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Message from the Council Chair

Times have become more and more difficult for IODP and ECORD because of the global situation (cost of fuel, high demand on all activities associated with oil industry, etc). Even with a rising budget, IODP cannot implement drilling expeditions all year round. Nevertheless, it is time to think about the future of the IODP post-2013.

The last IODP Council meeting in June could be considered as the kick-off meeting of the next ocean drilling programme. During the meeting, the Chairman Mr. Kazuya Shukuri (MEXT) raised critical questions regarding the structure of a future programme and the implications to IODP members.

The Lead Agencies from the USA and Japan, announced that, in principle, they intend to support a new programme, although they are aware that some changes will be needed to better fit the current situation. The Lead Agencies would like to see ECORD playing a more important role in the programme and have committed to maintain regular contacts with ECORD. Unfortunately, we are not yet ready to become a Lead Agency because our financial contribution to IODP is not high enough.

For ECORD to rise to the challenge of becoming a Lead Agency there are three critical points. First, ECORD has not been able to get the financial support of the European Commission to raise its contribution to IODP. The current scientific objectives of the

drilling program are probably not of enough societal relevance, a major concern of the EC. This critical issue has to be considered when the science plan for a future programme is discussed. Second, for the participation in IODP activities, ECORD currently applies quotas to member countries as a function of their financial contribution. To be able to act as a single member, ECORD needs to evolve towards a real "common pot" approach, with no national preferences, however this can be done only with the support of EC funding. Third, although IODP is not an exceptionally expensive program, each berth on a drilling expedition costs twice or three time more than the cost for a researcher in other programmes running large facilities. It is our role to explain that the benefit of IODP cannot be calculated only by considering the cost of a berth, but also by looking at the invaluable dataset made available to the scientific community. Making progress on these three issues will certainly help ECORD to become a Lead Agency in the future.

The question of the administrative structure for a future programme post 2013 should be addressed in coordination with the new science plan generated by the scientific community. We shall be looking for the structure most suited to achieve the scientific goals of the new programme.

Severino Falcon-Morales, Council Chair, September 2008



Clockwise: IODP inauguration of the Sant Ocean Hall at Smithsonian National Museum of Natural History in Washington DC (photo S. Harris), the ECORD/IODP booth at EGU 2008 (© ECORD/IODP), ECORD Summer School took core samples from the muddy tidal flats of the Wadden Sea (photo C. Petrea), "Drill Me a Painting" a watercolour album by ECORD scientist Christine Laverne (University of Marseille).



Colin Graham

Navigating the Data Ocean: The Data Portal for Mission-Specific Platform Operations

Data management in IODP performs three generic functions. These are: the capture of data during expeditions, the long-term management of the data once expeditions are completed, and the dissemination of data to the public and scientific community.

In IODP, each of the three Implementing Organisations (ESO for ECORD mission-specific platforms, the USIO for riserless drilling, and CDEX for riser drilling) is responsible for the management of the data resulting from their own expeditions.

Due to a variety of logistical, funding and timing issues within the IODP Program, each of the Implementing Organisations (IO) has adopted a different approach to data management, in terms of organisational structures, data management IT systems and user applications. However, all IOs provide the same functionality, namely, the systematic capture and storage of data during expeditions, using documented procedures, formats and standards; the generation of metadata (a description of the data and its content); quality control of the data; data security; access to the data, initially by the expedition scientists only, and later by the scientific community, via the metadata; and archival of the data for the foreseeable future.

IODP-MI is responsible for coordinating the data management activities of the IOs and for creating the overarching framework in which they operate. There is a good level of cooperation between the data management teams in the IOs and with IODP-MI. Examples of cooperation are, the development of an ISO-compliant, IODP standard metadata schema, the adoption of common terms and vocabularies for capturing and labelling data, the development and population of the IODP Scientific Earth Drilling Information Service (SEDIS - <http://sedis.iodp.org>), and the development of the Sample Data Request Management (SDRM) and Sample Material Curation (SMCS) systems.

For ECORD mission-specific platform expeditions, the data management process can be divided into three phases.

The **offshore phase** covers the duration of the offshore drilling operation. Due to the limited facilities onboard mission-specific platforms, only a limited amount of basic scientific data are generated (*above*). Data types include core and sample curation information, core-catcher photographs, initial lithological measurements, multi-sensor core log measurements, ephemeral

properties, microbiological observations, drilling parameters and expedition documents.

The **onshore phase** begins immediately after the drilling operation is completed and lasts until the end of the moratorium period. On completion of the offshore phase all data are transferred to the Bremen Core Repository at MARUM, University of Bremen, and are then available to expedition scientists via a password-protected data portal (*bottom, page 3*).



Operations and data management office onboard DP Hunter during the Tahiti Sea-Level Expedition (© ECORD/IODP).

Additional data are added throughout the duration of the onshore phase, before, during and after the Onshore Science Party. It is during this phase, especially at the Onshore Science Party in Bremen, that the bulk of the scientific data and interpretations are generated. Examples of the additional data types generated during this phase are visual core descriptions of the split cores, high-resolution line-scan and core overview images, XRF and XRD measurements and stratigraphic data.

ESO employs the ExpeditionDIS as its data management system during the offshore and onshore phases. This system is used by both

ESO and ICDP, and is based on the ICDP Drilling Information System originally developed by the Operational Support Group (OSG) ICDP at the GeoForschungsZentrum (GFZ) Potsdam. Details of ESO data management systems and operations are available at:

http://www.marum.de/English/MSP_offshore_data_storage_and_computer_facilities.html

Core and sample data are held in another version of the DIS, the CurationDIS which is used at the Bremen Core Repository (*top, page 3*).

The **post-expedition phase** begins at the end of the moratorium period. In this phase the data management process changes from the capture of expedition data to archiving of the data, and provision of the data to the scientific community. This is when the expedition data are transferred to WDC-MARE PANGAEA, the World Data Centre for Marine Environmental Sciences. Expedition data and other information, for example, lists of publications can be accessed via the MSP Data Portal - <http://iodp.wdc-mare.org/> (*bottom, page 3*). Metadata are also exported to the IODP SEDIS, SDRM and SMCS, which are in various stages of development (<http://sedis.iodp.org/>).

Colin Graham, Head of ESO Data Management

Conze, R., Wallrabe-Adams, H.-J., Graham, C. and Krysiak, F. 2007. Scientific Drilling, 4:32-34. doi:10.2204/iodp.sd.4.07.2007



Albert Gerdes

Interview with Colin Graham, Head of ESO Data Management

Colin Graham is head of data management for ESO and is based in the Edinburgh office of the British Geological Survey. ESO public relations officer Albert Gerdes talked with Colin about the nature of his work and the advantages of the mission-specific platform operations (MSP) Data Portal.

Colin, how long have you been working with the MSP Data Portal?

I joined the BGS Marine Geology Group in 1974 and for most of my career have been involved with offshore surveying and marine data management, including BGS offshore drilling projects. I was involved in the initial data management discussions that took place during the development of IODP, and became head of data management for ESO in 2003. Development of the MSP Data Portal began in 2004 for Expedition 302 (ACEX), and has since been used for Expedition 310 (Tahiti Sea Level).

How many people are working on servicing and updating the portal?

My colleague from MARUM in Bremen, Dr. Hans-Joachim Wallrabe-Adams, is responsible for management of the data portal and its content, with the technical support provided by WDC-MARE PANGAEA staff in Bremen.

Which categories do you use to organise the data?

The data are organised by expedition, and include an overview, list of participants, list of sites, access to the sample metadata held in the Curation Drilling Information System DIS, access to downloadable datasets, and links to other IODP data management web sites.

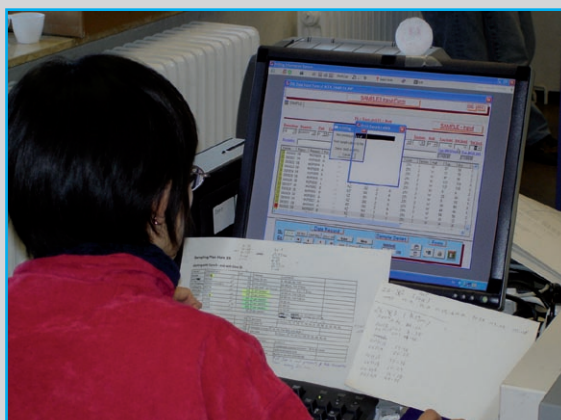
Who can benefit from the MSP Data Portal outside the ECORD or IODP community?

