JOIDES Executive Committee

25 – 26 June 2002
Granada Spain

Prepared by the *JOIDES* Office at the University of Miami - RSMAS, 4600 Rickenbacker Causeway, Miami, FL 33149 USA
http://joides.rsmas.miami.edu

JOIDES EXECUTIVE COMMITTEE MEETING

GRANADA
SPAIN

25-26 JUNE 2002

MEETING AGENDA

TUESDAY **25 JUNE** **9:00 AM**

Meeting Agenda

5. Review of Membership Status

EXCOM Motion 98-2-8: EXCOM urges the ODP Council to maintain the principle of full, equal international membership to the maximum extent. Recognizing that this has not always proved possible, the JOIDES Executive Committee agrees on the following rules for members that have been full contributors in the past, but who have reduced their contribution below the full subscription:
(1) Shipboard participation will be in proportion to their contribution
(2) Provided that they satisfy the following criteria, they will be permitted to retain their full privileges on committee and panel membership:
(a) Contribution must be equal to or greater than 5/6 of a full membership
(b) They must make a firm commitment to work towards full membership
(c) They must make significant progress towards achieving full membership each year. The Executive Committee will review the situation annually.
(3) If these conditions are not met, then the member will be designated as an associate member of the appropriate category.

Proposed by Harrison, seconded by Prior; 14 in favor, 1 abstention (Mével), 1 absent (Nowell).

5.1 EXCOM motion 98-2-8	(Harrison)	
5.2 ECOD	(von Knorring)	
5.3 Pacific Rim Consortium	(Powell)	

COFFEE BREAK 10:10 — 10:30 AM

6. Management and Operations Reports

6.1 NSF Management Report	(Malfait)	37
6.2 JOI	(Bohlen)	39
6.3 ODP Operations	(Fox)	46
6.4 LDEO Borehole Research Group	(Goldberg)	83
6.5 JOIDES	(Harrison/Becker)	89
6.5.1 JOIDES EXCOM Public Affairs Subcommittee	(White)	90
6.5.2 Approval of the Charge for PEC VI and membership suggestions	(Harrison)	

7. Relationships with Other Organizations

7.1 Post ODP prospects for JOIDES Resolution	(Fox/Bohlen)	93

LUNCH BREAK 12:30 – 1.45 PM

8. IODP Planning

8.1 IWG	(Harrison)	
8.1.1 iSAS Staffing	(Harrison)	

EXCOM Motion 02-1-4: The JOIDES Executive Committee recommends to the OD21 Science Advisory Committee and IWG that the Asian IODP Consortium (AIC, currently South Korea and Chinese Taipei) be given an observer status on the iSAS committees.

Falvey moved, Orcutt seconded; 15 in favor.

8.2 iPC activities	(Moore)	93
8.3 MEXT Report	(Miki)	
8.4 JAMSTEC Report	(Miki)	
8.5 iSAS Office Report	(Yamakawa)	99
8.6 OD21 Report	(Matsuzaki)	
8.7 European initiative	(Beiersdorf/Falvey/ von Knorring et al.)	107A
8.8 U.S. plans	(Malfait)	107
8.9 CMO	(Committee)	

EXCOM Consensus 02-1-5: Whereas the Central Management Office (CMO) must be an independent, legal entity committed to implementing IODP science, and whereas the Central Management Office must be prepared to execute the IODP by mid-2003 as directed by science planning from the Science Advisory Structure (SAS), international parties, other than the JOIDES Executive Committee, must act expeditiously and in concert to establish an international corporation, or its equivalent, to govern and operate the CMO.

COFFEE 3:30 —4:00 PM

9. LEGACY Plans

EXCOM Motion 00-2-5: EXCOM requests SCICOM to develop an ODP legacy that includes, among other things, the following:

- a list of ODP's greatest hits,
- a database of publications related to ODP results, as already begun by JOI and TAMU,
- written documentation from SCICOM, the SSEPs, and other panels about major ODP-related results, by field, to accompany the list of greatest hits and the publications database,
- a description of major technical developments, from TEDCOM with help from LDEO and TAMU,
- a reply to the question "How well did ODP do in answering the questions originally asked?"

This study should consider all phases of ODP *(i.e.*, it should extend back to COSOD 1). EXCOM would like to receive a draft report on the ODP legacy at its June 2001 meeting.

Harrison moved, Comas seconded; 14 in favor, 1 absent (Raleigh).

EXCOM Motion 01-1-3: EXCOM acknowledges the initial planning done by JOI and its subcontractors to prepare for the winding down of ODP from FY03 through FY07. EXCOM recognizes that detailed project planning is now needed to ensure that no gaps or overlaps occur during the lead-up to and phase out. EXCOM requests JOI to continue to develop the phase-out project plan, including contingencies and options for most cost-effective implementation, and report again in June 2001.

Falvey moved, Mutter seconded; 14 in favor, 1 absent (Kent).

EXCOM Motion 01-1-4: EXCOM acknowledges preliminary plans made by JOI and its subcontractors for the maintenance of ODP and JANUS databases, core repositories and other ODP legacies after ODP ends. EXCOM recognizes that detailed planning will be a continuing activity as new types of observations and measurements are made, and encourages JOI to develop up-to-date plans for this activity and to make regular reports to EXCOM.

Beiersdorf moved, Detrick seconded; 14 in favor, 1 absent (Kent).

EXCOM Consensus 02-1-6: The JOIDES Executive Committee thanks the JOIDES Science Committee for excellent work done on the ODP Legacy Project. The Executive Committee waits with anticipation to see the final results of the various projects, including the Achievements and Opportunities publication, ODP's Greatest Hits vol. II, database of publications and technological summaries.

