

Data Management for Ridge2000 & MARGINS.....

Science:

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Bill Ryan

Kerstin Lehnert

Tim Shank (WHOI)

Tom Shipley (UTIG)

Dave Becker (TAMU)

Technical:

Dale Chayes

Robert Arko

Deanna Barone

Artem Fishman

Andrew Goodwillie

Bill Haxby

Suzanne O'Hara

Rose Anne Weissel

**Come to our booth
425**

Presented by:

Dale Chayes <dale@ldeo.columbia.edu>

On behalf of the LDEO mgDMS Team

Data Systems for Science

- Are an enabling resource for obtaining new knowledge
- Enable testing and verification of observations and hypotheses
- Provide access to underutilized data sets for new applications
- Grow the scientific community of interest
- Are resources which can be exploited for education and outreach

Goals

- ✓ Enable R2K & MARGINS communities to find what data have been collected, where, when, and by whom
- ✓ Provide access to the data
- ✓ Preserve data for future use (**lifetime** of the data)
- ✓ Facilitate visualization & exploration of the data

Scope

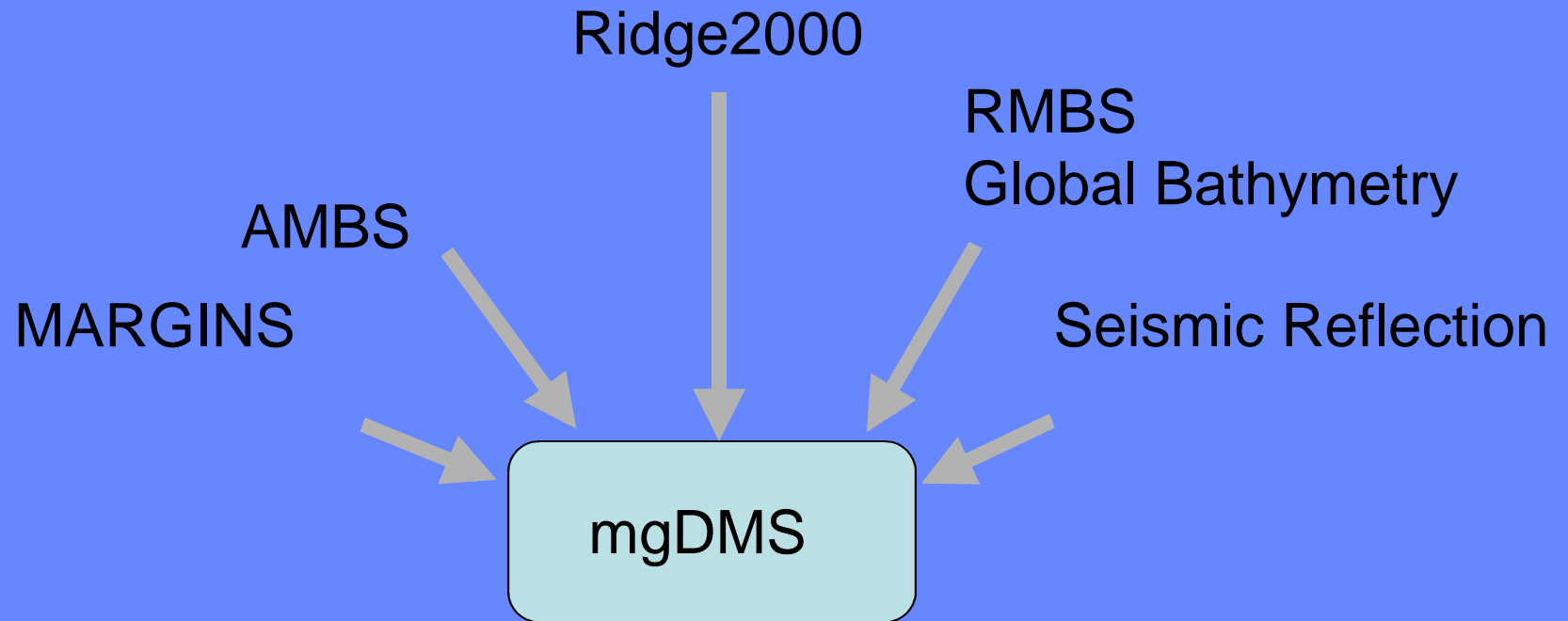
- A metadata catalog
- A data repository
- Tools
- Links to other R2K resources
- Facilitate Outreach and Education

Requirements

- Need to handle large and DIVERSE datasets
Seismic, Sonar, Geological, Fluid, Biological,
Samples (rocks, sediment, water, bio, ????),
Water properties (CTD, DO, PAR, Chemistry....),
Photo imagery
Plus derived products
- Need to serve a DIVERSE user community -
non-specialist and specialist access

VERY different from most existing data management efforts

Common (open source) back end



www.marine-geo.org

Marine Geoscience Data Management System	Applications	Data	Partners	Explore Further
	GeoMapApp	Antarctic Bathymetry	PetDB	Related Links
	Data Link	MARGINS	ODP Borehole	Contribute Cruise Data
	Create Maps & Grids	Ridge 2000	LDEO Core Repository	Meetings & Reports
	What's New	Ridge Bathymetry	UTIG Processed Seis	Acknowledgements
		Seismic Reflection	Statistics & Holdings	

Ridge 2000 Data Portal

This page provides access to cruise information and data collected during Ridge 2000 funded projects. Learn more about this web site by browsing the [What's New page](#), and reading other [Project Related Documents](#).

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Use [Create Maps and Grids](#) to generate a quick bathymetry map or grid for a region of interest.

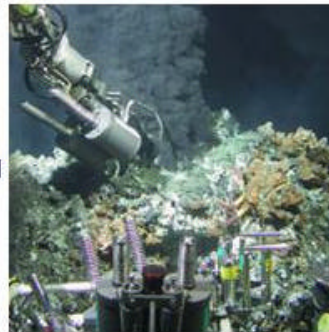


Photo by Karen Von Damm

Study Sites	Endeavor Segment (Juan de Fuca Ridge) Science Plan List Data: R2k-Funded / All Create Map/Grid Deployed Instruments Vent List Related Links	Lau Basin (Eastern Lau Spreading Center) Science Plan List Data: R2k-Funded / All Create Map/Grid Deployed Instruments Vent List Related Links	8°-11°N Segment (East Pacific Rise) Science Plan List Data: R2k-Funded / All Create Map/Grid Deployed Instruments Vent List Related Links
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User Functionality

- ✓ Web interface (Data Link)
- ✓ Analysis application (GeoMapApp)
- ✓ Web services
 - ✓ WMS
 - WCS
 - Query interface
 - ???

DataLink Search

Text-based search tool

Address: <http://www.marine-geo.org/link/?site=JdF>

Data Link

Region: West: North: East: South:

Focus/ Study Site:

Field Program ID: (eg. cruise, flight, transect,...)

Platform:

Operator:

Funding Agency:

Funding Initiative:

Investigator:

Institution:

Port Visit:

Start Date:

End Date:

Data Types:

	Track	Grid	Image
Gravity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Magnetics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sidescan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bathymetry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Echosounder	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Multibeam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Subbottom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seismics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• MCS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• SCS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• OBS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Samples	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Rock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Biology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
• Fluid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CTD/TSG	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Expendable Probe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ADCP	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(all)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Internet zone

December 2005

Marine Geoscience Data Management System

Applications	Data
GeoMapApp Data Link Create Maps & Grids	Antarctic Bathymetry MARGINS Ridge 2000 Ridge Bathymetry Seismic Reflection

Navigation icons: Back, Forward, Stop, Refresh, Home, AutoFill, Print, Mail

Address: <http://www.marine-geo.org/link/entry.php?id=AT11-20>

Marine Geoscience Data Management System

Applications	Data	Partners	Explore Further
GeoMapApp Data Link Create Maps & Grids	Antarctic Bathymetry MARGINS Ridge 2000 Ridge Bathymetry Seismic Reflection	PetDB ODP Borehole LDEO Core Repository UTIG Processed Seis	Related Links Contribute Cruise Info Meetings & Reports Acknowledgements Statistics & Holdings

Data Link Result

(Click on Entry ID to view full record.)

