

**19th Meeting of the
ECORD Science Support & Advisory Committee
ESSAC**

October 24- 26, 2012, Perpignan, France



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Draft Agenda of the 19th ESSAC Meeting

24th - 26th October 2012, Perpignan, France

Wednesday 24th October

Field trip

Thursday 25th October, 9:00 – 18:00 h

1. Introduction

- 1.1 Call to order, introductions (Escutia) (5')
- 1.2 Welcome and meeting logistics (Berné) (5')
- 1.3 Discussion and approval of the Agenda (Escutia) (5')
- 1.4 Items since the 18th ESSAC Meeting and ESSAC Office news (Escutia) (15')

2. IODP News

- 2.1 IWG+ and Framework of the International Ocean Discovery Program 2013-2023 (Camoin) (30')
- 2.2 Report of PEP, SIPCOM and OTF Meetings (Frueh-Green) (45')

3. ECORD News

- 3.1 EMA and ECORD Council (Camoin) (20')
- 3.2 ESO (Stevenson) (20')
- 3.3 ESO-EMA-ESSAC Outreach & ECORD publications (Maruéjol) (15')
- 3.4 ESSAC representatives and National Office reports (ESSAC Delegates) (60')

4. Breakout Sessions

- 4.1 Introductions (Escutia) (5')
- 4.2 Breakout sessions: ESSAC Nominations and Staffing / Education and Outreach/ AD-HOC working Group (60')

5. Nominations and Staffing

- 5.1 Staffing (45')
 - 5.1.1 Ranking procedures, quotas and statistics (Escutia)
 - 5.1.2 Updates on expedition staffing and applications (Escutia)
- 5.2 Updates on SAS panels (Escutia) (10')
- 5.3 Nomination and Staffing Subcommittee report, discussion and future actions (Lourens) (30')

6. ECORD highlights (1) Paul Wilson – Exp. 342 Paleogene Newfoundland Sediment Drifts Preliminary Results (45')

Friday 26th October, 9:00-15:00

7. ECORD Highlight (2): Benoit Idelfonse-Exp. 345: Hess Deep Plutonic Crust (45')

8. Education and outreach

- 8.1 ECORD Summer Schools 2012 update
 - 8.1.1 Urbino Summer School in Paleoclimatology July 2012 (Lourens) (10')
 - 8.1.2 ECORD Summer School on Submarine Landslides, MARUM, Bremen, September 2012 (Erbacher) (10')
 - 8.1.3 Impacts of the Cryosphere dynamics from Land to Ocean, Montreal, July, 2012 (Weis) (10')
- 8.2 Student report from the Urbino Summer School (C. Angue Minto'o) (15')
- 8.3 Outlook and ECORD Summer Schools 2013 (Gutiérrez-Pastor) (5')
- 8.4 ECORD Grants and scholarships 2012-2013 (Gutiérrez-Pastor) (10')
- 8.5 Distinguished Lecturer Programme update (Gutiérrez-Pastor) (10')
- 8.6 Teacher at Sea (Gutiérrez-Pastor) (10')
- 8.7 E&O Subcommittee report, discussion and future actions (Monteys) (30')

9. Workshop Reports

- 9.1 ECORD-ICDP Magellan Plus (Erbacher) (15')
- 9.2 Report on further workshops and conferences (20')
 - ACE Antarctic Drilling Workshop, Portland, July 2012 (Escutia)
 - IODP SW Pacific Ocean workshop, 9-11 Sydney, October, 2012 (Escutia)
 - Other?
- 9.3 Joint IODP/ICDP session at the EGU 2013 in Vienna (Escutia) (5')

10. Review of consensus, motions and actions (Escutia) (15')

11. Next meeting

- 11.1 ESSAC #20, May, 2013, Poland (Uscinowicz) (10')
- 11.2 ESSAC #21, October 2013, Israel? (Waldmann)

12. Any Other Business (Escutia)

Annex 1: List of Consensus, Motions and Actions

Annex 2: Urbino Summer School in Paleoclimatology 2012.

List of Participants

ESSAC Office

Carlota Escutia (Chair)	ESSAC Delegate Spain
Julia Gutiérrez-Pastor	ESSAC Science Coordinator

ESSAC Representatives

Serge Berné (meeting host)	ESSAC Delegate France
Jochen Erbacher	ESSAC Alternate Germany
Anneleen Foubert	ESSAC Delegate Belgium
Gretchen Früh-Green	ESSAC Delegate Switzerland
Lucas Lourens	ESSAC Delegate Netherlands
Xavier Monteys	ESSAC Delegate Ireland
Werner Piller	ESSAC Delegate Austria
Marit Solveig Seidenkrantz	ESSAC Delegate Denmark
Ian Snowball	ESSAC Delegate Sweden
Szymon Uscinowicz	ESSAC Delegate Poland
Antje Voelker	ESSAC Delegate Portugal
Bridget Wade	ESSAC Delegate UK
Dominique Weis	ESSAC Delegate Canada

Observers/Guests

Milena Borissova	EMA
Gilbert Camoin	EMA
Georges Ceulener	ESSAC Alternate France
Markus Kienast	ESSAC Alternate Canada
Patricia Maruéjol	EMA
Alan Stevenson	ESO
Benoît Ildefonse	Guest – invited lecturer
Paul Wilson	Guest – invited lecturer

Apologies

Bryndís Brandsdóttir	ESSAC Delegate Iceland
Elisabetta Erba	ESSAC Delegate Italy
Nalân Koç	ESSAC Delegate Norway
Rüdiger Stein	ESSAC Delegate Germany (Vice-chair)
Kari Strand	ESSAC Delegate Finland

Meeting logistics

VENUE:

The meeting will be held at Hotel Mercure Perpignan (<http://www.mercure.com/fr/booking/hotels-list.shtml#topMiddleContent>). This hotel is located in Perpignan downtown, within a walking distance of the historical centre of the city (Place du Castillet).



HOTEL RESERVATION:

Hotel Mercure (<http://www.mercure.com/fr/booking/hotels-list.shtml>). For booking or any changes call (+33- 4-68 35 67 66) or send an email to H1160@accor.com with your reservation dates. Please specify that you are part of the IODP-ESSAC Meeting.)

FIELD TRIP: 24th of October, 2012

Departure: 8:30 AM from the lobby of Mercure Hotel

The title of the field trip is "*TERROIRS* and Roussillon wines". The trip will be led by Pierre Giresse, who is Emeritus in the Department of Geology-Perpignan University. The term "Terroir" describes the complex relationships between geology, geography and climate, on one hand, and specific *CEPAGES* (grape types) on the other hand. We'll drive from Perpignan to Cote Vermeille (Vermilion coast: <http://gofrance.about.com/od/destinations/a/cotevermeille.htm>) to watch grenache vines growing on Cambrian shales, then take a look at the Plio-Pleistocene fluvial terrasses of the Tech River (Elne area), visit the Upper Paleozoic of Col de la Bataille (Caladroy), drive down to the famous Tautavel prehistoric site (Terroir of Muscat de Rivesaltes) and end up in Rivesaltes City, where we'll have a visit of the cellars and wine tasting at Domaine CAZES (<http://www.cazes-rivesaltes.com/en/>). The cost of the field trip (including transportation, lunch and wine tasting is of 20 Euro).

LUNCHES AND DINNER:

Dinner Wednesday 24th October: We'll have dinner at "Domaine Cases" around 19:30 (7:30PM), so that the return at the hotel will be not to late (about 20mn by bus from Rivesaltes to Perpignan-downtown at this time of the day).

A group dinner is scheduled on Thursday evening; we will be invited by IODP-France.

A quick lunch ("Buffet") will be served on Thursday and Friday at the meeting place (Hotel Mercure); the cost is 18.5 Euro and pre-reservation is required.