9.1 Achievements and Opportunities (Groschel)
9.2 Technical Data Sheets (Becker) 109
9.3 Publications Data Base (Bohlen) 109
9.4 ODP's Greatest Hits (Urquhart) 109
9.5 How well did we do? (Harrison/Becker)
9.6 SCICOM and SSEPs Suggestions (Becker) 110
9.7 Workshops post 2003 (Harrison)
9.8 Are there any other legacy objectives that we are missing? (Harrison)

10. TRANSITION Plans

EXCOM Motion 00-2-3: EXCOM accepts the Initial Report on ODP-IODP Transition Planning. This report raises a number of important issues and provides a very useful framework for planning the phase-out of ODP and the establishment of IODP. EXCOM thanks John Orcutt, JOI and its subcontractors, and other members of the JOIDES community who assisted in preparing this document. Given the importance of addressing in a timely manner the many unresolved issues related to the ODP-IODP transition, EXCOM requests the following actions.

For review at the January 2001 EXCOM meeting:

- JOI will prepare a draft phase-out plan for ODP management and operations,
- JOI and the JOIDES Science Advisory Structure will develop options for the long-term maintenance of the ODP database, JANUS database, core repositories, and other ODP legacies.

For review at the June 2001 EXCOM meeting:

- SCICOM will develop a draft phase-out plan for the JOIDES Science Advisory Structure,
- JOI will develop a plan for producing an ODP final report, including an outline of the contents of the report, defined writing responsibilities, and a timeline for completing it.

Detrick moved, Orcutt seconded; 14 in favor, 1 absent (Raleigh).

EXCOM Motion 02-1-3: In the context of the transition from ODP to IODP, the EXCOM wishes to ensure a positive perception of scientific ocean drilling having both:
1. Delivered important environmental and scientific outcomes through ODP, and
2. Prepared for a new, and still more exciting phase of research through IODP.
EXCOM therefore asks JOI to work with colleagues in JAMSTEC and ECORD/JEODI to develop a transition plan for public affairs for the period 2002 to 2004. This strategy should target the scientific community, industry, the public, and funding agencies.

Orcutt moved, Silver seconded; 15 in favor.

10.1 How is ODP doing in allowing a smooth transition to IODP?
(Harrison/Bohlen/Fox/Goldberg et al.)

WEDNESDAY 26 JUNE 9:00AM

11. SCICOM Report

11.1 Achievements on Legs 199-202	(Becker)	117
11.2 Proposal activity	(Urquhart)	119

12. Future Meetings and Other Business

12.1 Bermuda, 2003	(Harrison)
12.2 Other business	

JOIDES EXCOM — GRANADA, SPAIN
25 — 26 JUNE 2002
PARTICIPANTS

Executive Committee — EXCOM

Chris Harrison (Chair)	Rosenstiel School of Marine and Atmospheric Science, University of Miami, USA
Helmut Beiersdorf	Bundesanstalt fur Geowissenschaften Und Rohstoffe, Germany
Robert S. Detrick	Woods Hole Oceanographic Institution, USA
David Falvey	British Geological Survey, United Kingdom
Dennis V. Kent	Department of Geological Sciences, Rutgers University, USA
Mary von Knorring*	Swedish Research Council
John Mutter	Lamont-Doherty Earth Observatory (LDEO), Columbia University, USA
Neil Opdyke	Department of Geological Sciences, University of Florida, USA
Lisa Tauxe**	Scripps Institution of Oceanography, University of California, San Diego, USA
Robert M. Owen	Dept of Geological Sciences, University of Michigan, USA
Trevor Powell	Australian Geological Survey Organization, Australia.
David Prior	College of Geosciences, Texas A&M University, USA
Eli Silver	Earth Sciences Department, University of California, USA
Paul Stoffa	Institute for Geophysics, University of Texas at Austin, USA
Hidekazu Tokuyama	Ocean Research Institute, University of Tokyo, Japan
*Menchu Comas	University of Granada, Spain - substituting for von Knorring on morning of June 25th

Associate Member Observers

Mathilde Cannat	Laboratoire de Geosciences Marines, Universite Pierre at Marie Curie, Paris, France
Jianzhong Shen	Ministry of Science and Technology, Beijing, China

(**Tauxe substituting for Orcutt on a one-time basis)

Liaisons

Keir Becker	RSMAS, University of Miami, (SCICOM Chair), USA
Steven Bohlen	Joint Oceanographic Institutions (JOI), Inc., USA
Jeff Fox	Ocean Drilling Program (ODP), Texas A&M University, USA
Dave Goldberg	Lamont-Doherty Earth Observatory (LDEO), Columbia University, USA
Bruce Malfait	National Science Foundation (NSF), USA

Guests

J. Paul Dauphin	National Science Foundation (NSF), USA
Taneika Herman	Joint Oceanographic Institutions (JOI), Inc., USA
Herman Kudrass	Bundesanstalt fur Geowissenschaften Und Rohstoffe, Germany
Kate Moran	University of Rhode Island, USA
Ted Moore	University of Michigan, (iPC Co-Chair), USA
JoAnne Reuss	University of Michigan, USA
Kasey White	Joint Oceanographic Institutions (JOI), Inc., USA
Minoru Yamakawa	Japan Marine and Technology Center (JAMSTEC), iSAS, Japan

Guests from JOI BOG

Raymond Bye	Florida State University, Tallahassee, USA
David Farmer	Graduate School of Oceanography, University of Rhode Island, USA
Arthur Nowell	University of Washington, Seattle, USA
Brian Taylor*	SOEST, University of Hawaii at Manoa, Honolulu, USA

(* Taylor substituting for Raleigh on a one-time basis)

JOIDES Office

Henny Groschel-Becker	Editor JOIDES Journal, RSMAS, University of Miami, USA
Elspeth Urquhart	International Liaison, RSMAS, University of Miami, USA

1.2 Meeting logistics (von Knorring/Comas)

1.2.1 Logistics

MEETING LOCATION, DATES & TIMES:
Your meetings will be held at Alhambra Palace Hotel. The name of the meeting rooms will be posted at the hotel the day of the meeting.

