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ECORD *Science Support & Advisory Committee*

Updates

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IODP completed the final expedition of the first phase of its operations at the end of 2005 (Expedition 312, Superfast Spreading Rate Crust 3). The second phase, scheduled to begin in mid-2007 at the earliest, will be a bigger program utilizing three drilling platforms: the non-riser vessel (the refitted *JOIDES Resolution*) operated by the USA; the new riser drilling ship (the *Chikyu*) operated by the Japanese; and the mission-specific platforms (MSPs) for which ECORD is responsible. The MSP expedition to the New Jersey Shallow Shelf (Expedition 313), tentatively scheduled for 2006, will thus be the only IODP drilling activity for some time. This period of low drilling activity does, however, provide an excellent opportunity for planning and proposal writing for the subsequent period of enhanced activity.

Two European programmes have been set up to facilitate the development of new proposals. The ESF Marine Coring Programme, known as Euro-MARC, provides a route for European collaboration on site surveys. The Magellan Workshop series provide funding for workshops to improve existing drilling proposals and develop new proposals. The first workshop took place in Oxford in October, a follow-up to the successful conference in June 2005 on 'Climate Change: High Latitudes and Ocean Circulation'. The second workshop, focusing on the Deep Biosphere, was held in Switzerland in January 2006. Two further workshops are in advanced stages of preparation in 2006 on the theme of 'Geohazards' - volcanic and seismic hazards; submarine slides *(see page 7)*. ESF are about to put a call for further workshop proposals. At an international level, IODP will hold workshops that bring together European, Japanese and American scientists, though the number of European participants in these will necessarily be limited.

Participants of the 5th ESSAC meeting, 22-23 November in Edinburgh (ESSAC delegates, J. Behrmann, co-chief Exp. 308, and observers: D. Evans & H. Stewart - ESO, C. Franklin - Council Chair, C. Mével & P. Maruéjol - EMA).

Dates for your diary are the 8th and 9th of May 2006, when the EuroForum will be held in Cardiff at the National Museum of Wales *(see page 7)*. The EuroForum is run every two years, the previous one having been held in Bremen. The Cardiff meeting will be in two parts. The first will focus on achievements of the first phase of IODP drilling. The second will inform the community of the future capabilities of the three different types of drilling platform. It will also provide an opportunity for proposal writers to receive advice from specialists on how best to construct, and do the groundwork for, successful proposals.

Returning to the first phase of IODP, it is possible to reflect on, and evaluate, what has been achieved to date. 12 expeditions were carried out, 10 with the *JOIDES Resolution* and two (in the Arctic and around Tahiti) with mission-specific platforms. The MSP expeditions, with their technological challenges and implications for climate and sea-level change, have to stand out as major ECORD achievements. In total, some 96 Europeans participated in scientific parties, of whom 8 were co-chief scientists. Other Europeans contributed to shipboard logging and drilling operations. In general, there was a good match between the national balance and funding with the UK, France, Germany and the consortium of smaller contributors each supplying a quarter of the participants. ECORD has just initiated a full, independent review of the value of the science to date *(see cover page)*, so the IODP-linked publications and other output will help to provide the review panel with a portfolio of 'evidence'.

For the future, the next expedition, as noted above, is the New Jersey Shallow Shelf, with Stephen Hesselbo (University of Oxford) as one of the co-chief scientists. This is aimed at investigating the history of sea-level change and its relationship to sequence stratigraphy. A call for participants for a deadline of 8th February 2006, led to 24 European applications for its 8 places, good evidence of continued interest in the program. The dates of the expedition are not finalized as the processes of tendering for the platform and obtaining clearances is a complex and time-consuming one, but mid-late 2006 is the present target. Choosing the 'lucky 8' participants is a complex process designed to balance nationalities and expertise. It involves ESSAC delegates and their national offices in conjunction with the ESSAC Office, together with the co-chief scientists and the ECORD Science Operator (ESO). Those who do participate will find that an MSP expedition is not necessarily the same as a *JOIDES Resolution* expedition. Thus few scientific participants will spend time on the drilling platform: instead they will need to set aside a month of their time to attend one of the core repositories to carry out core descriptions, specialist studies of the core, sampling and report writing *(see also pages 6 and 7)*.

Beyond the New Jersey Shallow Shelf Expedition, the Science Planning Committee at its November 2005 meeting, made plans for Fiscal Years 2007 and 2008 *(see page 9)*. For the *Chikyu*, this is straightforward: she will remain in the Western Pacific carrying out tests and non-riser drilling before focusing on the riser drilling of the Nankai Trough Seismogenic Zone (NanTroSEIZE) – an expedition likely to last more than six months. The refitted *JOIDES Resolution* will drill the Equatorial

Pacific before crossing to the Western Pacific to contribute to the Seismogenic Zone project. She will then return to the Eastern Pacific to carry out two further expeditions before heading for the Southern Oceans and the Indian Ocean, reaching the Indian Ocean in 2009.