ENTRY	PLATFORM	CHIEF SCIENTIST
AT11-07	Atlantis	Schouten, Hans
DANA06RR	Roger Revelle	Constable, Steven
AT11-09	Atlantis	VonDamm, Karen
AT11-10	Atlantis	Lutz, Richard
AT11-20	Atlantis	Lilley, Marvin
AT11-26	Atlantis	Vetriani, Costantino



Data Link Entry

Entry: AT11-20

Platform: [R/V Atlantis](#)
 Designation: AGOR-25
 Operator: [WHOI](#)

- Project: Biocomplexity: Smart Sensors for In Situ Monitoring of Hydrothermal Vent Systems
- Project: Establishing a Role for Fe and S Microbial Metabolism in Ocean Crust Weathering ([Web site](#))
- Project: Time-Series Larval Studies in the Deep Sea ([Web site](#))
- Project: The Interaction of Microbial Biofilms and Fluid Chemistry on Larval Settlement ([Web site](#))

Chief_Scientist : Lilley, Marvin
 Scientist : Bach, Wolfgang (NSF [OCE02-41791](#))
 Scientist : Beaulieu, Stace (WHOI DOEI)
 Scientist : Booksh, Karl (NSF [OCE01-19999](#))
 Scientist : Edwards, Katrina (NSF [OCE02-41791](#))
 Scientist : Holloway, John (NSF [OCE01-19999](#))
 Scientist : McCollom, Thomas
 Scientist : Mullineaux, Lauren (WHOI DOEI)
 Scientist : Rouxel, Olivier
 Student_Graduate : Banning, Erin
 Student_Graduate : Canovas, Peter
 Student_Graduate : Poehls, Diane

Total entries: 6

**Marine Geoscience
Data
Management
System**

Applications

[GeoMapApp](#)
[Data Link](#)
[Create Maps & Grids](#)

Data

[Antarctic Bathymetry](#)
[MARGINS](#)
[Ridge 2000](#)
[Ridge Bathymetry](#)
[Seismic Reflection](#)

Partners

[PetDB](#)
[ODP Borehole](#)
[LDEO Core Repository](#)
[UTIG Processed Seis](#)

Explore Further

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[Contribute Cruise Info](#)
[Meetings & Reports](#)
[Acknowledgements](#)
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**DataLink
map view**

Data Link Result

(Click on Entry ID to view full record.)

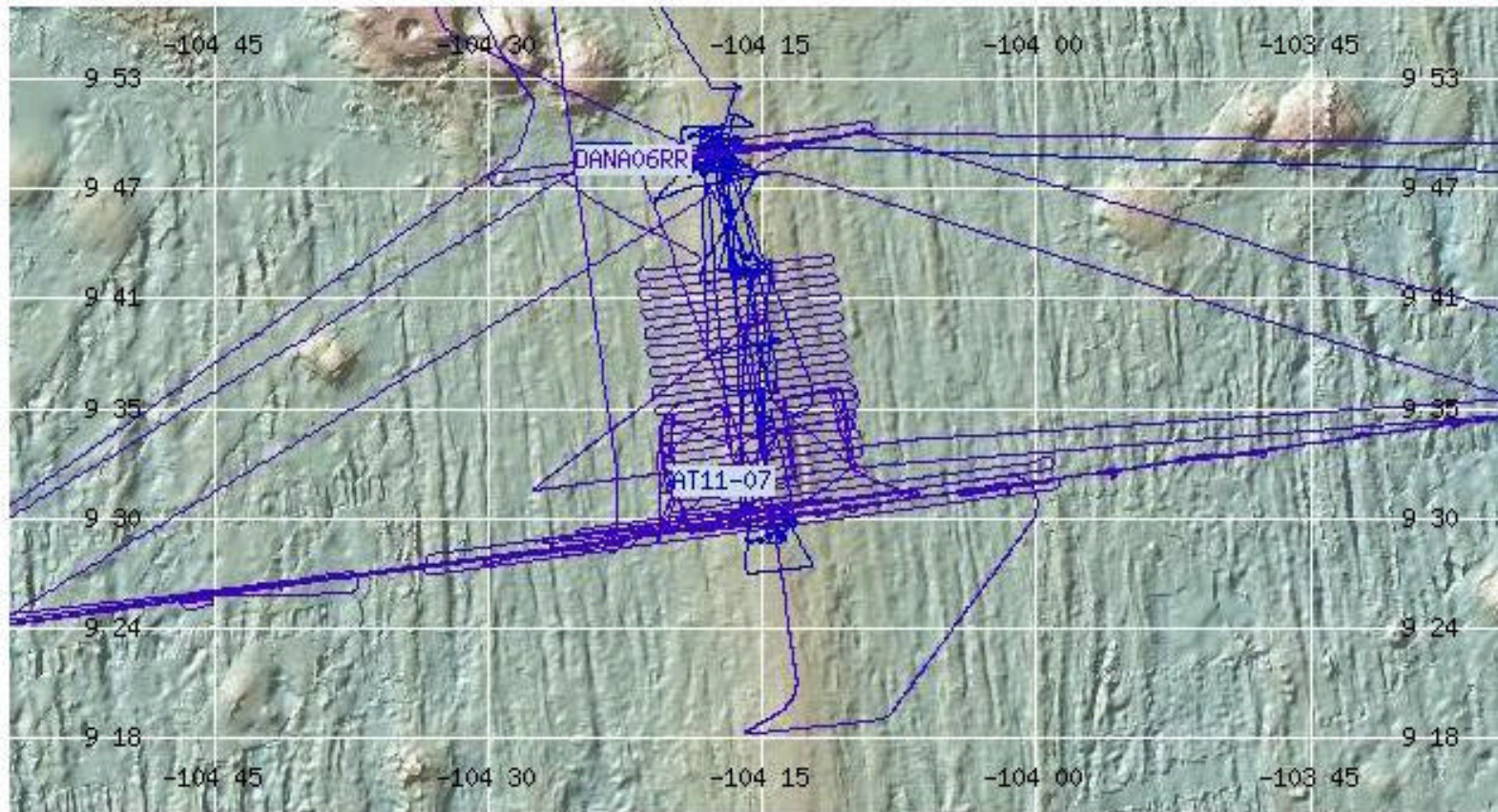
Map View

ENTRY	PLATFORM	CHIEF SCIENTIST	START DATE	PORT	END DATE	PORT
AT11-07	Atlantis	Schouten, Hans	2004-01-26	San Diego, California	2004-02-24	Puntarenas, Costa Rica
DANA06RR	Roger Revelle	Constable, Steven	2004-02-09	Puerto Caldera, Costa Rica	2004-03-09	Mazatlan, Mexico
AT11-09	Atlantis	VonDamm, Karen	2004-03-16	Puntarenas, Costa Rica	2004-04-02	Manzanillo, Mexico
AT11-10	Atlantis	Lutz, Richard	2004-04-07	Manzanillo, Mexico	2004-05-05	San Diego, California
AT11-20	Atlantis	Lilley, Marvin	2004-11-05	San Diego, California	2004-11-26	Manzanillo, Mexico
AT11-26	Atlantis	Vetriani, Costantino	2005-04-23	Manzanillo, Mexico	2005-05-15	Puntarenas, Costa Rica

Total entries returned: 6

**2004-2005
programs
at ISS are
inventoried**

Data Link: Map View



- Click Map:
- Re-Center
 - Zoom In
 - Zoom Out
- Factor:

Display Layers:

- Navigation
- Stations
- Global DEM *
- Lat/Lon Grid
- Coastlines

*(under



Scale:
0 9 mi

Mode:



Vent JdF:
Mothra: -129.10926 47.92112 47N53.634,129W9.87 4131 m 3027 m
Spikes

(from Deb Glickson, March 2005)

Vent JdF:
Mothra: -129.10894 47.92367 47N53.634,129W9.87 4155 m 3310 m
Tower

(from Deb Glickson, March 2005)

Vent JdF:
SaltyDawg: -129.07584 47.98213 47N53.634,129W9.87 6630 m 9810 m
Grendl

(from Deb Glickson, March 2005)

Vent JdF:
SaltyDawg: -129.07644 47.98213 47N53.634,129W9.87 6585 m 9810 m
SaltyDawg

(from Deb Glickson, March 2005)

Vent JdF:
Sasquatch: -129.06637 47.99732 47N53.634,129W9.87 7338 m 11499 m
PicoVent

(from Deb Glickson, March 2005)

Download

Downloads

http://www.marine-geo.org/ridge2000/index.html

Search

cape Search Bookmarks Internet Lookup New&Cool

Marine Geoscience Data Management System	Applications	Data	Partners	Explore Further
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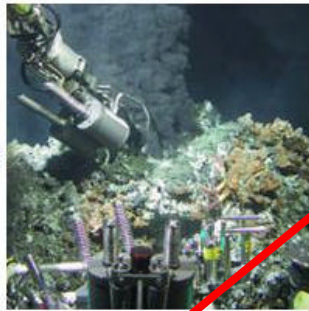