EXCOM:
June 25
09:00 — 17:00
June 26
09:00 — 12:00

ODP Council:
June 27
09:00 — 15:00

MEETING HOST on behalf of ECOD:
Prof. Dr. Menchu Comas
Instituto Andaluz de Ciencias de la Tierra
CSIC y Universidad de Granada
Campus Fuentenueva, Universidad de Granada
18002 Granada (Espa a)
tel: + 34 958 243357
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mcomas@ugr.es

1.2.2 Social events

Wine Party hosted by the Spanish Consortium for ODP
June 24, 20:30
Hotel Alhambra Palace

ECOD hosted Buffet-Dinner
June 25, 20:30 23:30
Gardens of *Carmen de la Victoria ,* Granada University Residence *c/ Cuesta del Chapiz, 9 (Albayzin, Granada)*

Official ODP Council Dinner
June 26, 20:30 — 23:00
Hotel Alhambra Palace

University of Granada hosted Reception
June 27, 19:00 - 20:30
University of Granada Central Building: *Hospital Real, Cuesta del Hospicio* Street: s/n
http://www.ugr.es

FIELD TRIPS (for people who has already registered to participate)

June 27 (evening)
Guided visit to The Alhambra
http://www.geocities.com/SoHo/Gallery/5858/english/visita.htm
http://www.greatbuildings.com/buildings/The_Alhambra.html,
Departure at 21:30 from the Hotel Alhambra Palace (walking distance from the hotel)
The Alhambra visit will start at 22:00 and will end at 23:30

June 28
One-day field trip to Sierra Nevada Natural Park
http://www.andalucia.com/environment/protect/sierra-nevada.htm.
Departure at 9:00 from the Hotel Alhambra Palace (by bus)
Lunch will be served in the *Capilleira* village (*La Apujarra* region)
http://www.andalucia.com/villages/alpujarras.htm
Arrival to the Hotel Alhambra Palace around 21:00

IMPORTANT notice to potential visitors to The Alhambra
(see also http://www.alhambra.org)

- **Visit times** (Monday to Sunday):
-

  Morning: from 08:30 to 14:00
  Afternoon from 14:00 to 20:00

- Where to get a ticket **(price 7 Euros each)**

  Direct sale:

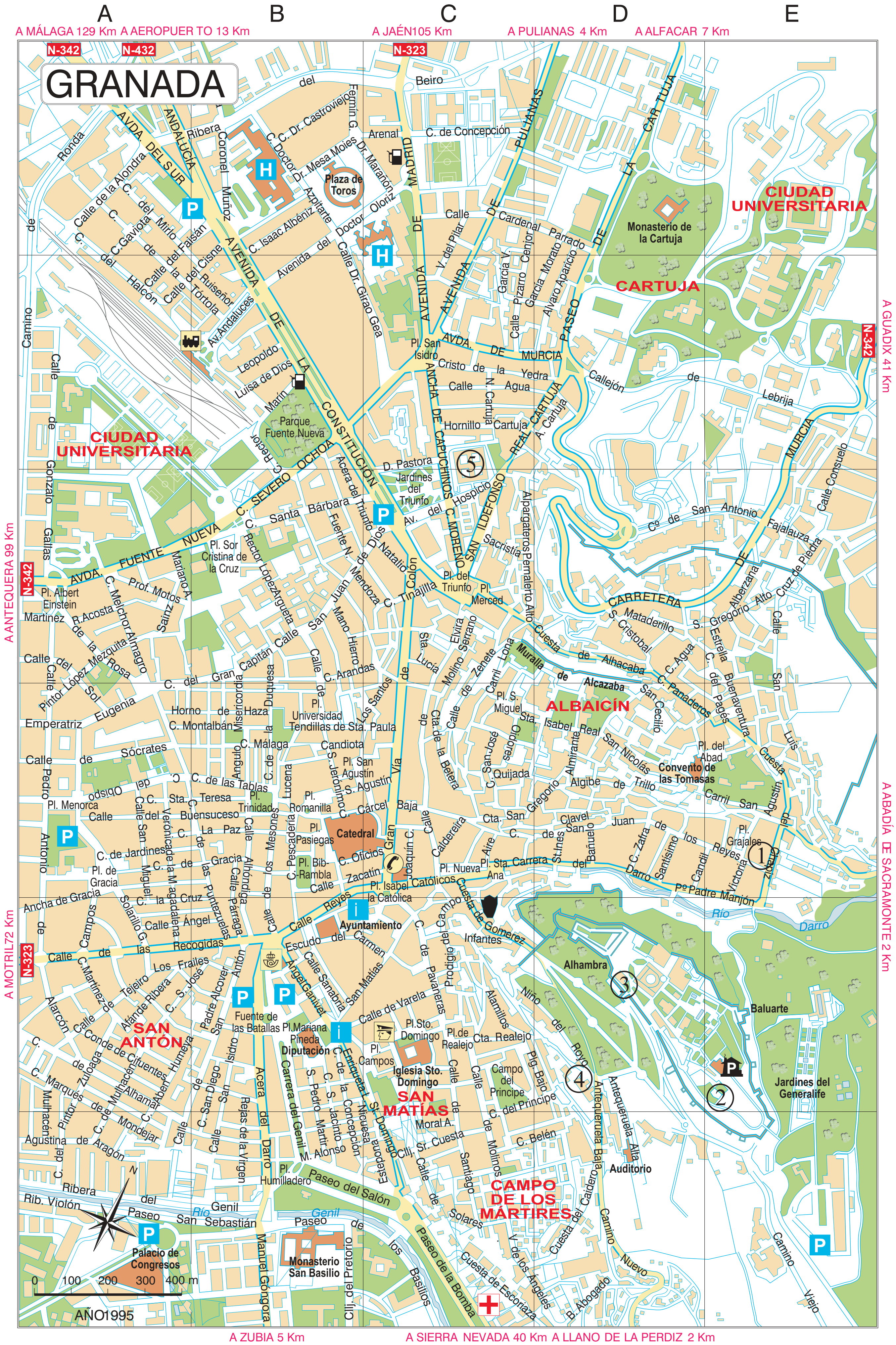
  Tickets can be bought in the Alhambra Ticket-office (Entrance Pavilion; open from 08:00 to 19:00) only the same day of the visit. Limited tickets are for direct sale and it would be a long queue of visitors to get tickets, so it is recommended to be in the ticket-office well in advance in the morning.

