



IODP-MI Data Management Overview

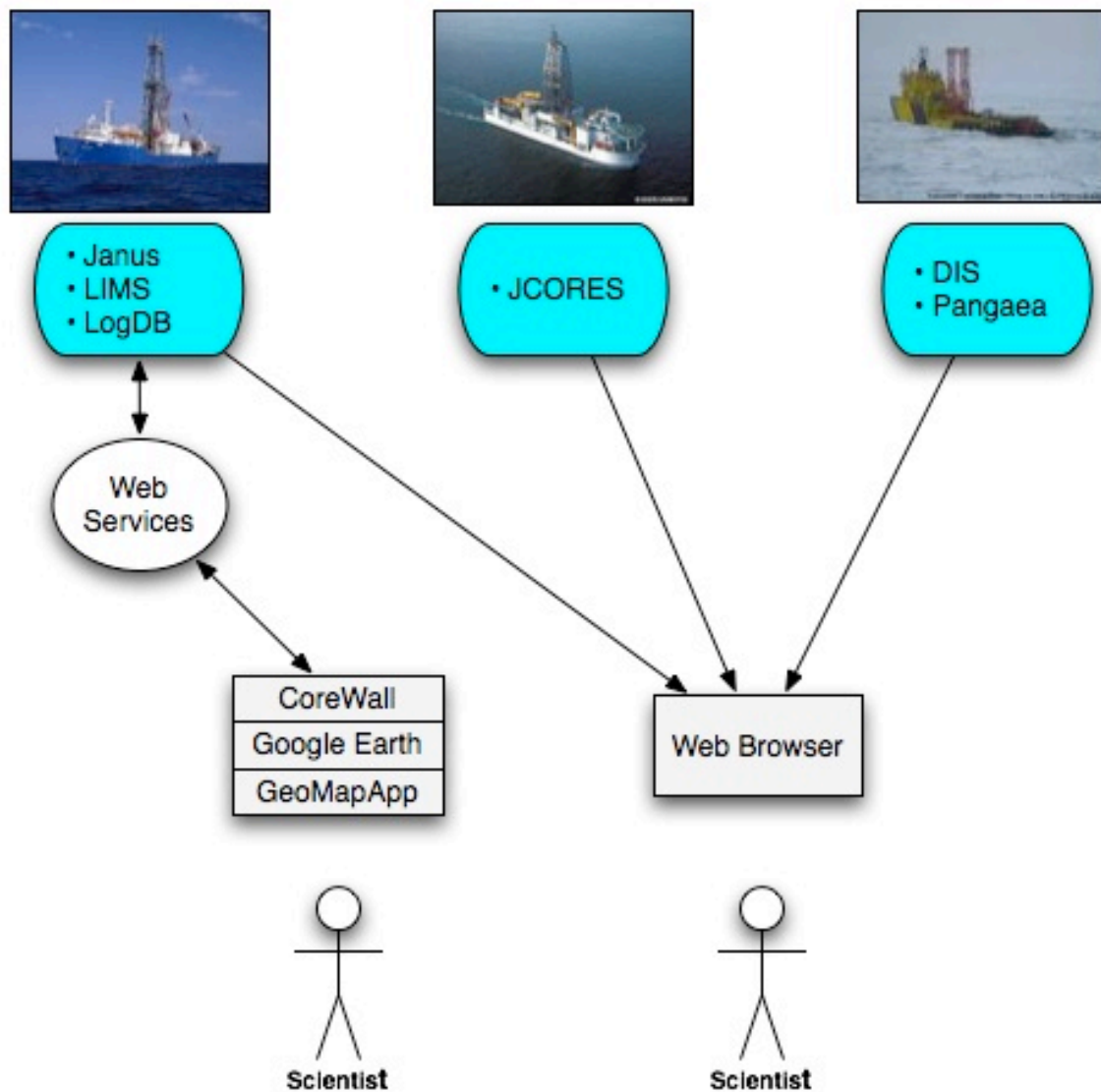
**Logging Symposium
8 February 2008**

Daniel Quoidbach

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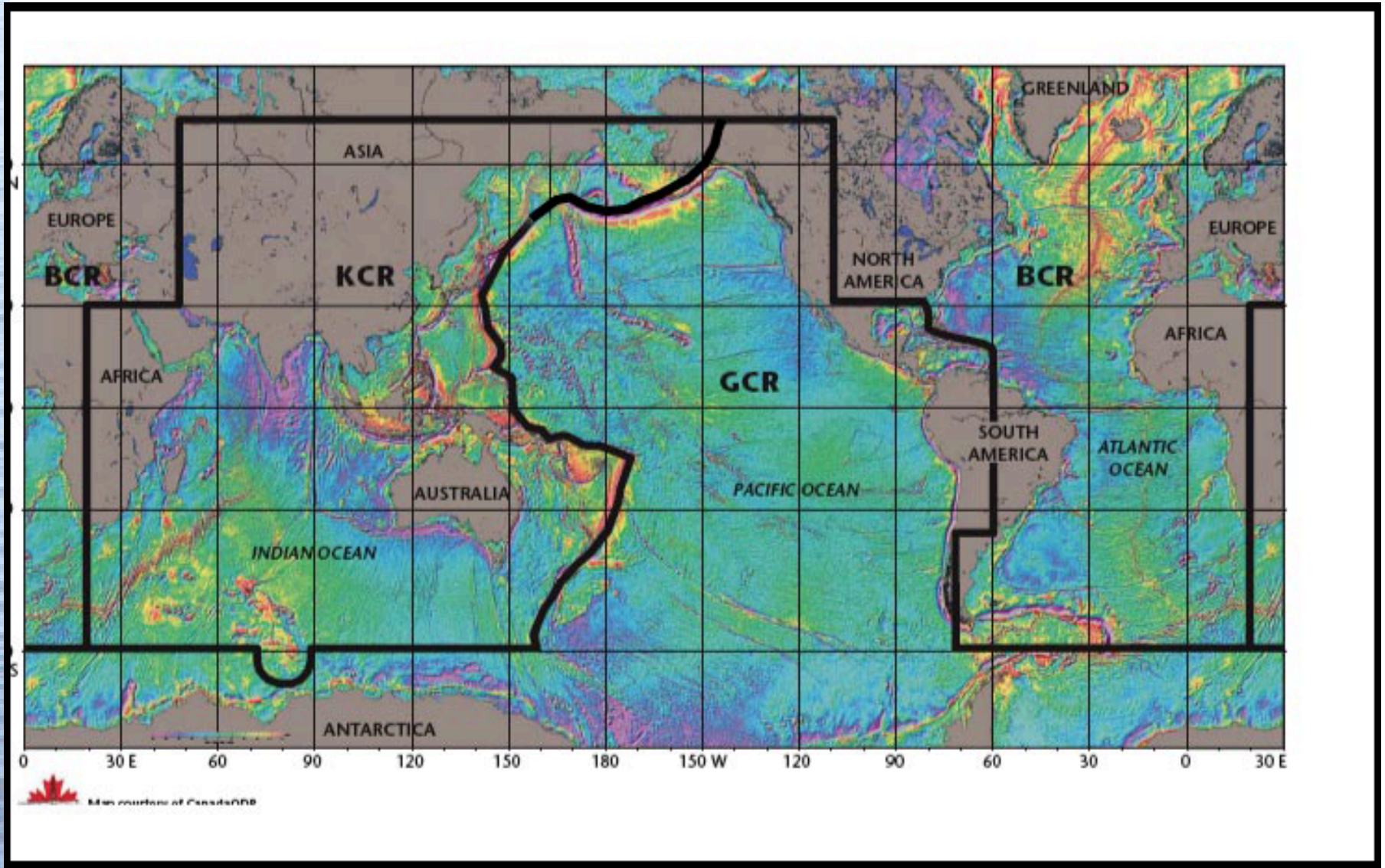


Overview of IODP Databases





Distribution of DSDP, ODP and IODP Materials





Core Data Collected

- Core data collected in DSDP, ODP, and IODP
- DSDP Legacy site:
<http://www.deepseadrilling.org>
- ODP Legacy site:
<http://www.odplegacy.org>
- DSDP, ODP and IODP data available through Janus:
http://iodp.tamu.edu/janusweb/links/links_all.shtml
- Really only available via web page. However, web services are being added by 3rd party.

	<i>ANALYSIS</i>	<i>IODP</i>	<i>ODP</i>	<i>DSDP</i>
Site/Hole Summary (meters recovered)	13485	222431	97160	
Hole/Core Summary (cores)	2821	36365	20113	
Core/Section Summary (sections)	12138	192669	94258	
Corelog (samples)	167555	2349450	72461	
GRA Bulk Density (sections)	8557	135648	0	
Magnetic Susceptibility (sections)	8907	135819	0	
Natural Gamma Radiation (sections)	7097	72924	0	
P-Wave Vel (Whole Core) (sections)	3895	58430	0	
P-Wave Vel (Split Core) (samples)	4208	64574	0	