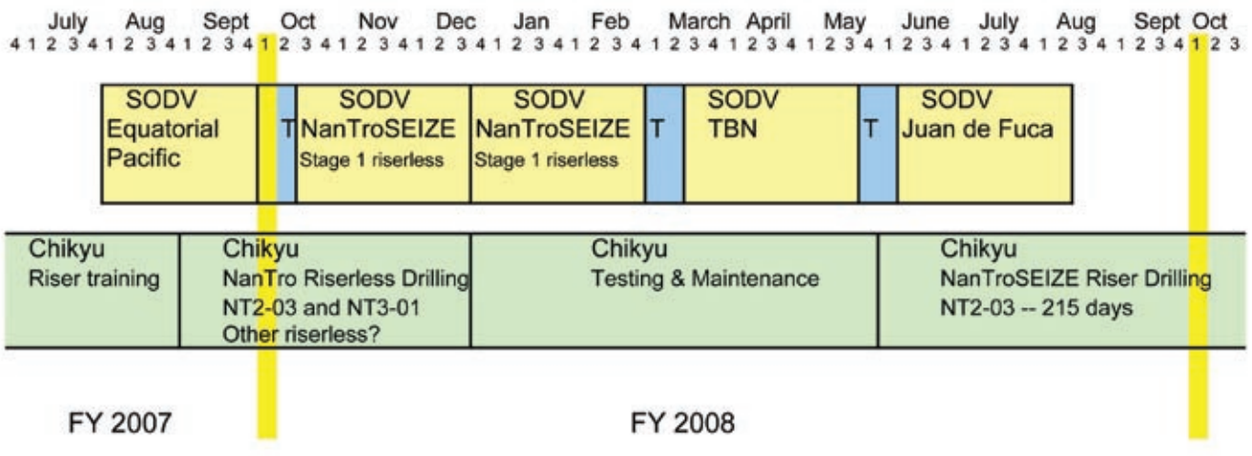
Informal get-together of the Japanese and ECORD participants at the SPC meeting, Kyoto, Japan, November 2005. You may be able to spot Catherine Mével (EMA Director), Dan Evans (ESO), Julian Pearce and Federica Lenci (ESSAC Office), Benoît Ildefonse, Hans Brumsack and Rolf Pedersen (ECORD SPC representatives), Rüdiger Stein (SSEP co-chair) and Roger Searle (SSP Chair).

There is plenty of European interest in the early expeditions of this second phase of IODP. Of the active proposals in the system, some 40 (36%) have European lead proponents. The first expedition of the second phase of drilling, to the Equatorial Pacific, has a European lead proponent in Heiko Pälike (Southampton). The NanTroSEIZE expeditions all have U.S. and Japanese lead proponents, but there are a significant number of European co-proponents likely to provide at least one co-chief scientist. When the non-riser ship heads for the Southern Oceans, highly-ranked proposals include Wilkes Land, led by Carlota Escutia (Granada), and the Indian Ocean has two highly ranked proposals, the Indus and Bengal Fans, headed by Peter Clift (Aberdeen) and Christian France-Lanord (Nancy) respectively. ESSAC will do all it can to assist these and other European scientists with active proposals in these areas to attain the high ranking necessary to include them in the drilling schedule. This effort begins with a Proposal Writing workshop at the upcoming EuroForum *(see page 7)*.
No plans have been made for drilling in Fiscal Year 2009 – that will depend on the highly-ranked proposals in the system. From the European perspective, however, we now have a number of proposals for drilling in the Mediterranean and European margins. If these are to be drilled, the science has to be first class and the site survey work has to be complete.

Closer to home, you should be aware that the Cardiff ESSAC Office has been busy enhancing the ESSAC website. It can be reached through the ESSAC hot-link on the ECORD website (**www.ecord.org**) and is meant to be the first port-of-call for anybody needing news or information on ESSAC activities. It contains, for example, full contact details for the Cardiff office, the ESSAC representatives and the national offices. It also contains forms, information and links to enable you to apply for expedition participation, to submit drilling proposals, to apply for samples, and to apply for EuroMARC or Magellan Workshop funding. Information on new developments, such as the concept of 'Missions' as outlined in the last Newsletter, will be posted on the website as soon as details become available. We thus recommend that you visit the ECORD and ESSAC websites regularly to keep yourself up-to-date with ECORD IODP news.

Finally, ESSAC would like to pay tribute to the huge contribution to ocean drilling science made by Professor Nick Shackleton, who sadly died, aged 68, in January 2006.

The ESSAC Office: Chris MacLeod and Julian Pearce, ESSAC Chairs and Federica Lenci, ESSAC Science Co-Ordinator



Provisional drilling schedule for the non-riser drilling vessel (SODV) and riser vessel (Chikyu) as approved by the Science Planning Committee in November 2005. In addition, one mission-specific platform expedition (313: New Jersey Shallow Shelf) is provisionally scheduled for 2006. Note that the intention is for the non-riser vessel to proceed to the Southern Oceans and then to the Indian Ocean after completing its 2008 activities in the Eastern Pacific.