  Advanced bookings and sales on Internet (highly recommended!!)

  Booking may be made through the *Banco Bilbao Vizcaya Argentaria* (BBVA), by phone to *Banca Telefonica*, Line BBVA:

  - Telephone in Spain: 902 22 44 60
  - Telephone Abroad: 00 34 91 346 59 36

  Sales on Internet: at http://www.alhambratickets.com (in "*Venta de Entradas*")



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① Carmen de la Victoria

② Entry to Alhambra

③ Entry to Alhambra

④ Hotel Alhambra Palace

⑤ University of Granada Main Building (Hospital Real)

3. Minutes and Matters Arising

3.1 Approve Jan. 2002 EXCOM Minutes

The following corrections were made to the January 2002 EXCOM Minutes and posted on the JOIDES website on March 4th.

- 5.6 LDEO Borehole Research Group, page 13, paragraph 4 now reads:

The IESX final report documenting this facility for core-log-seismic integration has been accepted by SCIMP and all seven recommendations endorsed. Two of these seven are, i) for continued use of IESX at the Site Survey Data Bank for SSP proposal review, & during ODP cruises; and ii) Digital Data Submission Guidelines to be revised, insuring that SSDB receives digital seismic data efficiently.

- 7.1 IWG, page 18, paragraph 2, line 9 now reads:
The fundamental decisions on engineering would be somewhat divorced from operations but wouldn t preclude funding of engineering development at the implementing organizations.

- 7.7 U.S. NSF Plans, page 23, paragraph 3, line 7 now reads:
Malfait said that NSF s traditional view is that scientific institutions and scientists should be the shareholders for such organizations, and not government agencies.

4. Country and Consortium Reports

4.1 Report from the ESF Consortium for Ocean Drilling (ECOD) for the period 1 January — 30 June 2002

1. **EMCO meetings**
   The 19th ECOD Management Committee (EMCO) meeting was held in Troms , Norway on April 8-9, 2002, partly as a joint meeting with the ECOD Scientific Committee (ESCO). The meetings were chaired by EMCO chair *Mary von Knorring* (Sweden) and ESCO chair *Jeroen Kenter* (the Netherlands). Main topics for discussion, apart from joint European plans for IODP participation, were actions necessary before the ODP comes to an end. A white paper containing both the history of ECOD s 17 years of ODP participation and reports of activity during phase III was suggested. The EMCO and ESCO secretariats will look into the issue of storing the ECOD archives.

   Apart from reports by the individual member country delegates, reports on ocean drilling related activities were given by four countries participating in the EMCO/ESCO meeting as observers, namely Austria, Greece, Romania, and Turkey.

   The next meeting of EMCO will also partly be a joint meeting with ESCO. It will be held in Salamanca, Spain 20-21 September 2002.

2. **ECOD membership status**
   The ECOD contribution to ODP has been discussed. In 2002 ECOD contributes with 99,5% of a full membership. ECOD is happy to announce, that although some cuts have been made in the contribution to the administration budget, ECOD will be able to maintain the present level of membership fee to ODP until the termination of the program.

3. **Other ECOD activities**
   EMCO sponsored the 4th European ODP forum that was held 10-12th April 2002. The University of Troms¿ and the Norwegian Polar Institute hosted the forum with organisational support provided by the ESCO office in Amsterdam. All the ECOD delegates attended the meeting along with over 250 participants from Europe, America and Japan. With funding from the ECOD, 16 travel grants were awarded to young scientists from Europe, as well as 4 grants to aid the attendance of scientific observers from Austria, Greece, Romania and Turkey.

   The EMCO chair and *Raymond Schorno* (the Netherlands), together with the chairman of the ECORD interim Council prepared a draft for a call for expressions of interest for acting as European Management Agency and European Science Operator for the European IODP contribution. Furthermore the group has set up a draft for the tasks of a European Science and Operations Committee.

   In June 2002, the ECORD interim Council will hold a meeting in Stockholm, Sweden, where the rules and terms for the European IODP entities will be decided upon. The meeting is held in conjunction with the 11th IWG meeting, which also is hosted by ECOD in Stockholm.

A meeting of JEODI work packages 2, 6 and 7 was held in Amsterdam on March 7-8th. The main items discussed included the required laboratory procedures and logging requirements of the upcoming "Mission Specific Platform" proposals (Arctic, South Pacific, New Jersey, Chicxulub and Storegga). Attention was focused on ways to develop joint activities between the respective work packages as well as liaison between IODP and ICDP.

4. ESCO meetings

The 34th ECOD Science Committee meeting (ESCO) was held jointly with EMCO on 8-9 April 2002 in Tromso, Norway. Proceeding the ECOD meetings, the 4th European ODP forum was also held (10-12 April). The next ESCO meeting has been scheduled for 21st September in Salamanca, Spain.

