ECORD

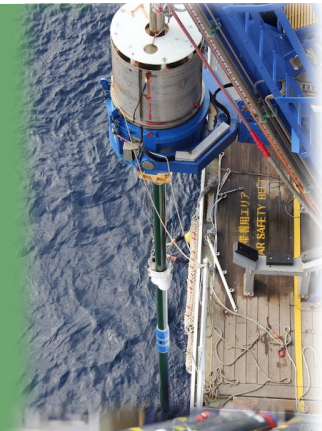
EUROPEAN CONSORTIUM FOR
OCEAN RESEARCH DRILLING

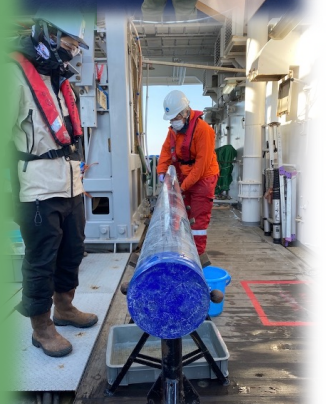
MINUTES

ECORD Council-ESSAC Meeting #11

15-16 November 2022

Gargonza, Italy





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***** *Remote attendance*
****** *Apologies*

15 November 2022

(9:04)
G. Lüniger opened the meeting.

** Moment of silence for Dirk 'Dick' Kroon **

1. INTRODUCTION

1.1 Self-introductions (All)

(9:09)
G. Lüniger let all the participants begin self-introductions.

1.2 Logistical information (A. Camerlenghi)

(9:21)
See agenda book.

1.3 Approval of the agenda (G. Camoin/G. Lüniger/A. Camerlenghi)

(9:26)
G. Lüniger presented the agenda. The ECORD Council approved the agenda.

ECORD Council Consensus 22-11-01:
The ECORD Council approves the agenda of the ECORD Council-ESSAC Meeting #11.

In favour: 15, **Abstain:** 0, **Against:** 0, **Absent:** 0

1.4 Objectives of the meeting (G. Lüniger/A. Camerlenghi/G. Camoin)

(9:28)
G. Lüniger presented the main objectives of the meeting: 1) post-2024 ECORD MoU/Agreement; 2) post-2024 status of EMA, ESO and ESSAC; 3) ECORD-Japan Scientific Ocean Drilling Programme; 4) development of the MSP concept; and 5) projected ECORD participation in post-2024 MSP expeditions.

1.5 Action items done/on hold/in progress since the Council-ESSAC #10 meeting (N. Hallmann)

(9:29)
The status of action items and consensus statements reached since the ECORD Council-ESSAC meeting #10 that was held in October 2021 can be found in the agenda book (pages 8-18).

2. ECORD BUDGET, MEMBERSHIP AND MANAGEMENT

2.1 ECORD News and Budget (G. Camoin)

(9:31)

G. Camoin presented the ECORD news, the budget situation for FY22 (Tables 1 and 2), FY23 (Tables 3 and 4) and budget projections until FY24.

20th anniversary of ECORD in 2023:

- Marine Geology Special Issue: "Twenty years of Mission-Specific Platforms expeditions in scientific ocean drilling"; Editor in Chief: Michele Rebesco; Guest Editors: Angelo Camerlenghi, Gilbert Camoin, Beth Christensen, Ken Ikehara, Gabi Uenzelmann-Neben
- Celebration at the EGU 2023 ECORD-ICDP Townhall Meeting

Extension of IODP and ECORD through 2024: At the moment, ECORD has 15 member countries. Germany still needs to sign the 2019-23 ECORD MoU. Spain is ready to sign an agreement (CNRS-MCIN) and to pay the membership fees to be again a full ECORD member (see ECORD Council Consensus 22-09-03). USFY24 is an 'option' year in Memoranda underlying the JR Consortium for IODP. The ECORD Council supports the extension of the 2019-2023 ECORD MoU through 2024 (see ECORD Council Consensus 21-10-05). A commitment of the ECORD funding agencies for FY24 is needed. The CNRS will produce a draft of the addendum to the 2019-2023 ECORD MoU covering FY24. The ECORD Council decided to extend the terms of EMA (CNRS), ESO (BGS), ESSAC (OGS-Trieste) and the BCR through 2024 (see ECORD Council Consensus 21-10-06).

ECORD membership: In 2019 and early 2020, ECORD was in contact with its past members Israel, Poland and Belgium as well as with Croatia, Greece and Russia concerning a potential membership. Since the start of the COVID-19 crisis there was no contact anymore, but the contact will be started again. In 2021, ECORD has been in contact with the United Arabian Emirates through the Italian community concerning a potential ECORD membership. In 2022, Iceland contacted ECORD.

There are following changes in the ECORD structure:

1) G. Lüniger (GER) is ECORD Council Chair in 2022. S. Guillot (FRA) is incoming ECORD Council Vice-Chair since 1 July 2022 and he will become ECORD Council Chair starting on 1 January 2023. G. Lüniger (GER) will be outgoing Vice-Chair during the first half of 2023.
2) G. Uenzelmann-Neben (GER) will be EFB Chair until 31 December 2022. Alexandra Turchyn (UK) will be Vice-Chair in 2022 before becoming Chair on 1 January 2023.
3) A. Camerlenghi (ITA) is ESSAC Chair and A. Morris (UK) is ESSAC Vice-Chair until 31 December 2024.

Tim Reston (UK) is SEP Co-Chair and Henk Brinkhuis is IODP Forum Chair until 30 September 2024.

The ECORD Council core group consists of five members: the Council Chair, the Council Vice-Chair and three additional Council delegates. The three major contributors will automatically belong to this core group. The current members of this core group are M. Webb (UK), G. Lüniger (GER), S. Guillot (FRA), M. Engelhardt (NOR) and B. Westerop (NLD). M. Engelhardt (NOR) will rotate off and needs to be replaced.

ECORD Council Consensus 22-11-02:
The ECORD Council approves the nomination of Annalisa Iadanza (CNR-Italy) as incoming member of the ECORD Council core group, with her membership effective as of 1 January 2023.

In favour: 15, **Abstain:** 0, **Against:** 0, **Absent:** 0

ECORD partnership: The ECORD Council decided to extend the 2019-2023 ECORD-NSF MoU through USFY24 and to pay half of the current contribution to the funding of the *JOIDES Resolution* in FY24, i.e., $3.5M USD (see ECORD Council Consensus 21-10-07). NSF requested letters of interest from their international partners by 1 August 2022. The letters should have stated the expected yearly level of donation to support JR operations during the potential 2025-2028 period; each berth is estimated to cost $470K USD. ECORD sent this letter to NSF at the end of July.
The 2013-2023 ECORD-JAMSTEC MoU does not include an 'option' year. The ECORD Council decided to extend the 2019-2023 ECORD-JAMSTEC MoU through 2024 (see ECORD Council Consensus 21-10-08).

Cancellation of ArcOP 2022 due to the uncertainty regarding the geopolitical situation (see ECORD Council Consensus 22-06-02). The total claim is of $7,696,058 USD and, in FY21, ECORD paid 6.7M USD to the Swedish Polar Research Secretariat (SPRS) for the implementation of ArcOP (*see below*). This amount does not include the remaining Rosmorport Claim in the amount of approximately $1.7M USD. See ECORD Council Consensus 22-10-01 and 22-10-02 concerning the settlement agreement and the claims.

AMS claim, updated	6 738 131 USD *(whereof 61 987 USD "questionable")*
SPRS claim, updated	957 927 USD
Total claim	7 696 058 USD
Payments by CNRS 2021	- 6 700 000 USD *(whereof AMS has received 6 000 000 USD)*
Net claim	996 058 USD *(whereof 738 131 AMS and 257 927 SPRS)*

COMMENTS on the cancellation of ArcOP:
Equipment has been purchased for ArcOP that can be used in the future (D. McInroy). ECORD could get some money back from Arctic Marine Solutions (AMS) when using the Dina Polaris in the future (G. Camoin).

G. Camoin presented the content of the ECORD Annual Report 2022. The call for contributions will be distributed in mid-November. The deadline for submission of contributions will be on 15 January 2023. The review of all sections will be done until 31 January 2023 and further editing until the end of February. Printed copies will be sent by mid-March 2023.

G. Camoin listed the 2023 ECORD and IODP meetings.
(see https://www.ecord.org/calendar/)

G. Camoin summarized the ECORD FY22 budget situation (Tables 1, 2). At the moment ECORD has 15 member countries. France, Ireland and Spain are paying in euros, Denmark in krones and the UK in pounds. FY21 ended with a positive balance of $22.77M USD, which was carried over to FY22. Together with the FY22 member contributions of $16.34M USD (Table 1), the FY22 income will yield $39.11M USD. The expenses will be of $12.71M USD and include the cancellation costs of IODP Expedition 377: Arctic Ocean Paleoceanography as well as costs related to the Personal Sampling Party of Expedition 386: Japan Trench Paleoseismology. FY22 will finish with a positive balance of $26.4M USD (Table 2).

Table 1: ECORD FY22 member contributions

FY22 Contributions (US$)	
DFG (Germany)	5 600 000
CNRS (France) *	3 146 684
UKRI (United Kingdom) *	3 386 200
Forskningsradet (Norway)	1 100 000
CNR (Italy)	700 000
FNS (Switzerland)	600 000
NWO (The Netherlands)	600 000
VR (Sweden)	400 000
DAFSHE (Denmark) *	145 300
GSI (Ireland) *	120 000
CCOD (Canada)	115 000
ÖAW (Austria)	100 000
FCT (Portugal)	90 000
Academy of Finland	80 000
MCIN (Spain) *	159 000
TOTAL	**16 342 184**
* Contributions in other currencies	

Updated on 2 December 2022.

Table 2: ECORD FY22 budget

ECORD FY22 Budget (US$)		
FY21 balance	22 766 957	
FY22 contributions	16 342 184	
ECORD-NSF MoU		7 240 000
ESO		2 070 253
AMS X377		738 131
SPRS X377		257 927
BGR X377		500 000
OSP-PSP X386		685 556
EMA		196 296
MagellanPlus		136 400
IODP Chairs Support		242 000
ESSAC		190 720
BCR		343 419
Outreach basic		46 550
Outreach TV		35 000
Outreach Officer		30 000
TOTAL	39 109 141	12 712 252
Expected FY22 balance	**26 396 889**	

Updated on 2 December 2022.

G. Camoin summarized the ECORD FY23 budget situation (Tables 3, 4). The FY23 member contributions will be of $14.97M USD (Table 3). Together with the positive FY22 balance the FY23 income will yield $41.37M USD (Table 4). ESO FY23 expenses include the implementation of IODP Expedition 389: Hawaiian Drowned Reefs*.

Table 3: ECORD FY23 member contributions

FY23 Contributions (US$)	
DFG (Germany)	5 600 000
CNRS (France) *	3 390 000
UKRI (United Kingdom) *	1 110 000
Forskningsradet (Norway)	1 100 000
CNR (Italy)	750 000
FNS (Switzerland)	600 000
NWO (The Netherlands)	600 000
VR (Sweden)	400 000
DAFSHE (Denmark) *	150 000
GSI (Ireland) *	120 000
CCOD (Canada)	115 000
ÖAW (Austria)	100 000
FCT (Portugal)	90 000
Academy of Finland	80 000
MCIN (Spain) *	765 000
TOTAL	**14 970 000**
* *Contributions in other currencies*	

Updated on 2 December 2022.