The two MSP expeditions conducted so far are very different in scientific objectives, so it is likely that there will be different user communities accessing the data and other information available from the portal. However, the data are available to any scientists or members of the public who can make use of the data.

If you would have to advertise the portal: what do you see as its greatest advantage?

The ability to browse through the various types of information that summarise the expeditions, and be able to locate and download

scientific datasets on a hole by hole basis. One of the roles of WDC-MARE PANGAEA is the archiving of post-expedition datasets, so there is an active programme to contact scientists and acquire copies of post-expedition datasets, which are also added to the portal.



Data input during the Onshore Science Party of the Arctic Coring Expedition (ACEX) (© ECORD/IODP).

Can researchers retrieve data by using a catchword function?

The layout of the data portal is designed so that access to the information and data for an expedition does not require a search form. However, for more complex searching, the PANGAEA suite search tools are available.

The MSP Data Portal is part of the IODP data network. How important is it to align these networks?

It is very important that common standards are adopted for describing the data so that it is possible to do searches across the data systems of the Implementing Organisations. This is the role of the SEDIS project and the coordination provided by IODP-MI.

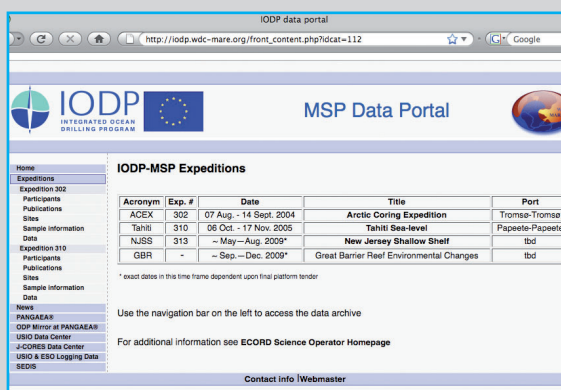
IODP maintains the web information service SEDIS. What is the difference between SEDIS and the MSP Data Portal?

SEDIS provides a single point of entry for users wanting to search for and locate expedition data held by the three IOs. The SEDIS portal harvests information (metadata) generated by the IOs in a common standard format, and presents this information to the public. No actual data are held in SEDIS, a search result points to the IO's data management system that holds the data.

Is it possible to access databases outside the IODP world through the MSP Data Portal website?

The Data Portal is essentially a customised view of ESO data within the WDC-MARE PANGAEA system, so by clicking on the PANGAEA link it is possible to search across the entire PANGAEA data inventory.

Thank you very much, Colin, for the interview.



Data portal of the mission-specific platform (MSP) expeditions: <http://iodp.wdc-mare.org/>



Dan Evans



Alan Stevenson

In September, Dan Evans (ESO Science Manager), Dave Smith (ESO Operations Manager), Alan Stevenson (ESO Outreach Manager) and Alister Skinner (ESO Drilling Consultant) visited Australia to make preparations for the Great Barrier Reef Environmental Changes Expedition (GBREC), which is planned to take place in the later part of 2009. During the trip the ESO team visited the Australian National University (ANU) in Canberra where they met Neville Exon, head of the Program Member Office of the Australia/New Zealand Consortium (ANZIC) and his colleagues at the ANU, led by Patrick de Decker, Associate Director of the Earth Environment Department. Dan Evans gave a presentation about IODP and future plans to staff of the ANU, which was also attended by geologists from Geoscience Australia.



ESO staff meet representatives from the Great Barrier Reef Marine Park Authority. Left to right, Alister Skinner, Dan Evans, Adam Smith, David Wachenfeld, Fiona Macdonald, James Monkivitch, Dave Smith, Jody Webster and Karen Vohland.

including the project science and benefits to the management of the reef as well as providing an operational update (*above*). The need to explain the science to stakeholders in the region is of prime importance to the success of the expedition and the ESO team will work closely with the GBRMPA in developing their communications plan. GBRMPA representatives included Dr Adam Smith (Manager, Environmental Impact Management), Dr David Wachenfeld (Knowledge Management Group), Fiona Macdonald (Director, Programme Delivery Group), Karen Vohland (Director, Communication and Education), James Monkivitch (Manager, Ports and Shipping) and Dr Ashley Frish (Project Manager, Fisheries).

En route to the United Kingdom, the ESO group stopped at Singapore, where they had the opportunity to visit the *JOIDES Resolution*. The team enjoyed a tour of the ship led by Jay Miller of IODP TAMU (*right*), who has been overseeing the refurbishment of the *JOIDES Resolution* since June 2008.



Alister Skinner, Jay Miller and Dan Evans pictured with the JOIDES Resolution.

Dan Evans, ESO Science Manager and Alan Stevenson, ESO Outreach Manager

Detailed informations about IODP mission-specific platform expeditions

- Arctic Coring (Expedition 302),
- Tahiti Sea Level (Expedition 310),
- New Jersey Shallow Shelf (Expedition 313)
- Great Barrier Reef Environmental Changes

<http://www.eso.ecord.org>



Albert Gerdes



Alan Stevenson

ECORD Outreach and Education Activities



Bonnie Wolff-Boenisch



Patricia Maruéjol

News from the Outreach Team

Since last April, the ECORD Outreach Team has been busy organising ECORD/IODP events at two major geological conferences in Europe, EGU 2008, April 13-18, in Vienna and the 33rd International Geological Conference, August 5-14, in Oslo. The whole team met in August 20-21, in Aix en Provence (*top right*) to outline the actions for the next 6-month period. The next meeting is scheduled for January 15-16, 2009 in Paris. A new IODP article for "Responding to Climate Change (RTCC)" is ready to be released at the UN Climate Change Conference to be held in Poznan, Poland, on December 1-12, 2008. Albert Gerdes and Patricia Maruéjol participated in the IODP Outreach Task Force meeting held in Washington DC, on October 2-3. 2009 will be a particularly busy year for the ECORD Outreach Team with two planned MSP expeditions, New Jersey Shallow Shelf and Great Barrier Reef Environmental Changes (*see pages 4 and 8*).

Past Conferences and Meetings

At least 8,400 people attended the European Geosciences Union General Assembly 2008 (EGU 2008), in Vienna, from April 13 to 18. ECORD co-organised the following events, <http://www.ecord.org/pi/egu08.html>, involving the European scientific drilling community: the ECORD/IODP booth, the joint ICDP-IODP Townhall meeting, the IODP media conference entitled "First results from drilling in the Nankai Trough into the seismogenic zone" and the IODP-ICDP EuroFORUM 2008 (*see page 11*). We were supported by IODP-MI, ICDP, in collaboration with CDEX-JAMSTEC and IODP-USIO, respectively the Japanese and US Implementing Organisations. For the fourth consecutive year, ECORD presented the ECORD/IODP booth (*cover page*) at EGU. For scientists, students and educators who visited the booth, it was a good opportunity to catch up with the most recent news of the program, to receive a wide range of information - printed (Newsletters, Scientific Drilling), on-line (web sites and databases), DVDs of expeditions and core replicas - and to meet the scientists who are participating in the program. We are

greatly thankful to Keita Umetsu, J-DESC, Jay Miller, IODP-USIO and Jamus Collier, IODP-MI and to all ECORD scientists who offered valuable help during the whole week.

The 33rd International Geological Congress (IGC) convened 6,000 scientists from 113 countries for nearly 2 weeks. About 80 nonprofit organisations, corporations, countries and scientific programmes

exhibited in the Geo Expo Hall, close to where the sessions were conducted. On this occasion we re-designed the posters presented at the ECORD/IODP booth (*middle left*), which attracted a broad section of attendees, notably from Russia, India, Iran, Western and Northern Europe, and South America. A photo gallery of IGC 33 is posted online at: www.iodp.org/igc-photo-gallery-082008.

Beside the cooperation with IODP-MI to man the booth, we are grateful to Are Carlson (Council delegate) and Catherine Stickley (University of Tromsø) for their support.