Moisture Density (samples)	4429	92716	0	
Thermcon (samples)	1433	37019	0	
Shear Strength (samples)	1912	26451	0	
Color Reflectance (sections)	7569	63214	0	
Point Susceptibility - MS2F (sections)	2011	2853	0	
Downhole Temp. - Adara (samples)	0	1219	0	
Splicer (tie points)	474	4372	0	
Tensor (cores)	725	2534	0	
Cryomag (sections)	8721	106858	0	
Paleo Investigation (samples)	287	96925	0	
Range Table (taxa)	1903	950364	0	
Age Profile (datum list)	0	4573	0	
Depth-Age Model	0	8178	0	
X-Ray Diffraction (samples)	1036	14169	0	
XRD Images (samples)	0	12176	0	
X-Ray Fluorescence (samples)	0	3949	0	
ICP (samples)	467	1375	0	
Chem: Rock Eval (samples)	0	7814	0	
Chem: Carbonates (samples)	1456	66494	0	
Chem: Gas Elements (samples)	1446	20593	0	
Chem: Interstitial Water (samples)	919	12825	0	
Smear Slides (samples)	698	11925	0	
Sedimentary Thin Sections (samples)	0	118	0	
Hard Rock Thin Sections (samples)	1272	2123	0	
Visual Core Description (sections)	8082	121643	0	
Hard Rock Visual Core Desc (sections)	0	4472	0	
Core Photo Images	1831	34037	18412	
Section Photo Images	10013	21653	0	
Closeup Info	3130	17825	0	




