach activities this quarter focused on opportunities to publicize scientific ocean drilling through related publications and events with the goal of raising public and media awareness.

Highlights include the following events:

- The USIO represented scientific ocean drilling at the 2008 Geological Society of America (GSA) Joint Meeting held 5–9 October 2008 in Houston, Texas. The materials and exhibit booth focused primarily on the education community, and attracted many educators who picked up posters and teaching tools for classroom use. The *JOIDES Resolution's* modernization and refurbishment was a major focus, featured on a 42 inch plasma monitor showing a conversion progress video.
- The USIO produced an updated version of the brochure “*Overhaul and Enhancement—JOIDES Resolution.*” The updated brochure will be a key component of upcoming FY09 outreach activities.
- The USIO was represented at the IODP-MI–sponsored and Ocean Leadership booths at the 2008 American Geophysical Union (AGU) Fall Meeting held 15–19 December 2008 in San Francisco, California. The Ocean Leadership booth displayed videos focused on SODV conversion and upcoming USIO expeditions. Directly across the aisle, IODP-MI hosted a video wall that repeated a 42 minute program comprising 12 short video chapters, four of which were USIO-related.

Public Relations Materials

USIO News Releases

The following news releases were distributed this quarter:

- *JOIDES Resolution* to sail away from shipyard Jan. 2009, start expeditions in March. Updated Integrated Ocean Drilling Program expedition schedule announced. (14 October 2008)
- Cumulative Index to the Proceedings of the Ocean Drilling Program. (3 November 2008)
- Redistribution of scientific ocean drilling cores complete. (5 November 2008)

Articles Authored by USIO Staff

Science and other articles authored by USIO staff published during this quarter include the following. Bold type indicates USIO staff. Other Program-related science articles are available online through the ocean drilling citation database (iodp.tamu.edu/publications/citations/database.html) and the IODP Expedition-related bibliography (iodp.tamu.edu/publications/citations.html).

- Duggen, S., Hoernle, K., Klügel, A., **Geldmacher, J.**, Thirlwall, M., Hauff, F., Lowry, D., and Oates, N., 2008. Geochemical zonation of the Miocene Alborán Basin volcanism (westernmost Mediterranean): geodynamic implications. *Contrib. Mineral. Petrol.*, 156(5):577–593. [doi:10.1007/s00410-008-0302-4](https://doi.org/10.1007/s00410-008-0302-4)
- **Geldmacher, J.**, Hoernle, K., Van Den Bogaard, P., Hauff, F., and Klügel, A., 2008. Age and geochemistry of the Central American forearc basement (DSDP Leg 67 and 84): insights into Mesozoic arc volcanism and seamount accretion on the fringe of the Caribbean LIP. *J. Petrol.*, 49(10):1781–1815. [doi:10.1093/petrology/egn046](https://doi.org/10.1093/petrology/egn046)

News Articles, Programs, Media Citations, or Public Commentary

News articles, programs, media citations, or public commentary published during this quarter resulting from IODP media and public awareness efforts included the following. See the “IODP in the news” Web page (www.iodp-usio.org/Newsroom/news.html) for other articles that raise the profile of the Program.

- Aggie Hotline, 2008. IODP scientists present Earth Science Day at Cypress Grove Intermediate School. Aggie Hotline, 9 October 2008. <http://dmc-news.tamu.edu/templates/?a=6777&z=15>
- California Institute of Technology, 2008. “Magnetic death star” fossils: earlier global warming produced a whole new form of life. *ScienceDaily*, 23 October 2008. <http://www.sciencedaily.com/releases/2008/10/081022135844.htm>
- Kerr, R.A., 2008. Deep-sea scientific drilling hit by a cost double whammy. *Science*, 322(5901):512–513. [doi:10.1126/science.322.5901.512a](https://doi.org/10.1126/science.322.5901.512a)
- European Science Foundation, 2008. Methods of ocean drilling in climate research. *ScienceDaily*, 24 November 2008. <http://www.sciencedaily.com/releases/2008/11/081124081154.htm>

Museum Partnerships

Deep Earth Academy continued its collaboration with the museum Parque de las Ciencias in Granada, Spain. From July 2008 through February 2009, the museum is featuring Antarctic ODP cores, videos, drilling artifacts, and Deep Earth Academy materials in *ANTARTIDA estacion polar*, an exhibit adapted from Ice Station Antarctica and developed by London’s Natural History Museum. In addition, Deep Earth Academy initiated partnerships with the Los Angeles Museum of Natural History, the Denver Museum of Nature and Science, and museums in Japan and Italy.