Albert Gerdes and Patricia Maruéjol represented ECORD at the annual Outreach Task Force meeting convened at IODP-MI, Washington on October 2-3. Dan Evans attended as an observer. Along with IODP-MI Director of Communications Nancy Light and outreach colleagues John Corsiglia (USIO) and Tadashi Yoshizawa (CDEX-JAMSTEC), the Task Force discussed a wide range of issues from the 08-09 outreach programme including; expedition communications plans for scheduled expeditions to Canterbury Basin, Wilkes Land, Equatorial Pacific, New Jersey, Great Barrier Reef as well as the ongoing NanTroSEIZE outreach efforts. Leslie Peart (Education Director, IODP-USIO) joined the meeting to describe plans for a Teacher-At-Sea aboard the Canterbury Basin expedition and a School of Rock session to be held during Juan de Fuca in mid-2009. Sharon Katz Cooper (IODP-USIO) described the new JR website, primarily targeted at young people, students, teachers, non-scientists, and rich in multimedia. It is interactive, with links to various social networks online. It is hoped that this approach can be developed in all of the IODP websites to make them more appealing to younger scientists. Tadashi Yoshizawa presented a new DVD about the first stage of NanTroSEIZE; a 16-minute, fast-moving video that is very useful for public events, in classrooms, with the media, and in other venues where a scientific drilling



The ECORD Outreach Team in Aix en Provence. Front left to right: Bonnie Wolff-Boenisch, Rosa Bernal-Carrera, Catherine Mével and Patricia Maruéjol. Standing, Alan Stevenson and Albert Gerdes.



Dan Evans, H.C. Larsen (IODP-MI) and Catherine Mével at the IODP booth during the 33rd IGC Conference.



Representatives from the Outreach Task Force at the opening of the IODP exhibition at the Ocean Hall, Smithsonian, Washington DC. Left to right, Dan Evans (ESO), Patricia Maruéjol (EMA), Nancy Light (IODP-MI), Yoshi Kawamura and Tadashi Yoshizawa (CDEX), Jon Corsiglia (IODP-USIO) and Albert Gerdes (ESO) (photo S. Harris).

overview of Nankai Trough drilling activity is required. Plans were drawn up for the IODP booth, December 16-19, and Town Hall Meeting, December 16, at AGU Fall 2008 in San Francisco. The programme for the Town Hall meeting will be different to previous years. Advance promotion online will give details of the format and urge people to come prepared with questions, which may also be submitted ahead of the meeting on the IODP website.

On the evening of October 3, the group attended the opening of an IODP exhibit at the Sant Ocean Hall (*bottom page 5 and cover page,*) at the Smithsonian National Museum of Natural History, where Dr Huber, curator and paleontologist, and Dr Suyehiro, executive director of JAMSTEC, welcomed the audience. The hall's "Journey through Time" section features how scientific ocean drilling contributes with cored samples collected from below the seafloor to tell the history of the Earth: its climatic changes, geodynamic cycles, and the characteristics of the deep biosphere. A large-scale model of the *Chikyū* provides a look inside the ship and the research that happens on-board - http://ocean.si.edu/ocean_hall/.

New Publications and Materials

- Information about IODP is featured in YouTube.
- The large wall posters designed for the ECORD/IODP booth at the IGC in Oslo are available on-line at the ECORD website. Copies can be sent to anyone interested in displaying the posters at their organisation or meetings/conferences.
- ECORD now has 5 core replicas that can be used within the ECORD member countries. EMA is responsible for managing loan arrangements - for further information, please contact ema@ipgp.jussieu.fr
- A new ECORD brochure entitled "ANSWERS" is now available in German and English.
- A watercolour album designed by Christine Laverne, an ECORD scientist who participated in seven ODP (Legs 70, 83, 140, 148) and IODP (309, 312) expeditions aboard the *JOIDES Resolution* is released (*cover page*).

ECORD on-line

The web page of ECORD Public Information - <http://www.ecord.org/pi/promo.html> - has been recently revamped to offer detailed and more appropriate information on ECORD/IODP program materials and activities and ECORD common resources. The website of the Spanish national office (IODP-España) is now online and linked to the ECORD website, as are the web pages of IODP Ireland and IODP Iceland.

ECORD 2008 Summer Schools

From the 13 students who were awarded funds by ECORD to attend the summer schools, Benoit Thibodeau and Catalin Petrea have agreed to share their experience in a short report.

ECORD 2008 Urbino Summer School Past Climate Reconstruction and Modelling Techniques, 15/7-3/8, 2008 in Urbino, Italy

The 5th Urbino Summer School in Paleoclimatology (USSP) was attended by more than 60 students and 30 professors from all over the world. This year, the USSP focused on the evolution and dynamics of Cretaceous and Cenozoic climates. In addition to classes on chronostratigraphy, biological and geochemical proxies and modeling, we had the opportunity to investigate various case-studies in working groups such as the Paleocene-Eocene thermal maximum and the Cretaceous-Tertiary boundary. A workshop on the Transient Changes in Past Warm Climates theme was held, during which presentations on the most recent discoveries in this particular field were made.

USSP 2008 was a great experience for me, not only did I expand tremendously on my general knowledge in paleoclimatology, but I also had the opportunity to build a strong social network with 60 of my peers in Urbino's spectacular environment.

I wish to thank ECORD and CCOR for their financial support, which gave me the wonderful opportunity to experience USSP 2008.

Benoit Thibodeau, ECORD Scholarship Awardee 2008, GeoTOP, Canada



ECORD Urbino Summer School (photo Bas de Boer)



ECORD Bremen Summer School (photo Marum/ GLOMAR)

ECORD 2008 Summer School in Deep Subseafloor Biosphere, 1-12/9, 2008 in Bremen, Germany

This summer school was for me a new and interesting experience and probably the best way to understand the complexity of the deep-sea biosphere. I appreciated both the quality of conference talks and the very interesting discussions during coffee breaks, which offered answers to some of my unsolved research questions. Probably the most important thing was to be in contact with many researchers from different fields of Earth Science

(microbiology, geology, geochemistry) which gave us the opportunity to discuss and compare our research topics.

Catalin Petrea, ECORD Scholarship Awardee 2008, U. of Torino, Italia

ECORD Outreach Team: Albert Gerdes and Alan Stevenson, ESO, Patricia Maruéjol, EMA and Bonnie Wolff-Boenisch, ESSAC

Where to find information about ECORD/IODP Education and Outreach?

- **ECORD Outreach Resources** - www.ecord.org/pi/promo

Publications - brochures/flyers and posters, ODP/IODP core replicas and the Arctic photo exhibition are available upon request.

- **ECORD Education** - www.ecord.org/edu/education

Educational materials, ECORD Teachers' Workshop, ECORD Summer Schools, ECORD Distinguished Lecturer Programme.



Catherine Mével

ECORD and the European Commission



In 2003, when a number of European countries decided that they should join IODP as a single member to be more visible, the European Commission supported this initiative with an ERA-Net project (ECORD-Net) with funding at a level of 2.8 M€. Although for various reasons not all the ECORD member countries participated in this project, it has been a great benefit to us. It provided the glue money that facilitated the set up of the ECORD structure. It also allowed the development of some associated activities such as the ECORD Teachers' Workshop in Vienna in 2007, or the workshop for potential new members in Edinburgh in 2008 (see page 13), which were both great successes. With the inclusion of a new workpackage, it was instrumental in developing the Deep Sea Frontier concept and producing the foresight paper "The Deep Sea Frontier: science challenges for a sustainable future", which opens the road for future activities. However, the European Commission has never funded the operation of the drill ships and as a consequence ECORD has not yet been able to contribute enough to IODP to become a Lead Agency.

After 57 months of hard and exciting work, ECORD-Net ended last August and the final report is being completed. At this stage, there is no follow-up to support ECORD. The European Commission considers that the work has been accomplished: ECORD is up and running, and has proved its efficiency as emphasized in the "ECORD evaluation committee report" published in 2006. Of course the member countries have committed to the program for 10 years and will continue to fund ECORD until 2013, the end of the current phase of IODP. However, the support of, for example, the ECORD management structure, the maintenance of the website and

the funding of outreach activities, will have to come from the ECORD co-mingled funds.

However, the ECORD Council still has ambitious plans. As shown by the Deep Sea Frontier Initiative, we are still willing to better integrate drilling with other activities, such as seafloor observatories and the investigation of deep-sea ecosystems, for a better understanding of deep-sea processes. We were hoping that a new ERA-Net, with the aim of organising the Deep Sea Frontier community, would be supported by the EC. Unfortunately, this will not happen in the near future. Instead, there is an opportunity for a coordination action with the aim of enhancing synergies between deep-sea research and drilling programmes. The scientific community is getting organised to answer the call. Hopefully, this coordination action will be funded and by formulating strategic plans for the future, will prepare the way for further support from the European Commission.