Janus Data Search

Ocean Drilling Data Queries

http://iodp.tamu.edu/janusweb/links/links_all.sht replacing a bathroom

Xsanity - Sa...ple's Xsan. DSDP Initial...Descriptions Beta Log Database Log database SODV

Ocean Drilling Data Que... 101 Cookbooks

 **Integrated Ocean Drilling Program** Overview | Search | Core data | Home
UNITED STATES IMPLEMENTING ORGANIZATION

Applications

[Moratorium Login](#)
[Sample Request Form](#)

[Pre-Cruise Site Editor \(1\)](#)
[Cruise Evaluation \(2\)](#)

Trivia

[IODP Expedition Details](#)
[ODP Leg Details](#)

[Leg Summary](#)
[Site Summary](#)

[Site Details](#)
[Hole Details](#)

Data Queries

Coring Summaries Site Hole Summary Hole Core Summary Core Section Summary	Sampling Sample Report Sample Totals Sampling Codes Sampling Plan Sample Template	Curation Sample Requests(1) Scientist Information(1) Participant List(1) Core Tracking Report Bibliographic Search Bibliographic Keywords D-Tube Labels Curatorial Statistics
(Alternative Summaries) Hole/Core Summary Core/Section Summary Core Log Core Log (flat ASCII files)	Lab Information Documents Systems & Components	
Physical Properties Bulk Density (GRA) Magnetic Susceptibility (MSL) Natural Gamma Radiation (NGR) P-Wave Velocity (PWL) P-Wave Velocity (PWS) Moisture & Density (MAD) Shear-Strength (AVS/PEN/TOR) Penetration Shear-Strength	Calibration Calibration Calibration Calibration Calibration	More Physical Properties Magnetic Susceptibility Core Logger (MSCL) Point Susceptibility (MS2F) Non-Contact Resistivity (NCR) Color Reflectance (RSC) Digital Image RGB Channels (RGB) Downhole Temperature (Adara APCT) Thermal Conductivity
Paleontology Range Table Age Profile Age Model	Paleomagnetism Tensor Orientation Tool Core Magnetization	Chemistry Rock Eval Carbonates Core Element




Magnetic Susceptibility Search

Magnetic Susceptibility

http://iodp.tamu.edu/janusweb/physprops/msldat.shtml

Xsanity - Sa...ple's Xsan. DSDP Initial...Descriptions Beta Log Database Log database SODV IODP-USIO: Directory LDEO Directory

Magnetic Susceptibility 101 Cookbooks

 **Integrated Ocean Drilling Program** [Overview](#) | [Search](#) | [Core data](#) | [Home](#)
UNITED STATES IMPLEMENTING ORGANIZATION

Magnetic Susceptibility

Data Request Form

Leg

Site

Hole

Core

Section

Output Raw Data checked = yes

Run to numeric range

Depth to meters

Latitude to degrees (South -90 to 0; North 0 to 90)

Longitude to degrees (West -180 to 0; East 0 to 180)

About This Form

This form enables the retrieval of subsets of the magnetic susceptibility data stored in the ocean drilling database. The data were acquired using a Bartington loop affixed to the whole-core multi-sensor track (WC-MST).

Enter those fields on which you want to limit the query. For example, if you wanted to see information for one specific hole, you could fill in the leg, site, and hole fields and leave the remaining fields blank.

Because of the size of this ODP dataset, it may not efficient to download the entire Magnetic Susceptibility data set via the web. If this page does not meet your data request needs, please contact the [Data Librarian](#).

