

IODP Bremen Core Repository (BCR)



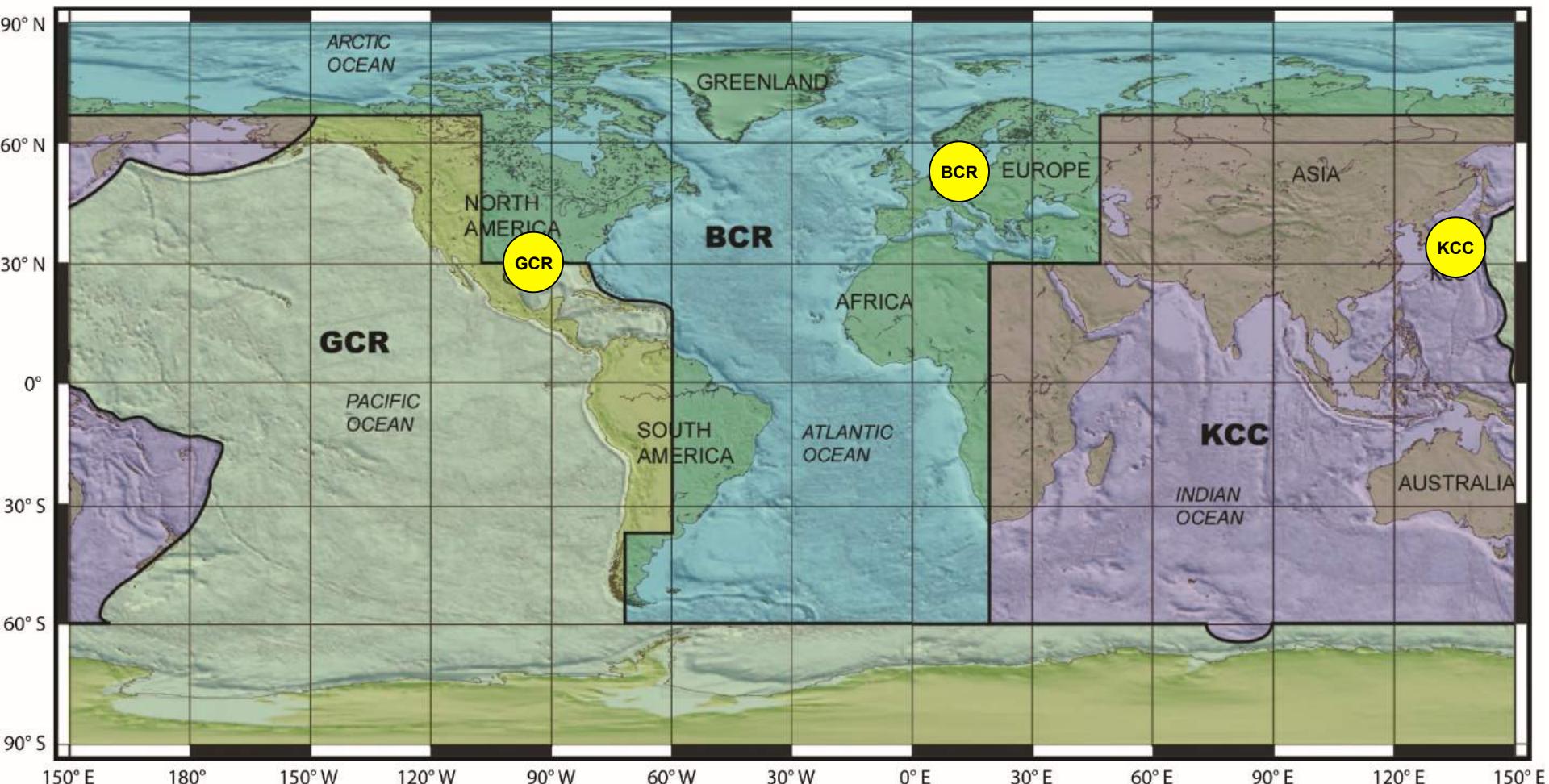
marum



 Universität Bremen



IODP Core Repositories

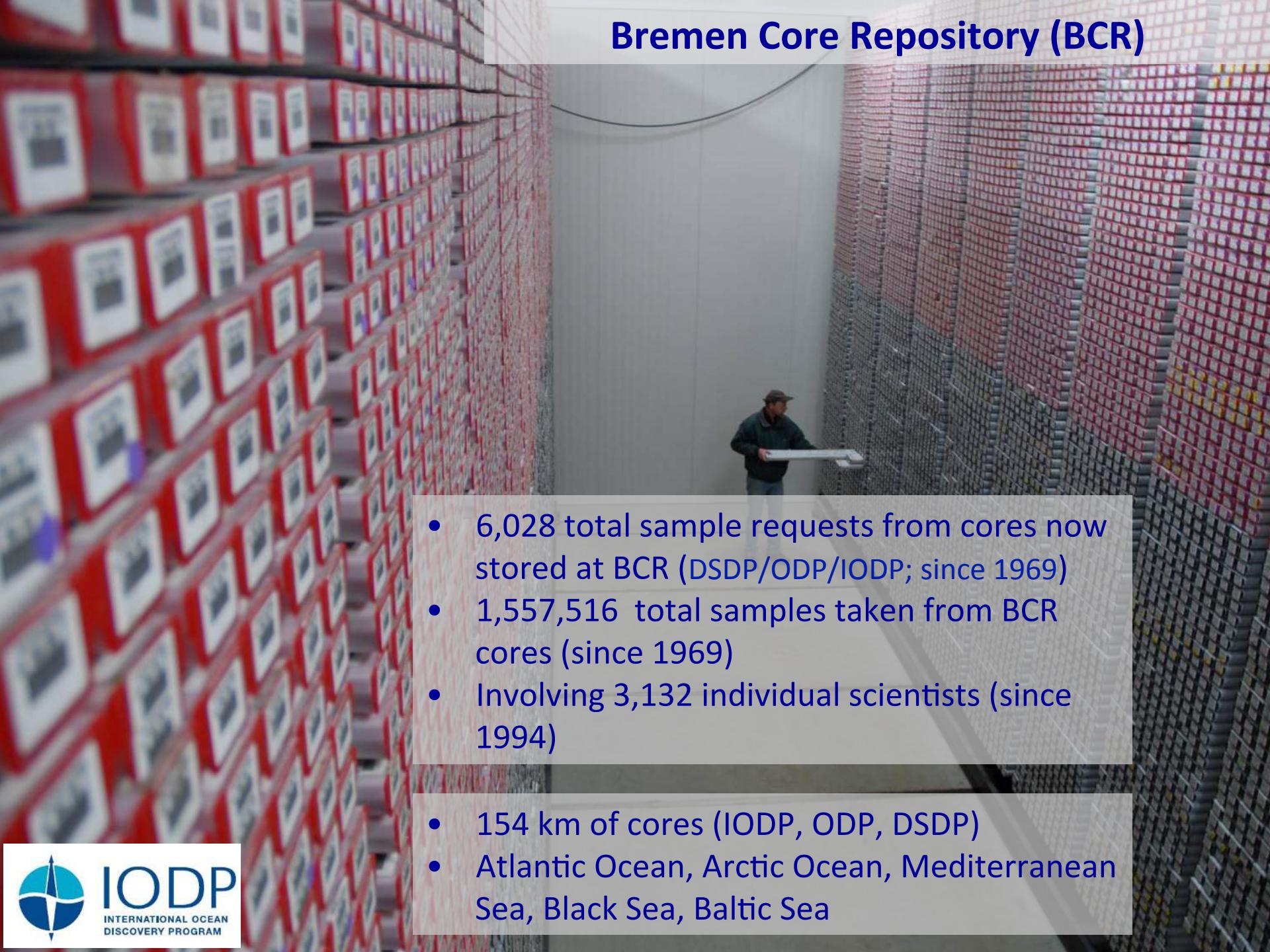


GCR: Gulf Coast Core Repository, College Station, Texas

KCC: Kochi Core Center, Kochi, Japan

BCR: Bremen Core Repository, Bremen, Germany

Bremen Core Repository (BCR)

- 
- 6,028 total sample requests from cores now stored at BCR (DSDP/ODP/IODP; since 1969)
 - 1,557,516 total samples taken from BCR cores (since 1969)
 - Involving 3,132 individual scientists (since 1994)
-
- 154 km of cores (IODP, ODP, DSDP)
 - Atlantic Ocean, Arctic Ocean, Mediterranean Sea, Black Sea, Baltic Sea



Center for Marine Environmental Sciences

home

IODP at MARUM

- IODP Bremen Core Repository
- Partner to the ECORD Science Operator
- all IODP expeditions
- SEDIS
- German IODP Office
- ECORD
- IODP

IODP at MARUM - IODP Bremen Core Repository

IODP Bremen Core Repository

- BCR Practices and Procedures
- Cores at BCR
- Satellite IODP Micropaleontological Reference Center

▼ International core repository at the University of Bremen

▼ Requesting samples from deep-sea cores

▼ Microbiology Sample Material Availability

▼ Upcoming events at BCR

▼ Contacts for the Bremen Core Repository

▼ How to find us

International core repository at the University of Bremen

The Bremen Core Repository - BCR, for International Ocean Discovery Program (IODP), > Integrated Ocean Drilling Program (IODP), > Ocean Drilling Program (ODP), and > Deep Sea Drilling Project> (DSDP) cores from the Atlantic Ocean, Mediterranean and Black Seas and Arctic Ocean is operated at University of Bremen within the framework of the German participation in IODP. It is one of three IODP repositories (beside Gulf Coast Repository (> GCR) in College Station, TX, and Kochi Core Center (> KCC), Japan) and was established in the summer of 1994. The IODP-BCR has a 1100 sqm refrigerated storage area with a movable rack system and state-of-the-art laboratory and office space, and is located in the MARUM building on the campus of Bremen University.

> BCR presently contains 154 km of deep-sea cores from 87 expeditions in around 250,000 boxes (also see > reports), which are sampled and analysed by national and international working groups. Around 200 scientists visit the repository annually, sometimes working on the cores in week-long sampling meetings (> video). As many as 50,000 samples per year are taken by guests and by the repository staff. The repository is an important contact point for scientists from all over the world (more than 2,000 visitors so far) and therefore significantly contributes to the exchange and transfer of marine science knowledge in Bremen, leading to interna-