Photo by Lauren Von Damm

Study Sites	Endeavor Segment (Juan de Fuca Ridge) Science Plan	Lau Basin (Eastern Lau Spreading Center) Science Plan	8°-11°N Segment (East Pacific Rise) Science Plan
	List Data: R2k-Funded / All Create Map/Grid Deployed Instruments Vent List Related Links	List Data: R2k-Funded / All Create Map/Grid Deployed Instruments Vent List Related Links	List Data: R2k-Funded / All Create Map/Grid Deployed Instruments Vent List Related Links

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Deployed Instruments

- generated dynamically

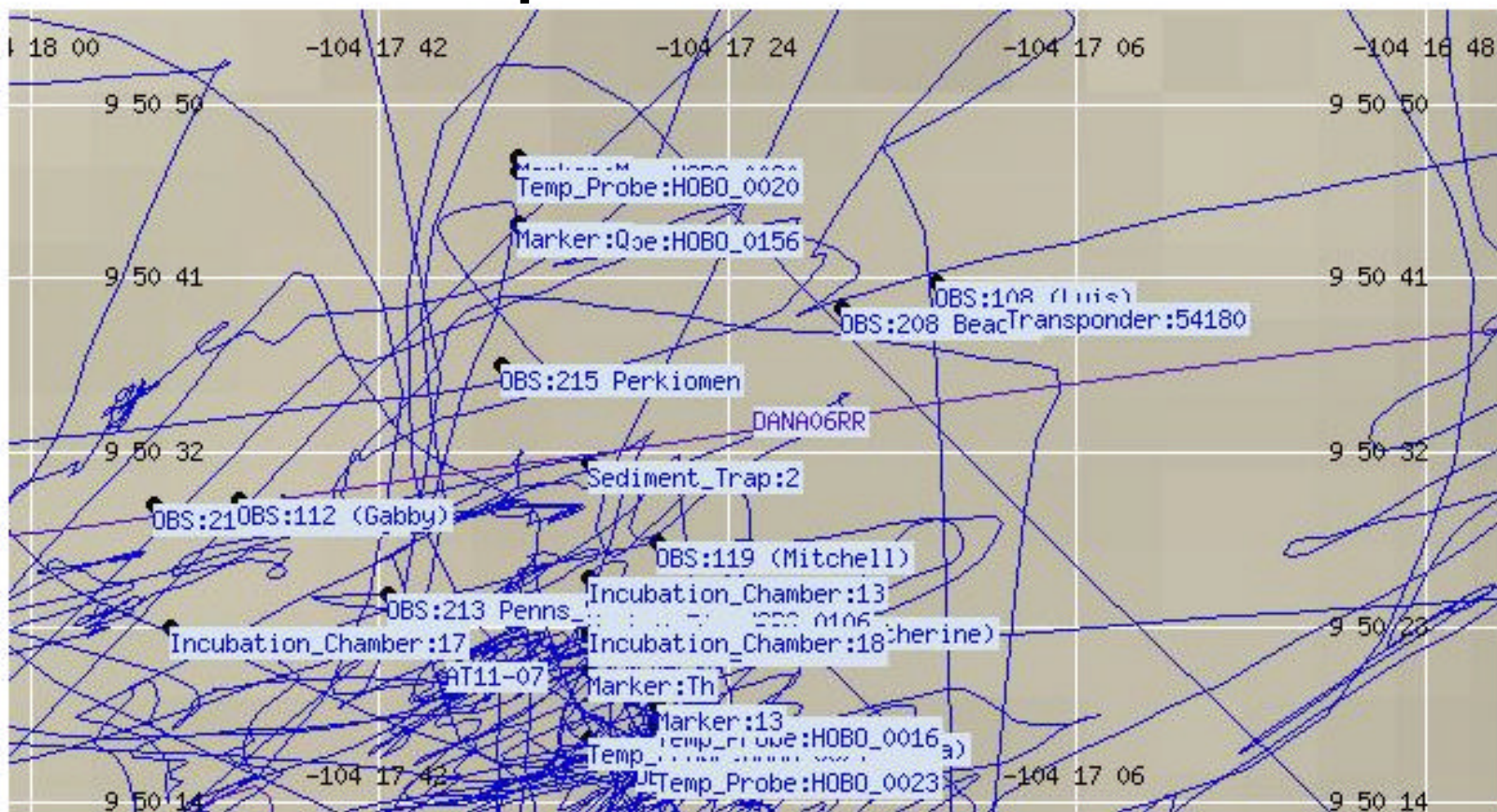


Address: <http://www.marine-geo.org/link/stations.php?target=JdF&active=yes>

WF2979	Deploy	Seismometer: KXBB	JdF:Explorer	Wilcock_William	2004-08-07	-129.00000	47.49880	
		<i>Broadband</i>						
WF2979	Deploy	Seismometer: KNBB	JdF:Nootka	Wilcock_William	2004-08-04	-127.69900	49.21600	
		<i>Broadband</i>						
WF2979	Deploy	Seismometer: KNNE	JdF:Nootka	Wilcock_William	2004-08-09	-127.56600	49.33350	
		<i>Seismonument</i>						
WF2979	Deploy	Seismometer: KNNW	JdF:Nootka	Wilcock_William	2004-08-09	-127.78800	49.32500	
		<i>Seismonument</i>						
WF2979	Deploy	Seismometer: KNCP	JdF:Nootka	Wilcock_William	2004-08-10	-127.67900	49.29560	
		<i>Seismonument</i>						
	Deploy	Transponder: 10	JdF:Endeavour	Kelley_Deborah	2000-01-01	-129.08300	47.95610	1896 m
		<i>(nominal deployment date) Pinged to death from SeaBreeze cruise</i>						
	Deploy	Transponder: 11.5	JdF:Endeavour	Kelley_Deborah	2003-07-26	-129.11300	47.93770	1920 m

Data Link: Map View

Map View of Instruments



- Click Map:
- Re-Center
 - Zoom In
 - Zoom Out
- Factor:

- Display Layers:
- Navigation
 - Stations
 - Global DEM *
 - Lat/Lon Grid
 - Coastlines
- *(under development)



Scale:
0 0.1 mi

Mode:



Port: 2004-11-05 San Diego, California
 Port: 2004-11-26 Manzanillo, Mexico

WESN: [not available]

Survey Locations and Navigation:

- [Listing](#) Submersible Dives (DSV:Alvin)
- [Listing](#) Deployed Stations (Current_Met)
- [Listing](#) Deployed Stations (Incubation_C)
- [Listing](#) Deployed Stations (Sediment_Tr)


Field Data Inventory:

- [Listing](#) Camera_Video_FG (Alvin Dives)
- [Listing](#) Samples_Biology (Alvin Dives) (
- [Listing](#) Samples_Fluid (Alvin Dives) (Ea
- [Listing](#) Samples_Rock (Alvin Dives) (Ec
- [Listing](#) Sonar_Scanning (Alvin Dives) (I)

Derived Data Products:

- [Download](#) Grids:Bathymetry
- [Download](#) Images:Bathymetry

Attachments:

 Science Report

Marine Geoscience Data Management System	Applications GeoMapApp Data Link Create Maps & Grids	Data Antarctic Bathymetry MARGINS Ridge 2000 Ridge Bathymetry Seismic Reflection	Partners PetDB ODP Borehole LDEO Core Repository UTIG Processed Seis	Explore Further Related Links Contribute Cruise Info Meetings & Reports Acknowledgements Statistics & Holdings
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Data Link Gridded Data