Data Sample

Leg	Site	H	Cor	T	Set	Top (cm)	Depth mbsf	Magnetic Suscept.	Corrected Suscept.
172	1054	A	1	H	1	4.0	0.04	12.000	12.000
172	1054	A	1	H	1	9.0	0.09	4.800	4.800

See Also

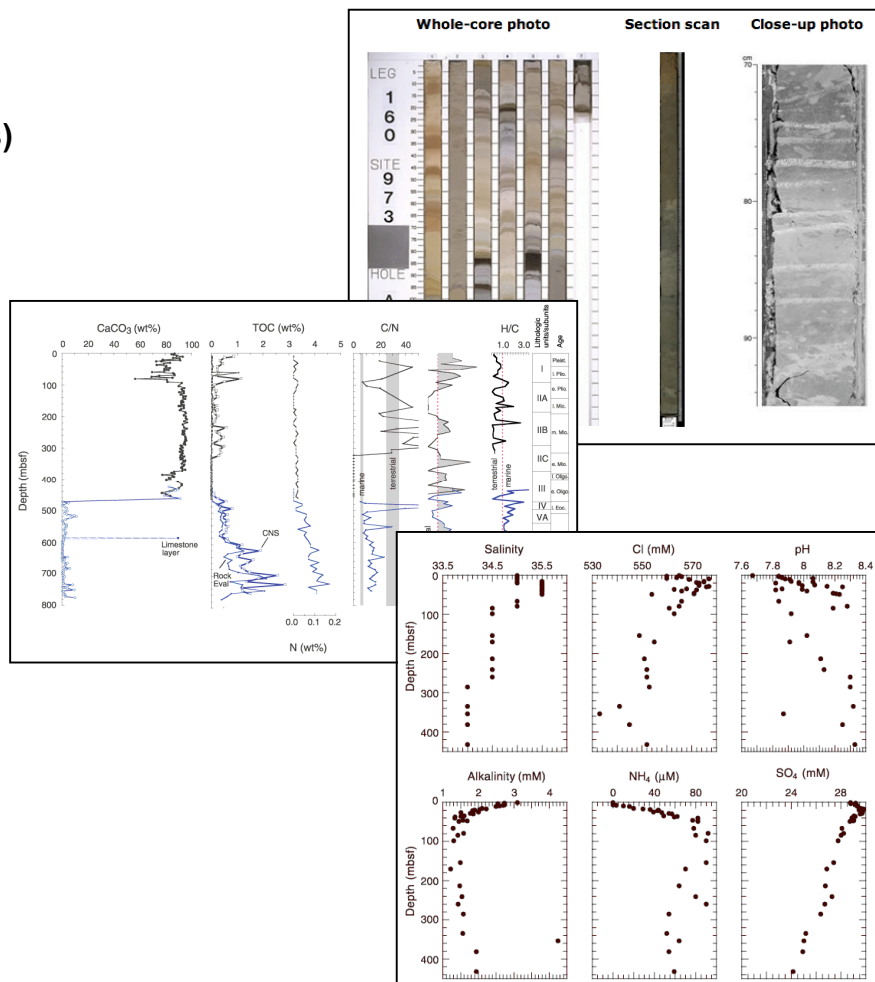
- [Physical Properties Handbook](#): Chapter 4. Magnetic Susceptibility system implementation notes.
- [Database Group](#): notes on the various data types ODP tracks and collects, links to other information and services.
- [JANUS MST Uploader documentation](#): screen and forms used to upload WC-MST data into the central database.

Non-Janus Data Sets

Online: <http://iodp.tamu.edu/database/coreimages.html>

Offline: <http://iodp.tamu.edu/database/datatypes.html>

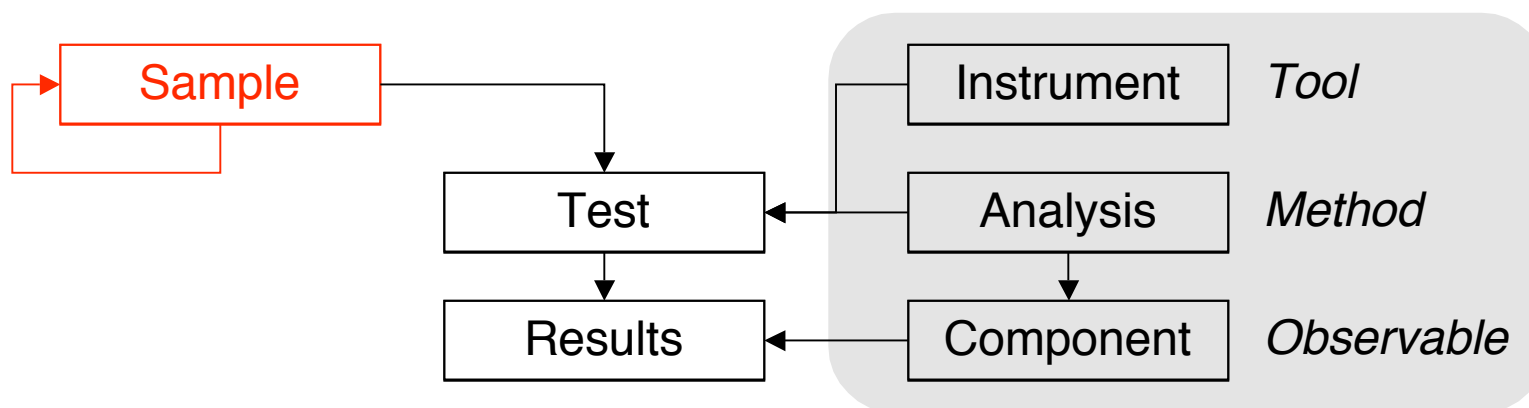
- Visual Core Descriptions
- Core Photos (entire core)
- Close-up Core Photos (core portions)
- Digital Core Images (by section)
- Color Reflectance
- Paleomagnetism
- Tensor tool
- Smear Slides and Thin Sections
- Paleontology
- Age Profile
- Microbiology
- Carbonate Contents
- Gas Chromatography
- ICP-AES
- Interstitial Water
- Rock Evaluation
- X-ray Fluorescence
- X-ray Diffraction
- Gamma ray attenuation (GRA)
- Index Properties (MAD)
- Magnetic Susceptibility
- Natural gamma ray (NGR)
- P-wave velocity (PWL)
- Shear Strength
- Sonic Velocity
- Thermal Conductivity