http://www.marum.de/en/IODP.html

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Universität Bremen

IODP at MARUM

IODP Bremen Core
Repository

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all IODP expeditions

SEDIS

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ECORD

IODP

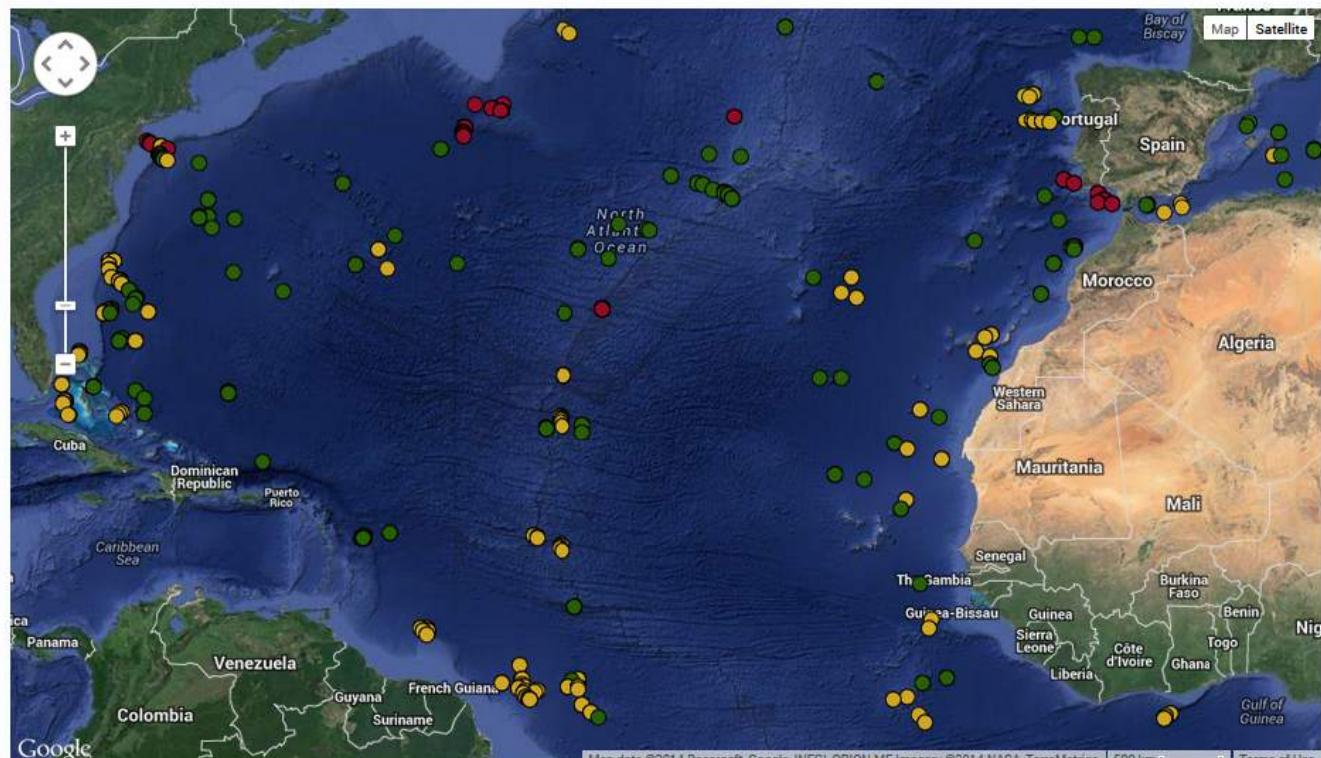
login | de



IODP at MARUM - IODP Bremen Core Repository - Cores at BCR

Cores at BCR

Map of sites at BCR

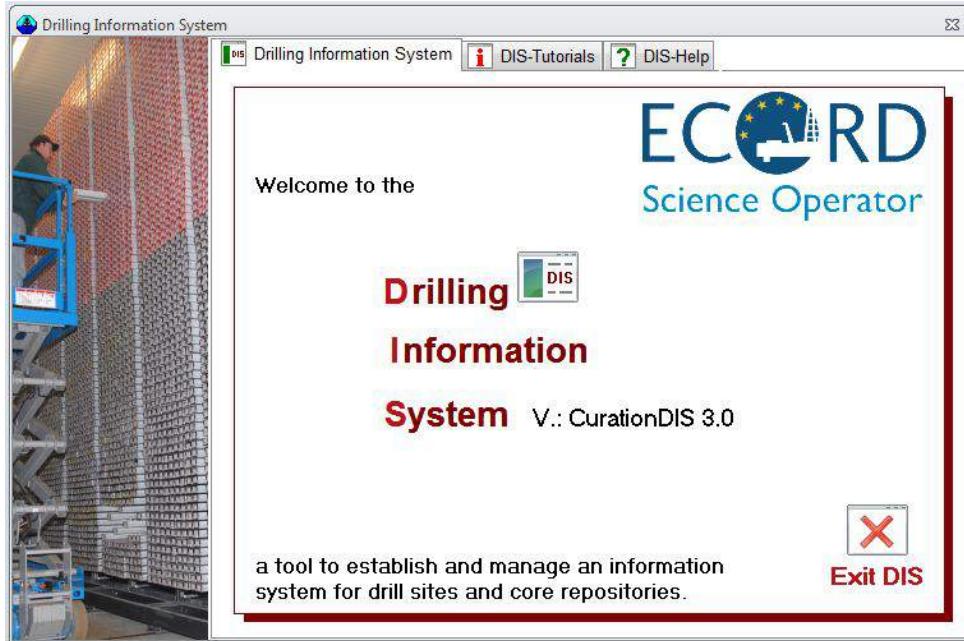


(Please zoom into the area of interest and click on a site to obtain its number and additional information, DSDP = green, ODP = yellow, IODP = red). Please click here for > polar view in Google Earth.