TOURIST INFO:

You can find most of useful information, in 4 languages (including Catalan, note that Perpignan is part of French Catalunya) at: <http://www.perpignantourisme.com/>

*Bus from Train station (TGV)

Line 2 (toward Mas St Pierre) stop: Wilson

Line 9 (direction Ste Marie Plage) stop: Wilson

Bus from airport (Perpignan-Rivesaltes)

Line 7 (direction Cabestany) stop: Wilson

LIST OF ACRONYMS

ACEX	Arctic Coring Expedition (Expedition 302)
APLACON	Alternative Platform Conference (Lisbon, May 2001)
AF	Academy of Finland
BCR	Bremen Core Repository
BGS	British Geological Survey (UK)
BoG	IODP-MI Board of Governors
CDC	Conceptual Design Committee (new riser vessel)
CDEX	Center for Deep Earth EX ploration (Japan)
CoNISMa	Consorzio Nazionale Interuniversitario per le Scienze del Mare (Italy)
CDP	Complex Drilling Project
CNR	Consiglio Nazionale delle Ricerche (Italy)
CNRS	Centre National de la Recherche Scientifique (France)
DASTI	Danish Agency for Science, Technology and Innovation
DFG	Deutsche Forschungs Gemeinschaft (German Research Foundation)
DSDP	Deep Sea Drilling Project
EC	European Commission
ECORD	European Consortium for Ocean Research Drilling
EDP	Engineering Development Panel
EPC	European Petrophysics Consortium
EMA	ECORD Managing Agency
ERA-Net	European Research Area Network
ESF	European Science Foundation
EPSP	Environmental Protection & Safety Panel
ESO	ECORD Science Operator
ESSAC	ECORD Science Support and Advisory Committee
FWO-Vlaanderen	Fund for Scientific Research-Flanders (Belgium)
FWF	Austrian Science Fund
GRICES	Gabineta de Relacoes Internacionais da Ciencias e do Ensino Superior (Portugal)
GSI	The Geological Survey of Ireland
ICDP	International Continental Scientific Drilling Project
IIS-PPG	Industry IODP Science Program Planning Group
INGV	Istituto Nazionale di Geofisica e Vulcanologia (Italy)
INSU	Institut National des Sciences de l'Univers (France)
IOs	Implementing Organisations
IODP	Integrated Ocean Drilling Program
IODP-MI	IODP Management International, Inc.
ISP	Initial Science Plan for the IODP
JAMSTEC	Japan Marine Science & TE chnology Center
J-DESC	Japanese Earth Drilling Science Consortium
JEODI	Joint European Ocean Drilling Initiative
JOI	Joint Oceanographic Institutions
JR	JOIDES Resolution
LDEO	Lamont Doherty Earth Observatory
MICINN	Ministerio de Ciencia e Innovación
MEXT	Ministry of Education, Culture, Sports, Science & Technology (Japan)
MoU	Memorandum of Understanding

MOST	People's Republic of China M inistry O f Science and Technology
MSP	M ission- s pecific p latform
NanTroSEIZE	N ankai T rough S Eismogenic Z one Experiment
NCMR	National Center for M arine R esearch (Greece)
NERC	Natural Environment R esearch Council (UK)
NSF	National Science F oundation (USA)
NWO	Netherlands Organisation for Scientific Research
OD21	O cean D rilling in the 21 st Century (Japan)
ODP	O cean D rilling P rogram
OEAW	Austrian Academy of Sciences
OGS	Istituto Nazionale di Oceanografiae di Geofisica S perimentale (Italy)
OTF	Operations Task Force
PEP	Proposal Evaluation Panel
RANNIS	The Icelandic Centre for Research
SAS	Science Advisory S tructure
SASEC	Science Advisory S tructure Executive Committee
SciMP	S cientific M easurements P anel
SCP	Site Characterization Panel
SIPCOM	Science Implementation and Policy Committee
SNF	Swiss National Science Foundation
SODV	Scientific Ocean D rilling V essel
SPC	Science P lanning Committee
SSEP	Science S teering & Evaluation Panel
SSP	Site Survey Panel
STP	Site T echnology Panel
TAMU	Texas A & M University
ToR	T erms of R eference
USSAC	United States Science Advisory Committee
USSSP	United States Science S upport P rogram
UVic	University of V ictoria (Canada)
VR	Swedish Research Council

ESSAC subcommittee procedures

ESSAC has been structured in three subcommittees (Staffing and Nominations, Education and Outreach, and ad-hoc working group) to increase the efficiency of ESSAC and the involvement of the ESSAC Delegates in ESSAC life. Subcommittee general tasks and composition are summarized below.

The subcommittees meet electronically to prepare the meetings on general issues and to work on specific issues at the request of the ESSAC Chair. Each subcommittee is coordinated by an ESSAC Delegate, nominated by the ESSAC Chair. The coordinator is in charge of writing a report for the Agenda book and of presenting the activities of the subcommittee at the meetings. A general discussion follows that presentation.

Staffing and Nominations subcommittee

Members: Lucas Lourens (Coordinator, NL), Carlota Escutia (ESSAC Chair, ES), Julia Gutiérrez-Pastor (ESSAC Science Coordinator, ES), Dominique Weis (CDN), Serge Berné (F), Bridget Wade (UK), Gretchen Früh-Green (CH), Ruediger Stein (D), Kari Strand (FIN), Antje Voelker (P).

General tasks:

- Suggesting nominations of ECORD representatives (delegates and alternates) on SAS panels, PPGs and DPGs.
- Co-ordinating applications, reviewing all the applications and suggesting nominations of shipboard participants.
- Reviewing the quota of shipboard scientists between participating countries.
- Suggesting co-chief nominations for IODP Expeditions.

Immediate actions:

- Summarize the current ECORD composition of SAS panels, identify future replacements (expertise), and suggest permanent alternates.
- Summarize the current ESSAC composition, identify future replacements (Delegates and alternates), and make recommendations.
- Summarize the quota balance for ECORD participation to IODP Expeditions.

Education and Outreach subcommittee

Members: Xavier Monteys (Coordinator, IRE), Carlota Escutia (ESSAC Chair, ES), Julia Gutiérrez-Pastor (ESSAC Science Coordinator, ES), Bryndis Brandsdottir (ICE), Elisabetta Erba (I), Nalan Koc (N), Werner Piller (A), Marit-Solveig Seidenkrantz (DK), Ian Snowball (S), Anneleen Foubert (B), Szymon Uscinowicz (POL).

General tasks:

- Developing educational opportunities/programs: Teacher's workshops, Summer Schools etc., especially in non-traditional audiences.

-
- Reviewing applications and suggesting nominations for ECORD scholarships.
 - Initiating applications of speakers for the Distinguished Lecturer Series and suggesting nominations.
 - Providing new ideas regarding new ways to raise funds for E&O activities.
 - Advising on the public outreach (societal relevance of the IODP science).

Immediate actions:

- Make recommendations for deadlines for submission of Summer School proposals and for applications for ECORD scholarships.
- Make suggestions of new ideas regarding E&O activities (societal relevance of the IODP science), especially in non-traditional audiences.
- Make suggestions regarding new ways to raise funds for E&O activities.
- Monitoring ECORD database (e.g. ECORD publications).

AD-HOC Working Group on relevant themes

1. Introduction

Letter from the Chair

Dear ESSAC Delegates, ESSAC alternates, and attendees of the 19th ESSAC Meeting,

It has been now one year that the ESSAC Office has been located at the Instituto Andaluz de Ciencias de la Tierra, Spain. With the help of Julia, our Science Coordinator, the collaboration of all ESSAC Delegates, and IODP bodies, we have tried to keep ESSAC activities running smoothly, while taking on new activities and responsibilities related to the preparation and transition to the new IODP that will start in October 2013.

Regarding activities of the ESSAC Office, we have been conducting nominations for the participation of ECORD scientists in the MSP Baltic Sea Expedition 347 (Spring-Summer 2013, co-chief scientists T. Andrén and B. Barker Jørgensen), and the JOIDES *Resolution* Asian Monsoon Expedition 346 (July 29-September 28, 2013, co-chief scientists R. Tada and R. Murray). A total of 96 applications from 14 of the 17 ECORD countries (and 2 from non-ECORD countries) show the strong ECORD involvement and interest in the IODP. We thank the delegates, and those acting as alternates when COI are identified, for your work and efficiency in the ranking and nominating process. Staffing for both expeditions is now in progress at the time of writing this letter. Updates will be provided during our upcoming meeting.