Table 4: ECORD FY23 budget*

ECORD FY23 Budget (US$)		
FY22 balance	26 396 889	
FY23 contributions	14 970 000	
ECORD-NSF MoU		7 000 000
ESO		2 218 705
ESO X-389		TBD
AMS Rosmoport X-377*		1 700 000
EMA		313 075
MagellanPlus		111 600
IODP Chairs Support		200 800
ESSAC		371 260
BCR		395 607
Outreach basic		65 399
Project Manager L2S		118 000
TOTAL	41 366 889	TBD
* *To be negotiated*		

Updated on 2 December 2022.

ECORD Council Consensus 22-11-03:
The ECORD members approve the table of the intended 2023 member contributions as shown below:

FY23 Contributions (US$)	
DFG (Germany)	5 600 000
CNRS (France) *	3 360 000 €
UKRI (United Kingdom) *	900 000 £
Forskningsradet (Norway)	1 100 000
MCIN (Spain) *	750 000 €
CNR (Italy)	750 000
FNS (Switzerland)	600 000
NWO (The Netherlands)	600 000
VR (Sweden)	400 000
DAFSHE (Denmark) *	1 000 000 DKR
GSI (Ireland) *	100 000 €
CCOD (Canada)	115 000
ÖAW (Austria)	100 000
FCT (Portugal)	90 000
Academy of Finland	80 000
TOTAL	**14 970 000**
* *Contributions in other currencies*	

In favour: 15, **Abstain:** 0, **Against:** 0, **Absent:** 0

* See confidential annex.

G. Camoin continued to present the predictions for the ECORD FY23 to FY24 budgets*.

2.2 ESSAC News - ECORD expedition staffing and quotas (A. Camerlenghi)

(10:19)

A. Camerlenghi gave an overview of expedition staffing.

ESSAC membership: New ESSAC delegates are Susann Henkel (Germany) and Matt O'Regan (Sweden). Carlota Escutia will rotate off as soon as the CNRS-MCIN Agreement has been signed.

Staffing of ECORD scientists on IODP Expeditions:

Expedition 391: Walvis Ridge Hotspot: Staffing is completed. Ten ECORD scientists including one Co-chief Scientist were sailing.

Expedition 392: Agulhas Plateau Cretaceous Climate: Staffing is completed. Twelve ECORD scientists including two Co-chief Scientists were sailing.

Expedition 390: South Atlantic Transect 1: Staffing is completed. Eleven ECORD scientists including one Co-chief Scientist were sailing.

Expedition 393: South Atlantic Transect 2: Staffing is completed. Ten ECORD scientists including one Co-chief Scientist were sailing.

Expedition 377: Arctic Ocean Paleoceanography: Staffing is completed. Eighteen ECORD scientists including one Co-chief Scientist were ready to sail. The expedition has been cancelled.

Expedition 397: Iberian Margin Paleoclimate: Staffing is completed. Ten ECORD scientists including two Co-chief Scientists were sailing.

Expedition 398: Hellenic Arc Volcanic Field: Staffing is completed. Twelve ECORD scientists including two Co-chief Scientists are ready to sail in USFY23.

Expedition 395: Reykjanes Mantle Convection and Climate: Staffing is completed. Ten ECORD scientists including one Co-chief Scientist are ready to sail in 2023.

Expedition 399: Building Blocks of Life, Atlantis Massif: Staffing is completed. Seven ECORD scientists including one Co-chief Scientist are ready to sail in 2023.

Expedition 389: Hawaiian Drowned Reefs: Staffing in progress.

Expedition 400: NW Greenland Glaciated Margin: Staffing is completed. Seven ECORD scientists including one Co-chief Scientist are ready to sail in 2023.

Expedition 401: Mediterranean-Atlantic Gateway Exchange: Staffing in progress. Two ECORD Co-chief scientists.

Expedition 402: Tyrrhenian Magmatism and Mantle Exhumation (TIME): Staffing in progress. One ECORD Co-chief scientist.

* See confidential annex.

(10:29)
coffee break
(11:02)

H. Kinkel summarized **statistics concerning the participation of ECORD scientists in IODP expeditions and educational activities**. The graphs will be distributed by ESSAC.

Overall, 408 ECORD scientists sailed (see Table 5; including 62 Special Calls and 37 Co-chief scientists) although ECORD would only have 346 berths according to the MoUs.

Since 2014, 979 participants have been trained in the ECORD Summer Schools and Training Courses. Since 2013, 132 ECORD Scholarships and 68 ECORD Research Grants have been awarded.

Lead-proponents of IODP proposals at SEP since 2013: n = 182, of those 77 ECORD, 58 USA, 16 Japan and 31 others. 77 ECORD: 23 Germany, 22 UK, 10 France and 22 others.
Number of proponents of IODP proposals at SEP since 2013: n = 1751, of those 721 ECORD, 479 USA, 126 Japan and 425 others. 721 ECORD: 180 UK, 168 Germany, 86 France and 287 others.

Table 5: Current quota situation. All expeditions up to Expedition 400 including preliminary staffing of Expedition 389. Excluding postponed Expeditions 387, 388 and 377.

	All expeditions				Quota calculations							
Member	Non-quota Co-Chiefs	Quota Co-Chiefs (JR)	Invited scientists	Special call/IKC	Total berths	Total quota berths	Total non-quota berths	Berth entitlement	Quota difference	% of quota berths	% budget	% difference
France	1	2	72	2	77	74	3	83.3	-9.3	22.16	24.93	-2.78
Germany	11	5	99	13	128	104	24	106.9	-2.9	31.14	32.02	-0.88
UK	7	4	69	25	105	73	32	68.7	4.3	21.86	20.56	1.30
Sum	**19**	**11**	**240**	**40**	**310**	**251**	**59**	**258.9**	**-7.9**	**75.15**	**77.51**	**-2.36**
	0	0	0	0								
Austria	1	0	5	5	11	5	6	1.9	3.1	1.50	0.57	0.93
Canada	0	0	4	1	5	4	1	1.4	2.6	1.20	0.42	0.78
Denmark	1	1	4	0	6	5	1	2.9	2.1	1.50	0.88	0.62
Finland	0	0	1	0	1	1	0	1.5	-0.5	0.30	0.46	-0.16
Ireland	0	0	3	0	3	3	0	2.3	0.7	0.90	0.70	0.20
Italy	1	0	11	7	19	11	8	9.5	1.5	3.29	2.86	0.43
Netherlands	0	0	11	1	12	11	1	10.4	0.6	3.29	3.11	0.18
Norway	0	1	14	1	16	15	1	21.0	-6.0	4.49	6.29	-1.80
Portugal	0	1	2	3	6	3	3	1.7	1.3	0.90	0.51	0.39
Spain	0	0	6	1	7	6	1	0.7	5.3	1.80	0.21	1.59
Sweden	0	0	8	2	10	8	2	9.0	-1.0	2.40	2.69	-0.30
Switzerland	1	0	8	1	10	8	2	11.5	-3.5	2.40	3.43	-1.04
Belgium	0	0	1	0	1	1	0	0.1	0.9	0.30	0.04	0.26
Iceland	0	0	0	0	0	0	0	0.1	-0.1	0.00	0.02	-0.02
Israel	0	0	1	0	1	1	0	0.2	0.8	0.30	0.06	0.24
Poland	0	0	1	0	1	1	0	0.1	0.9	0.30	0.04	0.26
Sum	**4**	**3**	**80**	**22**	**109**	**83**	**26**	**75.1**	**7.9**	**24.85**	**22.49**	**2.36**
	23	**14**	**320**	**62**	**419**	**334**	**85**	**334**	**0**	**100**	**100**	**0**

3. RECENT AND FUTURE MSP EXPEDITIONS

3.1 IODP Expedition 386: Japan Trench Paleoseismology - objectives, operations and outreach (D. McInroy/S. Davies/M. Bednarz/U. Prange)

(11:23)

D. McInroy presented a summary of the Onshore Science Party of Expedition 386: Japan Trench Paleoseismology.

The Onshore Science Party (OSP) comprises three phases:

1) Phase 1 from 14 February to 15 March 2022: hybrid with Japan-based scientists aboard the D/V *Chikyu* and remote participation of everyone else;
2) Phase 2 from 16 March to 14 November 2022: Science Party data review and reporting, assisted by ESO;
3) Phase 3 from 15 November to 6 December 2022: Personal Sampling Party (PSP) aboard the D/V *Chikyu*.

The Editorial Board Meeting will be organised in College Station, Texas, from 6 to 10 March 2023. The end of the moratorium period will be at the end of December 2023. The Expedition Review will be organised together with the EFB Chair. The 2nd post-expedition science meeting will take place in spring-summer 2024.
Outreach activities related to IODP Expedition 386:

- Exp. 386 blog: https://expedition386.wordpress.com/
- Social Media
- News item towards the end of the PSP to attract media attention

Expedition funding:
Additional costs due to the switch to a hybrid-OSP and the requirement for a Personal Sampling Party will be presented on day 2 of the meeting.

See agenda book pages 23-24 for further information about IODP Expedition 386.

3.2 IODP Expedition 389: Hawaiian Drowned Reefs - objectives, operations and outreach (D. McInroy/S. Davies/M. Bednarz/U. Prange)

(11:35)

D. McInroy summarized the scientific objectives, operational planning and permitting.

Operational planning: Co-chief Scientists are Jody Webster (AUS) and Christina Ravelo (USA). Eleven primary sites and nine alternate sites were proposed. The water depths range from 129 to 1234 m. Penetration depths are 45-110 (minimum) mbsf. ESO is aiming to use a seafloor drill as high recovery and high-quality cores can be obtained, and permitting is easier than with a geotechnical vessel with coring rig as the public perception is more acceptable. A Call to Tender has been issued from 14 April to 1 June

2022 and technically compliant bids have been received, but they have been over budget. On 30 June, the drilling budget has been revised and approved by the ECORD Council. The elevated budget includes fuel contingency. A new Call to Tender has been issued and the bids will be assessed in late December. The offshore phase will last up to 60 days and will take place some time between mid-August and end of October 2023 starting in Honolulu, Hawaii. The OSP will be up to four weeks long and will be organised in Bremen early 2024.

Permitting: Paperwork is being updated since 2019 and ESO is interacting with several state and federal agencies. The plan is to submit the paperwork in early 2023.

X-ray CT core scanning: Co-chief scientists and ESO are looking for options for XCT scanning of the cores. The new BGS core scanning facility could be used. A costed proposal will be prepared for ECORD in January 2023. ESO predict an underspend in 2022 and recommend to carry forward the underspend into 2023 for core scanning and expedition contingency (deep water seafloor drill test).

Option for deep water seafloor drill test: The seafloor drill technology could be demonstrated in deep water and hard rock in the vicinity of Hawaii. Once reef coring is finished, 3-4 days could be added at the end of the expedition to prove seafloor drill capability in these environments. This option has been added to the Call to Tender. If feasible, a costed proposals will be prepared for ECORD.

Outreach activities related to IODP Expedition 389:

- Updating communications plan
- Reestablishing contacts for outreach and media

A provisional Science Party has been identified.