http://www.marum.de/en/Cores_at_BCR.html

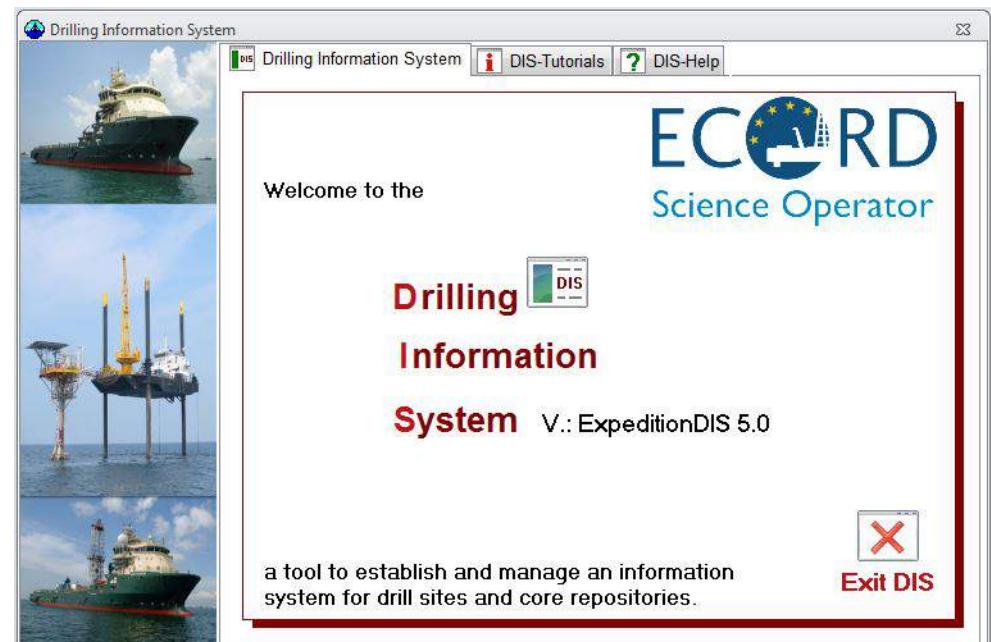
Major achievements in 2015

- Since October 2014 about 30,000 samples taken,
- Aftermath of recent expeditions (339, 342, 347)
 - sampling & XRF / CT scanning
- Digitizing all sample request since 1994 - done
- IGSN numbers for all BCR samples
- All curatorial data available online
- Updates CurationDIS 6.0 - ongoing
- Using SaDR for all requests
- Implementing new program policies & procedures
- Participating in a variety of meetings
- Planning of core workflow and compilation of sampling plans for Exp. 357 (Atlantis Massif) and Exp. 364 (Chicxulub Impact Crater)
- Initiating, designing and running new ECORD Training Course 2015
- Running ECORD Summer School 2015



Repository Database „CurationDIS“

Toward new versions Drilling Information System (DIS)



Expedition Database „ExpeditionDIS“

Digitizing sample request

DIS: data input form for requests and scientists of expedition v.: 3.5

REQUESTS / SCIENTISTS Input-Form

REQUEST SCIENTIST

Expedition: Exp302 Add. Expeditions: REQUESTS - Input

Request: MSP0165 Request Part: A Request Type: Post-Mort Request Code:

Request Date: 2013-10-08 Approval Date: 2013-10-09 Completion Date: 2013-10-28

1. Scientist: Dickson, Alexander 2. Scientist: Cohen, Anthony 3. Scientist: Bagard, Marie-Louise

Purpose: We request samples spanning the Early Eocene Climate Optimum, recovered at Site M0004A by Expedition 302. Previous research by our group (Dickson et al. 2012; Dickson and Cohen. 2012), established the utility of applying Molybdenum (Mo) isotope stratigraphy to the sedimentary deposits at this Site. These analyses have proven useful in helping to decipher the global magnitude of low-oxygen conditions in the Earth's oceans during the Early Eocene greenhouse interval. This sample request aims both to extend the existing Mo-isotope stratigraphy into

MSP0165A.pdf Open Link

Remarks:

Request	Part	Req. Type	Req. Date	Appr.. Date	Comp. Date	1.Scientist	Remarks
MSP0160	A	Post-Mort	2011-07-08	2011-07-12	2011-09-02	Davies	S. Morgan and masters student Hannah Fost...
MSP0160	B	Post-Mort	2012-02-10	2012-02-10	2012-02-24	Davies	also Annette McGrath. Visit. J. Inwood 20-21 ...
MSP0161	A	Post-Mort	2012-07-12	2012-07-12	2012-07-20	McGrath	Annette McGrath visited the BCR from 18 - 20...
MSP0162	A	Post-Mort	2012-08-02	2012-08-02	2012-10-01	Hayashi	pore-water samples were sent directly from ...
MSP0163	A	Post-Mort	2013-02-05	2013-02-09	2013-03-19	Pearson	Clarified by email, one 20cc sample every 2...
MSP0164	A	Post-Mort	2013-04-11	2013-04-11	2013-04-16	Quaijtaal	Fourth investigator Timme Donders. Pilot st...
MSP0164	B	Post-Mort	2013-08-22	2013-08-22	2013-10-01	Quaijtaal	Fourth investigator Timme Donders. Follow...
MSP0165	A	Post-Mort	2013-10-08	2013-10-09	2013-10-28	Dickson	U. Kotthoff and K. Harps-visit 26 June 2014; ...
MSP0166	A	Post-Mort	2014-03-25	2014-04-02	2014-09-01	Kotthoff	after the party, some of these samples were...
MSP1000	A	ShipShip	2006-02-14			SST	
MSP2000	A	ShipShore	2010-07-02			n.a.	
MSP9999	A	ShipShore	2004-08-01		2006-02-16	Asami	

Data Record Form

No. 5454 Co. 5458

CurationDIS v. 6.0 – new subsample tools

DIS: data Input form for samples of expedition v.: 6.0 cur.

SAMPLE **SUB SAMPLES** (circled)

Expedition: 347 Site: 62 Hole: A Report **SAMPLE - Input** DIS

Repository: Request: Part: Series: Code: Observer: Core: Section: Half: Top (cm): Bot (cm): Vol (cc):
 SHI MSP9999 A Undefined IWRH LS 4 1 W 135.0 140.0 0

Remarks:
 2x IWRH mix Top MBSF(m): Top MCD (m): IGSM:
 8.450 8.450 IBCR0347EX72201

IW: Total Amount [mL]: 17 pH: 8.08 Alkalinity [mM/L]: 15.6 Salinity [‰]: 7.8 Sulfide [mM/L]: 0.001 Ammonia [mM/L]: 0.8 Methane [mM/L]:

SAMPLE	LOC.	REQUEST	PART	SERIES	CODE	OBS.	EXP.	SITE	HOLE	CORE	SEC.	HALF	TOP	BOT.	REMARKS
4936865	SHI	MSP9999	A	Undefined	HSCH4	LS	347	62	A	4	2	W	135	140	OSP SLOMP 1870
4936866	SHI	MSP9999	A	Undefined	IWRH	LS	347	62	A	4	1	W	135	140	2x IWRH mix
4936867	SHI	MSP9999	A	Undefined	IWRH	LS	347	62	A	4	2	W	125	130	2x IWRH mix
4936868	SHI	MSP9999	A	Undefined	HSCH4	PG	347	62	A	5	1	W	145	150	OSP SLOMP 1870
4936869	SHI	MSP9999	A	Undefined	HSCH4	PG	347	62	A	5	2	W	145	150	OSP SLOMP 1870
4936870	SHI	MSP9999	A	Undefined	IWRH	PG	347	62	A	5	1	W	135	140	
4936871	SHI	MSP9999	A	Undefined	IWRH	PG	347	62	A	5	2	W	135	140	
4936872	SHI	1830IODP	A	Undefined	DNA	MM	347	60	A	75	3	WR	0	0.5	Sample of plant debris f
4936873	SHI	1830IODP	A	Undefined	DNA	MM	347	60	A	77	4	WR	0	0.5	Sample of plant debris f
4936874	SHI	MSP9999	A	Undefined	HSCH4	PG	347	62	A	6	1	W	145	150	OSP SLOMP 1870
4936875	SHI	MSP9999	A	Undefined	IWRH	PG	347	62	A	6	1	W	135	140	
4936876	SHI	MSP9999	A	Undefined	IWRH	PG	347	62	A	6	2	W	106	111	
4936877	SHI	1878IODP	A	Undefined	OSL	HK	347	62	A	7	4	W	0	10	
4936878	SHI	MSP9999	A	Undefined	HSCH4	PG	347	62	A	7	1	W	145	150	OSP SLOMP 1870

No.: 1647 Data Record [F6] [F9] [F11] [F12] [Del] Sample Interval Form
 Co.: 33453 Save New Edit Cancel Delete Interval: 0.0 cm
 Tot.: 1557516 Lists Order Label Close Count: 1

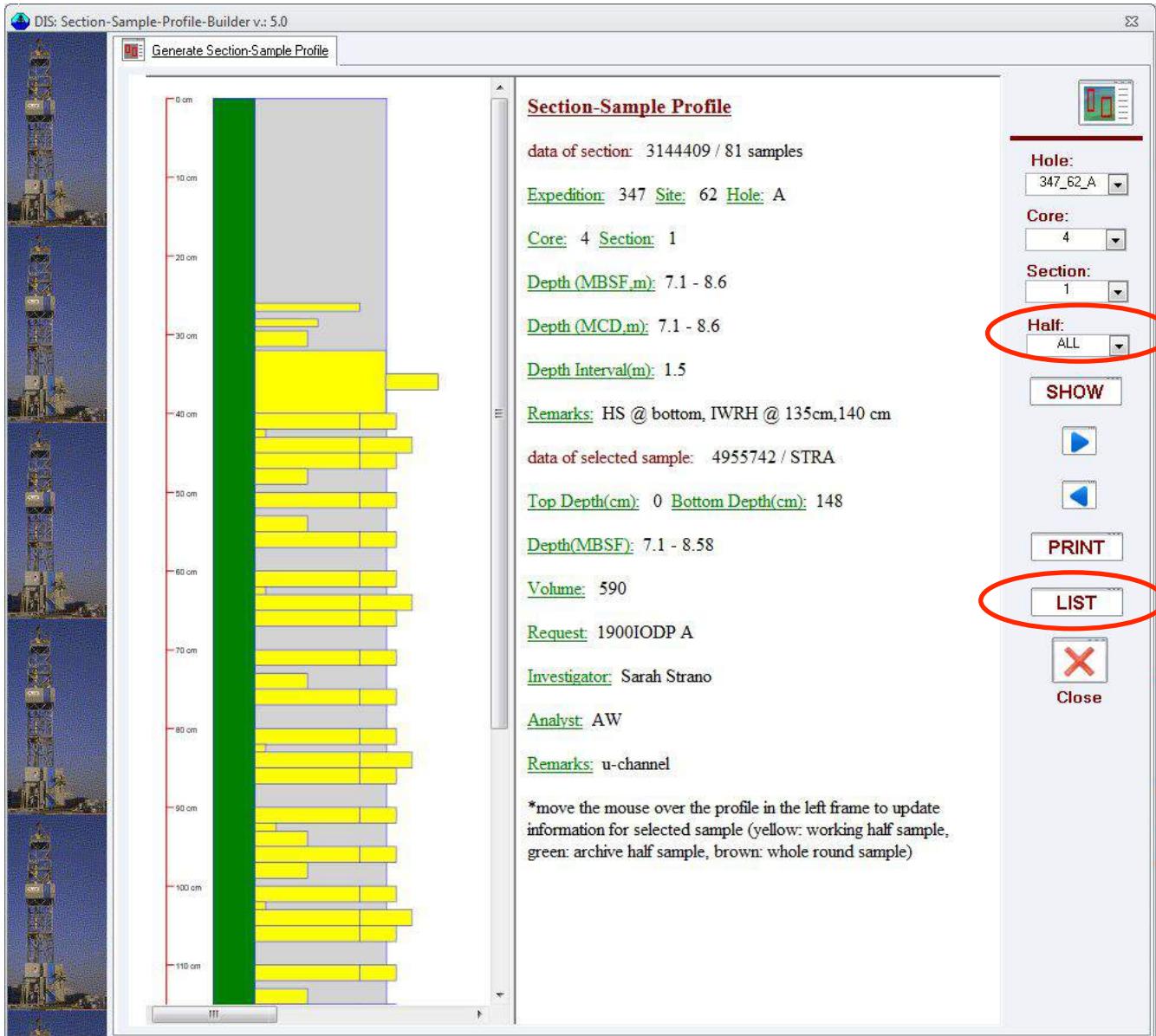
CurationDIS v. 6.0 – new subsample tools

DIS: data Input form for samples of expedition v.: 6.0 cur.