5. ESCO administration

Presently the ESCO Chair is held by *Jeroen Kenter* and the science coordinator is *Sam Purkis*. The office will reside at the Vrije Universiteit in Amsterdam, The Netherlands until the onset of the Integrated Ocean Drilling Program (IODP) in October 2003.

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6. ECOD iSAS representatives

The table below summarises ECOD panel members for the JOIDES advisory structure representatives for the iSAS committees and panels. Nominations to the JOIDES Advisory panels were installed at the 32nd ESCO meeting in Venice (06/04/01) and the ECOD interim panel members were submitted to the iSAS office by the ESCO Secretariat (14/02/02).

Committees	**Present Delegate/Alternate**
Executive Committee (EXCOM)	Del: Mary von Knorring (Sweden) Alt: Menchu Comas (Spain)
Science Committee (SCICOM) *Interim Planning Committee (IPC)	Del: Jeroen Kenter (The Netherlands) Alt: Hans Christian Larsen (Denmark)
Technology and Engineering Development Committee (TEDCOM)	Del: Sigmund Stokka (Norway) Alt: Sergio Persoglia (Italy)

Science Steering & Evaluation Panels (SSEPs)	**Present Delegate/Alternate**
Earth's Environment (ESSEP) *Interim ESSEP	Del: Helmut Weissert (Switzerland) Alt: Nolan Koc (Norway)*
Earth's Interior (ISSEP) *Interim ISSEP	Del: Rolf Birger Pedersen (Norway)* Alt: Luis Menezes Pinheiro (Portugal)

Service Panels (SPs)	**Present Delegate/Alternate**
Pollution Prevention and Safety Panel (PPSP) *Interim PPSP	Del: Juanjo Danobeitia (Spain)* Alt: Birger Larsen (Denmark)*

Site Survey Panel (SSP) *Interim SSP	Del: Annakaisa Korja (Finland) Alt: Lucas Gasperini (Italy)
Scientific Measurement Panel (SciMP)	Del: Leonardo Sagnotti (Italy) Alt: Eve Arnold (Sweden)

* iSAS Panels

7. **ECOD scientists sailing now / and from January 2002**
   -Leg 200 H_2O Observatory: Michele Lustrino (Italy)
   -Leg 201 Peru Biosphere: Patrick Meister (Switzerland) and Nils Holm (Sweden)
   -Leg 202 SE Pacific: Fatima Abrantes (Portugal), Jose-Abel Flores (Spain) and Helga Kleiven (Norway)

8. **ECOD scientists invited to sail**
   -Leg 203 Equatorial Pacific: Costanza Bonadiman (Italy)
   -Leg 204 Gas Hydrates: Eualia Gracia (Spain) and Maarten Vanneste (Norway)
   -Leg 205 Costa Rica: Paola Vannucchi (Italy)
   -Leg 206 Fast spreading crust: Laura Crispini (Italy) and Paola Tartarotti (Italy)
   -Leg 207 Demerara rise: Astrid Forster (The Netherlands) and Jorijntje Henderiks (Sweden)

9. **ECOD co-chiefs invited for upcoming legs**
   -Leg 208 Walvis Ridge: Dick Kroon (The Netherlands)

10. **ECOD Student trainees, participation and applications since Leg 195**
    -Leg 200 H_2O Observatory: Ingun Nielsen (Denmark)
    -Leg 205 Costa Rica: Michael Strasser (Switzerland) and Trine Klemensoe (Denmark)

Stockholm 30 May 2002
Mary von Knorring

4.2 Country Report — France

The ODP-France Office moved from Nancy to Montpellier in October 2001. The ODP-France Scientific Committee is now chaired by Philippe Pezard, assisted by Benoit Ildefonse. This Scientific Committee, and guests representing most ODP-involved labs and institutes, met in Paris on January 29 2002. This meeting covered a variety of issues, from the level of French participation in upcoming ODP cruises, to the concerted European effort toward IODP. Minutes of this meeting are available, for those who read French, on the ODP-France web site.

To contact ODP-France

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After a rather bleak year in 2001, the ODP-France Office has put renewed efforts into raising the level of French participation in the legs of the final two years of ODP. As a result, applications have significantly increased, both in number, and in quality. We certainly hope this effort will be taken into account by TAMU in its final decisions for the staffing of upcoming legs, particularly for the last two legs of the program, for which there has been a strong French involvment since the proposal stage.

A workshop on :"Ultradeep drilling in the mediterranean region" was held in Paris on the 25-26 March 2002, with 44 participants from 6 European countries, and from Japan and Israel. The objective was to answer a proposition made by Japanese colleagues from the Ocean Research Institute (Tokyo Univ.) to participate with their research vessels in survey cruises in the Mediterranean region, in view of putting together IODP proposals for ultradeep drilling using the *Chikyu*. Two propositions came out of the discussions:

1. Preparation of a letter of intent to be sent to the European Commission for an Integrated Project (called *ODYSSEUS*) in the framework of the 6th PCRD. The full title of this project would be : *Unravelling the geodynamic causes of major environmental changes in the Mediterranean region during the last 30 Myrs, the ultradeep drilling perspective.*
2. Preparation of a Euro-Japanese two-ships seismic sounding cruise across the Hellenic arc, Cretan Sea and Cyclades archipelago using one Japanese research vessel such as RV Hakuho Maru (Ocean Research Institute) or RV Kairei (JAMSTEC) and one European ship with compatible seismic multichannel equipment.

(For further information on this issue, contact Laurent Jolivet at laurent.jolivet@lgs.jussieu.fr)

4.3 Country Report - Germany

Germany's approach to IODP

In May, the co-ordinator of the DFG Priority Programme ODP/DSDP , Dr. H.-R. Kudrass, presented the brochure IODP- Das Integrated Ocean Drilling Program to the so called Geokommission , the major board advising DFG on all geoscientific matters. The Commission endorsed the document for presentation to the DFG Senate. It is hoped that the Senate will support DFG s request to the Federal Ministry of Education and Science (BMBF) for joint IODP sponsorship.