ESSAC nominations for replacement of scientists within the Science Advisory Structure (SAS), was approved by the ECORD Council. J. Geldmacher, V. Heuer, and L. McNeil will be the new ECORD Proposal Evaluation Panel (PEP) members replacing T. Ferdelman, J. Koepke, and D. Hodell, who rotated off. For the Site Characterization Panel (SCP) M. Huuse and D. Mosher will replace P. Clift and R. Urgeles. We welcome the new members and thank those rotating off for their service to ECORD and IODP.

The second phase of the ECORD Distinguished Lecturer Programme (DLP) ended this summer with a total of 30 lectures given in institutions from 13 ECORD countries and 2 non-ECORD countries. We thank the ECORD Distinguished Lecturers Kai-Uwe Hinrichs (MARUM, University of Bremen, Germany, “Benthic archaea - the unseen majority with importance to the global carbon cycle revealed by IODP drilling”), Dominique Weis (PCIGR, University of British Columbia, Canada, “What do we know about mantle plumes and what more can we learn by IODP drilling?”), and Helmut Weissert (ETH Zurich, Switzerland, “Carbon cycle, oceans and climate in the Cretaceous: lessons from Ocean Drilling (DSDP to IODP) and from records on continents”), for their service bringing the exciting scientific discoveries of the IODP to the geosciences community. After discussions during our next meeting, we will announce the new phase of DLP lectures and will issue a call for institutions to host the DLP lecturers.

In 2012, three summer schools were funded by ECORD: “Past Global Change Reconstruction and Modeling Techniques” (Urbino, Italy; July 11-31, 2012); the “Submarine Landslides, Earthquakes, and Tsunami” (MARUM, Germany, September 3-14, 2012); and the “Impacts of the Cryosphere dynamics from Land to Ocean” (Montreal, Canada, July 5-21, 2012). ECORD provided eighteen scholarships to allow young scientists to attend one of the three

ECORD-sponsored Summer Schools. These students were selected among 73 applicants from 9 ECORD countries.

ESSAC has recently been involved in the selection of two teachers to participate in the Teacher at Sea Program, an initiative of the Consortium for Ocean Leadership. Two ECORD teachers, Susan Gebbels and Jean-Luc Berenguer, will be participating in Expedition 345 aboard the *JOIDES Resolution*. In addition, ESSAC has provided funding for two ECORD scientists to assist to the first edition of the Short Course on Shipboard Sedimentology, organized by the IODP United States Science Support Program (USSSP).

The ESSAC activities are developing in parallel with the ECORD and ICDP sponsored Magellan Plus workshop series. Four Magellan Plus workshops will be held between 2012 and 2013. The next deadline for applications will be during 1 February 2013. More information regarding these workshops and contact information for participation is now posted on the ESSAC website <http://www.essac.ecord.org/index.php?mod=workshop&page=call-workshop>.

During the EGU 2013, we are organizing the Interdivision Session dealing with major achievements and perspectives in ocean and continental drilling. For the first time, this EGU edition we will have this session cross listed with many other sessions that are relevant to the science themes of the IODP and ICDP.

I like to end by thanking all the ESSAC delegates, and the strong support from EMA, the ECORD Council members, and other IODP bodies. The constructive and efficient cooperation between all of us helps our work to be conducted and improved. We look forward for this cooperation to continue during the coming months.

Carlota Escutia, ESSAC Chair

19th of October, 2012

1.1 Call to order, introductions

1.2 Welcome and Meeting Logistics

S. Berné will provide information about the meeting logistics.

1.3 Discussion and approval of the Agenda

At the meeting in Perpignan, France, C. Escutia will summarize the current agenda and remark potential goals of the meeting and/or changes of the agenda.

1.4 Items since the 18th ESSAC Meeting and ESSAC Office news

C. Escutia will present items since the last ESSAC meeting. The list down-below contains the actions items, which arose at the 17th ESSAC meeting in Aarhus. Action items that have been accomplished by the ESSAC Office since then are labelled as “Done”. Action items not fulfilled yet, are labelled “in progress”. The complete list of consensus, motions and actions from the 18th meeting are listed in *Annex 1*.

> **ESSAC Action Item 1205-01:** ESSAC Office to include a COI column in files requiring rankings by Delegates. COI not identified by the ESSAC Office must be declared by the Delegates. **Done**

> **ESSAC Action Item 1205-02:** Following approval by ECORD Council, ESSAC will issue a call for senior scientists to the ECORD FB. **Done**

> **ESSAC Action Item 1205-03:** ESSAC Office to issue a call for the next ESSAC Chair. **Done**

> **ESSAC Action Item 1205-04:** ESSAC Office to elevate nominations of new SAS members to the ECORD Council, after the ranking by ESSAC Delegates has been finalized. **Done**

> **ESSAC Action Item 1205-05:** ESSAC Office to contact qualified scientists that applied to the last SAS calls and who have not been nominated, to ask for their willingness to serve as official alternates to these panels. **In Progress**

> **ESSAC Action Item 1205-06:** ESSAC Office to contact official alternates to the panels in the old SAS structure to ask for their interest in continuing their service as official alternates to the new SAS panels. **In Progress**

> **ESSAC Action Item 1205-07:** ESSAC Office to provide for the October 2012 meeting the revised guidelines for the handling of the ECORD Scholarship applications, including a draft letter with guidelines/criteria for review for the ECORD Summer Schools. **Done**

> **ESSAC Action Item 1205-08:** ESSAC Office to draft the call for ECORD Grants 2013 to be reviewed and approved by the ESSAC Committee in its October meeting. **Done**

> **ESSAC Action Item 1205-09:** ESSAC Office to extend the call for DLP. **Done**

> **ESSAC Action Item 1205-10:** ESSAC Office to set up a Doodle Poll to determine the dates of the October 2012 ESSAC 19th meeting in Perpignan. **Done**

2. IODP News

2.1 IWG+ Framework of the International Ocean Discovery Program 2013-2023

G. Camoin will give a summary of the IWG+ and the framework of the International Ocean Discovery Program 2013-2023.

2.2 Report of PEP, SIPCOM and OTF Meetings

G. Frueh-Green will present a summary of the PEP, SIPCOM and OTF meetings (<http://www.iodp.org/meeting-schedule>).

3. ECORD News

3.1 EMA - ECORD Council

G. Camoin will give a summary about the latest news regarding EMA and ECORD Council activities.

3.2 ESO

A. Stevenson will report the ESO activity and news.

ECORD Science Operator update, October 2012

ESO continue to prepare for IODP Expedition 347: Baltic Sea Palaeoenvironment. The platform tendering exercise took place towards the end of the Summer, and ESO are now negotiating with a drilling contractor to secure the platform and drilling services for the expedition. The drilling contractor and the platform cannot be announced until a contract is put in place. Anticipating a successful outcome, ESO have been moving forward with expedition planning and have been working with Expedition Project Manager, Carol Cotterill and Co-chief Scientists Dr Thomas Andr  n and Prof Bo Barker J  rgensen to finalise the expedition's scientific program.

The Baltic Sea Paleoenvironment Expedition addresses four over-arching themes: climate and sea level dynamics of Marine Isotope State (MIS) 5, including onsets and terminations; the complexities of the last glacial, MIS 4 – MIS 2; deglacial and Holocene (MIS 2 – MIS 1) climate forcing; and deep biosphere responses to glacial-interglacial cycles.

The vessel will be a dynamically positioned geotechnical-type ship and will be equipped with a drill rig to deploy piston, extended nose and rotary coring tools, and a suite of downhole logging tools. The vessel will have sufficient deck space to accommodate ESO's suite of container laboratories: curation, petrophysics, geochemistry, general science, logging, ESO office, ESO database and a new microbiology container.