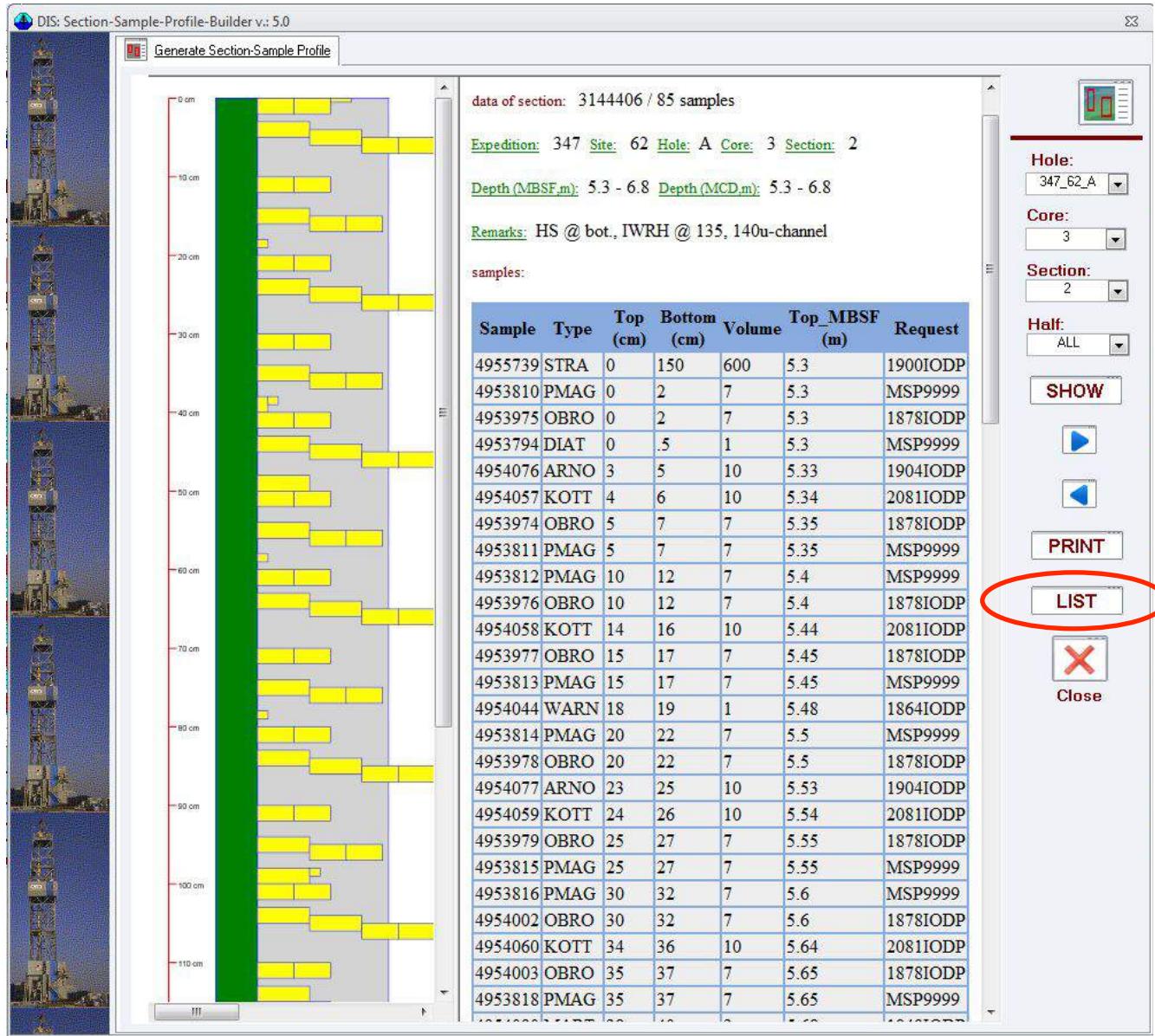
SAMPLE	SUB SAMPLES											
Expedition: 347	Site: 62	Hole: A	Sample: 4936866	SUB-SAMPLES								
Repository: SHI	Subsample: 3	Series: Undefined	Code: Sulf	Vol: 1 mL	Unit: mL	Preservative: ZnAc	Pres. Amount: 400µL ZnAc5%					
Vial:	2.0 mL Eppendorf cup	Vial Mat.:	PP	Storage:	cool (4°C)							
Remarks:	MSP9999											
SITE	HOLE	SAMPLE	SERIES	S-SAMPLE	CODE	VOL.	UNIT	PRES.	PRES. AMOUNT	VIAL	VIAL MAT.	STORAG
62	A	4936866	IW-Splits	1	Sal	0	mL	no prep.		1.5ml Eppendorf cup	PP	consum
62	A	4936866	IW-Splits	2	Alk/pH	0	mL	no prep.		1.5ml Eppendorf cup	PP	cool (4°)
62	A	4936866	IW-Splits	3	Amm	0	mL	no prep.		1.5ml Eppendorf cup	PP	cool (4°)
62	A	4936866	IW-Splits	6	Cat	3	mL	HNO3c.	30µL HNO3 65% s.p.	8.0 ml Nalgene cup	LDPE	cool (4°)
62	A	4936866	IW-Splits	7	An	3	mL	no prep.		8.0 ml Nalgene cup	LDPE	cool (4°)
62	A	4936866	IW-Splits	8	PO4	1	mL	HCLc.	10µL HCL 30% u.p.	6.0 mL Pony vial	PP/PE	cool (4°)
62	A	4936866	IW-Splits	16	d18O	2	mL	No HS	no Headspace	1.8 mL crimp vial	glass	cool (4°)
62	A	4936866	IW-Splits	17	Arch	4	mL			20 ml Scinti	PP	cool, resid
62	A	4936866	Undefined	1	Fe	1	mL	HNO3c.		2.0 mL Eppendorf cup	PP	cool (4°)
62	A	4936866	Undefined	2	Sulf bu	1	mL	ZnAc	400µL ZnAc5%	2.0 mL screw cup bl.	glass	cool (4°)
62	A	4936866	Undefined	3	Sulf	1	mL	ZnAc	400µL ZnAc5%	2.0 mL Eppendorf cup	PP	cool (4°)