USIO INTERACTIONS WITH IODP-MI AND OTHER IMPLEMENTING ORGANIZATIONS

Interactions

USIO Publications Support to CDEX

IODP Publication Services representatives met with Y. Kawamura (CDEX Director) and N. Eguchi (CDEX Group Leader and Staff Scientist) at TAMU on 31 October 2008 to discuss CDEX's FY09 expedition schedule and USIO publications support aboard the *Chikyu*. At CDEX's request, the USIO sent Publications Assistants to the *Chikyu* in FY08 to assist with coordinating shipboard reports during CDEX's first three IODP expeditions. CDEX requested that the USIO provide similar publication support services during IODP Expeditions 319 and 322, which are scheduled from early May through early October 2009. IODP Publication Services submitted a proposed scope of work for FY09 that is similar to the FY08 agreement with CDEX but includes several recommended service enhancements. Formal approval of the FY09 agreement was pending at the end of the quarter.

Meetings

Outreach Task Force Meeting

An OTF Meeting was held 2 and 3 October 2008 in Washington, D.C. (see "Appendix C" for list of USIO attendees). J. Corsiglia (Ocean Leadership Communications Associate) gave the USIO presentation, outlining tactics that will highlight the *JOIDES Resolution's* restarted drilling operations. The meeting focused on planning messages and tactics for communicating at the booth and Town Hall meeting at the upcoming 2008 AGU Fall Meeting. Expedition communications outlines from both CDEX and ESO were covered and meeting participants also shared plans and ideas for making better use of social media and Web 2.0 tools in IODP outreach.

Science Steering and Evaluation Panel Meeting

The Science Steering and Evaluation Panel (SSEP) Meeting was held 10–13 November 2008 in San Francisco, California (see "Appendix C" for list of USIO attendees). A total of 19 proposals were reviewed by the panel. Adam Klaus (TAMU Staff Scientist) gave the USIO presentation.

APPENDIX A: FINANCE REPORT

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

APPENDIX B: CONFERENCE AND MEETING SCHEDULE

Conference/Meeting*	Date	Location
Outreach Task Force (OTF) Meeting	2 and 3 October 2008	Washington, DC
IODP Reception at the Smithsonian's Sant Ocean Hall	3 October 2008	Washington, DC
Geological Society of America (GSA) Joint Meeting	5–9 October 2008	Houston, Texas
Science Steering and Evaluation Panel (SSEP) Meeting	10–13 November 2008	San Francisco, California
American Geophysical Union (AGU) Fall Meeting	15–19 December 2008	San Francisco, California

*Implementing organization meetings, IODP-MI task force meetings, Science Advisory Structure (SAS) panel meetings, Program-sponsored conferences, and scientific and educational conferences at which the USIO had a booth or exhibit.

APPENDIX C: TRAVEL

Purpose*	Dates	Location	Institution: Personnel
Geological Society of America (GSA) Meeting	4–8 October 2008	Houston, Texas	Ocean Leadership: J. Corsiglia TAMU: S. Dillard, J. Geldmacher, C. Alvarez Zarikian
Web 2.0 Science Conference	8 and 9 October 2008	Washington, DC	LDEO: M. Reagan
Publication Services meetings, training, and report production	8–22 October 2008	College Station, Texas	TAMU: G. Lowe
AMA Training: "The Effective Facilitator"	12–16 October 2008	Chicago, Illinois	TAMRF: A. Crane
Obtain Transportation Worker Identification Credential (TWIC) card	17 October 2008	Houston, Texas	TAMU: B. Julson
Relocation	22 October 2008	College Station, Texas	TAMU: S. Prinz
Colorado Software Summit Conference 2008	19–24 October 2008	Keystone, Colorado	TAMU: D. Hornbacher, S. Zeliadt
Gartner IT Financial, Procurement, and Asset Management Conference	25–30 October 2008	San Diego, California	TAMU: D. Ponzio
Engineering Development Meeting	28–30 October 2008	Houston, Texas	Ocean Leadership: S. Higgins
Testing the lockable flapper valve (LFV)	28–30 October 2008	Webster, Texas	LDEO: S. Mrozewski
Management Concepts Seminar: "Leadership and Management Skills for Non-Managers"	28 October–1 November 2008	Washington, DC	TAMRF: K. Huff
U.S. Scientific Ocean Drilling Vessel (SODV) Meeting**	31 October 2008	Singapore	Ocean Leadership: B. Gagosian
Workshop: Arctic Ocean History, from Speculation to Reality	3–5 November 2008	Bremerhaven, Germany	TAMU: J. Firth