The offshore phase of the Expedition is envisaged to start some time from mid-May to early June 2013, and will last for up to 60 days. The Onshore Science Party will be held a couple of months after the offshore operation has ended. The process of inviting the Science Party members has started, and is expected to be completed by the end of October.

ESO is also currently planning the first MSP expedition of the new IODP: Chicxulub Impact Crater. We are currently tendering for a seabed hazard survey for safe rig positioning offshore Mexico (closing date 26th October), and expect to contract the survey in 2013. This will pave the way for the Chicxulub coring operation in 2014, funding and authorisation permitting.

3.3 ESO-EMA-ESSAC Outreach & ECORD publications

P. Maru  jol will report on the outreach activities and news of the ECORD Outreach and

Education Task Force.

Our last meeting was held in Avignon (France) September 4- 5 and attended by A. Stevenson and A. Gerdes (ESO), J. Gutierrez Pastor and C. Escutia (ESSAC), G. Camoin, M. and P. Maruéjol (EMA).

Since June 2012, the following activities/publications have been carried out:

- Publication of the ECORD Annual Report 2011, a 36-page document published late May 2012 - http://www.ecord.org/pub/ECORD_Annual-report.pdf
- IODP-ECORD booth at Goldschmidt 2012, Montréal, in collaboration with IODPCanada - <http://www.ecord.org/pi/booths.html>
- ECORD Newsletter #19 - October 2012 - a 24-page issue released late October 2012. This issue is made up of ECORD news and updates from May 2012 to early October 2012, reports of ECORD Summer Schools 2012, IODP and MagellanPLUS workshops and DS3F White Paper, a science article about the upcoming Baltic Sea Expedition, A Letter from Canada (Anne de Vernal, Dominique Weis and Diane Hanano), and a new topic compiling News provided by ECORD members.
- ECORD website updates:
 - o ECORD structure <http://www.ecord.org/about/structure.html>
 - o Outreach: <http://www.ecord.org/pi/promo.html>
 - o Education: <http://www.ecord.org/edu/education.html>
 - o Databases: <http://www.ecord.org/data.html>
- ECORD materials/information provided to:
 - o IODP-ICDP booth at IGC 34, Brisbane, Australia
 - o ECORD members for national IODP meetings (IODP-Spain in Oviedo, etc.)
- Core replicas sent to IODP-Canada (ACEX), ESSAC Office (PETM, K/T), ESOBGS in Edinburgh (Tahiti).

Future activities/publications

- Publications/materials (<http://www.ecord.org/pi/materials.html>)
 - o Update of the ECORD folder and flyers (ECORD, ESSAC)
 - o ECORD 3-fold leaflet to be re-designed for distribution at AGU 2012
 - o ECORD Calendar 2013
 - o ECORD Annual Report 2012 to be released by February 2013
 - o New replicas: to contact Co-chief scientists of Exp 340 and 337
 - o New video on Expedition 337, partly funded by ECORD
 - Contributing to IODP-USIO booth at AGU 2012
 - ECORD-IODP at EGU 2012, Vienna, April 22-27: joint IODP-ICDP booth and townhall meeting with highlights on IODP expeditions and ICDP projects.
 - Preparing ECORD Newsletter #20 - April 2013 to be finalised during the next Outreach TF meeting and assembled according to the following deadlines:
 - o Call for contributions - mid February 2013
 - o Authors' deadline - March 10, 2013
 - o Date of release - EGU 2013
 - ECORD-IODP booth at Goldschmidt 2013, August 25-30, Florence Italy
- The **next ECORD Outreach and Education TF** meeting is scheduled on February 19-20, 2013 in Salamanca, Spain

3.4 ESSAC representatives and National Office reports

Each ESSAC delegate will give a short summary about the latest national activities regarding IODP and ECORD issues. The current ESSAC delegates and alternates are given in the table down below:

ESSAC Delegates and Alternates		
Austria	Werner E. Piller	Michael Wagreich
	werner.piller@uni-graz.at	michael.wagreich@univie.ac.at
Belgium	Anneleen Foubert	Stephen Lowye
	Anneleen.Foubert@ees.kuleuven.be	stephen.lowye@ugent.be
Canada	Dominique Weis	Markus Kienast
	dweis@eos.ubc.ca	markus.kienast@dal.ca
Denmark	Marit-Solveig Seidenkrantz	Paul Cornils Knutz
	mss@geo.au.dk	pkn@geus.dk
Finland	Kari Strand	Annakaisa Korja
	kari.strand@oulu.fi	annakaisa.korja@helsinki.fi
France	Serge Berné	Georges Ceulener
	serge.berne@univ-perp.fr	georges.ceuleneer@get.obs-mip.fr
Germany (Vice-Chair)	Ruediger Stein	Jochen Erbacher
	Ruediger.Stein@awi.de	j.erbacher@bgr.de
Iceland	Bryndís Brandsdóttir	Gudrún Helgadóttir
	bryndis@raunvis.hi.is	gudrun@hafro.is
Ireland	Xavier Monteys	David Hardy
	Xavier.Monteys@gsi.ie	david.hardy@gsi.ie
Italy	Elisabetta Erba	Leonardo Sagnotti
	elisabetta.erba@unimi.it	leonardo.sagnotti@ingv.it
The Netherlands	Lucas Lourens	Stefan Schouten
	llourens@geo.uu.nl	schouten@nioz.nl
Norway	Nalan Koç	Helga F. Kleiven
	Nalan.Koc@npolar.no	kikki@uib.no
Poland	Szymon Uscinowicz	Piotr Przedziecki
	szymon.uscinowicz@pgi.gov.pl	piotr.przedziecki@pgi.gov.pl
Portugal	Antje Voelker	Luiz F. Menezes Pinheiro
	antje.voelker@lneg.pt	Imp@geo.ua.pt
Spain (Chair)	Carlota Escutia Dotti	César Ranero
	cescutia@ugr.es	cranero@icm.csic.es
Sweden	Ian Snowball	Eve Arnold
	Ian.Snowball@geol.lu.se	eve.arnold@geo.su.se
Switzerland	Gretchen Früh-Green	Judith McKenzie
	frueh-green@erdw.ethz.ch	judy.mckenzie@erdw.ethz.ch
U.K.	Bridget Wade	Anthony Morris
	B.Wade@leeds.ac.uk	A.Morris@plymouth.ac.uk

19th ESSAC Meeting - A short report from Italy

Elisabetta Erba

In the past few months (after the 18th ESSAC Meeting) efforts have been dedicated to re-establish a formal contact with the Ministry of Research. At present, the Ministry is doing a census of ongoing European project with Italian participation. Specifically, such projects should be designed as European infrastructure and we have submitted a document describing IODP-Italy within ECORD. This action is supported by INGV and OGS, while CNR is aware but has not formally expressed support yet.

The initiative is aimed at identifying future funding priorities. Our purpose is to find a stable and adequate funding for IODP-Italy. The first phase of the census has just been completed and the second phase, which includes a list of European projects "approved" will be published by the end of the year.

We are preparing the periodic reports of all the activities of Italian researchers related to IODP-Italy for the interval 2009-2012. The report will be published later this year.

4. Breakout sessions

4.1 Introductions

Introductions will be provided by C. Escutia to guide discussions.

4.2 Breakout sessions: ESSAC Nominations and Staffing/ Education and Outreach/ AD-HOC working Group

Separate meeting of the ESSAC Nomination and Staffing and the Education and Outreach Subcommittees, and Plenary discussion regarding the ESSAC TOR.