Representatives of DFG and the German ODP community participated actively in all meetings held for the establishment of the European Consortium on Ocean Research Drilling (ECORD), in particular meetings of the ECORD interim Council. This group met April 18 in London with the objective to establish a European management structure and to apply for EC funding.

Colloquia

The German ocean drilling community continues to support a close cooperation within the European ocean drilling communities. 21 German scientists participated at the 4th European ODP forum which took place April 10 to 12, 2002 at the University of Troms¿ (Norway). Besides science, steps for a common European approach to future ocean drilling were discussed.

For closer cooperation with the International Continental Drilling Program (ICDP) a joint meeting of DFG Priority Programmes ODP/DSDP and ICDP will be organized and held in Potsdam (Germany) on 7/8 June 2002. International participation is encouraged. Additional information will be available soon under http://icdp.gfz-potsdam.de/html/new/new-index.html.

4.4 Country Report - Japan

1. Panel meeting

SCICOM and iPC joint meeting was held from March. 19-22, 2002 at JAMSTEC,Yokohama Institute (Sugita Yokohama).

2. Site Survey Cruise 2002 schedule

1) DTV survey in the accretionary prism and the forearc basin off Kumano and Tokai using *Natsushima* (February).

2) ROV (*Dolphin 3K*) survey in the Suruga Trough and Sagami Trough (March).

3) Seismic, piston sampling, heat flow surveys in the accretionary prism and the forearc basin off Kumano using *Tansei Maru* (March)

4) 2D/MCS surveys in the eastern Nankai Trough and northern Japan Trench by using a commercial seismic vessel (April).

5) Submersible survey in the accretionary prism and the forearc basin off Kumano using *Shinaki 6500* (May to June).

6) Morphological and magnetic survey in the southern Okinawa Trough by Wadatsumi deep tow backscattering system and 3 component magmetometer using R/V *Hakuho Maru* (June).

7) Submersible survey in the forearc basin off Tokai using *Shinaki 2000* (August).

3. ODP related symposium

1) Japan ODP Symposium - results of recent ODP Legs- (13 - 14 March at ORI, Tokyo).

2) Post cruise meeting of eastern Nankai MCS/OBS cruise performed by the framework of Japan-France collaborative project (26 April at Nice).

4. IODP related activity

Japanese IODP Executive meeting (8 March at JAMSTEC, Tokyo).

ORI is going to construct a Seismic Reflection Center (SRC) in FY2002 which provides state-of-the-art facilities for research and education in seismic reflection data processing and interpretation.

4.5 PACRIM GROUP REPORT TO EXCOM

Australian ODP Country Report

We have recently applied for our final year of ODP funding from the Australian Research Council, with the support of 13 Universities, Geoscience Australia and CSIRO. We are pleased that the contributing organisations continue to support Australia s membership in ODP.

The fall in the Australian dollar is still impacting on the finances of AUSODP and some cost cutting was necessary in 2001. However, hopefully the recent rise in the dollar will continue into next year.

Australia has had four shipboard scientists sail since October 2001, listed below.

Australian Participants in 2001/2002

Chris Fergusson	196	
Haidi Hancock	198	
Tracy Frank	198	
Greg Skilbeck	201	

We currently have 5 applicants for legs scheduled for 2003 (see below). Along with other countries in the PACRIM consortium we are concerned about getting scientists on board the ship for the final year of the program.

Applications for 2002/2003

Adkins Rhonda	PhD student	207	208		
Brown Kirsty	PhD student	207	208		
Dyksterhuis Scott	Honours Student	207	208	209	
Stacpoole John	Honours Student	207	208	209	
Yaxley Greg	Research Scientist	209			

Canadian ODP Country Report

The GSC and NSERC are contributing CD $1.26M to ODP for the coming fiscal year. Depending on the time of actual conversion to US dollars, this represents a $200K — 250K shortfall below the 1/3 Canadian membership fee of US $1M. The shortfall is caused by a steady decline in the value of the Canadian dollar since the PacRim membership fee was established, followed by a particularly sharp decrease during the past year. A similar shortfall was avoided last year with supplementary funding from NSERC, but neither NSERC nor the GSC could provide supplementary funds this

On a more positive note, Canada s plans to participate in IODP moved another step forward with the submission of a full proposal to the Canada Foundation for Innovation and NSERC for funds to participate as a full member in the new program. The proposal, which was written by a team of Canadian scientists over the winter with Kate Moran and Kathy Gillis as PIs, was submitted in February by the Atlantic Canada Petroleum Institute (ACPI) and Dalhousie University on behalf of the Canadian marine geoscience community. The proposal, which requests circa CD $40M over 5 years, represents a significant departure from earlier Canadian proposals in that it requests significant funding for research in addition to the subscription fee. The GSC and industry (through ACPI) have pledged considerable funds to the program, pending a favorable decision by CFI and NSERC. A decision is expected on June 15, 2002.

Finally, Robin Riddihough, who has represented Canada in the JOIDES advisory structure for many years, has retired and will be replaced by Jacob Verhoef, the director of the GSC Atlantic.

Korea ODP country report

KODP SciCom meeting was held on the 15 of May and discussed joining the IODP. KODP secretariat (KIGAM) submitted a proposal for U$ 500,000 on the 1st of March, 2002. If the PacRim consortium continues until the end of the IODP project, we can participate in IODP with the current position. If not, we have to look for other countries as partners. Currently, we have been trying to contact other Asian countries including Indonesia, Vietnam, and Philippines, and the final decision will be made when we have a PacRim consortium meeting in this October (tentative schedule).

Also, research funding for studying ODP core data will be increased to vitalize the KODP activities. For the year of 2002, KODP supports offshore scientists with about U$ 10,000 a year for their research.