BATHYMETRY GRIDS: AT11-20

File Name	File Size (MB)	West	East	South	North	X Cell	Y Cell	Units	Masked	Format	Contributor	Image
4051asciil_grid_LL.txt	0.126	-104.283	-104.279	9.771	9.788	0.00001	0.00001	Degrees	FALSE	ASCII	Ferrini_Vicki	-
4051asciil_grid_UTM.txt	0.126	578605.000	579123.000	1080170.000	1082030.000	1.00000	1.00000	Meters	FALSE	ASCII	Ferrini_Vicki	-
4052asciil_grid_LL.txt	0.057	-104.293	-104.291	9.837	9.846	0.00001	0.00001	Degrees	FALSE	ASCII	Ferrini_Vicki	-
4052asciil_grid_UTM.txt	0.057	577509.000	577731.000	1087520.000	1088510.000	1.00000	1.00000	Meters	FALSE	ASCII	Ferrini_Vicki	-
4053asciil_grid_LL.txt	0.134	-104.247	-104.241	9.479	9.496	0.00001	0.00001	Degrees	FALSE	ASCII	Ferrini_Vicki	-
4053asciil_grid_UTM.txt	0.134	582617.000	583311.000	1047920.000	1049730.000	1.00000	1.00000	Meters	FALSE	ASCII	Ferrini_Vicki	-
4054asciil_grid_LL.txt	0.033	-104.292	-104.291	9.835	9.840	0.00001	0.00001	Degrees	FALSE	ASCII	Ferrini_Vicki	-
4054asciil_grid_UTM.txt	0.033	577642.000	577785.000	1087250.000	1087850.000	1.00000	1.00000	Meters	FALSE	ASCII	Ferrini_Vicki	-
4055asciil_grid_LL.txt	0.090	-104.268	-104.246	9.479	9.482	0.00001	0.00001	Degrees	FALSE	ASCII	Ferrini_Vicki	-
4055asciil_grid_UTM.txt	0.090	580367.000	582784.000	1047950.000	1048200.000	1.00000	1.00000	Meters	FALSE	ASCII	Ferrini_Vicki	-
4056asciil_grid_LL.txt	0.041	-104.294	-104.291	9.839	9.847	0.00001	0.00001	Degrees	FALSE	ASCII	Ferrini_Vicki	-
4056asciil_grid_UTM.txt	0.041	577436.000	577708.000	1087670.000	1088530.000	1.00000	1.00000	Meters	FALSE	ASCII	Ferrini_Vicki	-
4057asciil_grid_LL.txt	0.145	-104.291	-104.275	9.828	9.838	0.00001	0.00001	Degrees	FALSE	ASCII	Ferrini_Vicki	-
4057asciil_grid_UTM.txt	0.145	577684.000	579464.000	1086470.000	1087620.000	1.00000	1.00000	Meters	FALSE	ASCII	Ferrini_Vicki	-
4058asciil_grid_LL.txt	0.100	-104.294	-104.288	9.835	9.847	0.00001	0.00001	Degrees	FALSE	ASCII	Ferrini_Vicki	-
4058asciil_grid_UTM.txt	0.100	577470.000	578038.000	1087240.000	1088540.000	1.00000	1.00000	Meters	FALSE	ASCII	Ferrini_Vicki	-
4059asciil_grid_LL.txt	0.090	-104.298	-104.288	9.834	9.840	0.00001	0.00001	Degrees	FALSE	ASCII	Ferrini_Vicki	-
4059asciil_grid_UTM.txt	0.090	576936.000	578127.000	1087190.000	1087810.000	1.00000	1.00000	Meters	FALSE	ASCII	Ferrini_Vicki	-
4060asciil_grid_LL.txt	0.080	-104.294	-104.289	9.838	9.846	0.00001	0.00001	Degrees	FALSE	ASCII	Ferrini_Vicki	-
4060asciil_grid_UTM.txt	0.080	577445.000	577939.000	1087570.000	1088500.000	1.00000	1.00000	Meters	FALSE	ASCII	Ferrini_Vicki	-
4061asciil_grid_LL.txt	0.198	-104.294	-104.288	9.826	9.849	0.00001	0.00001	Degrees	FALSE	ASCII	Ferrini_Vicki	-

Download data

Chief_Scientist : Lilley, Marvin
 Scientist : Bach, Wolfgang (NSF OCE02-41791)
 Scientist : Beaulieu, Stace (WHOI DOEI)
 Scientist : Booksh, Karl (NSF OCE01-19999)
 Scientist : Edwards, Katrina (NSF OCE02-41791)
 Scientist : Holloway, John (NSF OCE01-19999)
 Scientist : McCollom, Thomas
 Scientist : Mullineaux, Lauren (WHOI DOEI)
 Scientist : Rouxel, Olivier
 Student_Graduate : Banning, Erin
 Student_Graduate : Canovas, Peter
 Student_Graduate : Poehls, Diane
 Student_Graduate : Rogers, Dan
 Student_Graduate : Santelli, Cara

Port: 2004-11-05 San Diego, California

Port: 2004-11-26 Manzanillo, Mexico

WESN: [not available]

Survey Locations and Navigation:

- [Listing](#) Submersible Dives (DSV:Alvin)
- [Listing](#) Deployed Stations (Current_Meter) (Mullineaux)
- [Listing](#) Deployed Stations (Incubation_Chamber) (Edwards)
- [Listing](#) Deployed Stations (Sediment_Trap) (Mullineaux)

Field Data Inventory

- [Listing](#) Camera_Video_FG (Alvin Dives) (WHOI FrameGrabber)
- [Listing](#) Samples_Biology (Alvin Dives) (Edwards_Katrina)
- [Listing](#) Samples_Fluid (Alvin Dives) (Edwards_Katrina)
- [Listing](#) Samples_Rock (Alvin Dives) (Edwards_Katrina)
- [Listing](#) Sonar_Scanning (Alvin Dives) (Imagenex 881) (Lilley_Marvin)

CruiseID: AT11-20 CruiseName: EPR November 2004 View Highlights: [icon]

Alvin Dive	Pilot	Observers	Synopsis
4048	Anthony Tarantino	Marv Lilley Yoon Chang Kim	ran bio transect from Ty and IO to Bio Vent Top temperatures of hot vents and took Ramen and S
4049	Bruce Strickrott	Tom McCollom Olivier Rouxel	start at off axis deployment site, no luck locating good work at Tica deploying samples and recovery arm failed [wouldn't let go of hi t probe] hi t failed use of rudder, madness ensued continued dive as possible
			Start dive at Mkr 141. Raman Grounded so went to Pillar. Tested Raman for one data set the secured

Alvin Frame-Grabber: EPR November 2004 Dive4048

Source 1: SUB001 Source 2: SUB002

DAQ_ActiveDive: Alvin	DAO Time: 2004/11/11 15:30:31 Nav Time: 2004/11/11 15:30:31	Hdg: +26.956 Lat: 9 50.061300 N Lon: 104 17.429040 W	Alt: 1.1 Depth: +2502.730 TDepth: 2503.83	HTemp: 2.13 C LoTemp: 2.13 C SVel: [blank]
Type: ASNAPE	NavAttSrc: PWHANA	X: +4709.990 Y: +77529.881 Pitch: -2.822 Roll: -0.349	DopAlt: -0.012	MagX: [blank] MagY: [blank] MagZ2: [blank] MagT: [blank]

EType: Event

To browse, click on TimeBar or use Nav Buttons

EPR November 2004 Dive4048

SnapShot #0001

Marine Geoscience Data Management System	Applications	Data	Partners	Explore Further
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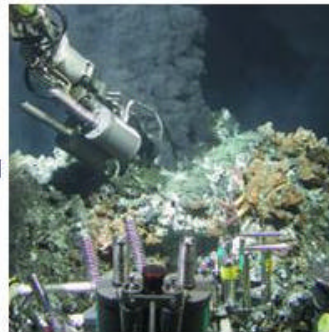


Photo by Karen Von Damme

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Standard forms for reporting cruise metadata