5. Nominations and Staffing

5.1 Staffing

C. Escutia will update the Staffing.

5.1.1 Ranking procedures, quotas and statistics

5.1.2 Updates on expedition staffing and applications:

USIO Expeditions: Asian Monsoon - IODP Exp. 346

MSP Expeditions: Baltic Sea Paleoenvironment - IODP Exp.347

Changes in previously staffed expeditions

5.2 Updates on SAS panels

C. Escutia will present rotations on panels..

5.3 N&S Subcommittee report, discussion and future actions

L. Lourens will report the N&S Subcommittee discussions and give an overview of the future actions.

6. ECORD highlights

6.1 Paul Wilson will give a Report of the "Paleogene Newfouland Sediment Drifts IODP Expedition 342 "

7. ECORD highlights

7.1 Benoit Idelfonse will give a summary of plans and goals of the "Hess Deep Plutonic Crust, IODP Expedition 345"

8. Education and outreach

8.1 Summer Schools 2012 update

8.1.1 USSP: The Urbino Summer School in Paleoclimatology: Past Global Change Reconstruction and Modeling Techniques, July 2012.

L. Lourens will give a report about the Urbino Summer School in Paleoclimatology (**Annex 2**)

8.1.2 ECORD Summer School on Submarine Landslides, MARUM, Bremen, September 2012

J. Erbacher will report about the ECORD Summer School on Submarine Landslides in Bremen.

8.1.3 Impacts of the Cryosphere dynamics from Land to Ocean, Montreal, July, 2012

D. Weis will report about the ECORD Summer School Impacts of the Cryosphere dynamics from Land to Ocean in Montreal.

8.2 Student Report from the Urbino Summer School.

C. Angue Minto´o will give a summary of his experience in the Urbino Summer School 2012.

8.3 Outlook and ECORD Summer Schools 2013-2014

J. Gutierrez-Pastor will give an update of ECORD Summer Schools 2013 and inform about future calls.

8.4 ECORD Grants and Scholarships 2012-13

J. Gutierrez-Pastor will give an update of ECORD Scholarships and Grants 2012 and future calls.

8.5 Distinguished Lecturer Programme update

J. Gutierrez-Pastor will present a summary of the Distinguished Lecturer Programme.

8.6 Teacher at Sea

J. Gutierrez-Pastor will present a summary of the Teachers at Sea and School of Rock Programme.

8.7 E&O Subcommittee report, discussion and future actions

X. Monteys will give the report of the E&O discussion and future actions.

9. Workshops Reports

9.1 ECORD-ICDP MagellanPlus

J. Erbacher will report on the Magellan Plus Program.

MagellanPlus

The MagellanPlus Workshop Series Programme is designed to support European and Canadian scientists in developing new and innovative science proposals for submission to IODP and ICDP. The Magellan+ Workshop Series Programme will thus continue and expand the success of the terminating ESF Magellan Workshop Series Programme, through the integration of continental and marine drilling and coring to meet future challenges in Earth, Life and Environmental sciences.

Both workshops granted during the first call of MagellanPlus were held recently or will be held, soon:

(1) Records of Geohazards and Monsoonal Changes in the Northern Bay of Bengal - Preparation of an IODP Drilling Proposal (by Volkhard Spiess, Tilmann Schwenk and Herrman- Rudolf Kudrass) with the aim of optimising an existing proposal for drilling the geohazard and paleoclimate history in the Gulf of Bengal (October, 8-10, 2012, Bremen).

(2) Drilling an active hydrothermal system of a submarine intraoceanic arc volcano (by Wolfgang Bach and Cornel de Ronde) with the aim of preparing a proposal for IODP to drill into an active hydrothermal system hosted by a submarine intraoceanic arc volcano (November 15-17, 2012, Lisbon).

Reports of these workshops will be published in the next issue of the ECORD Newsletter.

The second call for submission of proposals, which closed on July 1st, resulted in two workshops that will be held in spring 2013:

(1) Exploring the Cretaceous Greenhouse through Scientific Drilling (by Stuart Robinson and Timothy Bralower), April 15-17, 2013 - London, United Kingdom (<http://iodp-ussssp.org/workshop/cretaceous/>)

(2) Workshop: Deep-sea Record of Mediterranean Messinian events (DREAM) (by Camerlenghi, A., deLange, G., Flecker, R., Garcia-Castellanos, D., Hübscher, C., Krijgsman, W., Lofi, J., Lugli, S., Manzi, V., McGenity, T., Panieri, G., Rabineau, M., Roveri, M., Sierro, F.J.), May 6-8, 2013 - Brisighella, Italy

Summary: Goal of this workshop is to gather three generations of scientists to identify locations for multiple-site riser-drilling in the Mediterranean Sea that would allow to solve the open questions still existing about the causes, processes, timing and consequences at local and planetary scale of the Messinian salinity crisis (MSC). The initiative builds from recent activity by various research groups to identify potential sites to perform deep-sea research drilling in the Mediterranean Sea across the deep Messinian sedimentary record.

The MagellanPlus Workshop Series Programme supports workshops that are expected to lead to or foster high-quality and innovative scientific drilling proposals. The programme has two calls annually; deadlines are February 1 and July 1. Proposals are reviewed by the Magellan+ Steering Committee (MSC), with the advice of external reviewers where applicable. Proponents will be notified of the outcome within two months following the submission deadline.

Proposals should include complete and realistic scripts for the proposed workshop, and a funded workshop must be executed within nine months after notification of funding. A typical workshop is expected to take place over 2-4 days, and have 20-35 participants. The workshop should be located close to a convenient air and/or train hub and have relatively low-cost facilities. The participation of young scientists will be particularly encouraged. International experts of the relevant disciplines are expected to be invited to the workshops to provide scientific input to the workshop themes and enable international collaboration. Priority is given to proponents from ECORD and ICDP member countries.

The next deadline for submission of workshop proposals is February 1, 2013. The contribution of the Magellan+ Workshop Series will not exceed 15,000 Euros per workshop. The proponent is encouraged to seek co-funding from other sources.

For questions please contact magellan.plus@bgr.de or check <http://www.essac.ecord.org/index.php?mod=workshop&page=workshop>

Jochen Erbacher, Chair of the Magellan+ Workshop Series

9.2 Report on further workshops and conferences ACE Antarctic Drilling Workshop

C. Escutia will report about the ACE Antarctic Drilling Workshop, Portland, July 2012 and IODP SW Pacific Drilling Workshop, Sidney, October 2012.

9.3 Joint IODP/ICDP session at EGU 2013 in Vienna

C. Escutia will present the plans for the Joint IODP/ICDP Session at EGU, Vienna, April, 2013.

10. Review of consensus, motions and actions

C. Escutia will review the list of consensus, motions and actions of the 19th ESSAC meeting.

11. Next meetings

S. Uscinowicz will introduce the city and venue for the next ESSAC meeting in Poland.

ESSAC #20, May 2013, Poland

ESSAC #21, October 2013, Israel?

12. Any other Business

Annex 1: List of Consensus, Motions and Actions

LIST OF CONSENSUS, MOTIONS AND ACTIONS
18th ESSAC MEETING
Aarhus, 30 May-1 June, 2012

1. INTRODUCTION

1.3 Discussion and approval of the Agenda

ESSAC Consensus 1205-01: ESSAC approves the Agenda of its 18th meeting on May 30-June 1, 2012 in Aarhus, Denmark

1.4 Items since the 17th ESSAC Meeting and ESSAC Office news

> **ESSAC Action Item 1205-01:** ESSAC Office to include a COI column in files requiring rankings by Delegates. COI not identified by the ESSAC Office, must be declared by the Delegates.

2. IODP News

2.1 Framework for IODP

ESSAC Consensus 1205-02: ESSAC supports the ECORD view for one single PEP for IODP as the key scientific panel that integrates the Program and ensures scientific excellence.

ESSAC Consensus 1205-03: ESSAC supports that PEP and service panel representatives will be staffed by the Program Member Offices using a to-be-determined national quota system based upon contributions to the Program.

3. ECORD News

3.2 Future of ECORD

ESSAC Consensus 1205-04: Following approval of the new ECORD structure by the ECORD Council, ESSAC will issue a call for nomination of senior scientists to the ECORD Facility Board (FB). Applications will be reviewed by ESSAC and nominations will take place during the October 2012 ESSAC meeting.