ECORD-Net participants at the final coordination meeting in Den Haag, the Netherlands, celebrate with a glass of champagne. From front left to right, 1st row, Stefan Winkler-Nees (WP3-WP8) and Raymond Schorno (convenor and WP6), 2nd row, Catherine Mével (co-ordinator), José Monteiro (WP1), 3rd row, Soeren Duerr (WP3-WP8), Carol Cotterill (WP5), Olga Dias (ECORD Council), 4th row, Patricia Maruéjol (WP4), Rosa Bernal-Carrera (assistant co-ordinator), Sasha Leigh (WP5), 5th row, Heidi Elberling (ECORD Council) and Rikke Pedersen (WP1).

Catherine Mével, ECORD Managing Agency Director and ECORD-Net coordinator

ECORD member countries: Austria, Belgium, Canada, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

<http://www.ecord.org>

ECORD-Net member countries: France (coordinator), Denmark, Germany, Iceland, the Netherlands, Norway, Portugal, Sweden, Switzerland and the United Kingdom.

<http://www.ecord.org/enet/ecord-net.html>



Check and Subscribe to "ECORD News", the RSS newsfeed that keeps you up to date:
http://www.ecord.org/RSS/news_ECORD.xml



Gilbert Camoin

ECORD Science Support & Advisory Committee Updates



Bonnie Wolff-Boenisch

Since last year, when I took over the ESSAC chairmanship, ESSAC has changed the way it works and plans its activities as it now routinely works with three subcommittees (Staffing and Nominations, Education and Outreach, and Workshops, Communication and Vision) which meet electronically to prepare meetings on general issues and to work on specific issues at the Chair's request.

Over the last months we have completed the staffing of the Canterbury Basin and the Wilkes Land expeditions which were initially scheduled from November 2008 to February 2009 respectively and eventually postponed to the November 2009-March 2010 time window as consequences of further delays in the delivery of the *JOIDES Resolution*. The USIO has indicated that the ship will sail from Singapore by the end of January 2009, implying that the first two expeditions in 2009 will be the two Equatorial Pacific expeditions including also some additional work on the Juan de Fuca drill sites, which are scheduled from March to July 2009 (see table

right).

The Operations Task Force is now working on different scenarios to build the best drilling program for the rest of FY09. ESSAC has also just completed the staffing of the Great Barrier Reef Environmental Changes Expedition (about 30 applications), which should be the second MSP operation in 2009 (September-December 2009 time window), following the New Jersey Shallow Shelf Expedition, which is scheduled in May-August 2009. ESSAC has been recently engaged in staffing the next two NanTroSEIZE expeditions scheduled from March to September 2009*: the Stage 1B "Subduction Input" Expedition and the Stage 2 Expedition "Riser/Riserless Observatory 1", which will include the first riser drilling operations by the *Chikyu*. Two expeditions of the *JOIDES Resolution* have been scheduled recently by the Operations Task Force (see table above), the Bering Sea Expedition for which the USIO and the PMOs agreed to try to re-assemble the science party that was defined last year before the expedition was removed from the schedule in May 2008, and the Shatsky Rise Expedition for which a call for applications will be issued on November 1st, 2008.

The last year has been probably the most critical one for IODP since the beginning of the program, but it appears that 2009 should be the rebirth of IODP with all drilling capabilities

deployed simultaneously. Precise dates and official notification can be found in the table (below) and on the IODP website at: <http://www.iodp.org/expeditions/>.

13 young scientists from 8 countries were selected from 44 applicants from 10 ECORD and 6 non-ECORD countries to be funded by ECORD to attend one of the two ECORD-sponsored summer schools: "Past Global Change Reconstruction and Modelling Techniques" (Urbino, Italy; July-August 2008) and the "The Deep Subseafloor Biosphere" (Bremen, Germany; September 2008) (see page 6). At its spring meeting, ESSAC decided to fund the Urbino Summer School again in 2009 along with a summer school on "Geodynamics of Mid-Ocean Ridges" which will be organised in Bremen. Last June, the ECORD Council accepted an increase in the funding of the ECORD Summer Schools and the ECORD Scholarships for 2009. In parallel, a new call for applications for ECORD-sponsored 2010 summer schools has recently been issued by the ESSAC Office.

IODP Expeditions Drilling Schedule

Expedition	Drillship	Dates
Pacific Equatorial Age Transect (PEAT)	JR	5 March - 5 May 2009
NanTroSEIZE - Riser/Riserless Observatory 1	Chikyu	5 March - 30 July 2009 *
Pacific Equatorial Age Transect (PEAT)/ Juan de Fuca	JR	5 May - 5 July 2009
New Jersey Shallow Shelf	MSP	May/June-Aug. 2009
Bering Sea	JR	5 July - 4 Sept. 2009
NanTroSEIZE - Subduction Input	Chikyu	31 July - 12 Sept. 2009 *
Shatsky Rise	JR	4 Sept. - 4 Nov. 2009
Great Barrier Reef Environmental Changes	MSP	Sept. - Dec. 2009
Canterbury Basin	JR	4 Nov. 2009 - 4 Jan. 2010
Wilkes Land	JR	4 Jan. - 9 March 2010

from <http://www.iodp.org/expeditions> - MSP: Mission-Specific Platform, JR: *JOIDES Resolution*

* dates subjected to change

The first phase of the ECORD Distinguished Lecturer Programme launched in 2007 ended during the summer. The series has been very successful with a total of 23 talks in 15 ECORD and non-ECORD countries by the 2007-08 lecturers Judy McKenzie (see page 12), Benoit Ildefonse and Paul Wilson. At its spring meeting, ESSAC selected Peter Clift, Achim Kopf and John Parkes from 8 applicants to be the 2008-2009 ECORD Distinguished

Lecturers. To date, 34 institutions from 14 ECORD and non-ECORD countries have applied to host the lectures. The times and venues of the lectures will appear on the ESSAC website as soon as they are arranged.

At the meeting that was held on October 27-28, 2008 in Tübingen, Germany, ESSAC defined the format of a new tool called "ECORD Grants" which will consist of small and short-term grants that should cover travel and lab expenses to work on DSDP/ODP/IODP cores and/or data. The objectives of this programme will be to enlarge the use of DSDP/ODP/IODP cores and/or data, and to attract still more young scientists and IODP newcomers. This concept will soon be submitted to the ECORD Council to allow the start of the first funding phase of "ECORD Grants" to take place in FY2010.

The IODP-ICDP EuroFORUM entitled “Achievements and Perspectives in Ocean and Continental Drilling” was organised for the first time as an EGU Interdivision Session last April in Vienna (*page 11*) and was very successful with 29 talks and posters covering the 3 themes of the Initial Science Plan, and an attendance of more than 200 scientists.

ESSAC decided at its spring meeting that the EGU platform will be used again to organise an Interdivision Session entitled “Beyond 2013 - The future of European scientific drilling” convened by Gilbert Camoin and Rüdiger Stein (*below*). This will be followed by a 1 or 2-day workshop at the University of Vienna specifically addressing the future of European scientific drilling research with the objective to sharpen the European interests in the future IODP and to prepare for the INVEST (IODP New Ventures in Exploring Scientific Targets) Conference, which will be held on September 23–25, 2009 in Bremen, Germany. In parallel, ESSAC will initiate a web forum that will provide an opportunity for all people interested in scientific drilling to be included in the discussion, especially if they cannot attend the EGU. A questionnaire related to IODP achievements and perspectives, the IODP and ECORD structures, IODP problems, the relationships between academia and industry, the relationships between IODP and other drilling/coring programs will be posted soon on the ESSAC website - <http://www.essac.ecord.org/>.

ESSAC activities are developing in parallel with the very successful ESF Magellan workshop series. Three ESF Magellan-sponsored workshops have been or will be held in 2008: “Ocean Drilling for Seismic Hazard in European Geosystems” (*see page 11*), “Arctic Ocean: from Speculation to Reality” and “Lithospheric Heterogeneities, Hydrothermal Regimes and Links Between Abiotic and Biotic Processes at Slow Spreading Ridges” (*see page 10*).