Can't find the data with out it, so

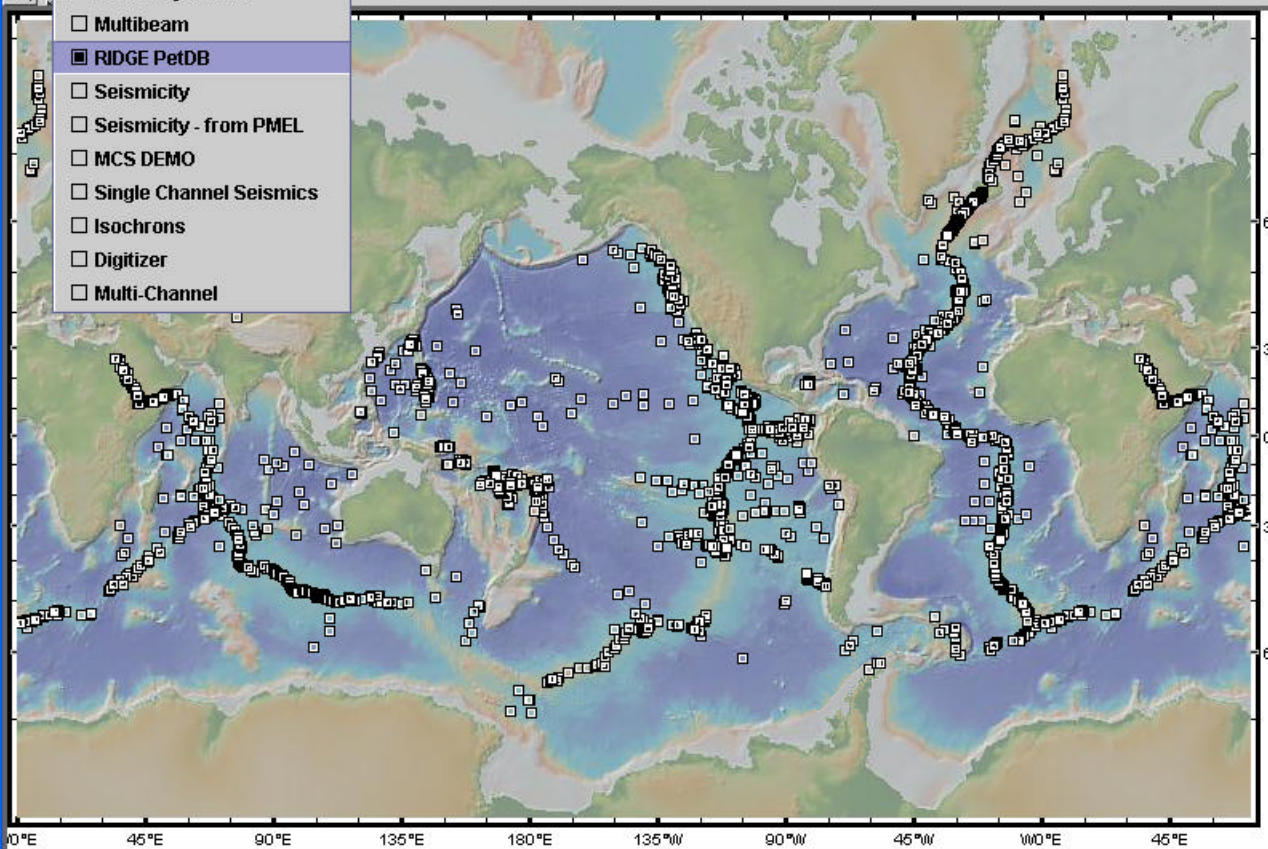
METADATA: don't come home without it!

GeoMapApp

Map-based Tool for Exploring Marine Geoscience Data

- Dynamically generated bathymetry grids and maps
- PetDB www.geomapapp.org
- Seismicity
- Bottom Photos
- Import Your Own Data

- underway MG&G
- Multibeam
- RIDGE PetDB
- Seismicity
- Seismicity - from PMEL
- MCS DEMO
- Single Channel Seismics
- Isochrons
- Digitizer
- Multi-Channel



RIDGE PetDB

close

Basic

Material	Data Type	Rock Type
All	All	All
Clear	Clear	Clear
whole rock(WR)	Age(A)	Alkaline(A)
glass(GL)	Major(MAJ)	Andesite(B)
Rock (unspec. XROC...)	Trace(TE)	Diabase/Dolerite(D)
mineral(MIN)	Rare Earth(REE)	Metamorphic(M)
inclusion(INC)	Radio-Isotope(IR)	Ore(O)
CC(CC)	Stable Isotope(IS)	Mafic Plutonic(P)
G(G)	Noble Gas(NGAS)	Silic(S)
GM(GM)	Volatile(VO)	Ultramafic(U)
	U-Series(US)	Basalt(V)
	End Member(EM)	Xenolith(X)

Open PETDB web page
for selected station

Stations	Compiled Chem	Analyses					
7724 stations	#Samples	material	data avail	rock type	Longitude	Latitude	
DST0041-001	96	WR; GL; ROCK; MIN	MAJ; TE; REE; IR; IS; US	V	-85.5	0.7099999785423279	▲
DST0041-002	11	WR; GL; ROCK; MIN	MAJ; TE; REE; IR	V	-85.12000274658203	1.7400000095367432	■
DST0041-003	32	WR; GL; ROCK	MAJ; TE; REE; IR; IS	V	-85.41999816894531	1.0399999618530273	
DST0041-004	1	WR	MAJ; TE; REE	V	-85.5999984741211	1.1399999856948853	
DST0041-005	83	WR; GL; ROCK; MIN	MAJ; TE; REE; IR; NGAS; US	V	-95.62000274658203	2.450000047683716	
DST0041-006	77	WR; GL; MIN	MAJ; TE; REE; IR; IS; VO	B; V	-95.23999786376953	2.700000047683716	
DST0041-007	22	WR; GL; MIN	MAJ; TE; REE	V	-95.41000366210938	2.4200000762939453	
DST0041-008	29	WR; GL; ROCK; MIN	MAJ; TE; REE; IR; NGAS	V	-95.33000183105489	2.5999999046325684	
KAK1979-002	40	GL; ROCK	MAJ	V	-93.72480010986328	1.3782999515533447	
KAK1979-004	18	WR; GL; ROCK	MAJ; TE	V	03.62890052710029	1.8040000475470428	▼

(129.170 W, 47.999 N, -2,176.0 m), zoom factor = 301.8

Go to PetDB sample

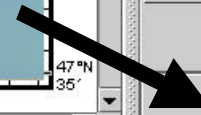
RIDGE PetDB

close

Basic

Material	Data Type	Rock Type
All	All	All
Clear	Clear	Clear
whole rock(WR)	Age(A)	Alkaline(A)
glass(GL)	Major(MAJ)	Andesite(B)
Rock (unspec. XROC...)	Trace(TE)	Diabase/Dolerite(D)
mineral(MIN)	Rare Earth(REE)	Metamorphic(M)
inclusion(INC)	Radio-Isotope(IR)	Ore(O)
CC(CC)	Stable Isotope(IS)	Mafic Plutonic(P)
G(G)	Noble Gas(NGAS)	Silic(S)
GM(GM)	Volatile(VO)	Ultramafic(U)
	U-Series(US)	Basalt(V)
	End Member(EM)	Xenolith(X)

Open PETDB web page for selected station



Stations Compiled Chem Analyses

14 analyses	La (PPM)	Ce (PPM)	Pr (PPM)	Nd (PPM)	Sm (PPM)	Eu (PPM)	Gd (PPM)	Tb (PPM)	Dy (PPM)	Ho (PPM)	ER (PPM)	Tm (PPM)	Yb (PPM)	I
ENV1986-001-005:2:0	8.74	21.4	3.11	14.12	3.94	1.34	4.1	0.77	4.8	1.0	3.07	0.42	2.83	0.4
ENV1986-001-004:2:0	4.02	11.62	2.94	9.89	3.45	1.28	4.07	0.8	5.34	1.14	3.41	0.49	3.11	0.4
TULCUR2-016-004:0:2	12.7	29.0		20.0	5.34	1.54		0.95					3.72	0.6
TULCUR2-024-006:0:2	17.4	38.4		21.6	5.16	1.56		0.82					2.59	0.4
TULCUR2-024-003:0:1	15.7	40.1		20.1	4.66	1.77		0.78					2.43	0.3
TULCUR2-025-004:0:2	1.66	6.64		6.14	2.28	0.86		0.49					2.81	0.4
TULCUR2-026-003:0:2	15.8	32.7		20.8	5.27	1.6		0.83					2.85	0.4
TULCUR2-026-001:0:1	16.1	36.7		22.9	5.39	1.79		0.78					3.03	0.5
TULCUR2-027-007:0:4	11.5	31.9		19.3	4.84	1.77		1.06					3.42	0.5

PetDB

Station Information

[To PETDB HOME](#)

Download Complete list of Stations.

Station ID:	ENV1986-001
Expedition:	GSC1986
Sampling Technique:	Dredge
Location description:	JUAN DE FUCA RIDGE:SPREADING_CENTER;PACIFIC:OCEAN

Sampling sites

site order	latitude	Longitude	elevation min	elevation max	land/sea	tectonic	comment
on	48°E	129.167°S	-2400	-2400	Subaquatic	SPREADING_CENTER	

Samples

sample	rock description	alteration	data
ENV1986-001-001	V, BASALT	SLIGHTLY ALTERED(VAN WAGONER, 1991)	Rock
ENV1986-001-002	V, BASALT	SLIGHTLY ALTERED(VAN WAGONER, 1991)	Rock, Mineral
ENV1986-001-003	V, BASALT	SLIGHTLY ALTERED(VAN WAGONER, 1991)	Rock
ENV1986-001-004	V, BASALT	SLIGHTLY ALTERED(VAN WAGONER, 1991)	Rock, Mineral
ENV1986-001-005	V, BASALT	SLIGHTLY ALTERED(VAN WAGONER, 1991)	Rock, Mineral