See agenda book page 25 for further information about IODP Expedition 389.

DISCUSSION about the staffing of IODP Expedition 389: Hawaiian Drowned Reefs:
ESSAC discussed at its last meeting the staffing and the nomination of a Spanish scientist in the light of Spain's missing contributions and its overquota situation. Some expertise is not needed offshore, but only at a later stage onshore (G. Camoin). Special Calls should be reserved for members who are paying contributions (G. Camoin). The Spanish scientist could apply directly to the Co-chief scientists and operator to get samples as a shore-based collaborator (A. Morris). If the topic is not yet covered by any Science Party member, then it could be done during the moratorium period (A. Morris). In this case, the contribution of the scientist would not be included in the expedition report, but only later in the publications (D. McInroy). Shore-based scientists requesting samples are not listed as participants of the Science Party (A. Voelker). A strict policy needs to be applied. ESSAC will continue its discussions.

3.3 ECORD Facility Board (G. Uenzelmann-Neben)

(12:16)

G. Uenzelmann-Neben gave an update on the ECORD Facility Board (EFB) activities.

The EFB members are 1) the six Science Board members: EFB Chair Gabriele Uenzelmann-Neben (GER), EFB Vice-Chair Alexandra Turchyn (UK), Michele Rebesco (ITA), Yasuhiro Yamada (JPN), Fengping Wang (CHN) and Beth Christensen (USA); 2) the members of the ECORD Vision Task Force: ECORD Council core members, EMA Director, ESO Manager and ESSAC Chair; and 3) NSF and MEXT with one representative each.

Alexandra Turchyn (UK) is EFB Vice-Chair and will replace Gabriele Uenzelmann-Neben (GER) as EFB Chair on 1 January 2023. Yasuhiro Yamada (JPN) and Fengping Wang (CHN) will rotate off on 31 December 2022.

Council Consensus 22-11-04:
The ECORD Council approves the extension of the terms of Michele Rebesco (Italy) and Beth Christensen (USA) as Science Board members of the ECORD Facility Board until the end of FY2024.

In favour: 15, **Abstain:** 0, **Against:** 0, **Absent:** 0

ECORD Council Consensus 22-11-05:
The ECORD Council approves the nominations of Yuki Morono (Japan) and Jody Webster (ANZIC) as incoming Science Board members of the ECORD Facility Board, with their terms starting on 1 January 2023.

In favour: 15, **Abstain:** 0, **Against:** 0, **Absent:** 0

G. Uenzelmann-Neben gave an overview of MSP proposals at the EFB:

637-Full2: New England Shelf Hydrogeology - in the EFB waiting room.

708-Full - Expedition 377: Arctic Ocean Paleoceanography - in the EFB waiting room (2022 cancellation).

716-Full - Expedition 389: Hawaiian Drowned Reefs – scheduled for 2023 (see Agenda Item 3.2).

730-Full2: Sabine Bank Sea Level - in the EFB waiting room. A new Principal Investigator (PI) has been identified.

813-Full - Expedition 373: Antarctic Cenozoic Paleoclimate - in the EFB waiting room.

G. Uenzelmann-Neben summarized MSP proposals at the SEP (see Agenda Item 7):

796-ADP: NADIR: Nice Amphibious Drilling - needs to be revised.

931-Pre: East Antarctic Ice Sheet Evolution - needs to be developed as full proposal.

1003-Pre2: N. CAVA Volcanic Ash - needs to be developed as full proposal.

1005-Full: Sunda Sea Level and Weathering - needs to be revised.

1006-Pre: Mediterranean - Black Sea Gateway Exchange - needs to be developed as full proposal.

1007-Full: Sunda Shelf Carbon Cycling - needs to be revised.

The MagellanPlus Workshop Series Programme will help to get more MSP proposals into the system (see Agenda Item 3.5).

G. Uenzelmann-Neben summarized issues that need to be considered for the future:

- Review process (SEP and EPSP): funding of SSO, SEP and EPSP will end in September 2024
- Fate of existing proposals at SEP and at the EFB: proposals need to be linked to the 2050 Science Framework (addenda have been received for proposals 637-Full2 and 813-Full) and the EFB agreed on the transfer of MSP proposals to an MSP-only phase.
- Programme administration: SSO equivalent
- Future facility board(s) for MSP proposals
- Data management: site survey data, expedition data
- ECORD expedition reports and publications
- Core storage
- Future ESO
- New implementation approaches: regional or technological clustering, collaborations with other platform providers and ICDP, implementation in several phases

G. Uenzelmann-Neben presented her involvement in scientific ocean drilling.

(12:35)
lunch break
(14:04)

Proposal 637-Full2: New England Shelf Hydrogeology

D. McInroy summarized the drilling plan and the costs. The EFB recommended at its last meeting the scheduling of an expedition based on IODP Proposal 637: New England Shelf Hydrogeology in FY24, if budget allows (EFB Consensus 22-09-03).

Water depths:	33 – 79 m
# of sites	2 primary, 2 alternate
Coring strategy	1 hole per site, choose 3rd site at sea
Penetration: (primary sites):	550 mbsf per hole 1650 m total
Lithologies:	Sands, silts and clays
Timing	March – August Avoid hurricanes and winter storms

The drilling plan includes three sites (2 primary and one of the two alternate sites) at water depths of 33-79 m and penetration depths of down to 550 mbsf at each of the three sites. A geotechnical vessel or a large liftboat could be used. D. McInroy presented the cost estimates assuming three holes with wireline logging*.

Permitting is complicated by windfarm activity and needs a minimum six-month notice and ESO would aim for 12 months to de-risk.

ECORD Council Consensus 22-11-06:
The ECORD Council approves the EFB recommendation to schedule an expedition based on IODP Proposal 637: New England Shelf Hydrogeology in FY2024, if budget allows.

In favour: 15, **Abstain:** 0, **Against:** 0, **Absent:** 0

3.4 MSP proposals at SEP (T. Reston)

Postponed. See day 2 of the meeting.

3.5 MagellanPlus Workshop Series (L. Lourens/N. Hallmann)

(14:16)

N. Hallmann presented the composition of the MagellanPlus Steering Committee (SC). The Chair is Lucas Lourens and the Vice-Chair is Johan Lissenberg. Michele Rebesco rotated off and has been replaced by Catalina Gebhardt.

ECORD Council Consensus 22-11-07:
The ECORD Council approves the nomination of Catalina Gebhardt (Germany) as new member of the MagellanPlus Steering Committee, with her term starting in April 2022.

In favour: 15, **Abstain:** 0, **Against:** 0, **Absent:** 0

* See confidential annex.

ECORD and ICDP fund MagellanPlus workshops and travel grants to support the development of new and innovative scientific drilling proposals for all IODP platforms and ICDP. The MagellanPlus workshop programme provides financial support of up to 15 k€ per workshop. Since 2014, 41 MagellanPlus workshops have been organised and 24 IODP pre- and full proposals have been generated. Since 2012, more than 1500 participants from 13 ECORD and 26 non-ECORD countries, of those seven IODP and 19 non-IODP countries, have been involved in MagellanPlus workshops.

The MagellanPlus Steering Committee suggested to issue two calls for workshop proposals with deadlines of 15 January and 15 May 2022 generating MSP drilling proposals addressing the Strategic Objectives of the 2050 Science Framework. The ECORD Council approved a budget increase from 70 k€ to 110 k€ for 2022 (ECORD Council Consensus 21-06-10) in order to fund two additional workshops and to provide more travel grants: 60-75 k€ for regular workshops, 15-30 k€ for exploratory workshops and 20 k€ for travel grants. In 2022, seven workshop proposals have been received and the MagellanPlus Steering Committee decided to fund six workshops. So far, nine workshops have been organised in 2022, and one more workshop will still be held in 2022. Of those, seven are regular workshops to develop a drilling proposal and three are exploratory workshops to bring together scientists who explore how MSPs could be used to address Strategic Objectives of the 2050 Science Framework. Three workshops are already scheduled in 2023. A MagellanPlus call for workshop proposals with a deadline of 15 January 2023 has been issued.

For further information:

- MagellanPlus Workshop Series Programme: https://www.ecord.org/science/magellanplus/

COMMENTS on MagellanPlus workshops:
Proponents of the TIMOR workshop submitted a pre-proposal and proponents of the COSNICA workshop are ready to submit a proposal (W. Piller). A high number of participants attended the IO:DIP workshop and three proposals have been discussed in detail. The SCYLLA proponents plan to identify locations for MSPs as their sites are currently at a water depth below 2500 m (A. Camerlenghi).

4. NEWS FROM ECORD MEMBER COUNTRIES (ECORD Council & ESSAC Delegates)

(14:30)
ECORD Council and ESSAC delegates presented the news from their respective country.

B. Plunger (**Council-Austria**): Austria is committed until the end of 2023. Funding beyond 2023 still needs to be secured. The Austrian community is well organised to move on with the participation to IODP.

W. Piller (**ESSAC-Austria**): Michi Strasser has been Co-chief Scientist on IODP Expedition 386: Japan Trench Paleoseismology. Arianna Valentina Del Gaudio sailed on IODP Expedition 391: Walvis Ridge Hotspot and Walter Kurz has been shore-based scientist on IODP Expedition 390: South Atlantic Transect 1. The MagellanPlus workshop TIMOR has been organised in Vienna in May 2022 and an IODP pre-proposal has been submitted at the October 2022 deadline. The MagellanPlus workshop COSNICA has been organised by Walter Kurz in Graz in September 2022. Gerald Auer organised the exploratory MagellanPlus workshop IO:DIP in Graz in September 2022.

J. Jamieson (**Council/ESSAC-Canada**): A 5-year proposal starting in 2023 with a significant higher funding level had to be signed off at the highest level of the government. Two weeks before signing off the proposal, the war in Ukraine started and priorities changed so that the budget was never approved. In 2023, Canada could provide funding at the current level. A successful session has been organised at the Geological Association of Canada conference highlighting work on IODP samples in Canada. The JR will be twice in St. John's in summer 2023. At this occasion, a press event or reception will be organised. Several students and early-career scientists coming from Europe to Canada who recently sailed asked for funding for post-cruise activities. All funding goes to the ECORD membership so that no funds are available for post-cruise activities. Canada does not fund specific projects, but programmes.

M.-S. Seidenkrantz (**Council/ESSAC-Denmark**): It is assumed that funding will be available in 2023 as at the moment Denmark has no government and no fiscal budget. Funding for 2024 is still unknown. An application has been sent to the Ministry concerning the membership in ECORD; to increase the ECORD membership fees and to propose a membership in ICDP. No funds are available, but the application will be submitted again. The contact at the Ministry left and at the moment it is unknown who took over this position. Paul Knutz will be Co-chief Scientist on IODP Expedition 400: NW Greenland Glaciated Margin. The MagellanPlus workshop 'Northeast Greenland' will be held in Copenhagen in November 2022.

H. Pikkarainen (**Council-Finland**): The ECORD MoU has been signed and Finland is omittedd until the end of 2023. The Research Council is positive towards ECORD, but needs to discuss the commitment for 2024 and post-2024.

J. Virtasalo (**ESSAC-Finland**): The MagellanPlus workshop "Mechanisms of rifting of large continental blocks – a case study at the Baltic Sea" has been organised in Helsinki in December 2021. Currently, a seismic survey is planned in the Baltic Sea to develop a drilling proposal. J. Virtasalo could not attend the Expedition 386 PSP in Japan due to travel restrictions. There is ongoing work on Expedition 386 samples.