In conclusion, soon after the 11th ESSAC meeting held in Tübingen, I am pleased to note that ESSAC has grown considerably and extended its activities to better serve the ECORD contribution to IODP. This new phase of ESSAC development could not have been achieved without the hard work of the ESSAC Science Coordinator and of the ESSAC delegates, as well as the strong support from Catherine Mével (EMA) and the ECORD Council members.

Gilbert Camoin, ESSAC Chair

EGU Interdivision Session, Vienna, 20-24 April 2009 “Beyond 2013 - The Future of European Scientific Drilling Research”

Conveners:

Gilbert CAMOIN (IODP) - CEREGE, Aix-en-Provence, France
Rüdiger STEIN (IODP) - AWI, Bremerhaven, Germany

Steering Committee:

Wolfgang BACH (IODP) - Univ. of Bremen, Germany
Jan BEHRMANN (IODP) - IFM-GEOMAR, Kiel, Germany
Angelo CAMERLENGHI (IODP) - Univ. of Barcelona, Spain
Jochen ERBACHER (ESF Magellan) - Univ. of Hannover, Germany
Ulrich HARMS (ICDP) - GFZ, Potsdam, Germany
Jeroen KENTER - Chevron-Texaco, USA
Heiko PAELIKE (IODP) - NOC, Southampton, UK
Ralph SCHNEIDER (IMAGES) - Univ. of Kiel, Germany

Session description:

The Integrated Ocean Drilling Program (IODP) is funded for the period 2003–2013, and is now starting to plan for ocean drilling beyond 2013.

A community-wide (USA, Europe, Japan, Asian and Oceanian countries), major conference INVEST (IODP New Ventures in Exploring Scientific Targets) addressing all international IODP partners is planned for September 23–25, 2009 in Bremen, Germany (*More information at <http://www.marum.de/English/iodp-invest.html>*) to discuss future directions of scientific ocean drilling.

The outcome of the conference will be a contribution to a science plan that will be drafted in 2010 to define new goals and strategies to effectively meet the challenges of future ocean drilling.

At its last meeting, ESSAC discussed the opportunity to

organise a Session of the EGU General Assembly 2009 in Vienna, Austria, (April 2009), followed by a 1-2 day workshop specifically addressing the future of European scientific drilling research with the objective to sharpen the European interests in the future IODP and to prepare the INVEST Conference. The key items that should be addressed during the EGU Session and the workshop should especially include :

- (1) The future of ECORD (science, technology, management),
- (2) New research initiatives and emerging fields in scientific drilling,
- (3) Relationships between IODP and other programmes (e.g. ICDP, IMAGES etc),
- (4) Collaboration between academia and industry,
- (5) New technologies and the mission-specific platform approach.

Additional topics will be defined based on participants' propositions.

This EGU session and the related workshop are open to all scientists with an interest in scientific drilling and to representatives from industry.

Gilbert Camoin, ESSAC Chair

IODP: Integrated Ocean Drilling Program - <http://www.iodp.org>

ESF Magellan - <http://www.esf.org/magellan>

ICDP: International Continental Scientific Drilling Program - <http://www.icdp-online.de>

IMAGES: The International Marine Past Global Change Studies - <http://www.images-pages.org>

Workshops and Conferences Announcements

- ◆ ESF Magellan Series - <http://www.esf.org/magellan>
 - Cold water Carbonate Reservoir systems in Deep environments - COCARDE, January 21-25, 2009, Fribourg, Switzerland (Convener: Sylvia Spezzaferri)
- ◆ Beyond 2013 - The Future of European Scientific Drilling Research - April 23-25, 2009, Vienna, Austria
- ◆ IODP-MI Workshops - <http://www.iodp.org/workshops>
- ◆ Distinguished Lecturer Programme 2008-2009 - <http://www.essac.ecord.org/index.php?mod=education&page=dlp>

INTERNATIONAL CONFERENCES:

- ◆ AGU Fall 2008, December 15-19, 2008, San Francisco, USA - <http://www.agu.org/meetings/fm08/>
- ◆ EGU 2009, April 19-24, 2009, Vienna, Austria - <http://meetings.copernicus.org/egu2009/>
- ◆ JPGU 2009, May 16-21, 2009, Chiba-city, Japan - http://www.jpгу.org/meeting_e/index.html
- ◆ AOGS 2009, August 11-15, 2009, Singapore - <http://www.asiaoceania.org>
- ◆ INVEST, September 23-25, 2009, Bremen, Germany - <http://www.marum.de/iodp-invest.html>

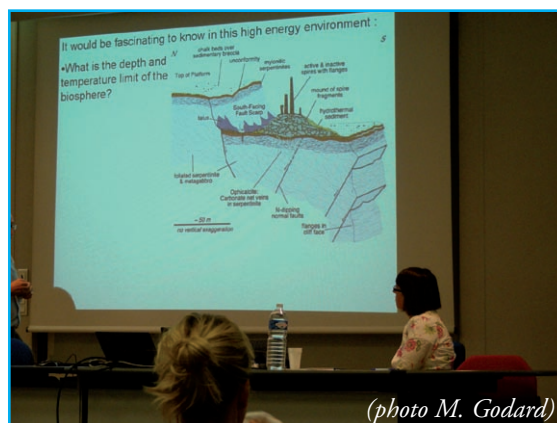
Workshop and Conference Reports

- ◆ **Lithospheric Heterogeneities, Hydrothermal Regimes, and Links Between Abiotic and Biotic Processes at Slow Spreading Ridges** - ESF Magellan Workshop Series Programme, September 10-12, 2008, Montpellier, France
 Conveners: Marguerite Godard (Marguerite.Godard@gm.univ-montp2.fr), Gretchen Früh-Green (frueh-green@erdw.ethz.ch), and Christopher MacLeod (macleod@cardiff.ac.uk)

Recent discoveries of low-temperature hydrothermal vents specific to mantle exhumation areas and of abiotic synthesis of hydrocarbons directly associated with these vents highlights the strong links between the structural and petrological heterogeneities of the lithosphere formed at slow spreading ridges and the development of conditions favourable to life in extreme environments.

A workshop was held in Montpellier (France) between September 10 and 12, 2008 that brought together specialists in marine geology and geochemistry, oceanography, biology and petrology; its aim was to develop a European-initiated, mission-specific platform (MSP) IODP drilling proposal to investigate geological, physical and chemical evolution of the accretion system at slow spreading ridges and the life it sustains. The workshop was supported by ESF (Magellan Workshop Series), UK IODP and InterRidge. A total of 23 participants from 12 research institutions from 6 European countries, together with 4 participants from the United States (3 institutions) attended.

The workshop was introduced by a series of presentations that provided an updated view of tectono-magmatic processes in a volcanic slow spreading centres, the associated development of H₂ generating, serpentine-hosted hydrothermal fields and on related microbial communities, as well as an introduction to the most recent improvements in seabed rock drills (BGS, MeBo etc). Discussions focussed on (1) the development of novel uses of MSPs to explore ridges processes and options for design of a drilling experiment, and (2) the major questions and rationale that drive interest in scientific ocean drilling at slow spreading ridges today. Atlantis Massif (Mid-Atlantic Ridge, 30°N) was chosen as target area because (a) it samples a typical slow spreading ridge intrusive mantle lithosphere (mantle rocks intruded by gabbros), (b) it hosts a H₂ generating hydrothermal system (Lost City Hydrothermal Vent), (c) abundant geophysical and geological data were already obtained at this site (e.g., IODP Expeditions 304-305), and (d) of its shallow topography. Substantial discussion was directed at defining the detailed objectives, and work plan, to submit a proposal using an IODP MSP in April 2009 (coordinator: Gretchen Früh-Green) focused on the exploration/characterisation of interactions between faulting, serpentinisation, fluid flow and microbial activity in the shallow ultramafic seafloor.



(photo M. Godard)

Marguerite Godard, Marion Drouin, Philippe Gouze and Yves Lagabrielle, Géosciences-Montpellier, France; Muriel Andreani, Université Lyon1, France; Mathilde Cannat and Adélie Delacour, Institut de Physique du Globe de Paris, France; Christopher MacLeod and John Parkes, Cardiff University, UK; Andrew McCaig, University of Leeds, UK; Antony Morris, University of Plymouth, UK; Roger Searle, Durham University, UK; Dave Smith, BGS, Loanhead, UK; Gretchen Früh-Green, Tamara Baumberger and Esther Schwarzenbach, ETH, Zürich, Switzerland; Tim Freudenthal, MARUM, Bremen University, Germany; Chiara Boschi, IGG-CNR, Pisa, Italy; Magnus Ivarsson, Stockholm University, Sweden; Donna Blackman, Scripps Institution of Oceanography, La Jolla, USA; Mike Cheadle and Barbara John, University of Wyoming, Laramie, USA; Marvin Lilley, University of Washington, Seattle, USA.