(129.814 W, 45.643 N), zoom factor = 142.3

NOAA
PMEL



Seismicity - from PMEL

close

Open NOAA/PMEL
web page about
these data

areas

- SOSUS
- EPR
- MAR

load

plot

131°W20' 131°W 130°W40' 130°W20' 130°W 129°W40' 129°W20' 129°W 128°W40' 128°W20'

reset

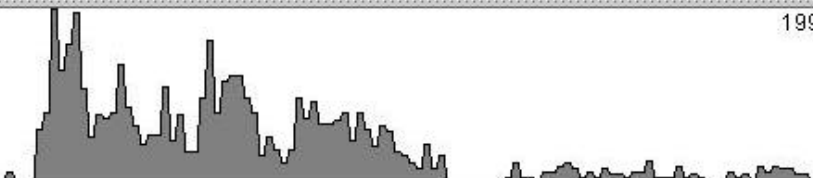
play

Save

10 frames/s

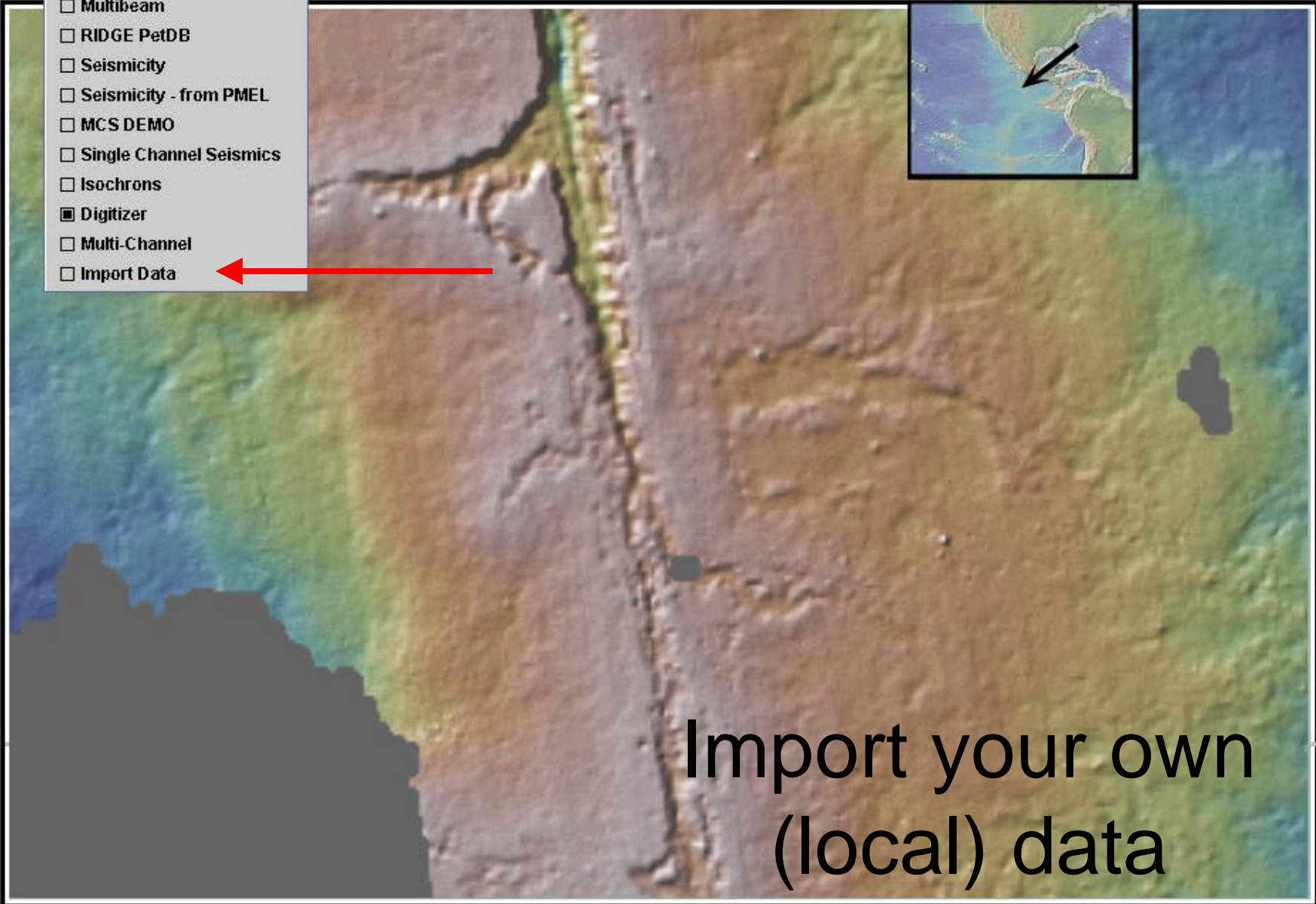
1998 022 00:07:52

1998 037 01:25:23



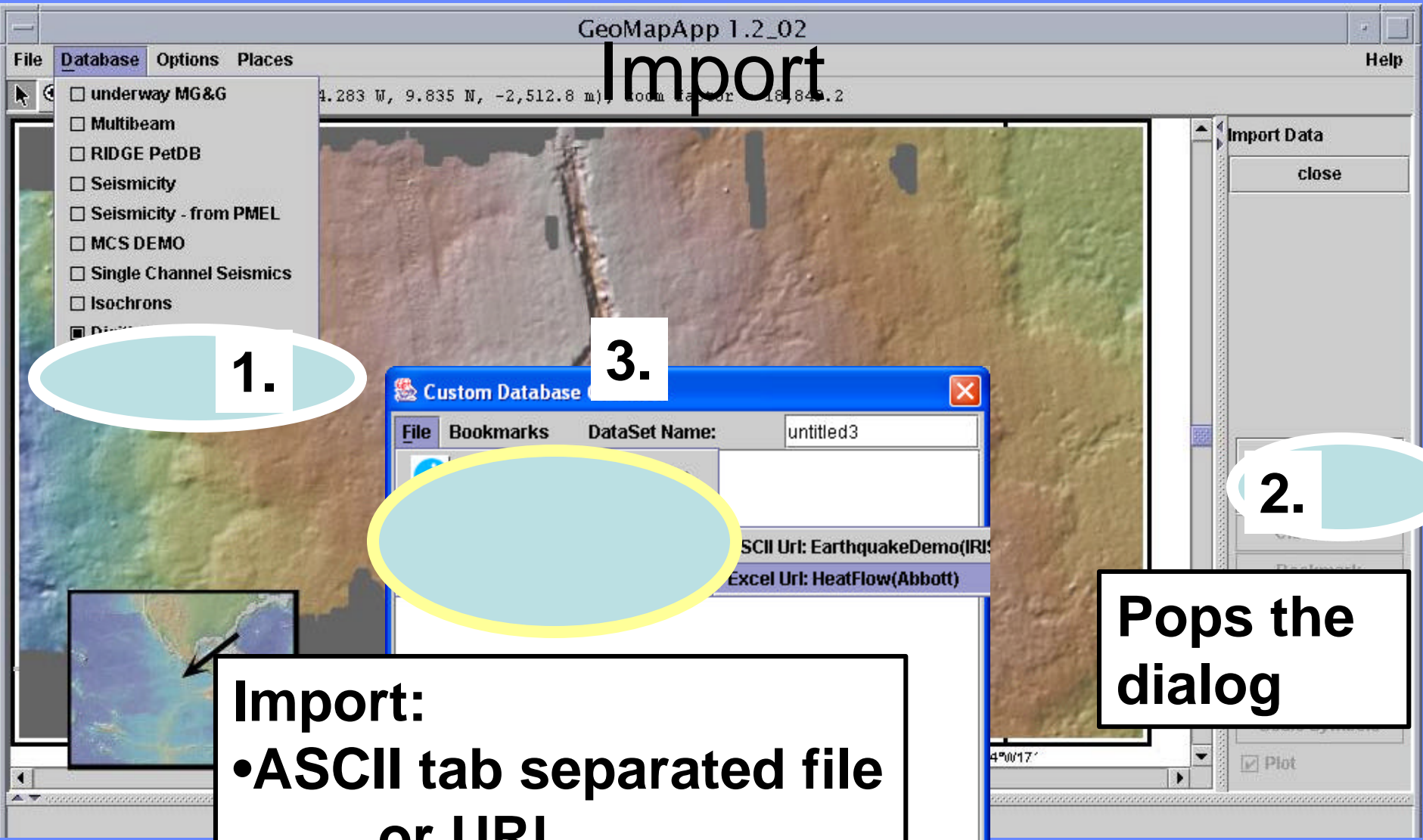
1.286 W, 9.835 N, -2,507.8 m), zoom factor = 37,703.4

- underway MG&G
- Multibeam
- RIDGE PetDB
- Seismicity
- Seismicity - from PMEL
- MCS DEMO
- Single Channel Seismics
- Isochrons
- Digitizer
- Multi-Channel
- Import Data



Import your own
(local) data

Import



1.