F. Lagroix (**Council-France**): The CNRS is very supportive to continue the funding at the current level in 2023 and 2024. The CNRS is also very supportive to the new ECORD-Japan Scientific Ocean Drilling programme. The role of the CNRS in the cancellation of the ArcOP expedition and the Settlement Agreement is acknowledged.

G. Ceuleneer (**ESSAC-France**): An IODP France-ECORD booth has been at the annual meeting of the Association of French Sedimentologists in Brest in September 2022. The French community is strongly involved in the national fleet so that they have less time to be devoted to IODP. French scientists have rapid access to financial support; when they come back from a cruise, they can apply for research funds that they will receive 2-3 months later. The IODP-France post-doc scholarships initiative started in 2014. So far, 26 post-docs have been funded for an average duration of 1.5 years. The purpose of the post-docs is related to boarding (46%), work on recent expeditions (19%) and work on legacy expeditions (35%). Fifteen laboratories in France hosted the post-docs. Tim Druitt will sail as Co-chief scientist on Expedition 398 and Emmanuelle Ducassou will sail as Co-chief scientist on Expedition 401. Matthias Sinnesael from an astronomical observatory in Paris applied for a Special Call for Expedition 395.

G. Lüniger (**Council-Germany**): The German membership is secured at the current level until the end of 2024 as well as the supporting Priority Programme in which about 2.6M € per year are provided for projects related to ICDP, IODP and legacy programmes. Post-2024 is still an open question. Post-2024 will be the next step in cooperation between ICDP and IODP. There will be a unified proposal to fund both programmes under 'Scientific Drilling'.

A. Bornemann (**ESSAC-Germany**): The annual joint IODP/ICDP colloquium with 200 participants has been organised in Potsdam in November 2022. At this occasion, the German community has been informed about post-2024 plans. There is a good number of participants in expeditions, applications, Co-chief scientists, etc.

D. Hardy (**ESSAC-Ireland**): The 2021 financial contribution to ECORD has been delayed due to administrative changes, but the issue has been resolved. One Irish scientist sailed on IODP Expedition 396: Mid-Norwegian Continental Margin Magmatism. Ireland is working on mechansims to provide travel funding to support participation.

A. Iadanza (**Council-Italy**): The Ministry for University and Research has confirmed the annual funding to support the participation to IODP. Normally, 80% of the budget is dedicated to paying the annual contribution to ECORD and 20% are allocated to support the Italian participation in the programme (support of successful applicants, national grants, travels, outreach activities, etc.). Additional funds have been obtained for the next three years, i.e., 2023 to 2025, devoted to implement a research infrastructure project with the prime objective to ensure the implementation of the FAIR data principle. The total funding for IODP is about 3M € in three years to improve the access

to ECORD and ICDP. The Italian 2023 contribution to ECORD has been increased to $750K USD. A further increase in 2024 and 2025 is to be expected. ECORD has been included at the national level in the 7-year term of the National Plan for Research Infrastructures (2021-2027). Italy reaffirms its commitment to ECORD until 2024 and is optimistic concerning the 2025-2028 period.

A. Camerlenghi (**ESSAC-Italy**): The CNR-ECORD Committee for IODP and ICDP is chaired by Elisabetta Erba and Annalisa Iadanza is the Scientific Secretary. So far, seven applications to sail on IODP Expeditions have been received in 2022 and five applicants have been successful. Two Italian Co-chief scientists have been appointed: Nevio Zitellini on JR Expedition 402: Tyrrhenian Continent-Ocean Transition, and Renata Lucchi on JR Expedition 403: Eastern Fram Strait Paleo-archive. In 2022, two MagellanPlus workshops have been organised in Italy: SCYLLA in Bologna in September and VoCS in Lecco in October. The MAREXKUS MagellanPlus workshop will be organised in Rome in March 2023. There are 25 Italian co-proponents and three lead proponents of active drilling proposals across all oceanic basins. Paola Vannucchi, Filomena Loreto and Alessio Sanfilippo are SEP members and Michele Rebesco is EFB member. Three grants for 2-year positions for early-career scientists have been recently assigned to work on IODP data and samples. A booth has been organised at the 91st Congress of the Italian Geological Society in Turin in September 2022.

B. Westerop (**Council-Netherlands**): The MoU is secured until the end of 2023 and ways to fund post-2023 are currently explored.

M. Ziegler (**ESSAC-Netherlands**): The Dutch community is small, but active. Scientists are working on material from past expeditions. Information about IODP and the importance for the Dutch research community has been provided to the NWO.

H. Kleiven (**Council/ESSAC-Norway**): IODP Expedition 396: Mid-Norwegian Margin Magmatism and Paleoclimate Implications was very important for the Norwegian membership. This expedition had great attention and was well communicated at the policy level. The cancellation of ArcOP was difficult. Funding is secured for 2023. A part of the funding comes directly from the Ministry of Oil and Energy and work has to be done to continue or even increase the funding. The new Director of the Research Council is aware of IODP. The Norwegian government has defined the high North as its most important strategic policy area. The government came up with an ocean strategy 'Blue Opportunities' addressing the knowledge building and sustainable development in the region. There is a strong focus on ocean research: mapping and understanding of the continental shelf and the Arctic Ocean. Norway is optimistic about future funding. Some funding needs to be taken for post-cruise activities.

A. Amorim (**Council-Portugal**): Information received per email on 20 December 2022:
"Portugal, according to the MoU (2019 to 2023), commits to pay the annual quota of 90000 USD up to and including 2023 and, although we take into consideration the important role of Portugal's participation in this consortium, we do not yet have, nor can we give, at this moment, indications for future actions.
For this current year of 2022, FCT didn't had the invoice until now, but the payment is already on going."

A. Voelker (**ESSAC-Portugal**): Fatima Abrantes is currently sailing as Co-chief Scientist on IODP Expedition 397: Iberian Margin Paleoclimate. Two Outreach Officers are involved in this expedition; of those one is onshore and visited ten schools reaching about 1000 school kids. The exploratory MagellanPlus workshop "MSP approaches to assessing natural hazards that impact society" has been organised at the University of Lisbon in July 2022. One Special Call scientist was sailing. There is ongoing work on previous expeditions.

C. Escutia (**ESSAC-Spain**): Spain does not sign MoUs anymore, but Agreements. The Ministry is convinced that Spain should be part of IODP. The Spanish community is very interested in IODP.

J. Henderiks (**ESSAC-Sweden**): According to M. Friberg (Council-Sweden), the MSP concept is very clever and will maintain ECORD's independence. Sweden fully supports and applauds the new ECORD-Japan Scientific Ocean Drilling programme. The Swedish Research Council wants to continue funding at the current level. M. O'Regan is the new Swedish ESSAC delegate. Sweden has a small, but active community. The 2022 ESSAC spring meeting was hosted at the University of Stockholm. Swedish scientists are sailing and also working on legacy data.

M. Kern-Lütschg (**Council-Switzerland**): The Swiss participation in ECORD is guaranteed until the end of the current programme in 2023. Since summer 2022, there are ongoing discussions at the Swiss National Science Foundation concerning the post-2023 participation. The aim for the current phase is an extension of the membership by one year with a contribution probably at the same level. Post-2024 funding is still difficult to predict as there are ongoing discussions.

G. Früh-Green (**ESSAC-Switzerland**): The Swiss community is small, but very active. A Swiss Drilling Day has been organised with participation from the joint ICDP and IODP community. A joint IODP-ICDP session has been organised at the 2022 Annual Swiss Geoscience Meeting. A report on the impact of IODP research has been submitted to the Swiss National Science Foundation. A special request for the extension of ECORD to 2024 will be prepared. Discussions have been started about post-2024 funding proposals. At the moment, a low number of participants is recently sailing due to the postponement of expeditions and the COVID-19 restrictions.

M. Webb (**Council-UK**): The funding situation is stable until the end of 2024.

A. Morris (**ESSAC-UK**): The UK has continued great interest in IODP. A. Morris took over from Damon Teagle as the Chair of the Programme Advisory Group of UK-IODP. Jude Coggon is the UK-IODP Knowledge Exchange Coordinator. The UK-IODP Workshop 2022: An Introduction to Scientific Ocean Drilling has been organised in a hybrid-mode in Southampton on 2-3 November. Four of the 2022/2023 MagellanPlus workshops have a lead proponent from the UK.

(15:42)
coffee break
(16:17)

5. IODP NEWS AND ECORD PARTNERSHIP

5.1 IODP Forum: ending IODP (H. Brinkhuis)

(16:17)
H. Brinkhuis summarized the outcomes of the IODP Forum meeting, which was held in Palisades, NY, USA, on 14-15 September 2022.

Consensus Statements of the September 2022 IODP Forum meeting:
https://iodp.org/forum-minutes-and-consensus-items

5.2 Science Support Office (C. Meth)

(16:26)
The tasks of the IODP Science Support Office (SSO; see agenda book pages 37-46) are: 1) to support the JRFB and its advisory panels, including liaison functions with other facility boards, the IODP Forum, science operators and PMOs; 2) to manage proposals and data; 3) to maintain the IODP website, and 4) to provide an IT platform (PDB, SSDB).

Proposal submission history: Since the start of the International Ocean Discovery Program in 2013, 182 new proposals have been received. Of those, 53% have been declined, 20% are under active review at SEP and 13% were forwarded to the Facility Boards for scheduling. An additional 19 proposals carried over from the Integrated Ocean Drilling Program are still active in the system.

C. Meth summarized the proposal statistics (see agenda book pages 47-53). At the moment there are 95 active IODP proposals in the system: 66 JR, 11 *Chikyu*, 13 MSPs and 5 Multiple proposals. Of those, 57 are at the Facility Boards and 38 are at SEP (2 are in the holding bin). The proposals target mainly the Pacific (39) and the Atlantic (23) oceans. ECORD and the USA are nearly equal in the number of lead proponents (ECORD:

37, U.S.: 35, Others: 23). ECORD has the highest number of unique proponents (ECORD: 488, U.S.: 370, Others: 355). Of the 95 active proposals, 57 are full proposals and 23 are pre-proposals, plus nine APL and six umbrella proposals.

5.3 SEP (T. Reston)

Postponed. See day 2 of the meeting.

5.4 *JOIDES Resolution* Facility Board (G. Camoin)

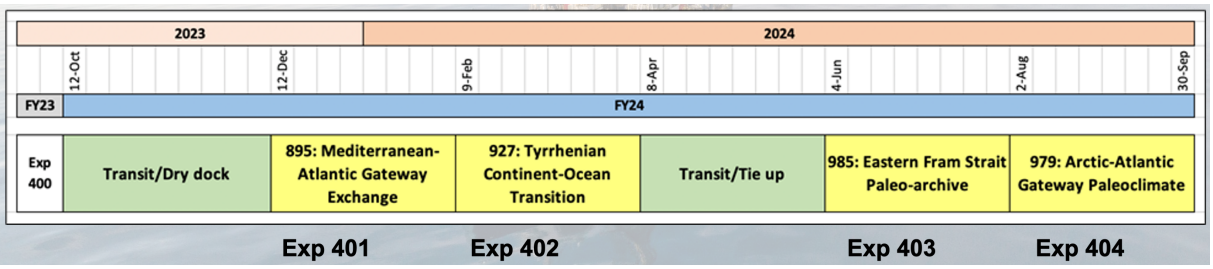
(16:46)

G. Camoin summarized the JR consortium membership: ECORD will be committed until the end of USFY24. ANZIC is committed until the end of USFY22 and is currently working on the renewal. China and India ae committed until the end of USFY23. At the moment, Brazil and South Korea are not members of the JR consortium.