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Purpose*	Dates	Location	Institution: Personnel
Meeting with National Science Foundation (NSF) representatives	1–6 November 2008	Singapore	TAMU: B. Kjervfe, B. Wasson
Repository work	9–15 November 2008	College Station, Texas	TAMU: G. Esmay
Science Steering and Evaluation Panel (SSEP) Meeting	10–13 November 2008	San Francisco, California	LDEO: G. Guerin TAMU: J. Geldmacher, Adam Klaus
Conversion Management Team (CMT) Meeting**	13 and 14 November 2008	College Station, Texas	Ocean Leadership: S. Higgins
IODP Management Meeting	17–19 November 2008	Washington, DC	LDEO: D. Goldberg
USIO Management Meeting	24 November 2008	Washington, DC	Ocean Leadership: S. Higgins LDEO: D. Goldberg TAMU: S. Bohlen
Engineering Development Meeting	3–7 December 2008	Houston, Texas	Ocean Leadership: S. Higgins
Government Contract Audit Training	10–13 December 2008	Washington, DC	TAMRF: B. Lancaster
CMT Meeting**	19 and 20 December 2008	College Station, Texas	Ocean Leadership: B. Gagosian
LabVIEW Training	14–19 December 2008	Austin, Texas	TAMU: A. Morgan
American Geophysical Union (AGU) Fall Meeting	15–19 December 2008	San Francisco, California	Ocean Leadership: J. Corsiglia, D. Divins, S. Higgins, M. Morell LDEO: A. Cook, H. Evans, D. Goldberg, A. Malinverno, M. Reagan, D. Quoidbach, A. Slagle, T. Williams TAMU: P. Blum, S. Bohlen, L. Crowder, K. Gamage, J. Geldmacher†, Adam Klaus, M. Malone

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

**USIO funded this trip for USIO representative(s) to attend an SODV Project meeting.

†Travel costs funded by other source.

APPENDIX D: USIO QUARTERLY REPORT DISTRIBUTION LIST

J. Allan, NSF, jallan@nsf.gov
R. Batiza, NSF, rbatiza@nsf.gov
M. Rouse, NSF, mrouse@nsf.gov
J. Emmitte, IODP-MI, jemmitte@iodp.org
M. Talwani, IODP-MI, mtalwani@iodp.org
J. Corsiglia, Ocean Leadership, jcorsiglia@oceanleadership.org
D. Divins, Ocean Leadership, ddivins@oceanleadership.org
B. Gagolian, Ocean Leadership, rgagolian@oceanleadership.org
S. Higgins, Ocean Leadership, shiggins@oceanleadership.org
J. Hubler, Ocean Leadership, jhubler@oceanleadership.org
M. Morell, Ocean Leadership, mmorell@oceanleadership.org
L. Peart, Ocean Leadership, lpeart@oceanleadership.org
D. Goldberg, LDEO, goldberg@ldeo.columbia.edu
D. Grames, LDEO, grames@ldeo.columbia.edu
M. Purdy, LDEO, purdy@ldeo.columbia.edu
M. Reagan, LDEO, reagan@ldeo.columbia.edu
M. Respo, LDEO, mrespo@admin.ldeo.columbia.edu
S. Bohlen, TAMU, bohlen@iodp.tamu.edu
Ann Klaus, TAMU, annklaus@iodp.tamu.edu
B. Kjerfve, TAMU, kjerfve@tamu.edu
B. Lancaster, TAMRF, lancaster@iodp.tamu.edu
L. Schulze, TAMRF, schulze@iodp.tamu.edu
W. Wasson, TAMRF, wasson@iodp.tamu.edu