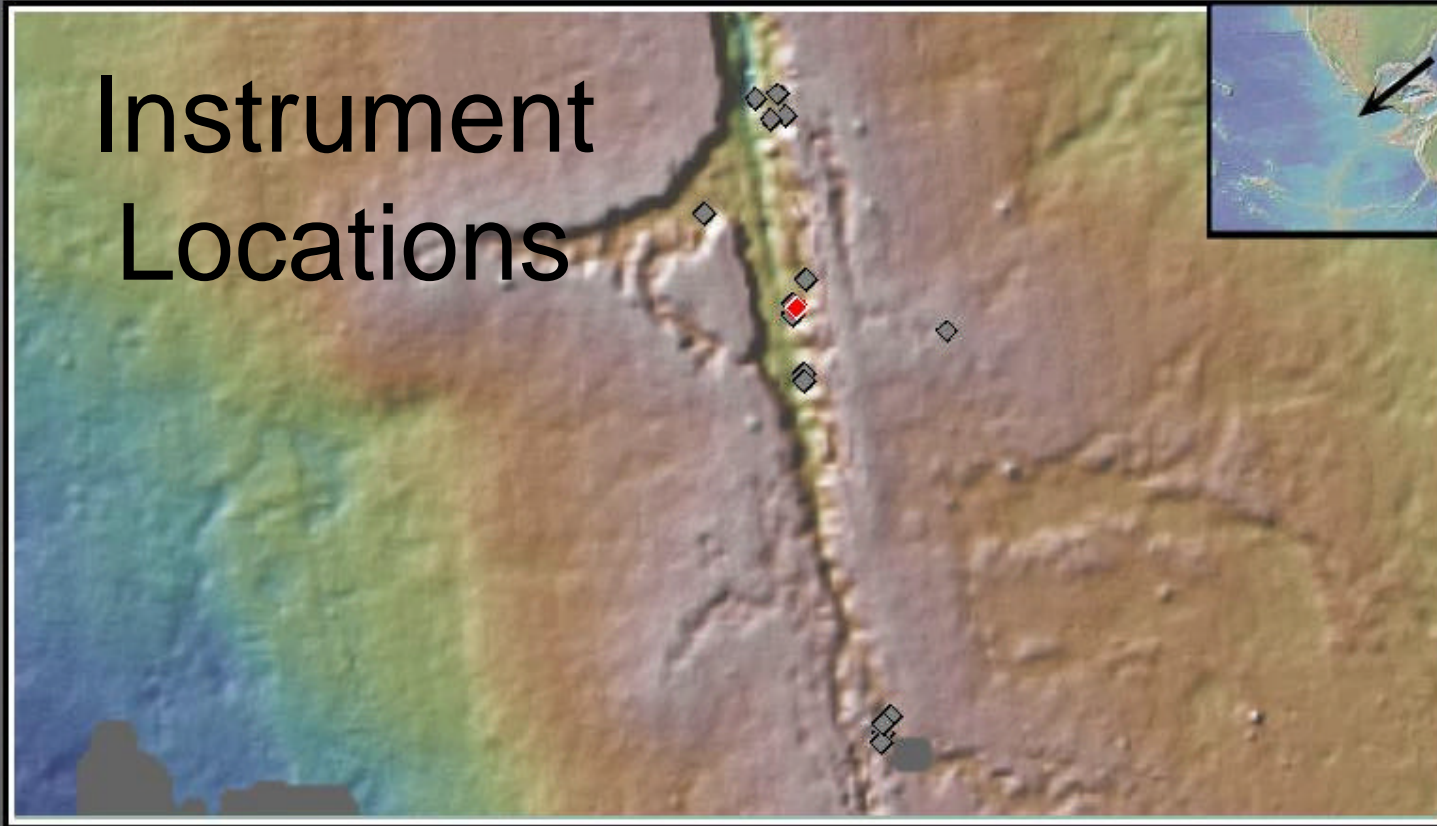
3.

2.

Pops the dialog

Import:

- ASCII tab separated file or URL
- Excel file or URL



Import Data

close

stations

Load

Close Data

Bookmark

Configure

Graph

Color Symbols

Scale Symbols

Plot

Data

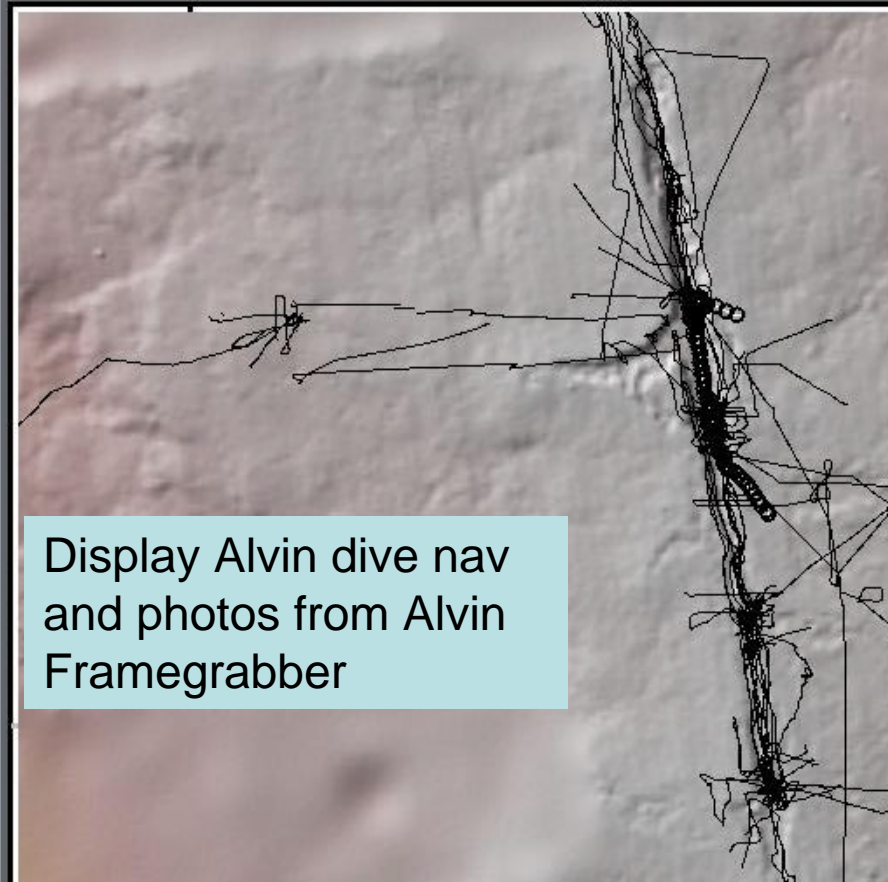
Entry/Cruise	Dive_Type/ID	Station_Typ...	Device	Location	Start_Date	Longitude	Latitude	Depth(m)	Temp(degC)
AT11-09	Alvin:3992	Deploy	Probe_Temperature:HOBO_0013	EPR:Vent:Bio_9+	3/27/04 16:...	-104.291393	9.838651	2510	388
AT11-09	Alvin:3992	Deploy	Probe_Temperature:HOBO_0014	EPR:Vent:P-middle	3/27/04 18:...	-104.291339	9.838136	2506	371
AT11-09	Alvin:3992	Deploy	Probe_Temperature:HOBO_0016	EPR:Vent:Bio_9	3/27/04 17:...	-104.291421	9.838597	2509	382
AT11-09	Alvin:3992	Deploy	Probe_Temperature:HOBO_0017	EPR:Vent:Bio_9++	3/27/04 17:...	-104.291439	9.838588	2511	378
AT11-09	Alvin:3992	Deploy	Probe_Temperature:HOBO_0024	EPR:Vent:P	3/27/04 19:...	-104.291339	9.838073	2510	369
AT11-09	Alvin:3992	Deploy	Marker:Tica	EPR:Vent:Tica	3/27/04 16:...	-104.291721	9.840279	2512	
AT11-09	Alvin:3992	Deploy	Marker:Bio_9	EPR:Vent:Bio_9	3/27/04 17:...	-104.291421	9.838597	2509	
AT11-09	Alvin:3992	Deploy	Marker:Bio_9++	EPR:Vent:Bio_9++	3/27/04 17:...	-104.291439	9.838588	2511	
AT11-09	Alvin:3992	Deploy	Marker:Bio_9+	EPR:Vent:Bio_9+	3/27/04 17:...	-104.291421	9.838679	2509	