No.: 11 Data Record [F6] [F9] [F11] [F12] [Del] Sample Interval Form
Co.: 11 Show All Save New Edit Cancel Delete Interval: 0.0 cm Count: 1 Lists Order Label Close
Tot.: 6170

DIS Section-Sample-Profile-Builder v. 5.0



DIS Section-Sample-Profile-Builder v. 5.0



BCR DIS Internet Interface

Samples by Expedition

DIS View: SAMPLES BY EXPEDITION Displays only data of expeditions not under moratorium! Select expedition 0 to search over all samples!

Select Exp.: Site Hole Select a Field: Apply Show Hide PageSize Export

347 59 A EXPEDITION EXPEDITION Show/Hide All All 100 Set Excel Export

Select a Field: Criterion: Value: Applies: Remove: Please, use the toolbar on the left to apply a filter to the displayed data.

EXPEDITION = Apply Filter Remove Filter

Exp.	Site	Hole	Core	C-Type	Sec.	CC	Top Depth (cm)	Bot. Depth (cm)	Vol.	MBSF Top (m)	MCD Top (m)	Half	Curator	Repos.	Request	Req.Part	Code	Date	Sample	IGSN	Re
347	59	A	1	H	1	no	0	1	0	0.00	0.21	W	JW	SBM	MSP9999	A	DIAT	01-23-2014	4941063	IBCR0347EX0501	To
347	59	A	1	H	1	no	7	9	10	0.07	0.28	W	TB	SBM	MSP9999	D	TOC	01-23-2014	4941212	IBCR0347EXP260	
347	59	A	1	H	1	no	10	10	8	0.10	0.30	WR	LS	SBM	MSP9999	A	JWRH	09-13-2013	4933224	IBCR0347EX99901	No
347	59	A	1	H	1	no	15	17	20	0.15	0.36	W	MS	SBM	MSP9999	H	FORAM	01-23-2014	4941182	IBCR0347EXP1601	
347	59	A	1	H	1	no	62	64	7	0.62	0.83	W	IM	SBM	2114IODP	A	HERR	02-16-2014	4966760	IBCR0347EXQ501	
347	59	A	1	H	1	no	75	77	20	0.75	0.96	W	MS	SBM	MSP9999	H	FORAM	01-23-2014	4941183	IBCR0347EXQ1601	
347	59	A	1	H	1	no	77	80.5	50	0.77	0.98	W	AW	SBM	2062IODP	A	ASH	01-24-2014	4942003	IBCR0347EXHW501	
347	59	A	1	H	1	no	100	101	0	1.00	1.21	W	JW	SBM	MSP9999	A	DIAT	01-23-2014	4941064	IBCR0347EXKLV501	Y
347	59	A	1	H	1	no	112	114	7	1.12	1.33	W	IM	SBM	2114IODP	A	HERR	02-16-2014	4966761	IBCR0347EXZU501	
347	59	A	1	H	1	no	120	121	10	1.20	1.41	W	AM	SBM	MSP9999	A	PP	01-23-2014	4941062	IBCR0347EXZU501	
347	59	A	1	H	1	no	130	131.5	20	1.30	1.51	W	MS	SBM	1887IODP	A	FANG	01-23-2014	4941065	IBCR0347EX3V501	
347	59	A	1	H	1	no	131.5	133	15	1.32	1.52	W	TB	SBM	1984IODP	A	BAUR	01-23-2014	4941264	IBCR0347EXH4601	
347	59	A	1	H	1	no	133	134	2	1.33	1.54	W	IM	SBM	1902IODP	A	MORO	02-16-2014	4966762	IBCR0347EX5QS01	
347	59	A	1	H	1	no	133	134	1	1.33	1.54	W	AB	SBM	1864IODP	A	WARN	01-23-2014	4941320	IBCR0347EXL6601	
347	59	A	1	H	1	no	133	134	1	1.33	1.54	W	AB	SBM	1888IODP	A	GRAN	01-23-2014	4941337	IBCR0347EX57601	
347	59	A	1	H	1	no	135	136.5	20	1.35	1.56	W	MS	SBM	1887IODP	A	FANG	01-23-2014	4941067	IBCR0347EX4V501	
347	59	A	1	H	1	no	136.5	138.5	10	1.37	1.57	W	AB	SBM	2081IODP	A	KOTT	01-23-2014	4941350	IBCR0347EX48601	
347	59	A	1	H	1	no	137	139	8	1.37	1.58	W	WH	SBM	MSP9999	B	PMAG	01-23-2014	4941074	IBCR0347EXHN501	
347	59	A	1	H	1	no	138.5	139.5	20	1.39	1.59	W	TB	SBM	2012IODP	A	GRON	01-23-2014	4941265	IBCR0347EXI4601	
347	59	A	1	H	1	no	140	141.5	20	1.40	1.61	W	MS	SBM	1887IODP	A	FANG	01-23-2014	4941068	IBCR0347EX5V501	
347	59	A	1	H	1	no	141	141	3	1.41	1.62	WR	LS	SBM	MSP9999	A	JWRH	09-13-2013	4935226	IBCR0347EX99901	No
347	59	A	1	H	1	no	141.5	143.5	20	1.42	1.62	W	TB	SBM	1870IODP	A	SLOM	01-23-2014	4941263	IBCR0347EX4601	
347	59	A	1	H	1	no	145	146.5	20	1.45	1.66	W	MS	SBM	1887IODP	A	FANG	01-23-2014	4941069	IBCR0347EX6V501	
347	59	A	1	H	1	no	145	146.5	20	1.45	1.66	W	NX	SBM	1887IODP	A	FANG	01-23-2014	4941073	IBCR0347EXGW501	
347	59	A	1	H	1	no	145	151	5	1.46	1.67	WR	LS	SHI	MSP9999	A	HSCH4	09-13-2013	4935220	IBCR0347EX6001	Lx
347	59	A	1	H	1	no	146	151	5	1.46	1.67	WR	LS	SHI	MSP9999	A	HSCH4	09-13-2013	4935221	IBCR0347EXK6001	Lx
347	59	A	1	H	1	no	147	149	30	1.47	1.68	W	AB	SBM	1872IODP	A	STEP	01-23-2014	4941342	IBCR0347EXA7601	
347	59	A	1	H	2	no	0	1.5	20	1.51	1.72	W	NX	SBM	1887IODP	A	FANG	01-23-2014	4941075	IBCR0347EXPW501	
347	59	A	1	H	2	no	3.5	5	10	1.55	1.75	W	AT	SBM	1870IODP	A	SLOM	01-23-2014	4941123	IBCR0347EXJY501	
347	59	A	1	H	2	no	5	6.5	20	1.56	1.77	W	NX	SBM	1887IODP	A	FANG	01-23-2014	4941076	IBCR0347EXW501	
347	59	A	1	H	2	no	7	8	2	1.58	1.79	W	IM	SBM	1902IODP	A	MORO	02-16-2014	4966765	IBCR0347EX9QS01	
347	59	A	1	H	2	no	7	8	1	1.58	1.79	W	AB	SBM	1864IODP	A	WARN	01-23-2014	4941321	IBCR0347EXO6001	
347	59	A	1	H	2	no	8	9.5	20	1.59	1.80	W	TB	SBM	2012IODP	A	GRON	01-23-2014	4941279	IBCR0347EXY4601	
347	59	A	1	H	2	no	10	10	6	1.61	1.82	WR	LS	SHI	MSP9999	A	JWRH	09-13-2013	4935226	IBCR0347EXR6001	
347	59	A	1	H	2	no	10	11.5	20	1.61	1.82	W	NX	SBM	1887IODP	A	FANG	01-23-2014	4941077	IBCR0347EX4X501	
347	59	A	1	H	2	no	11	13	20	1.62	1.83	W	MS	SBM	MSP9999	H	FORAM	01-23-2014	4941185	IBCR0347EXK1601	
347	59	A	1	H	2	no	13	15	10	1.64	1.85	W	AT	SBM	1909IODP	A	HARD	01-23-2014	4941124	IBCR0347EXKYS1	
347	59	A	1	H	2	no	15	16.5	20	1.66	1.87	W	NX	SBM	1887IODP	A	FANG	01-23-2014	4941078	IBCR0347EX5V501	