◆ Ocean Drilling for Seismic Hazard in European Geosystems - ESF Magellan Workshop Series Programme, August 18-20, 2008, Luleå, Sweden

Conveners: Mary Ask (maria.ask@ltu.se) and Achim Kopf (akopf@uni-bremen.de)

Submarine seismic geohazards are devastating natural events in terms of lives lost and economic impact, but their governing processes and recurrence intervals are still poorly understood. Potential European geohazards include, but are not limited to, earthquakes along the active tectonic margins of the Mediterranean and Sea of Marmara, landslides on active and passive margins, and tsunamis. For example, the Mediterranean, which is the World's leading holiday destination with up to 30% of the global tourism, is vulnerable to submarine geohazards because of its densely-populated coastline and seafloor with its sub-sea installations (e.g. pipelines and cables).

The objectives of this workshop, which was sponsored by the European Science Foundation and the Swedish Research Council, were to (1) address scientific questions and goals on a European scale; (2) combine European expertise in research related to seismogenesis, and (3) coordinate and strengthen Europe's role within large-scale international projects (IODP, ICDP, etc) in this field. A total of 19 dedicated scientists participated at the workshop, from 9 European countries and the USA.

The workshop started with presentations about the IODP and ICDP structure, active and future drilling proposals related to the topic of the workshop, technologies needed, funding, as well as on various aspects of seismic hazard. The second half of the workshop was devoted to discussions on existing and new drilling and engineering development proposals, as well as on proactive activities to increase the recognition of ocean drilling for geohazards within individual member countries, the EU and IODP. The results of the workshop are outlined in an ESF report, and comprise as major spin offs to date, submission of an Ancillary Project Letter to IODP, planning of several other proposals to IODP and in response to a recent EU call, and presentations of workshop results at other international conferences.



Maria Ask, Luleå University of Technology, Sweden; Achim Kopf, Sylvia Stegmann and Michi Strasser, MARUM, University of Bremen, Germany; Marc De Batist, University of Gent, Belgium; Angelo Camerlenghi, University of Barcelona, Spain; Kari Strand, University of Oulu, Finland; Jean Yves Collot, GeoAzur, Villefranche sur mer, France; Francois Cornet, Institut de Physique du Globe de Strasbourg, France; Pierre Henry, CEREGE, Aix en Provence, France; Nabil Sultan, Ifremer, Plouzané, France; Amir M. Kaynia and Maarten Vanneste, Norwegian Geotechnical Institute, Oslo, Norway; Maria-Ana Baptista and J. Miguel Miranda, Lisbon University, Portugal; Gerome Calves, University of Aberdeen, UK; Sergio Llanza-Funez, University of Liverpool, UK; Lisa McNeill, National Oceanography Centre, Southampton, UK; Julia Morgan, Rice University, USA.

◆ IODP-ICDP EuroFORUM'08, April 17, 2008, Vienna

Convener: Gilbert Camoin (gcamoin@cerge.fr), co-conveners : Ulrich Harms (ulrich@gfz-potsdam.de), Flavio Anselmetti (flavio.anselmetti@eawag.ch), Henk Brinkhuis (h.brinkhuis@uu.nl) and Ursula Roehl (uroehl@marum.de)

The IODP-ICDP EuroFORUM'08 was organised for the first time as an EGU Interdivision Session last April in Vienna ("Achievements and Perspectives in Ocean and Continental Drilling"). The session was supported by several EGU divisions : SSP – Stratigraphy, Sedimentology & Palaeontology, OS – Ocean Sciences, Biogeosciences, CL – Climate : Past, Present and Future, GMPV – Geochemistry, Mineralogy, Petrology & Volcanology, and TS – Tectonics and Structural Geology.

The principal goals of the IODP-ICDP EuroFORUM'08 were to summarise and to review major scientific achievements in ocean and continental drilling with special emphasis on the European contributions to IODP and ICDP. 11 talks, among which 8 were solicited (5 IODP, 3 ICDP), and 18 posters covering the 3 themes of the Initial Science Plan were presented during the IODP-ICDP EuroFORUM'08 session. Perspectives and visions for drilling projects using a multi-platform approach have been tackled.

The EuroFORUM'08 meeting was very successful and was attended by more than 200 scientists. In addition to the main session, more focused sessions related to the activities of EuroFORUM'08 were organised (e.g. « EuroFORUM 2008 - European Collaboration for Implementation of Marine Research on Cores – EuroMARC - », co-organised by OS, BG, CL, GMPV & TS).

Find detailed information about Workshops, Conferences and DLP at:
<http://www.essac.ecord.org>



Judith McKenzie

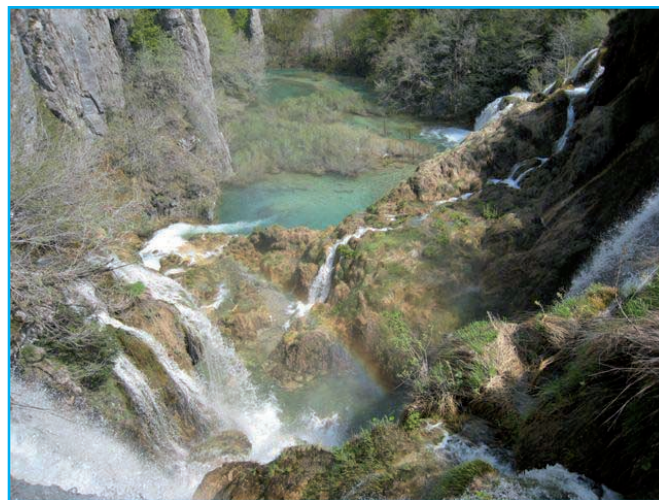
Travels of an ECORD Distinguished Lecturer 2007-2008

When I agreed to become one of the three lecturers in the first ECORD Distinguished Lecturer Programme (DLP), offering a lecture entitled “Exploring the Deep Biosphere beneath the Seafloor with Scientific Ocean Drilling”, I was very curious to learn who would request my lecture and to which European locations this journey would take me. Informed of the requests arriving at the ESSAC Office, I was very pleased at the interest for my proposed lecture and began planning my lecture tour. With 14 invitations from 8 different countries from which to choose, the logistics of planning such a lecture tour required much juggling of dates within the 2007/2008 timeframe, particularly as each location had a specific timetable in which to accommodate individual seminar schedules or a certain meeting date. However, with a bit of organisation, it was my great pleasure to be able to schedule 7 DLP lecture dates in a variety of venues, as reported below.

The first stop on my DLP lecture tour was in Granada, Spain, where I spoke to a keenly interested audience from the Faculty of Earth Sciences on October 18, 2008. The seminar room was packed and the questions following my talk were many. Such lively discussions on the deep biosphere and IODP were to be a common thread throughout my lecture tour. Of course, Spanish tapas and wine promoted continued discussions throughout the following 9th ESSAC meeting and a field trip to the beautiful Las Alpujarras Mountains. My next DLP lecture was delivered to an even larger audience as a keynote in the plenary session of the 9th Netherlands Earth Science Congress (NAC 9) held on March 18 & 19, 2008 in a converted nunnery, the Koningshof in Veldhoven. The two-day meeting in this secluded pastoral setting offered numerous opportunities to converse with Dutch colleagues and many young students in a congenial atmosphere sharing meals in a common dining room. Inspired by these positive experiences, I gave my third DLP lecture to the Croatian Geological Society in Zagreb on April 24, 2008. As Croatia is not a member of ECORD, this lecture also provided an opportunity to present the ECORD/IODP to a new audience. As a special “deep biosphere” attraction, my hosts guided me on a one-day tour of the Plitvice Lakes National Park, where microorganisms are actively at work creating tufa/travertine barriers over which waterfalls cascade to interconnect a string of turquoise blue lakes in a magnificent karst landscape (*above*).