> **ESSAC Action Item 1205-02:** Following approval by ECORD Council, ESSAC will issue a call for senior scientists to the ECORD FB.

ESSAC Consensus 1205-05: ESSAC agrees to conduct an e-mail discussion regarding the role of ESSAC in the new ECORD structure to provide final input to the ESSAC ToR in the ECORD MoU during the ESSAC October meeting.

ESSAC Consensus 1205-06: ESSAC agrees that, following approval by the ECORD Council, an open call for election of the next ESSAC Chair is issued.

> **ESSAC Action Item 1205-03:** ESSAC Office to issue a call for the next ESSAC Chair.

7. NOMINATIONS AND STAFFING

7.1 Updates on SAS panels

> **ESSAC Action Item 1205-04:** ESSAC Office to elevate nominations of new SAS members to the ECORD Council, after the ranking by ESSAC Delegates has been finalized.

> **ESSAC Action Item 1205-05:** ESSAC Office to contact qualified scientists that applied to the last SAS calls and who have not been nominated, to ask for their willingness to serve as official alternates to these panels.

> **ESSAC Action Item 1205-06:** ESSAC Office to contact official alternates to the panels in the old SAS structure to ask for their interest in continuing their service as official alternates to the new SAS panels.

8. EDUCATION AND OUTREACH

8.2 ECORD scholarships and grants 2012

ESSAC Consensus 1205-07: ESSAC approves 18 awardees of ECORD Scholarships 2012: B: 2, CA: 1, CH: 1, D: 2, DK: 1, P: 1, E: 2, NL: 2, UK: 6

ESSAC Consensus 1205-08: ESSAC approves 6 awardees of the ECORD Research Grant 2012: D: 1, DK: 1, F: 3, UK: 1.

ESSAC Consensus Item 1205-09: ESSAC approves a revision in the process the ECORD scholarship applications are reviewed by the ECORD Summer Schools and ESSAC. This revision includes:

1) Summer Schools will be provided with a letter with guidelines/criteria for the review of scholarships. The schools should follow the criteria of prioritizing first the letter of motivation and second the CV.

2) 1-2 ESSAC Delegates will be charged to check the applications and the rankings provided by the ECORD Schools, and to give recommendations to the ESSAC Committee.

> **ESSAC Action Item 1205-07:** ESSAC Office to provide for the October 2012 meeting the revised guidelines for the handling of the ECORD Scholarship applications, including a draft letter with guidelines/criteria for review for the ECORD Summer Schools.

ESSAC Consensus Item 1205-10: ESSAC approves a revision in the wording of the call for the ECORD Grants. The Grants should prioritize work on Ocean Drilling Programs (i.e., DSDP, ODP, IODP) materials by early career scientists; preference should be given to working in laboratories outside the home lab and to establishment of new collaborations; and should request a letter of support from the host institution not just the home laboratory.

> **ESSAC Action Item 1205-08:** ESSAC Office to draft the call for ECORD Grants 2013 to be reviewed and approved by the ESSAC Committee in its October meeting.

8.3 ECORD Summer Schools 2013

ESSAC Consensus 1205-11: ESSAC approves that in 2013 two ECORD Summer Schools will be granted: the ECORD Bremen Summer School 2013 on "Deep-Sea

Sediments: From Stratigraphy to Age Models”, and the Urbino Summer School in Paleoclimatology 2013.

8.4 Distinguished Lecturer Programme update

ESSAC Consensus 1205-12: ESSAC approves to extend the call for applicants for DLP, while identifying and encouraging excellent scientists and communicators in the 4 themes of the science plan to apply.

> **ESSAC Action Item 1205-09:** ESSAC Office to extend the call for DLP.

10. NEXT MEETINGS

ESSAC Consensus Item 1205-13: Location of ESSAC Meeting #19 is Perpignan, France. The date of the meeting will be determined after a Doodle Poll is conducted by the ESSAC Office.

> **ESSAC Action Item 1205-10:** ESSAC Office to set up a Doodle Poll to determine the dates of the October 2012 ESSAC 19th meeting in Perpignan.

11. ANY OTHER BUSINESS

ESSAC Consensus Item 1205-14: ESSAC thanks Marit Solveig Seidenkrantz for hosting the 18th ESSAC Meeting in Aarhus, Denmark.

Annex 2: Urbino Summer School in Paleoclimatology 2012.

THE 2012 IODP-ECORD URBINO SUMMER SCHOOL IN PALEOCLIMATOLOGY (USSP)

To promote the integration of field data and modeling results in the next generation of paleoclimatologists, the USSP Consortium and teacher pool (Table 1a, b) organized the **9th annual IODP-ECORD Urbino Summer School in Paleoclimatology during July 11 – 31 in Urbino, Italy**. The USSP brought together 34 world experts in paleontology, palaeoceanography, palaeoclimatology, and geochemistry, including many past and future ODP/IODP participants, to lecture and mentor 67 typically first-year graduate students from 21 nations (Table 2). This report summarizes the USSP in terms of structure and impact, support and financing, and ongoing planning for its next offering.

USSP 2011 Structure and Impact – The USSP 2011 provided an integrated student-centered program comprised of (1) integrated topical lectures by internationally recognized scientists; (2) student-centered data-rich exercises, investigations, and presentations on field data and modeling results; (3) Parallel sessions providing groups of participants with a more focused coverage of selected topics within paleoclimatology (4) a regional field excursion to classic Cretaceous and Cenozoic sections, and (5) intensive discussions of specific palaeoclimate topics in small student working groups facilitated by dedicated instructors. The 2012 program structure included, as usual, a first week almost exclusively centered on IODP/JOI elements, mainly including elements of the 'School of Rock' by Mark Leckie (UMass. Amherst, USA). This allowed developing several student-centered investigations within the broader structure of a "virtual IODP leg" and comparison of oceanic sequences with the local succession counterparts. The USSP 2011 schedule is presented in Table 3. In addition, USSP 2012 program included a 1-day workshop (July 22, 2012) where many instructors gave informal presentations on their latest, often unpublished, field and modeling results, providing students with an excellent opportunity to experience the cutting edge of scientific progress. Student 2012 course evaluations assessed USSP 2012 as extremely positive.

USSP Support and Financing – As in past years, the Faculty of Sciences & Technologies of the University of Urbino hosted the program, providing a large hall for lectures, smaller rooms for student working groups and parallel sessions, and computer and library access to support student-centered investigations. Student tuition was set at an economical 650, due in large part to generous sponsorship by (1) the Italian Ministry for Environment (2) the European Consortium for Ocean Research Drilling (ECORD), (3) the United States National Science Foundation (4) the universities of Urbino and Utrecht, (6) the Netherlands Darwin Center for Geobiology. Additional generous support allowed USSP to offer more than 20 student fellowships. The collective support of these institutions is gratefully acknowledged. All institutional support and student tuition is used to fund travel and lodging for the USSP instructors, who freely donate their valuable time and effort to organize and produce the USSP program.

USSP 2013 Ongoing Planning – For our 2013 offering, we have received, and gratefully acknowledge the financial support from ECORD. We are currently seeking additional financial sponsorship, notably from non-European IODP sources, to reduce tuition levels, increase student enrollment, and maintain our low instructor to student ratio.

obo USSP consortium: Henk Brinkhuis & Simone Galeotti, directors USSP

Table 1a. *Members of the USSP Consortium. The Consortium was established in November 2005 to support and give continuity to the USSP programme.*

Member	Institution	Country
Henk Brinkhuis (Lead Organizer)	Utrecht University	Netherlands
Ken Caldeira	Stanford Univesity	USA
Gerald Dickens	Rice University	USA
Simone Galeotti (Lead Organizer)	Italy	Urbino University
Matthew Huber	Purdue University	USA
Mark Leckie	University of Massachussets	USA
Mark Pagani	Yale University	USA
Isabella Raffi	Chieti University	Italy
Eelco Rohling	University of Southampton	UK
Stephen Schellenberg	San Diego State University	USA
Jim Zachos	University of California, Santa Cruz	USA

Table 1b. Members of the USSP teacher pool and their academic institution. USSP lecturers are recognized scholars in paleoclimatology, and related disciplines, and frequently contribute to the field through publications in peer-reviewed journals (e.g., *Science*, *Nature*, *Geology*, *Paleoceanography*, etc.). Nearly all teach university courses and mentor student research from the undergraduate and graduate level.