Chinese Taipei ODP report

The Chinese Taipei ODP consortium is working together with Korea ODP and we intend to visit several countries in SE Asia and encourage them to join with us for a future Asia IODP consortium.

Chinese Taipei ODP is working on a list to send our representatives as "observers" in the IODP committees.

The Taiwan geoscience community is interested to combine our ICDP (International Continent Drilling Program) group together with IODP. Dr. Yi-Ben Tsai, our ICDP representative, and Dr Chao-Shing Lee are planning to visit JAMSTEC in late June. We will work closely with the Japanese scientists to propose future drilling targets.

4.7 U.K. Country Report

1. ODP Special Topic Grants

The following ODP special topic grants have been awarded since the last EXCOM meeting

Dr S. Stokes, Optical dating of Pleistocene Marine Climate Records from ODP cores
Dr. D. Teagle, Alteration of the Detroit and Nintoku seamounts, Emperor seamount chain, ODP leg 197: Chemical fluxes and implications for ocean chemistry

2. Rapid Research Grants

The Following have received rapid response grants since the last EXCOM meeting

B. Wade	University of Edinburgh
C. Smart	University of Plymouth
L. Clarke	University of Wales, Bangor
P. Sexton	University of Southampton
P. Wilson	University of Southampton
H. Coxall	University of Southampton
J. Wilson	Royal Holloway

3. Post Doc-Funding

One post-doc received special funding under the scheme,

4. UK Forum

The annual UK ODP forum will be held this year at University College, London on the 6th November 2002.

5. 4th European Forum

The 4th European Forum was held in Troms¿, Norway, 10th-12th April 2002. UK-ODP funded 11 members of the UK community

6. IODP

Work on the EU funded JEODI (Joint European Ocean Drilling Initiative) project for IODP planning is ongoing.

4.8 U.S.A

4.8.1 NSF COUNTRY REPORT

Although the President's 2002 budget request to Congress identified only a 1% increase for NSF, Congress chose to appropriate funds at a higher level. The final 2002 agency budget that has been signed by the President provides an overall NSF increase (from the 2001 level) of 8.4%. Within the total budget ($4,796B), the Geosciences Directorate is increased by $45.8M (or 8.1%). Divison (Earth, Atmospheric and Ocean) and Program budgets have now been identified as of two weeks ago. The Geosciences Directorate increases from $563.60M to $609.47M (or 8.48%).

Discussions within the U.S. Congress concerning the NSF FY 2003 budget have been very positive. Members of the Science Committee for the House of Representatives has introduced legislation to place the National Science Foundation (NSF) on a track to double the agency's budget in five years. The bill authorizes a 15 percent increase for NSF for each of the next three years. From these actions we are hopeful that when the budget bills are finally passed NSF will actually see a significant budgetary increase.

Personnel recruitment activities continue within the **Division of Ocean Sciences** following re-organization. Bruce Malfait has been identified as the Head of the **Marine Geosciences Section**. Bruce's promotion has left one of the two Program Director positions in the Ocean Drilling Program vacant. The Division has extended recruitment for this position in an effort to maximize the diversity and extent of the applicant pool. Applications will be accepted until the end of June. Brad Clement (visiting scientist) from Florida International University continues with the primary ODP responsibility for NSF grants activity and has extended his stay for another year. John Walter from the Dept. of Commerce, NOAA/Naval Sea Systems Command has recently come to NSF to fill a second visiting scientist/engineer position identified for the Ocean Drilling Program. It is expected that this position will concentrate on IODP planning – specifically with respect to the acquisition of the non-riser drill ship. John has experience with U.S. government contracting and ship acquisition.

Focused NSF funding in support of ODP science is divided between the U.S. Science Support Program (USSSP) administered by JOI ($6.4M in FY 2002) and a separate unsolicited proposal/grant activity administered by NSF ($10.3M in FY 2002).

NSF/ODP supported field programs for calendar year 2002 include 1) a study of sediment drifts in the North Atlantic (Greg Mountain – LDEO as lead scientist); 2) a VSP experiment on hydrate ridge as part of Resolution drilling on leg 204 (Ingo Pecher and Ann Tehu as lead scientists); 3) additional heat flow studies in the Cocos Plate by Andy Fisher (Santa Cruz) and others; 4) a study of gas hydrates in the Gulf of Mexico by Carolyn Ruppell (Georgia Tech) and others; and 5) and a return to the Corks in the Galapagos region by Becker (Miami) and Spiess (Scripps). NSF has also committed to funding Miriam Kastner (Scripps) and others for the Cork deployments as part of Leg 205. NSF/ODP also participates in support for the Margins program and in 2002 will

support Brian Taylor and others for a US-Japan MCS/OBS study of the Marianna Arc and an MCS program under the direction of Dan Lizzeralde in the Gulf of California.

NSF will continue to support field programs for research and data acquisition with a view toward the beginning of the IODP. Field programs in 2003 for which a funding commitment has already been made include: 1) a study of fluid flow in the Mariana arc by Patricia Fryer (Hawaii) and, 2) a study of the Kane megamullion by Morris Tivey (Woods Hole).

U.S. Science Support activities funded under NSF's cooperative agreement with JOI can be found in the following report.

4.8.2 U.S. Country Report (Part II) JOI/USSSP Activities 1/02 to 6/02:

U.S. Science Support Program (USSSP) Plan

The Year 18 USSSP Program Plan was approved in March by NSF at a level of $6.4M. Year 18 is the last year of USSSP in which support for U.S. scientists is sought for a full year of ODP science operations. The annual close-out report for USSSP Year 17 (March 1, 2001 to February 28, 2002) was submitted to the U.S. National Science Foundation (NSF) in May 2002. Because the timing and duration of USSSP are linked to ODP, wind-down of USSSP will begin in calendar 2003 (with USSSP Year 19) and will conclude before February 28, 2006 (at the end of Year 21). USSSP operation beyond 2003 is necessary to accommodate post-cruise research and other activities, and to enable financial and programmatic closeout.