The occasion of the 10th ESSAC meeting in Stockholm, Sweden provided me with the possibility to combine two trips and present my 4th DLP lecture to members of the Department of Geology and Geochemistry at the University of Stockholm on May 14, 2008. Afterwards, a fine selection of wines and cheeses was offered for tasting in order to stimulate conversation among

the attendees and continue an interesting discussion of the deep biosphere. Later in May on the 28th, my 5th DLP lecture was scheduled as part of a special programme on IODP held in the beautiful old library of the Academia das Ciências de Lisboa, a truly impressive setting for any gathering of Earth scientists.



Waterfalls cascading over tufa/travertine barriers built by carbonate precipitating microorganisms in Plitvice Lakes National Park, Croatia (photograph courtesy of Davor Pavelic).

This special Portugal/IODP event attracted a large enthusiastic audience, including a busload of students from the University of Aveiro who had traveled to Lisbon to learn more about the scientific plan behind IODP. Finally, the last two DLP lectures that I was able to schedule allowed me to make a mini-tour of France. Traveling by train, I visited the University Joseph Fourier in Grenoble on June 3 and CRPG-CNRS in Nancy on June 9. These 6th and 7th DLP lectures were both presented within the seminar programmes of the respective institutes and offered the opportunity to discuss the deep biosphere and IODP, as well as partaking of the famous French cuisine.

In summary, my ECORD DLP lecture tour 2007/2008 was most enjoyable and full of wonderful cultural variety. Stimulating scientific discussions were encountered at each stop along the way. In fact, I feel that the experience was so worthwhile that I hope to accommodate a few more of the unfulfilled invitations outside of the official tour. Finally, I warmly thank all of my hosts* for their kind hospitality and for introducing me to their scientific and social environments.

Judith A. McKenzie, Geological Institute, ETH Zürich, Switzerland

* *Menchu Comas (Granada, Spain), Henk Brinkhuis (Utrecht, the Netherlands), Josip Bubnic and Davor Pavelic (Zagreb, Croatia), Eve Arnold (Stockholm, Sweden), Fatima Abrantes and José Monteiro (Lisbon, Portugal), Nick Arndt, Catherine Chauvel and Stephane Guillot (Grenoble, France) and Peter Burnard and Christian France-Lanord (Nancy, France).*

“Drilling for the Future” ECORD-Net Workshop, Edinburgh, United Kingdom, May 27-29, 2008



In February 2005, Catherine Mével (EMA/CNRS) and Jonas Björck (Swedish Research Council) visited Helsinki to present ECORD to representatives from the Polish, Estonian, Latvian and Lithuanian Research Councils. This was followed up by a Baltic workshop hosted by Jonas Björck and Stockholm University in December 2005 (*see Newsletter #4*). Building on the contacts made in 2005, it was decided to hold a workshop in Edinburgh, hosted by the British Geological Survey (BGS)/ Natural Environment Research Council (NERC), to consolidate understanding of the potential obstacles to joining the ECORD consortium and opening up contacts with non-member states to encourage future involvement. This was an ideal time to host such a meeting as thoughts are now turning to the future of ocean research drilling after 2013, when the current IODP comes to an end. The workshop therefore provided the opportunity to involve countries from both EU-member countries not currently involved in the program, as well as some non-EU countries, in discussion with ECORD scientists/managers and to hear their views, which could potentially be incorporated into any new research drilling structure.

The workshop was aimed at bringing together funding agencies, academics and scientists from across Europe to explore the research opportunities provided by membership of ECORD and IODP. Delegates invited to attend the meeting were actively engaged in the type of scientific research in their countries that would benefit from ocean research drilling, or were in influential positions within their organisations. It was also decided that young scientists/ Ph.D students from ECORD member countries could attend, providing their country supported their travel expenses. In order to make the workshop as informative and productive as possible, speakers were invited to cover a wide range of topics, from the organisational structure of ECORD/IODP and proposal submission processes to scientific results and technology development associated with certain MSP/IODP expeditions. With regards to the scientific presentations, the speakers covered a range of disciplines, member country representatives and expeditions. In addition to the presentations (*above*), speakers were invited to supply posters that could be displayed alongside those detailing the role of mission-specific platform expeditions, the *Chikyu* and *JOIDES Resolution*.

It was equally important to hear from the invited delegates about what they perceived as being the major obstacles preventing their countries from joining the consortium. During an afternoon group discussion, delegates and speakers broke into small groups of approximately 8-10 people to discuss membership obstacles, technological developments and how to encourage/reach young scientists in member countries. It was important to gain as much

feedback from the invited delegates as possible, in order to see how to progress with encouraging participation and membership of new countries in ECORD and IODP.

There was a general feeling that the IODP objectives are very focused on the “global” picture. Many representatives felt that a more regional/geographical approach would be more beneficial in raising interest in their respective countries, e.g. the Greek representatives enquired as to whether there were currently any active drilling proposals in the seas around Greece and the Mediterranean in general. Amongst the feedback received throughout the course of the workshop, a few dominant issues were addressed as a priority. **Contact - Discussion:** ECORD will hold a list of relevant contacts in non-member countries and include them in e-mails about ECORD/IODP News. Key contacts from non-member countries are encouraged to host in-country workshops to spread the news about ECORD/IODP activities, to which key ECORD members will be invited to talk about the program. Key contacts within non-member countries will be invited to discussions about the future of ocean research drilling (e.g. EGU sessions, INVEST).

Mentoring: Where possible, member countries will act as a mentor to non-member countries. It is hoped that, if mentoring is started during the current IODP phase this will help convince new countries to join a consortium post 2013.

Outreach: In order to encourage involvement/participation of scientists in IODP, ECORD will discuss the possibility of one-year start-up grants and publicise ECORD activities (e.g. summer schools, Distinguished Lecturer Programme, workshops) that are open to non-member countries. Scientists who are allocated a berth on an ECORD/IODP expedition will also be asked to publicise and talk about the program within their national colleges/universities as part of their scientific requirements.

Funding: A number of the participating countries have expressed their financial barriers in participating in ECORD, given their difficult economic situation at the national level. Moreover, now ECORD-Net has ended (*see page 7*), ECORD is now funded exclusively by its member countries contribution to co-mingled funds. A financial contribution from the European Commission would turn the ECORD co-mingled funds into a common pot of true European funds. This would allow ECORD to consider all European countries as members of the consortium. Scientists from all European countries could then be eligible to participate in ECORD/IODP activities. Possible funding schemes to achieve this goal should be negotiated between ECORD and the European Commission.

Carol Cotterill, ECORD Science Operator and Sasha Leigh, NERC



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United Kingdom	Rachael H. James R.H.James@noc.soton.ac.uk	<i>pending</i>

ECORD scientists on NanTroSEIZE expeditions

Expedition - 314:
Logging While Drilling Transect
Sylvain Bourlange, France
Marianne Conin, France
Maria-José Jurado-Rodriguez, Spain
Lisa McNeill, U.K.
Joanne Tudge, U.K.

Expedition - 315:
Megasplay Riser Pilot
Siegfried Lallemand (co-chief), France
Jan H. Behrmann, Germany
Babette Böckel, Germany
Gerome Calves, U.K.
Vincent Famin, France
Pierre Henry, France
Anna H. Kaksonen, Finland
Achim Kopf, Germany
Friederike Schmidt-Schierhorn, Germany

Expedition - 316:
Shallow Megasplay and Frontal Thrusts
Lillemor Claesson, Sweden
Olivier Fabbri, France
France Girault, Switzerland
Yujin Kitamura, Germany
Laurent Louis, France
Uisdean Nicholson, U.K.
Natasha Riedinger, Germany
Michael Strasser, Germany

More information about ESSAC and SAS delegates at: <http://www.essac.ecord.org>

Highlights of IODP Proposal recently sent to the Operations Task Force

Latest Pleistocene drowned coralgal banks and mounds along the South Texas continental shelf edge

André W. Droxler and William W. Sager
IODP Proposal 581

Southern and Baker Banks are currently drowned coralgal reefs about 40 to 50 m-thick on the edge of the South Texas Shelf 55 km offshore Corpus Christi. They are interpreted to have grown during the first half of the last sea-level transgression on top of topographic highs occurring along a Last Glacial Maximum lowstand siliciclastic paleo coastline.

(1) The drilled material will shed some new light on the enigmatic findings that coralgal edifices flourished on the edge of the South Texas shelf during the first part of last deglaciation, an interval of time when conditions of sea-surface temperature (SST) and sea-surface salinity were expected to be lower in the Gulf of Mexico, and rates of eustatic sea-level rise much faster than they are today.