JRFB membership: There are two ECORD JRFB members: Gilbert Camoin presenting the ECORD funding agencies and Steffen Kutterolf as Science Board member. Robert McKay (New Zealand) and Huayu Lu (China) are new JRFB members.

G. Camoin presented the USFY22-23 JR expedition schedule. Seven out of nine expeditions are based on proposals with an ECORD lead proponent. He continued to present the USFY24 JR schedule and some forward-looking steps.

USFY24 JR schedule: Guidance from NSF was to schedule four expeditions of low cost and low operational risk, and to realize that the fourth expedition may have to be canceled due to increased operational costs or start of JR demobilisation. The JR will undergo a mandatory 45-year drydock at the beginning of USFY24. The extent of the USFY24 JR operations will depend on the outcome of the drydock, the financial contributions from the IODP partners, the potential demobilisation of the JR at the end of IODP and increased operational costs. All four expeditions are based on proposals with an ECORD lead proponent.



The JRFB recognizes the importance of international collaboration in the history of scientific ocean drilling. The JRFB supports efforts to extend JR operations beyond 2024. Activities by SEP and EPSP will depend on JR extension vs demobilisation.

If JR operations are extended, the JRFB recommends to transfer existing proposals to the new programme with proponent consent and an addendum stating how the 2050 Science Framework is addressed, and with maintaining the current review/approval status. A call for new proposals would be issued with a deadline of 1 April 2023 and the JR would continue working in the Atlantic in USFY2025.

For further information:

- Minutes of the *JOIDES Resolution* Facility Board May 2022 meeting: https://www.iodp.org/jrfb-minutes/1182-jrfb-2022-may-minutes/file

(16:58)

IMMAGE project

The ECORD Council received a request from lead proponent Rachel Flecker for an 18-month salary for a Project Manager concerning the first land-to-sea project: Investigating Miocene Mediterranean-Atlantic Gateway Exchange (IMMAGE). Rachel Flecker presented the scientific objectives of this project as well as the challenges and opportunities of land-to-sea drilling. The project manager would help with the governance, coordination, integration and communication. Rachel Flecker is Co-chief scientist of IODP Expedition 401 and land drilling is planned with ICDP in Spain and Morocco. A pre-cruise workshop will be held in early 2023.

ECORD Council Consensus 22-11-08:
The ECORD Council approves the funding of a Project Manager position for 18 months (100 000 GBP = about 114 000 €) in support of the implementation of the land-2-sea drilling project entitled: "Investigating Miocene Mediterranean-Atlantic Gateway Exchange" (IMMAGE; lead proponent: Rachel Flecker, UK). This includes the obligation of the lead proponent to report back to ESSAC and Council after completion of funding in order to review current procedures for the implementation of land-2-sea projects.

In favour: 15, **Abstain:** 0, **Against:** 0, **Absent:** 0

5.5 *Chikyu* IODP Board (N. Seama)

(17:43)

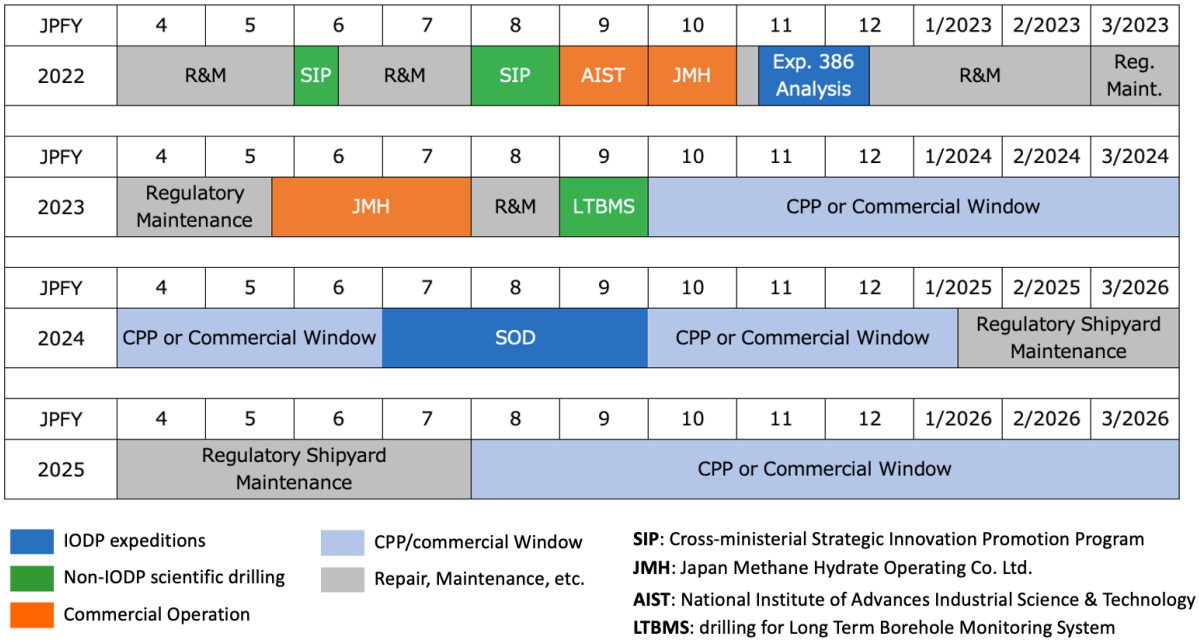
In 2022, two CIB meetings have been held: 1) in Kobe and online on 30-31 August, and 2) online on 18 October.

CIB membership: There are two ECORD CIB members: Gilbert Camoin presenting the ECORD funding agencies and Achim Kopf as Science Board member. The terms of four CIB members have been extended until the end of IODP. CIB member David Goldberg extended his term by one year. The term of the new member Masa Kinoshita will end in July 2025.

N. Seama presented ten out of 13 CIB consensus statements from the August CIB meeting (see agenda book pages 66-67):

- CIB Consensus_0822-03 on the CAB nomination
- CIB Consensus_0822-04 on the KCC report
- CIB Consensus_0822-05 on virtual expeditions
- CIB Consensus_0822-06 on core repositories and curatorial policies
- CIB Consensus_0822-08 on SEP proposal review request
- CIB Consensus_0822-09 on CIB implementation recommendation
- CIB Consensus_0822-10 on APL 939
- CIB Consensus_0822-11 on active *Chikyu* proposals
- CIB Consensus_0822-12 on post-2024 scientific ocean drilling
- CIB Consensus_0822-13 on the next CIB meeting

N. Seama presented the tentative *Chikyu* operational plan for JPFY2022 to JPFY2025:



N. Seama summarized the four CIB consensus statements from the October CIB meeting (see agenda book page 68):

- eCIB_Consensus-1022-01 on IODP proposal 835 for JPFY24 implementation
- eCIB_Consensus-1022-02 on the future of scientific ocean drilling
- eCIB_Consensus-1022-03 on the creation of a Project Coordination Team and APL handling
- eCIB_Consensus-1022-04 on SEP and SSO acknowledgements

For further information:

- Minutes of the CIB meetings: https://www.jamstec.go.jp/cib/

COMMENT:
ECORD contributes $1M USD to the annual funding of the Chikyu. The level of funding is defined each year by the ECORD Council and will be discussed by the ECORD Council in spring 2023.

5.6 PMOs (A. Camerlenghi/H. Masuda)

(17:54)
H. Masuda presented the J-DESC Advisory Structure, J-DESC participation in USFY22-23 IODP expeditions and the KCC-J-DESC virtual expedition concept might be launched in spring 2023 (at the beginning as a domestic programme).

G. Lüniger closed the meeting at 18:00.

Evening invited talk: *Making the Seafloor. Science on making history: exploring new deep territories (B. Martinez Rius)*

16 November 2022

(9:00)
G. Lüniger opened the meeting.

Live connection to the *Chikyu* where the PSP is taking place.

Science Talk: *Expedition 386: Japan Trench Paleoseismology (M. Strasser / K. Ikehara)*

(9:36)
D. McInroy presented the **additional costs for IODP Expedition 386: Japan Trench Paleoseismology**.

The original ECORD-JAMSTEC MoU was based on a 'normal' OSP attended by the ESO and the Science Party, but the personal sample shipping was not included. Additional costs in the amount of $685,556 USD are due to the switch to a hybrid-OSP and the requirement for a Personal Sampling Party (see Table 6).

Table 6: Additional costs for IODP Expedition 386.

OSP additional costs Extra JAMSTEC support Additional MWJ staff and student lab help Additional communications for the OSP OSP sampling shipping	$ 609,799
PSP additional costs Additional MWJ support staff Accommodation on Chikyu for Science Party PSP Covid mitigation (inc. PCR tests)	$ 218,614
MoU balance	$ -142,857
Total	**$ 685,556**

ECORD Council Consensus 22-11-09:
The ECORD Council approves additional costs of $685,556 USD related to the organization of the Onshore Science Party and the Personal Sampling Party of IODP Expedition 386: Japan Trench Paleoseismology.

In favour: 15, **Abstain:** 0, **Against:** 0, **Absent:** 0

6. THE FUTURE OF SCIENTIFIC OCEAN DRILLING BEYOND 2024

6.1 IODP Forum: post-IODP (H. Brinkhuis)

Post-IODP Discussion: The discussion summary from Day 2 is available to download on the Post-IODP Planning section of iodp.org (https://www.iodp.org/post-iodp-planning/updates).

6.2 ECORD-Japan Scientific Ocean Drilling Programm

This agenda item is not outlined in the meeting minutes for confidentiality reasons.

(10:40)
coffee break
(10:50)

ECORD CLOSED SESSION (*ECORD Council members only*)
(10:50)

- ECORD post-2024

(11:55)

Action Item 1: Guido Lüniger
To circulate the consensus statement(s) from the closed session to the ECORD Council members.

(Summary received by email on 10 February 2023)
Discussion of this agenda item was conducted as closed session with only representations of funding agencies present. The main points covered in the discussion are outlined below:

Need and appropriateness of current ECORD entities (EMA, ESO, BCR, ESSAC) for the post-2024 programme?
- Current ECORD entities are well-organized and well-run.
- There is a clear need for all the current ECORD entities - they work extremely well together and have clear responsibilities in support of ECORD.
- ECORD's priority should be to secure the current level of financial contributions to ECORD and so resources for ECORD entities in the post-2024 programme should be planned according to current budgets.
- There is no need at this time to plan for a significant build up in the level of service provided by ECORD entities; if additional funds are available, ECORD can then react.
- It is agreed that ESO, EMA, BCR, and ESSAC are fit for purpose to deliver their services in the post-2024 programme but will require appropriate support from ECORD as plans for the post-2024 programme firm up.