USSP Teachers		
David Beerling	University of Sheffield	UK
Jelle Bijma	Alfred Wegener Institute	Germany
Gabriel Bowen	Purdue University	USA
Henk Brinkhuis (Lead Organizer)	Utrecht University	The Netherlands
Ken Caldeira	Stanford University	USA
Anthony Cohen	The Open University	UK
Thomas Cronin	USGS National Center	USA
Robert DeConto	University of Massachusetts	USA
Gerald Dickens	Rice University	USA
Timme Donders	TNO – Utrecht	The Netherlands
Jochen Erbacher	University of Hannover	Germany
Simone Galeotti (Lead Organizer)	Urbino University	Italy
Gerald Ganssen	Vrije Universiteit Amsterdam	The Netherlands
Nicolas Gruber	ETH Zurich	Switzerland
David Harwood	University of Nebraska-Lincoln	USA
Gerold Haug	ETH Zurich	Switzerland
Jorijntje Henderiks	Uppsala University	Sweden
Jens Herrle	University of Liverpool	UK
Chris Hollis	GNS Science Lower Hutt	New Zealand
Matthew Huber	Purdue University	USA
Paul Koch	University of California Santa Cruz	USA
Dick Kroon	Vrije Univ. Amsterdam	The Netherlands
Lee Kump	Penn State University	USA
Wolfram Kuerschner	Utrecht University	The Netherlands
Luca Lanci	Urbino University	Italy
Mark Leckie	University of Massachusetts	USA
Lucas Lourens	Utrecht University	The Netherlands
Simonetta Monechi	Firenze University	Italy
Ulysses Ninnemann	University of Bergen	Norway
Mark Pagani	Yale University	USA
Heiko Pälike	University of Southampton	UK
Richard Pancost	University of Bristol	UK
Isabella Premoli-Silva	Milano University	Italy
Isabella Raffi	Chieti University	Italy
Michael Rampino	New York University	USA
Maureen Raymo	Boston University	USA
Gert-Jan Reichert	Utrecht University	The Netherlands
Andy Ridgwell	University of Bristol	UK

Eelco Rohling	University of Southampton	UK
Yair Rosenthal	Rutgers University	USA
Francesca Sangiorgi	Utrecht University	The Netherlands
Stephen Schellenberg	San Diego State University	USA
Stefan Schouten	NIOZ	The Netherlands
Luke Skinner	University of Cambridge	UK
Caroline Slomp	Utrecht University	The Netherlands
Appy Sluijs	Utrecht University	The Netherlands
Jan Smit	Vrije Universiteit Amsterdam	The Netherlands
Howard Spero	University of California Davis	USA
Catherine Stickley	Norwegian Polar Institute	Norway
Paolo Stocchi	Delft University	The Netherlands
Debbie Thomas	Texas A&M University	USA
Ellen Thomas	Yale University	USA
Paul Valdes	University of Bristol	UK
Roderik van de Wal	IMAU Utrecht	The Netherlands
Bert Vermeersen	Delft University	The Netherlands
Anna von der Heydt	IMAU Utrecht	The Netherlands
Bridget Wade	University of Leeds	UK
Johan Weijers	Utrecht University	The Netherlands
Scott Wing	Smithsonian Inst. Washington DC	USA
Jim Zachos	University of California, Santa Cruz	USA
Richard Zeebe	University of Hawaii at Manoa	USA

Table 3. Participants to USSP2012 and their affiliation. USSP received more 100 applications this year and was able to accept 64 participants, several of them receiving a scholarship from different institutions.

	Name	Affiliation	e-mail
1	Abella Jose	CICESE, Ensenada MEXICO	joseluisabella@gmail.com
2	Acosta Rene Paul	Purdue University, USA	rpacosta07@gmail.com
3	Alvarez Castro M. Carmen	Pablo de Olavide University, Sevilla SPAIN	mcalvcas@upo.es
4	Angue Minto'O, Charlie	Perpignan University, FRANCE	charlie.angue-mintoo@univ-perp.fr
5	Armstrong McKay David	University of Southampton, UK	d.armstrong-mckay@noc.soton.ac.uk
6	Ausín González	University of Salamanca, SPAIN	b_ausin@usal.es
7	Balmer Sven	University of Kiel, GERMANY	balmer@gpi.uni-kiel.de
8	Baronas Jotautas	University of Southern California, USA	jotautas.baronas@gmail.com
9	Baumgarten Henrike	Hannover	henrike.baumgarten@liag-hannover.de
10	Besseling Marc	Utrecht	m.a.besseling@students.uu.nl
11	Bolaski Benjamin	LIAG Hannover, GERMANY	bebolaski@plymouth.edu
12	Boscolo Galazzo FLAVIA	University of Padova, ITALY	galazzo.flavia@hotmail.it
13	Boussaha Myriam	University of Coopenaghen, DENMARK	myriam.boussaha@geo.ku.dk
14	Bradshaw Catherine	Bristol University, UK	c.bradshaw@bristol.ac.uk
15	Brocas William	University of Bremen, GERMANY	willbrocas@hotmail.com
16	Caves Jeremy	Stanford University, USA	jcaves@stanford.edu
17	Chaanda Mohammed	Plymouth University, UK	chaandamohammed@gmail.com
18	Chabangborn Akkaneewut	Stockholm University, SWEDEN	akkaneewut.c@geo.su.se
19	Cliff Leah	University of Southampton, UK	lec306@soton.ac.uk
20	Crichton Katherine	University of Grenoble, FRANCE	kcrichton@lgge.obs.ujf-grenoble.fr
21	Cui Ying	Penn State University, USA	cuiying00@gmail.com
22	Datema Mariska	Utrecht University, THE NETHERLANDS	m.c.datema@uu.nl
23	de la Vara Fernández Alba	Utrecht University, THE NETHERLANDS	delavarafernandez@uu.nl
24	Egger Matthias	Utrecht University, THE NETHERLANDS	eggerm87@gmail.com
25	Farmer Jesse	Columbia University, USA	jfarmer@ldeo.columbia.edu
26	Foan Amanda	University of Edinburgh, UK	a.g.foan@sms.ed.ac.uk
27	Fox Bethany	University of Otago, NEW ZEALAND	bethany.fox@otago.ac.nz
28	Frieling Joost	Utrecht University, THE NETHERLANDS	j.frieling1@uu.nl
29	Gambacorta Gabriele	University of Milano, ITALY	gabriele.gambacorta@unimi.it
30	Greene Sarah	Bristol University, UK	sarah.greene@bristol.ac.uk
31	Grothe Arjen	Utrecht University, THE NETHERLANDS	a.grothe@uu.nl
		Max Planck Institute for Meteorology,	