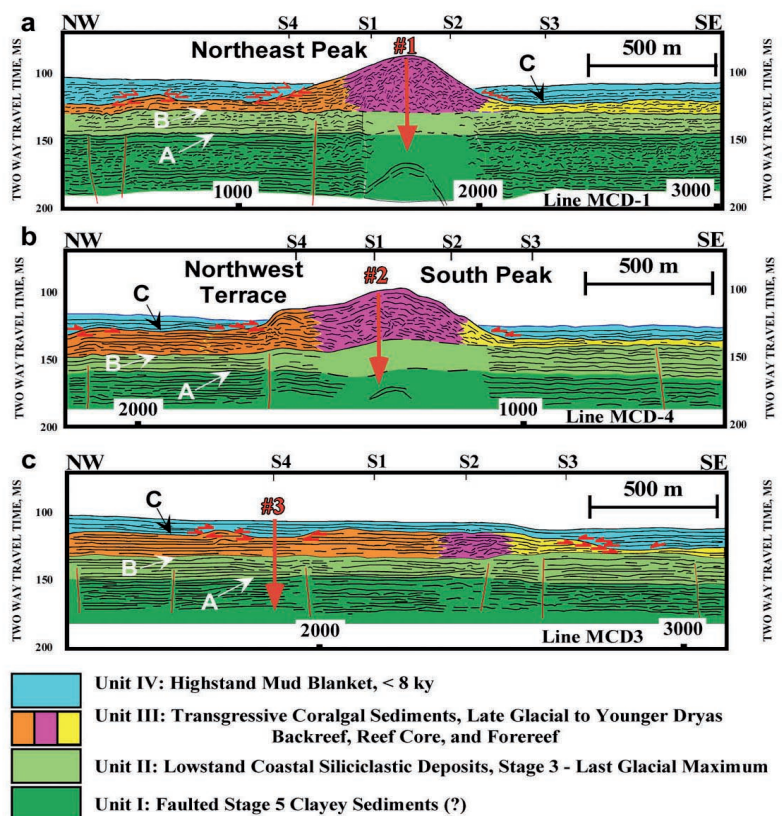
(2) The drilled material will improve the resolution of the last deglacial sea-level history from late Glacial to the Younger Dryas, including the interval of the melt-water pulse 1A, from a passive margin environment. In particular, to find lines of evidence whether sea-level significantly dropped during the Younger Dryas and, if it occurred, an amplitude estimate of the sea-level fall during that time interval, and indirectly a rate constraint of continental ice sheet formation.

(3) The drilled material will help us to better understand the sedimentary and biological processes involved with the origin (initial establishment), growth, and demise of carbonate reef tracts along the edge of siliciclastic shelves. We will be able to test the model (*above*) that:

(a) the transgressive coralgal reefs, such as Southern and Baker Banks were established on top of elongated lowstand (Last Glacial Maximum) siliciclastic coastal deposits such as beach ridges and barrier islands, (b) the different coralgal reef edifices flourished and were capable of keeping up with unusually high rates of sea-level rise during the first part of the last sea-level transgression (16-12 cal. Kyr BP), resulting in the deposition of 35 to 45 m-thick coralgal buildups, and (c) the coralgal reef demise was initiated possibly by the establishment of colder SST in the Gulf of Mexico during the Younger Dryas (12-11 cal. Kyr BP) and by a significant contemporaneous sea-level fall triggering the return of large clay volume on the edge of the South Texas Shelf.

(4) The latest Pleistocene transgressive coralgal reefs on the edge of the South Texas Shelf can be studied as recent analogs for reefal reservoirs buried in siliciclastic shelves. The drilled material and logs, once integrated with the multi-channel high resolution seismic grid existing on Southern Bank, will help to characterise in particular the porosity and permeability distribution as well as the seismic attributes within Southern Bank.

Southern and Baker drowned coralgal banks, observed on the edge of the South Texas Shelf, are contemporaneous and grew in a similar mixed carbonate siliciclastic continental shelf depositional setting as the latest Pleistocene early deglacial drowned coralgal barrier reef along the Gulf of Papua (IODP 728-APL-Full2).



How to Submit an IODP Drilling Proposal ?

next submission deadline: April 1, 2009

Further information on ESSAC at:

www.essac.ecord.org



Peter Clift

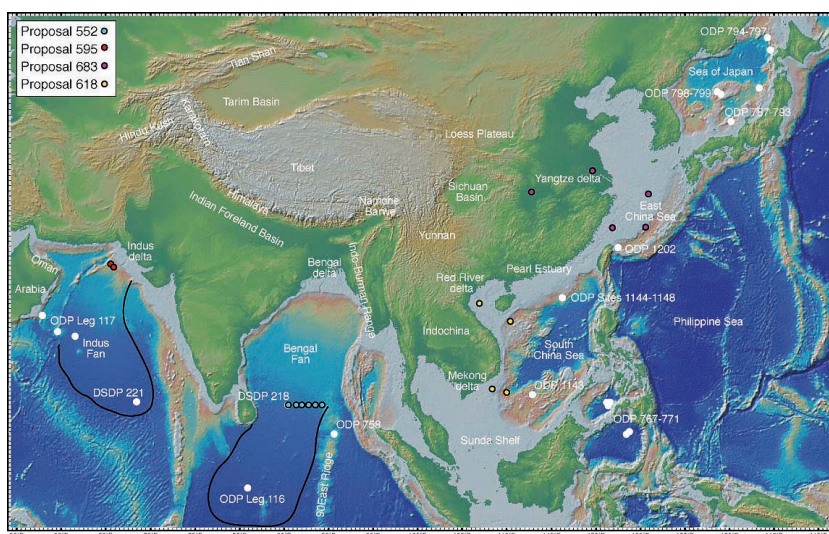
Report on Monsoon Detailed Planning Group (DPG)

A detailed planning group (DPG) was convened in Washington DC in March 2008 at the request of the Science Planning Committee to develop a plan for research drilling concerning the Asian monsoon system within the remaining operations of IODP. The DPG was triggered by a "Mission" for monsoon drilling, which originally proposed to integrate drilling from six legs across Asia. However, this DPG focused only on those four proposals (*below*) that specifically addressed the issue of tectonic controls on monsoon intensity. These were Proposal 595 for the

Indus Fan, Proposal 552 for the Bay of Bengal (*see Newsletter #9*), Proposal 618 for the Vietnam margin and Proposal 683 for the East China Sea. European scientists play lead role in three of these four projects. At the outset of the meeting the Indus Fan drilling was ruled out of consideration because of security concerns by the Japanese government concerning D/V *Chikyu* operations in the Pakistan offshore

region. Nonetheless, the DPG did encourage the proponents of that initiative to seek alternative non-riser holes. Plans for a revised non-riser Indus leg are now being developed. The DPG developed a two-phase plan for drilling with strong links to climate modelling. The group recognised that no single sedimentary proxy gives a uniquely clear picture of uplift, erosion, or marine or terrestrial environments and that multiproxy studies are essential, with results feeding back into new climate models that might guide future drilling. The primary goal is to test the hypothesis of monsoon-uplift relations using modern, coupled (atmospheric and oceanic) models of the climate system.

In order to determine the uplift-erosional history of both the Himalaya and Tibetan region the DPG were especially interested in the Bengal Fan proposal. This was selected as the top priority for looking at climate-tectonic interactions over long time scales, i.e. >20 Ma. The deep drill site, which is projected to reach back at least to the Eocene-Oligocene boundary, was considered particularly critical and achievable using *JOIDES Resolution*. In addition, the DPG recommended coring of the top 1 km offshore the deltas of the Yangtze, Red and Mekong Rivers as part of



Locations of the proposed IODP drill sites.

Phase 1. The sites are important to seeing how the East Asian monsoon varies in comparison with the South Asian system.

Phase 2 drilling would involve deepening the two sites in the South China Sea / Vietnam margin to at least the Oligocene and then to start a new hole in the East China Sea that would yield a record of similar duration. The goal is to develop erosion

histories that span the uplift and intensified erosion and which reveal the pre-monsoon conditions in East Asia. The DPG recognised the importance of deriving erosional and weathering histories in both South and East Asia in order to understand how the two monsoon systems are coupled and whether they are both principally controlled by the elevation of the Tibetan Plateau, or whether local effects, such as African topography or the temperature of the Western Pacific Warm Pool might be significant too.

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