Tendering
- Agreed that if there is a tendering exercise in future for ESO and EMA, they should not take place at the same time; ESO would most likely be tendered first so that EMA could support the ESO tendering process.
- There is a strong case for not changing a winning team via a tendering process when the support provided is regarded as excellent and good-value.
- Tendering is time-critical for all entities and a potential tender process is not without considerable risk to ECORD.
- Starting a tendering process and building a new team of ECORD entities will consume a lot of time in the run up to the start of the post-2024 programme.

ESO
- Previously planned re-tender for ESO was cancelled by Council for good reasons as the cost-benefit appraisal strongly supported retaining the current ESO consortium; if retendering is required by Council for the post-2024 programme, the process should start soon.
- ESO did an incredible job for ECORD with the starting up and closing down of the ArcOP expedition; really no evidence at this time that significant changes with ESO support for ECORD are necessary.
- ESO overhead charges are not unreasonable and there is no evidence that they will be significantly improved via an ESO tendering process.
- If significantly more expeditions need to be implemented in the new post-2024 programme, one bigger ESO operator is favourable over two smaller operators.

- As it stands, the anticipated average of one expedition per year in the post-2024 programme can be supported by ESO; if more expeditions are required, then the current ESO entity should be upgraded instead of contracting a second operator.
- If an upgrade is required in future, ESO should develop a costed proposal for what is needed for consideration by Council.

ESSAC
- Current memberships' 2-year term is considered too short and it should be extended to a 3- year term.
- Continued rotation of the ESSAC office is supported, as to give all countries the chance to be involved.

EMA/CNRS
- EMA provides an excellent level of support to ECORD and has been playing a critical role recently in successfully resolving challenges with ArcOP and in supporting Council in developing plans and partnership arrangements for the post-2024 programme.
- The value to ECORD of the support provided by the current EMA Director, ably supported by the wider EMA/CNRS team, cannot be overstated.
- CNRS provides trusted and highly valuable banking and legal services for ECORD, and remains very committed to support EMA in the post-2024 programme.
- Agreed that any consideration of general changes to EMA should be suspended until after the current EMA Director leaves post by which time CNRS's proposed plans for EMA will be known; at which point Council can consider whether an EMA tendering process is required.
- For the future programme, consideration should be given to supplementing EMA with a distinct data-person.

Situation regarding the US/NSF
- No clear commitment for JR from NSF; still unclear, how long it will be available and under which conditions. Clear gap of service for several years ahead.
- ECORD should not wait for US/NSF to act or to provide new drillship for a new programme.
- ECORD should concentrate on itself, looking ahead to ECORD-Japan programme.
- It should be emphasised, that ECORD continues to develop its own plans, but is not turning away from a future partnership with the US programme.
- We will welcome US partnership with the new ECORD-Japan programme.

General remarks regarding the Council
- If requested by a Council member, the respective alternate member shall be permanently included in any Council business.
- The council chair has the mandate to call for further additional council meetings, if it appears to be necessary.

Agreed consensus statements from closed session discussions:

ECORD Council Consensus 22-11-15: The ECORD Council observes that the current ECORD entities (EMA, ESO, BCR, ESSAC) are fit for purposes and are working very well. Therefore, no significant changes to these entities are recommended at this time. If the funding situation changes significantly in the future, or any other impactful circumstance arises, the need for adjustments to any of the ECORD entities may be considered.

In favour: 15, **Abstain:** 0, **Against:** 0, **Absent:** 0

ECORD Council Consensus 22-11-16: The ECORD Council recognises the professionalism and exceptionally high quality of service that ESO provides to the programme. Going forward into the post-2024 programme, Council agrees to maintain the current ESO entity in its current form, provided that the number of expeditions remains at no more than an average of one expedition per year. If the number of expeditions is expected to increase, ESO should provide Council with a costed proposal for what will be needed to meet the increased requirements.

In favour: 15, **Abstain:** 0, **Against:** 0, **Absent:** 0

ECORD Council Consensus 22-11-17: The ECORD Council explicitly emphasises and appreciates the high level of service that CNRS and EMA consistently provide for the programme. The trusted and highly valuable banking service and legal advice provided by CNRS is highly valued. The Council also stresses the critical role of the EMA Director, Gilbert Camoin, and his EMA/CNRS team in successfully resolving challenges that ECORD has faced (e.g., with ArcOP) and in supporting Council in developing plans and partnership arrangements for the post-2024 programme. Therefore, ECORD Council agrees to maintain EMA in its current form until at least the time when Gilbert Camoin is no longer available to be the EMA Director.

In favour: 15, **Abstain:** 0, **Against:** 0, **Absent:** 0

ECORD Council Consensus 22-11-18: The ECORD Council confirms the suitability of the ESSAC office's rotation and recommends maintaining this principle for a post-2024 programme. However, the Council suggests extending the term of the ESSAC office to three years in the future, instead of two years in the current programme.

In favour: 15, **Abstain:** 0, **Against:** 0, **Absent:** 0

ECORD Council Consensus 22-11-19: The ECORD Council mandates the chairperson of the Council to call for extraordinary meetings, if considered helpful for the renewal of ECORD post-2024 or for the implementation of the envisaged ECORD-Japan programme. Any extraordinary meeting should preferably be held online. If the meeting shall be held in-person, a hybrid option is mandatory.

In favour: 15, **Abstain:** 0, **Against:** 0, **Absent:** 0

Action Item 2: Guido Lüniger
To get the 2019-2023 ECORD MoU signed by the DFG.

Action Item 3: EMA and SSO
To explore the services that the current Science Support Office in San Diego, USA, could provide for the post-2024 ECORD-Japan ocean research drilling program, and to estimate the associated costs.

(12:46)
lunch break
(14:33)

Action Item 4: ESSAC
To establish a calendar of national meetings and other potential occasions where the post-2024 ECORD-Japan programme can be presented.

3.4 + 5.3 SEP report (T. Reston)

(15:39)
T. Reston gave a panel update. SEP is responsible for the evaluation of all IODP proposals in terms of scientific excellence as well as completeness and quality of the site characterization data packages.

SEP membership: The Science Subgroup has 31 members and the Site Subgroup has 21 members. The SEP Science Co-chairs are Kathleen Marsaglia (USA) who started on 1 April 2022 and Tim Reston (UK) who started his term in December 2021. Pre-SEP introductory meeting are organised for new panel members and a similar meeting is held before every SEP meeting.

Five watchdogs with expertise in science, site survey data and operation are responsible for the evaluation of an IODP proposal. General evaluation criteria for IODP proposals include 1) wide interest of scientific questions, 2) compelling and feasible scientific proposal, 3) advancement of the IODP Science Plan and 4) engagement of new

communities or other science programmes. Site Characterization Classification to assess if the reviewed data are sufficient to support the scientific objectives.

So far, SEP organised four virtual meetings in June 2020, January 2021, July 2021 and January 2022. The most recent meeting in June 2022 was hybrid.

At the January 2022 SEP meeting, eleven proposals have been reviewed, of which seven were JR proposals, one *Chikyu* and four MSP. The results of the January 2022 SEP meeting are shown in Table 7. MSP proposals 1003-Pre2: N. CAVA Volcanic Ash and 1006-Pre: Mediterranean - Black Sea Gateway Exchange need to be developed as full proposals. MSP proposal 1005-Full: Sunda Sea Level and Weathering needs to be revised. MSP proposal 995-Full: Canterbury Bight Offshore Freshened Groundwater was declined.

Table 7: Outcomes of the January 2022 SEP meeting. Yellow: MSP proposal. Blue: JR proposal.

969	Full	JR	Guangfa Zhong	Huatung Basin Mesozoic Ocean Relics	Decline
992	Full	JR	Peter Haeussler	Prince William Sound Subduction and Climate	Revise
995	Full	MSP	Aaron Micallef	Canterbury Bight Offshore Freshened Groundwater	Decline
990	Full2	JR / NR Chikyu	Rie Nakata	Hyuga-Nada Observatory	External review
971	Full2	JR	Alessio Sanfilippo	Kane Megamullion Deep Drilling	JRFB. Rated Good
885	Add	JR	Jangjun Bahk	Ulleung Basin Landslides	JRFB. Rated Good
941	Add	JR	Yasuhiko Ohara	Godzilla Megamullion Lithosphere Architecture	External Review (dec-ision at last meeting)
1004	APL2	JR	Uisdean Nicholson	Nadir K-Pg Impact Crater	Revise
1003	Pre2	MSP	Ann Dunlea	N. CAVA Volcanic Ash	Revise to Full
1005	Full	MSP	Peter Clift		Revise
1006	Pre	MSP	Wout Krijgsman	Mediterranean-Black Sea Gateway Exchange	Revise to Full

At the June 2022 SEP meeting, three full proposals, one APL and two addenda at the request of the EFB have been reviewed. The results of the June 2022 SEP meeting are shown in Table 8. Proposals 637, 813 and 1007 are MSP proposals. MSP proposal 1007-Full: Sunda Shelf Carbon Cycling needs to be revised.

Table 8: Outcomes of the June 2022 SEP meeting. Red: EFB special request, green: back from external review, orange: revised, blue: new proposal.

ID	Type	PI	Short Title	Recommendation
637	Add8	Brandon Dugan	New England Shelf Hydrogeology	Good for SF2050
813	Add2	Trevor Williams	Antarctic Cenozoic Paleoclimate	Good for SF2050
941	Full2	Yasuhiko Ohara	Godzilla Megamullion Lithosphere Architecture	Holding Bin
990	Full2 (Add)	Rie Nakata	Hyuga-Nada Observatory	Holding Bin
1004	APL3	Uisdean Nicholson	Nadir K-Pg impact Crater	Holding Bin
1007	Full	Zhifei Liu	Sunda Shelf Carbon Cycling	Revise

T. Reston summarized MSP proposals currently at SEP that may be forwarded to the EFB:

#	type	platform	Last reviewed	Lead	Title	Status / last review
796	ADP	MSP	6/2015	Achim Kopf	NADIR – Nice Amphibious Drilling	Revise to L2S proposal
931	Pre	MSP	1/2018	Amelia Shevenell	East Antarctic Ice Sheet Drilling	Revise to Full
1003	Pre2	MSP	1/2022	Ann Dunlea	N. CAVA Volcanic Ash	Revise to Full
1005	Full	MSP	1/2022	Peter Clift	Sunda Shelf Sea Level	Revise
1006	Pre	MSP	1/2022	Wout Krijgsman	Mediterranean-Black Sea Gateway Exchange	Revise to Full
1007	Full	MSP	6/2022	Zhifei Liu	Sunda Shelf Carbon Cycling	Revise
1008	Pre	MSP	1/2023	Eberhard Gischler	Belize Barrier Reef Postglacial Sea-level	not yet reviewed
1009	Pre	MSP	1/2023	Uwe Balthasar	Timor Sea Paleoenvironment	not yet reviewed

Proposals to be discussed at the January 2023 SEP meeting are shown in Table 9.

Table 9: Proposals to be discussed at the January 2023 SEP meeting. Yellow: MSP proposal. Blue: JR proposal.