Janus Replacement: LIMS

- Database for samples and analyses, both during and post-cruise
- Post-moratorium data will be available via web services
- Single sample table with parent-child relationship simplifies sample ID
- Expandable: New analyses components, and instruments can be easily added as program develops
- Currently under development; Deployment this summer for *JR Shakedown*





Current Log Database Page

<http://iodp.ideo.columbia.edu/DATA/ODP/index.html>

The screenshot shows a web browser window with the URL <http://iodp.ideo.columbia.edu/DATA/ODP/index.html>. The page header includes navigation links: Search, Site map, People, Intranet, Home. The main title is "Integrated Ocean Drilling Program" with the subtitle "UNITED STATES IMPLEMENTING ORGANIZATION". Below this are buttons for IODP, ODP, and DSDP. The page content is titled "Log database" and "ODP log database search". It includes a "TO SEARCH:" section with instructions and a link to the "Database User's Manual". There is also an "OTHER SEARCH OPTIONS:" section with a link for "Geographic Data Search (Latitude/Longitude)". The main search area contains three dropdown menus: "LEG", "HOLE", and "LOCATION". Below these are three more dropdown menus: "OCEAN/SEA", "SPECIALTY TOOLS", and "THIRD-PARTY TOOLS".

LEG **HOLE** **LOCATION**

109	638B	Walvis Basin
108	637A	Walvis Ridge
107	634A	Wegener Canyon
105	627B	West Tasmania Slope
104	626D	Woodlark Basin
103	504B	Wodebejato Guyot
102	418A	Yamato Basin
101	395A	Yermac Plateau
NONE	NONE	NONE

OCEAN/SEA **SPECIALTY TOOLS** **THIRD-PARTY TOOLS**

tropical NE Pacific	LWD	large scale resistivity
tropical NW Atlantic	magnetic field	magnetic field
tropical NW Indian	magnetic susceptibility	magnetic susceptibility
tropical NW Pacific	temperature	multichannel sonic
tropical SE Indian	ultrasonic borehole imager	multisensor gamma tool
tropical SE Pacific	versatile seismic imager	shear sonic
tropical SW Indian	well seismic tool	temperature
tropical SW Pacific	3-axis well seismic tool	3-component seismometer
NONE	NONE	NONE



New Log Data Search Interface (beta)

<http://brg.ideo.columbia.edu/logdb/>

LDEO BRG: Log Database
http://brg.ideo.columbia.edu/logdb/

IODP-USIO
Integrated Ocean Drilling Program
U.S. IMPLEMENTING ORGANIZATION

Note: All available log files are online. Some holes were not logged.

Data & samples > Log database
Log database BETA

Go to: [Web Services](#)

DATA SEARCH

PROGRAM	YEAR	LEG/EXP	HOLE
DSDP	1968	1	1
ODP	1969	2	3
IODP	1975	4	8A
	1976	5	28
	1977	6	29C

BOUNDS
N: 90
W: -180 E: 180
S: -90

LOCATION
Agadir Canyon
Alboran Basin
Allison Guyot
Amazon Fan
Antarctic Peninsula

OCEAN/SEA
Alboran Sea
Antarctic
Arctic
Bismarck Sea
Caribbean Sea

TOOL
3-Axis Magnetometer (BGR) (MAGN_BGR)
3-Axis Magnetometer (GBM) (MAGN_GBM)
3-Axis Magnetometer (JAPEX) (MAGN_JAPEX)
3-Axis Magnetometer (RUS) (MAGN_RUS)
3-Axis Magnetometer (USGS) (MAGN_USGS)
(re-sort tools by acronym)

MODE
lwd wireline

TYPE
3rd party
specialty
standard

MEASUREMENT
borehole acoustic images
borehole electrical images
borehole parameters
borehole seismics
caliper

Search Clear

USAGE NOTE:
Selecting multiple parameters (i.e. Program + Location) will narrow search (logical "AND").
Selecting multiple values for a parameter (CTRL-CLICK) will widen search (logical "OR").