ECORD summer schools

- 2007: "Paleoceanography"
- 2008: "The Deep Subseafloor Biosphere"
- 2009: "Geodynamics of Mid Ocean Ridges"
- 2010: "Dynamics of Past Climate Changes"
- 2011: "Subseafloor fluid flow and gas hydrates"
- 2012: "Submarine Landslides, Earthquakes and Tsunamis"
- 2013: "Deep Sea Sediments: From Stratigraphy to Age Models"
- 2014: "Subseafloor Biosphere: Current Advances and Future Challenges"
- 2015: "Ocean crust processes: magma, faults, fluxes, and life"
- 2016: "Submarine Geohazards: Mapping, Monitoring, and Modelling"**



combine

- a practical on IODP style “shipboard” methodologies
- as well as lectures and interactive discussions on the main themes of IODP.

http://www.marum.de/en/ECORD_Summer_Schools.html

NEW

ECORD training course



**IODP-style lab exercises form the foundation
following the pattern of the unique “Virtual Ship” approach
developed for the Bremen ECORD Summer Schools;
Held for the first time March 9 - 13, 2015
Next → March 7 – 11, 2016**



- one-week course
- offers a basic training focusing on IODP core flow procedures,
- preparing participants for sailing in an offshore drillship expedition,
- and instilling them with an appreciation for high standards in all kinds of coring projects.

http://www.marum.de/en/ECORD_Training_Courses.html

Milestones in 2016

- Aftermath of more recent expeditions (339, 342, 347)
 - sampling & XRF / CT scanning
- Updates CurationDIS 6.0 – ongoing
- IGSN numbers for all BCR samples – registration
- Using SaDR for all requests
- Implementing new program policies & procedures
- Participating in a variety of meetings
- Onshore Science Party for Exp. 357 (Atlantis Massif) (Jan/Feb)
- Planning of core workflow and compilation of sampling plans for Exp. 364 (Chicxulub Impact Crater)
- Exp. 364 (Chicxulub Impact Crater) (Apr/May)
- Onshore Science Party for Exp. 364 (Chicxulub Impact Crater) (late Sept/early Oct)
- Running ECORD Training Course 2016 (Mar)
- Running ECORD Summer School 2016 (early Sept)



BCR Budget – FY16

Budget (12 months: 1 Jan - 31 Dec 2016)

	Core Curation	TOTAL
Salary and Fringes 1.6 FTE		\$ 257,848.00
Travel		\$ 4,025.00
Supplies		\$ 9,660.00
Shipping		\$ 20,125.00
Student workers		\$ 16,100.00
CurationDIS update		\$ 6,706.00
SEDIS maintenance 24/7 & upgrades 0.08 FTE		\$ 17,710.00
Total Core Curation		\$ 332,174.00