ID	Type	PI	Short Title	Ship	Theme	Destination
941	Full2 Add2	Yasuhiko Ohara	Godzilla Megamullion Lithosphere Architecture	JR	EC	Decline/ HB/JRFB
992	Full2	Peter Haeussler	Prince William Sound Subduction and Climate	JR	CO	Decline/ External Review
1002	Full	Taryn Noble	Totten Glacier Climate Vulnerability	JR	CO	Decline/ Revise/ External Review
1004	APL3 Add	Uisdean Nicholson	Nadir K-Pg impact Crater	JR	CO	Decline/ HB/JRFB
1008	Pre	Eberhard Gischler	Belize Barrier Reef Postglacial Sea-level	MSP	CO	Decline/ Revise (Pre2 or Full)
1009	Pre	Uwe Balthasar	Timor Sea Palaeoenvironment	MSP	CO	Decline/ Revise (Pre2 or Full)

The next (hybrid) SEP meeting will be held in La Jolla, CA, USA, in January 2023.

7. ECORD & JAPAN FACILITIES

7.1 ECORD Petrophysical Consortium - EPC (S. Davies)

(15:53)

S. Davies presented the activities of the European Petrophysics Consortium (EPC).

Staff updates: Katharina Hochmuth left the EPC team and has been replaced by Andrew McIntyre. Tim van Peer joined the team as Senior Petrophysicist.

IODP Expedition 386: Japan Trench Paleoseismology: EPC remotely supported the offshore phase of Expedition 386 as well as the OSP aboard *Chikyu*. Recently, EPC supported the onshore Personal Sampling Party (PSP).

IODP Expedition 377: Arctic Ocean Paleoceanography (ArcOP): EPC personnel planned and prepared for Expedition 377 prior to its postponement. EPC worked on new logging equipment and a revised logging protocol for ArcOP.

IODP Expedition 389: Hawaiian Drowned Reefs: Planning for this expedition has been started and EPC explored the Co-chief scientists' requests for data acquisition. EPC will work on aspects of the permitting together with the wider ESO.

Equipment: New slimline logging tools and equipment are a good investment for future. They are suitable for ArcOP, but also for other potential expeditions. A penetrometer and a shear vane have been purchased.

ECORD Summer School: An online logging summer school has been organised on 4-8 July 2022: Downhole Logging for IODP Science. Participants from eight countries by institution and eleven countries by nationality attended this online course. A ship-to-shore event and "petrophysics in the kitchen" have been organised. In-person courses work better than online courses with a global audience. The attendees wish to learn more about IODP. EPC staff participated in the 2022 Bremen Summer School.

2023: EPC will get prepared for the offshore phase of IODP Expedition 389: Hawaiian Drowned Reefs and the expedition based on IODP Proposal 637: New England Shelf Hydrogeology. An in-person summer school will be organized in 2023.

For further information:

- Short EPC report: agenda book pages 72-73

(16:06)
coffee break
(16:31)

7.2 Bremen Core Repository - BCR (U. Röhl)

(16:31)

U. Röhl gave an update on the Bremen Core Repository (BCR). The BCR currently archives about 164 km of cores from the Atlantic Ocean, Arctic Ocean, Mediterranean Sea, Black Sea and Baltic Sea. Core curation includes the documentation, preservation and protection of the cores as well as the promotion of the responsibility of taking samples from the cores for scientific purposes. The MARUM is also involved in data management tasks, outreach and training.

Activities over the last year: The BCR hosted two Sampling Parties for IODP Expeditions 396 and 391. A high level of sampling has been performed during the pandemic. From September 2021 to October 2022, 36,378 samples for 243 requests have been taken. The configuration and establishment of a new database system will start at the end of November 2022. Remote support has been provided for IODP Expedition 386: Japan Trench Paleoseismology. Currently, BCR staff is participating in the Expedition 386 Personal Sampling Party (PSP) onboard *Chikyu*. Preparation for Expedition 377 has been done and currently BCR staff is involved in the preparation for IODP Expedition 389: Hawaiian Drowned Reefs. Visitors and tours are back; a prominent visitor in early July 2022 was Prince Albert II from Monaco. The 14th ECORD Summer School "Sea level, climate variability, and coral reefs" was held on 5-16 September 2022 with 30 participants from 13 different countries.

Milestones in 2023: The BCR will host 3-5 Sampling Parties for IODP-JR Expeditions with about 20 km of core. A high level of sampling will be performed on cores from more recent expeditions (Expeditions 396, 391, 390/393). The 6th ECORD Training Course and 15th ECORD Summer School will be organized in 2023. The BCR will get prepared for the offshore phase of IODP Expedition 389: Hawaiian Drowned Reefs.

The BCR is well prepared for post-2024. Additional racks have been added to the current IODP reefer, which has now a remaining capacity of 34 km. The new building including a new reefer is under construction and anticipated to be completed late 2023.

U. Röhl presented the draft MoU regarding the storage, archiving, and sampling of NSF-owned cores.

For further information:

- Short BCR report: agenda book pages 74-75

U. Röhl presented her involvement in scientific ocean drilling.

ECORD AWARDS

Gabi Uenzelmann-Neben received the 9th ECORD Award and Ulla Röhl received the 10th ECORD Award in recognition of their achievements and support for IODP and ECORD.

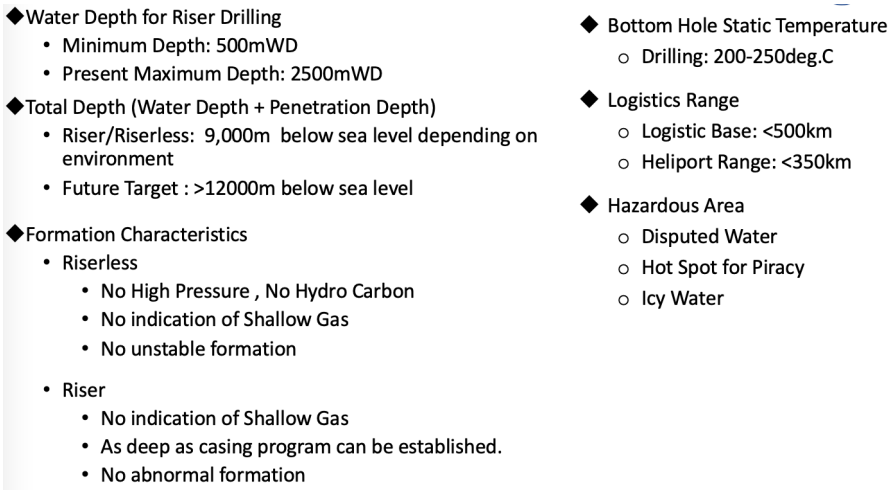
7.3 JAMSTEC Facilities (N. Eguchi/S. Kuramoto)

(17:00)

N. Eguchi presented the JAMSTEC facilities. JAMSTEC has six research vessels among which are *D/V Chikyu* and *R/V Kaimei*.

D/V Chikyu is a fifth-generation drilling vessel that was delivered in 2005 and can perform riser as well as riserless drilling. N. Eguchi presented the general arrangement and the lab facilities. Present drilling capabilities include a maximum riser drilling water depth of 2500 m and a maximum total depth of 9000 m from sea level. *D/V Chikyu* is equipped with a dynamic positioning system as well as an ROV with a maximum operation depth of 3000 m water depth. An underwater TV system can be used to reenter a hole and in deeper water than the ROV can access. A variety of special scientific wellheads, accessories and special scientific completion systems have been developed. *D/V Chikyu* has experience with high current operations, ultra-deep drilling and hydrothermal drilling.

N. Eguchi summarized the limitations of the *D/V Chikyu*:



R/V Kaimei is equipped with a three-mode, multi-channel seismic survey system, a Boring Machine System (BMS), a Power Grab, a Giant Piston Corer (GPC; 40 m), a CTD/water sampling system and an ROV. The GPC has a main cable of 12,000 m. The maximum water depth of the BMS is 3,000 m. The schedule of the *R/V Kaimei* is full so that the vessel needs to be booked a couple of years ahead.

7.4 Kochi Core Center - KCC (N. Eguchi)

(17:25)

Yusuke Kubo is the IODP curator at the Kochi Core Center (KCC). N. Eguchi presented the role and responsibility of the KCC. The KCC currently archives about 146 km of cores from the Western Pacific and the Indian Ocean. In December 2022, about 810 m of IODP Expedition 386 cores will be stored at the KCC and IODP Expedition 392 cores will be delivered to the KCC in early 2023. Since the start of the pandemic in early 2020, the number of visitors declined and only Japanese visitors came to the KCC. Sampling resumed later in 2020 and was back to the pre-pandemic level. The main reefer is >90% full with ODP and IODP cores. DSDP and Expedition 386 cores are stored in the old reefer. A tsunami-hazard protection needs to be installed in the old reefer. A KCC-J-DESC virtual expedition concept is under development where core repositories as virtual

drilling platforms are hosting virtual expeditions using legacy cores.

KCC follows the IODP Forum Consensus 9 from the April 2022 meeting and supports the current distribution of core storage post-IODP with a common set of curatorial and sampling policies.

DISCUSSION about post-IODP core storage:
There is a draft MoU between ECORD and NSF to maintain the cores as currently distributed at no cost for NSF (G. Camoin). If ECORD would decide not to sign this MoU, the NSF-owned cores would need to be transported back to the USA. All scientists can use legacy cores independent of where they are located (G. Camoin). Initially, NSF wanted to provide funds, however, in this case they would need to reopen a competition (G. Camoin). The wish of the international community is to keep the current geographical distribution of the cores. The BCR is largely filled with JR cores, but in the future, there will not be a compensation to maintain the cores (G. Camoin). The benefit would be that ECORD scientists would have easier access to the cores when they stay in their current core repository (G. Camoin). This would be a good message to the international community. There is a high risk for the cores during the transport (U. Röhl).

ECORD Council Consensus 22-11-10:
The ECORD Council agrees on the principle outlined in the draft MoU between the *Centre National de la Recherche Scientifique* (CNRS) on behalf of ECORD, and the National Science Foundation (NSF) regarding storage, archiving, and sampling of 1) NSF-owned cores recovered during the Deep-Sea Drilling Program (DSDP) and Ocean Drilling Program (ODP), and 2) NSF-owned cores recovered by the *JOIDES Resolution* during the Integrated Ocean Drilling and International Ocean Discovery Programs (both IODP). It is mutually agreed between NSF and CNRS/ECORD that these cores are to be stored, archived, and available for sampling at no cost to NSF, in order to preserve the core distribution amongst the three current core repositories and thus to serve the needs of the global science community.
The ECORD Council mandates the CNRS to validate and sign an MoU according to these principles.

In favour: 15, **Abstain:** 0, **Against:** 0, **Absent:** 0

8. EDUCATIONAL ACTIVITIES

8.1 ECORD Summer Schools and Training Course/ECORD Scholarships (H. Kinkel/U. Röhl/S. Davies)

8.2 ECORD Distinguished Lecturer Programme (H. Kinkel)

8.3 ECORD Research Grants (H. Kinkel)

(17:48)

Since 2014, 979 participants have been trained in the ECORD Summer Schools and Training Courses. Since 2013, 132 ECORD Scholarships and 68 ECORD Research Grants have been awarded.

ECORD Summer Schools and Scholarships: Three ECORD Summer Schools have been organised in 2022:

1) "Downhole Logging for IODP Science" was held online from 4 to 8 July. About 15 participants attended this summer school.

2) The 2022 Urbino Summer School in Paleoclimatology was held from 7 to 20 July. Fourty-six participants attended this summer school and fifteen scholarships were funded.