Search Results Page

LDEO BRG: Log Database

http://brg.ideo.columbia.edu/logdb/result.htm

Directory o...By Lastname Apple - Mac...- Resources Leopard: Inc...e - MacFixIt Skype Busine...ntrol Panel




IODP-USIO
Integrated Ocean Drilling Program
U.S. IMPLEMENTING ORGANIZATION

Note: All available log files are online. Some holes were not logged.

Data & samples > Log database

Log database

BETA 

Go to: [Web Services](#)

RESULT:

SEARCH PARAMETERS:
WEST = -180 AND EAST = 180 AND SOUTH = -90 AND NORTH = 90
TOOL = adnVISION

TOTAL: 10 HOLES

YEAR	PROGRAM	LEG/EXP	HOLE	LOCATION	OCEAN/SEA	TOOLS THAT MEET SEARCH CRITERIA
2005	IODP	308	U1319B	Brazos Trinity Basin IV	Gulf of Mexico	adnVISION
2005	IODP	308	U1320B	Brazos Trinity Basin IV	Gulf of Mexico	adnVISION
2005	IODP	308	U1321A	Brazos Trinity Basin IV	Gulf of Mexico	adnVISION
2005	IODP	308	U1322A	Ursa Basin	Gulf of Mexico	adnVISION
2005	IODP	308	U1323A	Ursa Basin	Gulf of Mexico	adnVISION
2005	IODP	308	U1324A	Ursa Basin	Gulf of Mexico	adnVISION
2005	IODP	311	U1325A	Cascadia Margin	NE Pacific	adnVISION
2005	IODP	311	U1326A	Cascadia Margin	NE Pacific	adnVISION
2005	IODP	311	U1327A	Cascadia Margin	NE Pacific	adnVISION
2005	IODP	311	U1328A	Cascadia Margin	NE Pacific	adnVISION




New Log Data Browse Interface (beta)

logdb-browse.html

Search | Site map | People | Intranet | Home

Integrated Ocean Drilling Program

UNITED STATES IMPLEMENTING ORGANIZATION



Browse the Logging Database

open all | close all

Available Logging Data

- [-] DSDP
- [-] ODP
- [+] IODP
 - [+] Exp 301
 - [-] Exp 303
 - U1305C
 - [+] Exp 304
 - [-] Exp 305
 - [-] U1309D
 - Phase 2
 - Phase 3
 - [+] Exp 306
 - [+] Exp 307
 - [+] Exp 308
 - [+] Exp 309
 - [+] Exp 311
 - [+] Exp 312

tree menu javascript
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Browse Results Page

logdb-browse.html

Data File Summary - IODP Expedition 303 Hole U1305C

[Click here for information about downloading the data](#)

DownloadSelection

Check To Download	Data Type (click for detailed file listing)	Original/ Processed	File Format	Download Size
<input checked="" type="checkbox"/>	Documents	--	HTML	0.007MB
<input type="checkbox"/>	Standard Data	Processed	ASCII	0.317MB
<input type="checkbox"/>	High Resolution Data	Processed	ASCII	0.181MB
<input type="checkbox"/>	Temperature Data	Original & Processed	ASCII	1.292MB
<input type="checkbox"/>	Original Data	Original	DLIS	20.447MB
<input type="checkbox"/>	Processed Data	Processed	DLIS	5.601MB

DownloadSelection

Additional Resources:

- [Expedition 303 Site 1305 Janus database page](#)
- [Expedition 303 Logging Summary](#)
- [Expedition 303 IODP Proceedings](#)


Log Data Administrator: logdb@ldeo.columbia.edu



New Log Processing Info Browse Page (beta)

logdocs-browse.html

Search | Site map | People | Intranet | Home



Integrated Ocean Drilling Program

UNITED STATES IMPLEMENTING ORGANIZATION

Browse Processing Information for Logging Data

open all | close all

- Log Processing Information
 - DSDP
 - ODP
 - IODP
 - Exp 301
 - Exp 303
 - U1305C
 - Exp 304
 - Exp 305
 - U1309D
 - Phase 2
 - Phase 3
 - Exp 306
 - Exp 307
 - Exp 308
 - Exp 309
 - Exp 311
 - Exp 312

tree menu javascript
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Log Processing Info Results Page

http://brg.ideo.columbia.edu/data/iodp/exp303/U1305C/documents/index_documents.html

Documents File Index IODP Expedition 303 Hole U1305C

[PreviousPage](#)

Documents: (download size = 0.007MB)

[Acronyms](#)
[Standard Data Processing Notes](#)
[Temperature Data Processing Notes](#)

[PreviousPage](#)

Log Data Administrator: logdb@ideo.columbia.edu

http://brg.ideo.columbia.edu/data/iodp/exp303/U1305C/documents/index_documents.html

IODP operator and logging contractor: LDEO-BRG
Hole: U1305C
Expedition: 303
Location: Eirik Drift (Labrador Sea)
Latitude: 57° 28.507'N
Longitude: 48° 31.783'W
Logging date: October 21, 2004
Sea floor depth: 3469.7 mbrf (driller's mudline)
Sea floor depth: 3471 mbrf (step in GR log)
Total penetration: 287.1 mbsf
Total core recovered: 298.2 m (103.9 % of cored section)
Oldest sediment cored: Late Pliocene
Lithologies: Silty clay, silty clay with nannofossils, nannofossil silty clay, silty clay nannofossil ooze, and nannofossil ooze with silty clay.