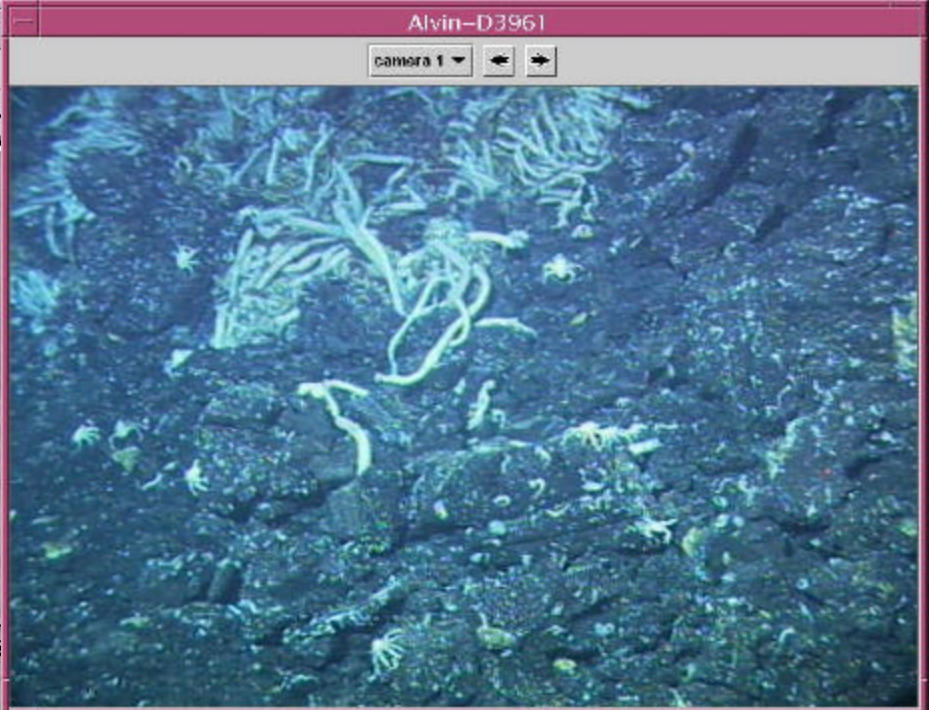
GeoMapApp

File Database Under Development Options Places

(104.292 W, 9.835 N, -2,502.7 m), zoom f.



Display Alvin dive nav and photos from Alvin Framegrabber



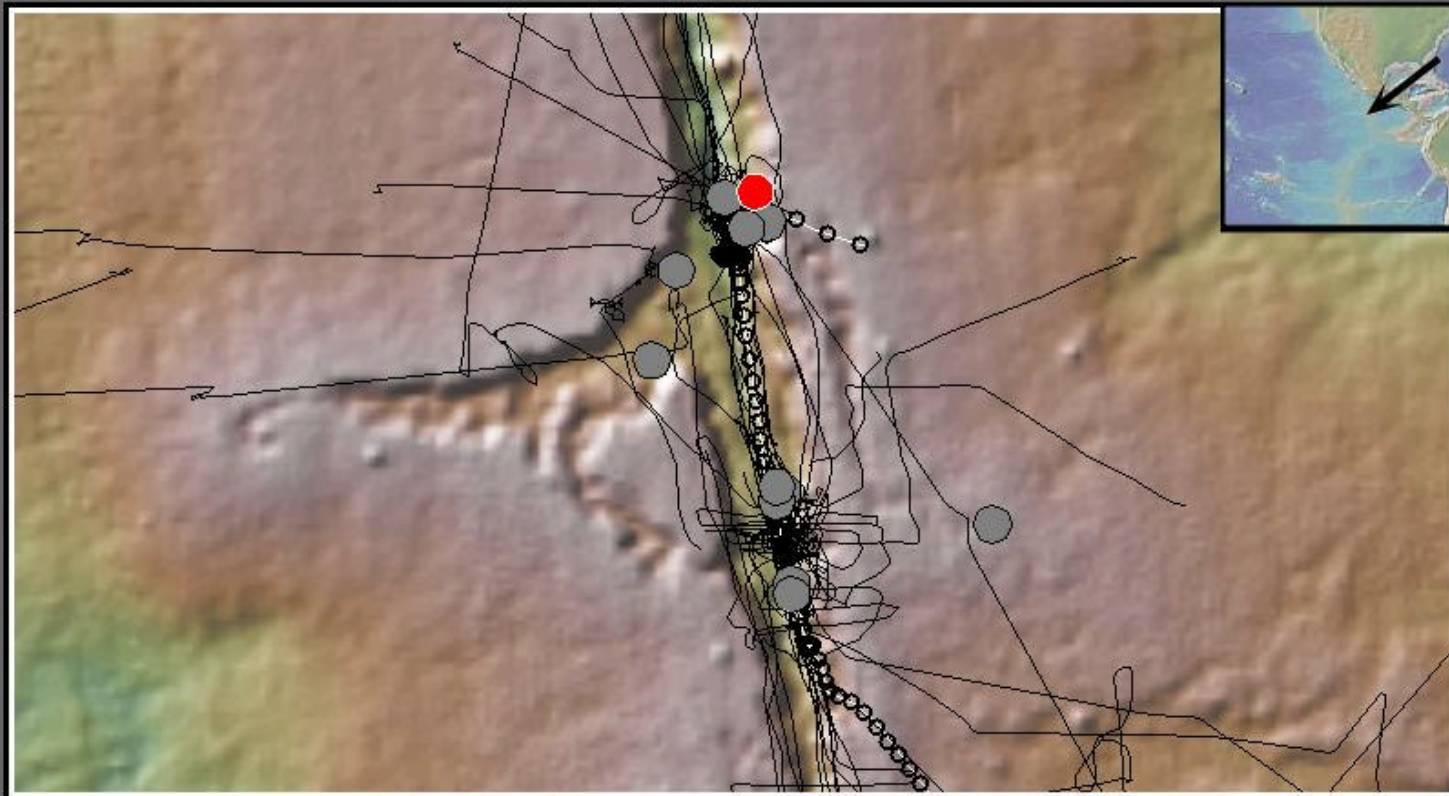
9°N
50'

Layers

name	type	visible	color	Line	time
DiveNav	23	<input checked="" type="checkbox"/>	black	—	20040203_201855
Alvin-D3...	1	<input checked="" type="checkbox"/>	black	—	20040203_201925
					20040203_201955
					20040203_202025
					20040203_202055
					20040203_202125
					20040203_202155

Elevation Data Sources  

(104.290 W, 9.838 N, -2,502.4 m), zoom factor = 54,719.6



Import Data

close

ed Instruments, EPR 2

Load

Close Data

Bookmark

Configure

Graph

Color Symbols

Scale Symbols

Data

Cruise	Dive_Type/ID	Station_acti...	Device	Location	Start_Date	Longitude	Latitude	Depth(m)	Temp(degC)	Contact	Comments
AT11-09	Alvin:3992	Deploy	Marker:Bio...	EPR:Vent...	3/27/04 17:...	-104.291439	9.838588	2511		VonDamm...	
AT11-09	Alvin:3992	Deploy	Marker:Bio...	EPR:Vent...	3/27/04 17:...	-104.291421	9.838678	2509		VonDamm...	Back side o...
AT11-09	Alvin:3992	Deploy	Marker:P-m...	EPR:Vent...	3/27/04 18:...	-104.291339	9.838136	2506		VonDamm...	
AT11-09	Alvin:3992	Deploy	Marker:P	EPR:Vent:P	3/27/04 18:...	-104.291339	9.838073	2510		VonDamm...	
AT11-09	Alvin:3993	Deploy	Probe_Te...	EPR:Vent:T...	3/28/04 18:...	-104.291548	9.840315	2512	337	VonDamm...	CHIP1=15...
AT11-09	Alvin:3995	Deploy	Probe_Te...	EPR	3/30/04 0:00					VonDamm...	CHIP1=62...
AT11-10	Alvin:4009	Deploy	Probe_Te...	EPR:Vent...	4/22/04 0:00				311	Shank_Tim...	CHIP1=19...
AT11-20	Alvin:4049	Deploy	Incubation...	EPR	2004-11-1...	-104.29200	9.83988	2514		Edwards_K...	marker=U...
AT11-20	Alvin:4049	Deploy	Incubation...	EPR	2004-11-1...	-104.29200	9.83988	2513		Edwards_K...	marker=U...

Elevation Data Sources



Plans

- Continue ingesting data and metadata
- Improved Project & Process Management
- Refine search capability
- Serve as OBIS data provider
- Become a GEON node
- Improve procedures for data & metadata capture
- Improved interface to NDSF Virtual Van
- Develop robust data quality metrics (start w/ MB)
- Web Services enable - GMA
- GoogleEarth

Questions?

Come to our
booth
425