3) The 2022 Bremen Summer School with the topic "Sea level, climate variability, and coral reefs" was held at MARUM from 5 to 16 September. About 30 participants attended this summer school and six scholarships were funded.

Besides supporting the three traditional ECORD Summer Schools in Bremen, Urbino and Leicester, ESSAC supported participation of young scientists at the GLAcial Sedimentology School (GLASS), which was held at the Oregon State University, USA, from 23 to 27 May 2022. Twenty-three participants attended this course and eight scholarships were funded. In addition, ESSAC will support participation at the ANZIC Marine Geoscience Masterclass, including the funding of two scholarships.

In total, about 100 participants have been trained in ECORD Summer Schools and 29 ECORD Scholarships were given in 2022. The topic of the 2023 Bremen Summer School is "From Greenhouse to Icehouse - chemistry of the Arctic Ocean and global climate history". The 2023 Summer School "Downhole Logging for IODP Science" will be held in-person. The Urbino Summer School in Paleoclimatology and GLASS want to continue.

ECORD Training Course: The 2022 ECORD Training Course could not be organised due to the COVID-19 situation. The 6th ECORD Training Course "Shipboard Simulation" will be organized at MARUM in spring 2023.

Distinguished Lecturer Programme (DLP): A call has been issued to launch a new DLP starting in 2023. The lecturers will cover the four themes of the Science Plan. The lectures can also be held online and they will be recorded so that an archive of lectures can be created.

ECORD Research Grants: A call for ECORD Research Grants will be issued soon.

9. OUTREACH ACTIVITIES

9.1 ECORD outreach resources and activities (M. Bednarz/H. Kinkel/U. Prange)

(17:57)

M. Bednarz summarized ECORD Outreach Task Force (OTF) activities on behalf of the ECORD OTF.

The ECORD Sphere has been displayed at the Italian Geological Society (SGI) and Italian Society of Mineralogy and Petrology (SIMP) joint congress "Geosciences for a sustainable future", which has been organised in Turin, Italy, from 19 to 21 September 2022. The ECORD Sphere has also been presented at the Trieste Next Science Festival in Trieste on 22-24 September 2022. A version for the ECORD website is planned to introduce the content of the ECORD Sphere. The ECORD Sphere will be shown to the Gargonza meeting participants.

Permanent and long-term exhibitions: 1) ECORD will provide various resources and organise different events during the about 10-year-long exhibition "Planet Earth", which is planned from 2022 to 2032 at the Natural History Museum in Vienna. The pandemic delayed this exhibition. An event for media and VIPs is planned for the opening day in February 2023. 2) The about 1-year-long exhibition "CHANGE NOW - Ships change the world" at the German Maritime Museum has been organised from 24 February to 31 July 2022. ECORD provided the ACEX core replica and further scientific information. Guided virtual tours will be available until the end of 2024. 3) A permanent exhibition focused on lab settings and microscopic set up is planned at the German Maritime Museum with an opening in mid-2024. At this occasion, ECORD will provide core replicas, coral models and microscopic photographs.

IODP Expedition 389: Hawaiian Drowned Reefs: The ECORD and ANZIC outreach teams met on 22 November 2022 to discuss outreach activities.

IODP Expedition 398: Hellenic Arc Volcanic Field: ECORD provided funding in the amount of 11,500 € and supported the USSSP outreach activities in Santorini, Greece. 3D models of microfossils, posters and a 3D bathymetric map have been printed and ECORD will keep these materials. An IODP exhibition has been organised from 21 to 25 November 2022 including lectures on IODP. The K-Pg core replica was loaned for the exhibition.

Conferences and meetings: Planning for the AGU 2022, EGU 2023 and INQUA 2023 is in progress.

COMMENT on outreach activities related to IODP Expedition 398:
The funding has been taken from the EMA budget (G. Camoin).

8. EDUCATIONAL ACTIVITIES

8.4 J-DESC educational activities (S. Saito/H. Masuda)

9. OUTREACH ACTIVITIES

9.2 J-DESC outreach resources and activities (S. Saito/H. Masuda)

(18:17)
H. Masuda presented J-DESC educational and outreach activities.

SCORE (Chikyu **S**hallow **CORE** Program) is a non-IODP, short-term, piston-coring programme that has been initiated in 2017. In 2021, J-DESC called graduate students to participate in a SCORE expedition as a member of a Science Party, and six students sailed on a SCORE expedition in August 2021. Of those, two sailed on IODP Expedition 390/393.

The J-DESC Core School provides various skills for analysing core samples to students and young scientists. A Basic Core Analysis Course with 12 participants has been organised from 16 to 19 August 2022. A Microfossil Course and an Isotope Analysis Course are planned in March 2023.

Travel support is provided to students for legacy core sampling at the KCC.

The J-DESC workshop "Prospects of Scientific Ocean Drilling towards the post-IODP era" has been organised online for the science community on 3-4 March 2022, and 275 people participated. J-DESC held the online symposium "For the Future of Anthropocene" for the public on 14 March 2022 where about 100 people participated. Another symposium entitled "Future of Scientific Drilling" is planned in Tokyo on 14 January 2023.

A promotional video "Scientific Drilling and the future" has been produced: https://www.youtube.com/watch?v=xC2KTgh_0Ww
An English version is in production.

AOB

(18:26)
A European Marine member on the Editorial Board of the *Scientific Drilling* journal needs to be replaced.

ESSAC will decide soon concerning the establishment of a working group on virtual expeditions.

Action Item 5: ESSAC
To establish a working group on Virtual Expeditions.

10. CONCLUSIONS

10.1 Summary of outcomes (G. Lüniger/A. Camerlenghi/G. Camoin)

(18:30)
The list of action items and consensus statements will be sent by email.

10.2 Next ECORD Council-ESSAC meetings (S. Guillot/G. Lüniger/A. Camerlenghi)

(18:31)

ECORD Council Consensus 22-11-11: The ECORD Council decides that the next ECORD Council Spring meeting will be held for two days in Germany in spring 2023. The location and dates are to be determined.

In favour: 15, **Abstain**: 0, **Against**: 0, **Absent**: 0

ECORD Council Consensus 22-11-12: The ECORD Council decides that the ECORD Council-ESSAC meeting #12 will be held in France in autumn 2023. The location and dates are to be determined.

In favour: 15, **Abstain**: 0, **Against**: 0, **Absent**: 0

ACKNOWLEDGEMENTS

ECORD Council Consensus 22-11-13: The ECORD Council warmly thanks Angelo Camerlenghi, Hanno Kinkel and Giulia Casalena for hosting the ECORD Council-ESSAC meeting #11 at the magnificent Castello di Gargonza and for bringing the appropriate weather conditions for studious sessions. The ECORD Council greatly appreciated the display of the ECORD Sphere and the wonderful ambiance during these days. Thanks are extended to Chiara Boschi and colleagues for organizing a field trip in this beautiful region.

In favour: 15, **Abstain**: 0, **Against**: 0, **Absent**: 0

G. Lüniger closed the meeting at 18:36.

LIST OF ACRONYMS

ACEX: Arctic Coring Expedition
Add: Addendum
ADP: Amphibious Drilling Proposal
AGU: American Geophysical Union
AMS: Arctic Marine Solutions
ANZIC: Australian and New Zealand IODP Consortium
APL: Ancillary Project Letter
ArcOP: Central Arctic Paleoceanography, IODP Expedition 377
BCR: Bremen Core Repository
BGR: Bundesanstalt für Geowissenschaften und Rohstoffe - Federal Institute for Geosciences and Natural Resources, Hannover, Germany
BGS: British Geological Survey
BMS: Boring Machine System
CAB: Curatorial Advisory Board
CCOD: Canadian Consortium for Ocean Drilling
CIB: *Chikyu* IODP Board
CNR: Consiglio Nazionale delle Ricerche – National Research Council, Italy
CNRS: Centre National de la Recherche Scientifique - National Center for Scientific Research, France
CO: Climate and Ocean Change – IODP Science Theme
CT: Computer Tomography
DAFSHE: Danish Agency for Science and Higher Education
DFG: Deutsche Forschungsgemeinschaft - German Research Foundation
DLP: Distinguished Lecturer Programme
EC: Earth Connections – IODP Science Theme
ECORD: European Consortium for Ocean Research Drilling
EFB: ECORD Facility Board
EGU: European Geosciences Union
EMA: ECORD Managing Agency
EOTF: ECORD Outreach Task Force
EPC: European Petrophysics Consortium
EPSP: Environmental Protection and Safety Panel
ESO: ECORD Science Operator
ESSAC: ECORD Science Support and Advisory Committee
EVTF: ECORD Vision Task Force
FB: Facility Board
FCT: Fundação para a Ciência e a Tecnologia - National Funding Agency for Science and Technology
FNS: Fonds National Suisse de la Recherche Scientifique - Swiss National Science Foundation
FY: Fiscal Year (1 Jan. - 31 Dec.)
GLASS: GLAcial Sedimentology School
GPC: Giant Piston Corer
GSI: Geological Survey of Ireland
HB: Holding Bin
ICDP: International Continental Scientific Drilling Program
INQUA: International Union for Quaternary Research
IODP: Integrated Ocean Drilling Program (2003-2013) & International Ocean Discovery Program (2013-2023)
JAMSTEC: Japan Agency for Marine Earth Science and Technology
J-DESC: Japan Drilling Earth Science Consortium
JOIDES: Joint Oceanographic Institutions for Deep Earth Sampling
JPFY: Japanese Fiscal Year
JR: *JOIDES Resolution*
JRFB: *JOIDES Resolution* Facility Board
KCC: Kochi Core Center
L2S: Land-to-Sea
MarE3: Institute for Marine-Earth Exploration and Engineering
MARUM: Zentrum für Marine Umweltwissenschaften der Universität Bremen - Center for Marine Environmental Sciences, University of Bremen
mbsf: meters below sea floor
MCIN: Ministry for Science and Innovation, Spain
MEXT: Ministry of Education, Culture, Sports, Science & Technology, Japan
MoU: Memorandum of Understanding
MSP: Mission-specific platform
NHM: Natural History Museum
NSF: National Science Foundation, USA
NWO: Nederlandse Organisatie voor Wetenschappelijk Onderzoek - Netherlands Organisation for Scientific Research
ODP: Ocean Drilling Program
ÖAW: Österreichische Akademie der Wissenschaften - Austrian Academy of Sciences

OGS: Istituto Nazionale di Oceanografia e Geofisica Sperimentale - National Institute of Oceanography and Experimental Geophysics
OSP: Onshore Science Party
OTF: Outreach Task Force
PDB: Proposal Database
PI: Principal Investigator
PMO: Program Member Office
PSP: Personal Sampling Party
ROV: Remotely Operated Vehicle
SC: Steering Committee
SCORE: Chikyu Shallow CORE Program
SEP: Science Evaluation Panel
SGI: Società Geologica Italiana - Italian Geological Society
SIMP: Società Italiana di Mineralogia e Petrologia - Italian Society of Mineralogy and Petrology
SPRS: Swedish Polar Research Secretariat
SSDB: Site Survey Data Bank
SSO: Science Support Office
UKRI: UK Research and Innovation
USFY: U.S. Fiscal Year
USSSP: U. S. Science Support Program
VR: Vetenskapsrådet - Swedish Research Council
WD: Water Depth