Data

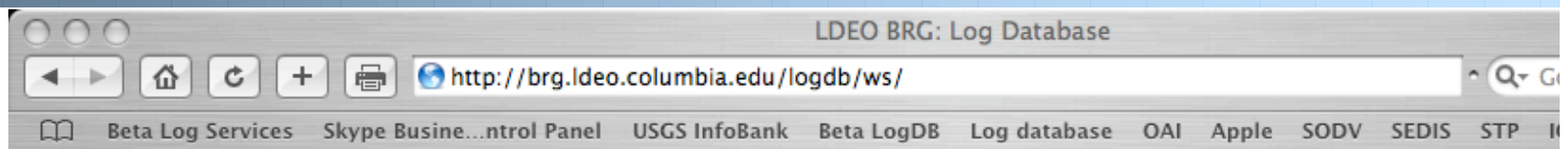
The logging data was recorded by Schlumberger in DLIS format. Data were processed at the Borehole Research Group of the Lamont-Doherty Earth Observatory in October 2004.

Logging Runs

Tool string	Pass	Top depth (mbsf)	Bottom depth (mbsf)	Bit depth (mbsf)	Notes
1. DIT/APS/HLDS/GPIT/HNGS/TAP	Downlog	15	212	96.5	
	Main	0	255	96.5	Reference
	Repeat	109	194		



New Log Web Services (Beta)



Go to: [Search Page](#)

WEB SERVICES

(best viewed in Firefox)

1. Service: OGC Web Feature Service ([WFS](#))

Usage:

<http://brg.ldeo.columbia.edu/logdb/ws/ogc-wfs?service=WFS&version=1.0.0&request=GetCapabilities>

2. Service: OAI Protocol for Metadata Harvest ([PMH](#))

Usage:

<http://brg.ldeo.columbia.edu/logdb/ws/oai>

3. Service: Catalog Search ([REST-type](#))

Usage:

<http://brg.ldeo.columbia.edu/logdb/ws/HoleVisits/?param=value&...>

where param is one of:

- program*
- year*
- leg*
- hole*
- location*
- waterbody*
- measurement*
- tool*
- toolmode*
- tootype*

Examples:

<http://brg.ldeo.columbia.edu/logdb/ws/HoleVisits/?hole=642E>

<http://brg.ldeo.columbia.edu/logdb/ws/HoleVisits/?measurement=geochemistry>

<http://brg.ldeo.columbia.edu/logdb/ws/HoleVisits/?tool=vsj>



Google Earth: IODP KML File

<http://campanian.iodp-mi-sapporo.org/google/data/iodp.kml>

IODP Expedition Database

Metadata	
Expedition:	308
Site:	U1323
Hole:	A
Program:	IODP
Latitude:	28.0912
Longitude:	-89.0725
Date:	06/15/05 1845

Data	
Core Data	
Log Data	
VCD	

Publication	
Scientific Prospectus	
Preliminary Report	
Proceeding Report	

Layers

- Drilled holes
 - IODP
 - ODP
 - DSDP
- Proposed Sites
 - 1: Deep biosphere and subsurface ocean
 - 2: Environmental change, processes and cycles
 - 3: Solid earth cycles and geodynamics
 - Site survey data

Pointer: 29°27'44.20" N 79°41'45.63" W
Streaming: 100%
Eye alt: 10000.00 km



GeoMapApp: Web Feature Service

Connect to WFS

Enter URL

Example: "http://www.marine-geo.org/services/wfs?service=WFS&version=1.0.0&request=GetCapabilities"

Connect Dispose

LDEO-BRG:BoreholeResearchGroup

Select Feature from MapServer WFS

Select Feature: Select Bounding Box: Load Feature

Please be patient:
Loading times may vary depending on server traffic and connection speed

Grids

Layer Information for LogEvent

GeoMapApp 1.6.2

Import Data (Tables)