		GERMANY	
33	Howell Fergus	University of Leeds, UK	eefwh@leeds.ac.uk
34	Inglis Gordon	Bristol University, UK	gordon.inglis@bristol.ac.uk
35	Lang Dave	University of Southampton, UK	d.lang@noc.soton.ac.uk
36	Liu Xiting	University of Bremen, GERMANY	xliu@marum.de
37	Lowery Chris	University of Massachusetts, USA	chris.lowery09@gmail.com
38	Marr Julene	Victoria University of Wellington, NEW ZEALAND	julene.marr@vuw.ac.nz
39	Martin Calvo Maria	Imperial College, UK	m.martin-calvo@imperial.ac.uk
40	Marzocchi Alice	Bristol University, UK	marzocchi.alice@gmail.com
41	Modestou Sevasti	University of Glasgow, UK	s.modestou@gmail.com
42	Moebius Iris	Goethe University Frankfurt, GERMANY	moebius@em.uni-frankfurt.de
43	Oakes Rosie	University of Toronto, CANADA	rosie.oakes@utoronto.ca
44	Ohneiser, Christian	University of Otago, NEW ZEALAND	christian.ohneiser@otago.ac.nz
45	Owens Jeremy	University of California Riverside, USA	jowens@student.ucr.edu
46	Pabich Stephanie	University of Münster, GERMANY	stephanie.pabich@uni-muenster.de
47	Parker Andrew	Texas A&M University, USA	parkerao@geos.tamu.edu
48	Peterson Carlye	University of California, Santa Barbara, USA	carlye.peterson@gmail.com
49	Port Ulrike	Max Planck Institute for Meteorology, GERMANY	ulrike.port@zmaw.de
50	Prentice Katherine	Imperial College, UK	k.prentice11@imperial.ac.uk
51	Rouselle Gabrielle	Pierre et Marie Curie University, FRANCE	gabrielle.rouselle@upmc.fr
52	Rugenstein Maria	Utrecht University, THE NETHERLANDS	m.a.a.rugenstein@uu.nl
53	Segura Miguel	University of Exeter, UK	m.segura@exeter.ac.uk
54	Sibert Elizabeth	University of California, Santa Diego USA	esibert@ucsd.edu
55	Skonieczny charlotte	University of Lille, FRANCE	charlotte.skonieczny@univ-lille1.fr
56	Sprenk, Daniela	University of Cologne, GERMANY	dsprenk@uni-koeln.de
57	Stern Joseph	University of California, Santa Barbara, USA	jstem@umail.ucsb.edu
58	Struve Torben	Imperial College, UK	t.struve11@imperial.ac.uk
59	Voigt Janett	GEOMAR-Kiel, GERMANY	jvoigt@geomar.de
60	Warden Lisa	NIOZ, The Netherlands	lisa.warden@nioz.nl
61	Wei Jeremy	University of Massachusetts, USA	jhwei@geo.umass.edu
62	Weidle India	University of Cambridge, UK	imw28@cam.ac.uk
63	Whipple Matthew	Bristol University, UK	glymw@bristol.ac.uk
64	Zhang Yige	Yale University, USA	yige.zhang@yale.edu

	Wed 11-Jul	Thu 12-Jul	Fri 13-Jul	Sat 14-Jul	Sun 15-Jul	Mon 16-Jul	Tue 17-Jul
9:00 - 10:30	Introduction to Past Climate Variability: Tempo and Scales (von der Heydt)	Age Models I: Time and Stratigraphy (Schellenberg, Leckie)	Carbon Cycle: Dynamics and Patterns I (Ridgwell)	FREE DAY (Optional Carbon Cycle Investigation in AM)	Field Excursion (all instructors present)	Past Climate Variability and Orbital Forcing (Raymo)	Stable Isotopes I: Theory and Systematics (Zachos)
11:00 - 12:30	Paleoclimate Archives (Leckie)	Age Models II: Biomagnetostratigraphy of PETM (Schellenberg, Leckie)	Carbon Cycle: Dynamics and Patterns II (Ridgwell)				Stable Isotopes II: Theory and Systematics (Zachos)
13:30 - 15:00	Primer on Stable Isotopes (Spero)	Age Models III: Cyclostratigraphy Theory (Lourens)	Carbon Cycle: Dynamics and Patterns III (Ridgwell)			Age Models IV: Cyclostratigraphy Exercise (Lourens)	Stable Isotopes III: Problem Set and Data from Field Sections (Zachos)
15:30 - 17:00	Forams as Geochemical Information carriers (Jorissen)	Age Models III: Cyclostratigraphy Theory (Lourens)	Carbon Cycle: Dynamics and Patterns IV (Ridgwell)				Stable Isotopes IV: Problem Set and Data from Field Sections (Zachos)
Night							

	Wed 18-Jul	Thu 19-Jul	Fri 20-Jul	Sat 21-Jul	Sun 22-Jul	Mon 23-Jul	Tue 24-Jul
9:00 - 10:30	The Mesozoic Greenhouse World (Jenkyns)	Discussion and Integration: Age Models, Isotopes, Carbon Cycle, and Earth History	Proxies IV: Marine Biota (Gronin)	Parallel Session I	Cioppino Conference (Dickens, Brinkhuis)	FREE DAY	Discussion and Integration: Proxies, Parallel Sessions, and Cioppino
11:00 - 12:30	The Paleogene Greenhouse World (Stujs)	Proxies I: Marine Inorganic (Rosenthal/Rechart)	Proxies V: Terrestrial (Bower)	Parallel Session II			Geochemical Modeling I: (Zeebe/Dickens)
13:30 - 15:00	Greenhouse to Icehouse Transition and the Icehouse State (Zachos)	Proxies II: Marine Inorganic (Rosenthal/Rechart)	Proxies VI: Organic Chemistry Principles (Pagani, Pancost)	Parallel Session III			Geochemical Modeling II: (Zeebe/Dickens)
15:30 - 17:00	The Quaternary (Raymo)	Proxies III: Marine Biota (Schellenberg)	Proxies VII: Organic Chemistry Proxies (Pagani, Pancost)	Parallel Session IV			Geochemical Modeling III: Calculations and Simulations (Zeebe/Dickens)
Night	The Holocene (Rosenthal)		Polar adventures (Brinkhuis)				

	Wed 25-Jul	Thu 26-Jul	Fri 27-Jul	Sat 28-Jul	Sun 29-Jul	Mon 30-Jul	Tue 31-Jul
9:00 - 10:30	Climate Models I: Principles and Practices (Deconto, Huber, Valdes)	Climate Models III: Cretaceous (Deconto, Huber, Valdes)	Climate Models VII: Cryosphere Dynamics and sea level (Vermeersen/Stocchi)	Tipping Points in Climate (Skinner)	FREE DAY	Past to Future I: Meet The Anthropocene (DeMenocal)	Past to Future V: TBD
11:00 - 12:30		Climate Models IV: Paleogene (Deconto, Huber, Valdes)	Climate Models VIII: Cryosphere Dynamics and sea level (Vermeersen/Stocchi)	Ocean Acidification (Cabeira)		Past to Future II: Global Warming (Huber)	Past to Future VI: Biotic Responses (Middelburg)
13:30 - 15:00	Climate Models II: Calculations and Simulations (Deconto, Huber, Valdes)	Climate Models V: Miocene-Pliocene (Deconto, Huber, Valdes)	Climate Models IX: Quaternary/Holocene Climate Models (Deconto, Valdes)	Pliocene Dynamics (Ravelo)		Past to Future III: Sea Level Rise (Vermeersen)	Past to Future VII: Paleoclimatology: Politics, Policy (Deconto/DeMenocal)
15:30 - 17:00		Climate Models VI: Biosphere Dynamics (Deconto, Huber, Valdes)	Discussion and Integration: Geochemical and Climate Modeling	Past Climate Sensitivity		Past to Future IV: Panel and Discussion	Past to Future VIII: Panel and Discussion
Night							

Parallel Session	Parallel 1	Parallel 2	Parallel 3
Parallel Session I	Planktonic foraminifera (Premoli)	High-Resolution Skeletal Archives (Schellenberg)	Cretaceous Oceanic Anoxic Events (Slomp)
Parallel Session II	Dinocysts (Sangorgi)	Arctic Paleodimates (Gronin)	Mass Extinctions (Rampino)
Parallel Session III	Calcareous Nanofossils (Henderiks)	Frontiers in Inorganic Geochemistry (Reichardt/Rosenthal)	PETM and Hyperthermals (Stujs)
Parallel Session IV	Benthic Foraminifera and Ostracods (Gronin)	Symbiosis and geochemistry of Living Planktonic foraminifera (Spero)	E/O Boundary (Wade)

Lectures	Investigations	Field Work and Analyses	Integration and Discussion	Parallel Sessions	Cioppino Conference	Evening Activities
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