close

Lasso Tool

LogEvent - MapServer WFS

Save

Load

Dispose

Bookmark

Configure

Graph

Color Symbols

Scale Symbols

Plot/Refresh

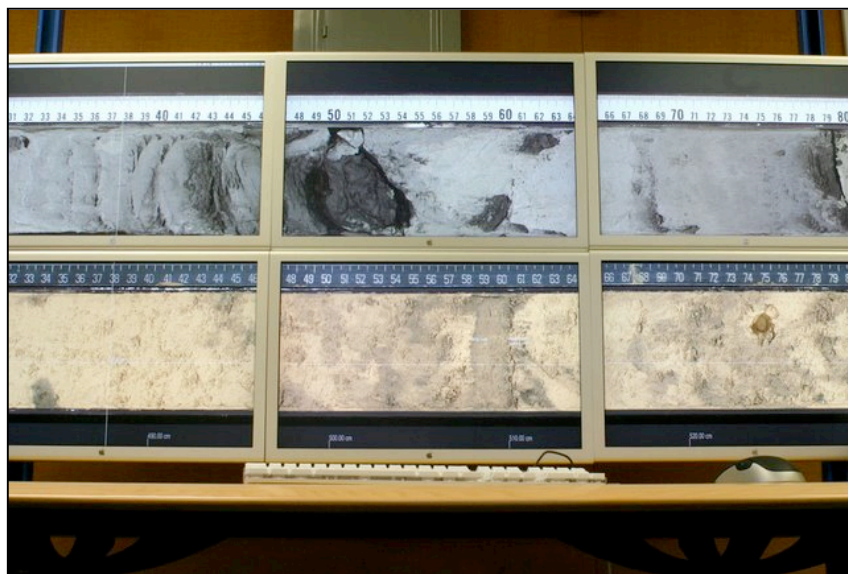
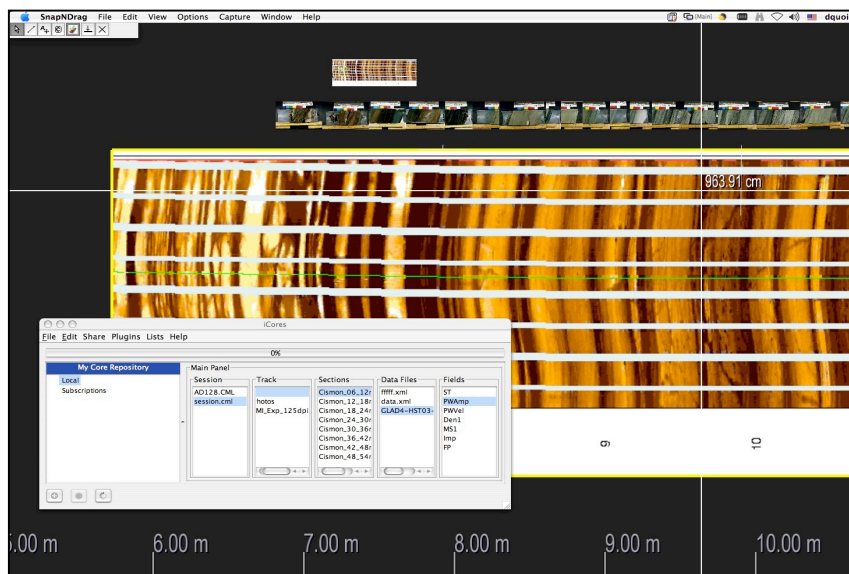
Thumbs

LogEvent - MapServer WFS		Symbol Color - None Selected		Symbol Size - None Selected						data	
Lon	Lat	year	program	leg	hole	location	waterbody				
-92.1833...	25.858330	1968	DSDP	1	1	Sigsbee A...	Gulf of Me...	http://brg.ldeo.columbia.edu/data/dsdp/leg1/1/			
-92.0233...	23.016670	1968	DSDP	1	3	Sigsbee A...	Gulf of Me...	http://brg.ldeo.columbia.edu/data/dsdp/leg1/3/			
-67.5533...	35.416670	1968	DSDP	2	8A	Hatteras-...	NW Atlantic	http://brg.ldeo.columbia.edu/data/dsdp/leg2/8A/			
-65.6221...	20.586500	1969	DSDP	4	28	Outer Ridge	Caribbean...	http://brg.ldeo.columbia.edu/data/dsdp/leg4/28/			
-69.3226...	29.785170	1969	DSDP	4	29C	Venezuela...	Caribbean...	http://brg.ldeo.columbia.edu/data/dsdp/leg4/29C/			
-127.474...	40.673670	1969	DSDP	5	35	Escanaba...	NE Pacific	http://brg.ldeo.columbia.edu/data/dsdp/leg5/35/			
141.1916...	18.033330	1969	DSDP	6	53	Iwo Jima R...	tropical N...	http://brg.ldeo.columbia.edu/data/dsdp/leg6/53/			
143.5333...	8.681670	1969	DSDP	6	57	Caroline R...	equatorial...	http://brg.ldeo.columbia.edu/data/dsdp/leg6/57/			
-140.362...	6.334670	1969	DSDP	8	70A	Clipperton...	central eq...	http://brg.ldeo.columbia.edu/data/dsdp/leg8/70A/			

Elevation Data Sources



CoreWall Suite



- CoreWall Suite components:
 - Corelyzer - core images and depth-registered data
 - Correlator - next generation Splicer + Sagan (in development)
 - CoreNavigator - Google Earth style basemap showing datasets (in development)
- Loads image files
- Loads flat file data
- Data loading via web services under development
- Available at:
<http://www.corewall.org>



Contact Information

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