U.S. Science Advisory Committee (USSAC) membership rotation

The following six people will complete their terms on USSAC and will rotate off the panel on September 30, 2002: Peggy Delaney (Chair), Tim Bralower, Jon Martin, Tommy Phelps, John Sinton, and Deborah Smith. To generate replacements, a call for nominations was published in the May 28th issue of *EOS,* and was announced in other media (e.g., listserver, *JOI/USSAC Newsletter*). Nominations will be considered by USSAC at their July 10-12 meeting. A slate of candidates will be forwarded to the JOI Board of Governors for their consideration and final approval before October 1, 2002. At their February 2002 meeting, USSAC selected Warren Prell (Brown University) to succeed Peggy Delaney as chair, effective October 1, 2002.

U.S. planning for IODP

USSAC planning activities
USSAC is currently expending significant time and energy in considering how U.S. scientists will need to be supported when participating in the incipient Integrated Ocean Drilling Program (IODP). Such consideration involves defining a new U.S. Science Advisory Committee (with additional tasks and responsibilities), a new support program to succeed USSSP, and other aspects of U.S. participation, such as NSF support for regional geophysical studies in support of drilling proposal development, and post-cruise research funding (beyond

the level awarded by USSSP). The topic of U.S. participation in IODP will continue to be a major agenda item in next two USSAC meetings (July 10-12, 2002, San Francisco, California, and February 19-21, 2003 in either St. Petersburg, Florida or La Jolla, California). The outcome of USSAC s deliberations and considerations will be a white paper to NSF containing recommendations on a national program to support all aspects of U.S. participation in IODP. This recommendation will be submitted in the Fall of 2002.

Conference on U.S. Participation in IODP (CUSP)
U.S. scientists are anticipating national participation in IODP, and thus the creation of a successor program to USSSP as well as other changes in manner in which NSF supports the full range of activities conducted by U.S. scientists participating in an international ocean drilling program. As such, USSAC will sponsor a conference on this topic, and the following announcement was published in *EOS* and elsewhere in March. Over 60 participants are expected .

> ***How should U.S. participation in IODP be structured and supported?***
>
> ***A workshop to develop recommendations to NSF***
>
> *The international Ocean Drilling Program (ODP) will be succeeded by the Integrated Ocean Drilling Program (IODP), beginning October 1, 2003. The U.S. will be a major partner in the IODP, providing a riserless vessel to complement the Japanese riser vessel and mission-specific platforms likely to be provided by European entities. The Initial Science Plan for the IODP is available at www.iodp.org/isp.html.*
>
> ***Go to the CUSP** (Conference on U.S. Participation)*
> ***When:** June 12-14, 2002*
> ***Where:** Washington, DC*
> ***Why:** To achieve broad community input in developing a USSAC recommendation to NSF*
>
> ***How:** To participate in this conference or to contribute comments, please email USinIODP@joiscience.org by April 22, 2002, and in 300 words or less express your views on how U.S. participation in IODP should be structured and supported. Participants will be selected by the conference convenors to represent the broad U.S. marine science community interested in drilling-related science. Travel support will be provided to approximately 50 participants, including USSAC members. For additional information on this activity and the conference agenda, see www.joiscience.org.*
>
> ***Convenors and report authors:** The report will be written by an ad hoc USSAC committee, Advisory Committee on U.S. IODP Participation. This committee will also run the conference and is co-chaired by Peggy Delaney (delaney@cats.ucsc.edu) and Warren Prell*

(Warren_Prell@brown.edu). The other committee members are Nathan Bangs, Earl Doyle, Bob Duncan, and Terry Quinn.

How does NSF support U.S. participation in ODP?
Support for U.S. participation in the ODP and for drilling-related research is provided by the NSF. NSF s Ocean Drilling Program, in the Division of Ocean Sciences, sustains investigations of potential drilling regions (regional geological and geophysical field studies), the feasibility and initial development of downhole instruments and techniques, downhole geophysical and geochemical experiments, and studies leading to long-range definition of future drilling objectives. Support for post-drilling studies are submitted through other NSF programs such as Marine Geology and Geophysics, Earth Sciences, and Polar Programs.

Additional support for U.S. scientists is provided through the U.S. Science Support Program administered by Joint Oceanographic Institutions, Inc. (JOI) through a cooperative agreement. This NSF-sponsored program consists of several elements including: planning activities (e.g., workshops) and participation in the planning structure (e.g., JOIDES meetings); support for U.S. scientists participating on the drillship and for necessary follow-up studies related to the publication of initial drilling results; site surveys and data synthesis to develop the context for drilling; educational programs; development of instrumentation for downhole experimentation; dissemination of results; and support a USSAC to interact with the scientific community and NSF.

IODP GeoSCOPE, a workshop/informational session focusing on geophysical needs

To help the U.S. scientific community better understand riser drilling and the geophysical needs associated with developing riser drilling proposals and with conducting drilling, USSAC has agreed to sponsor a combined workshop and informational session on this subject, this fall, probably just before the AGU meeting in San Francisco, which runs from December 6-10. The workshop will be led by Nathan Bangs and others. The activity would focus on the U.S. community, but, as always, would be widely announced and open to non-US participants as well. Participants would include scientists interested in developing riser drilling proposals, people who understand riser drilling and the types of data needed to enable drilling, leaders of the activity, including USSAC members, and liaisons to explain the program.

US participation on the interim Science Advisory Structure
JOI/USSSP is continuing to assist in the process of selecting and supporting U.S. representatives to the various panels and committees of the interim Science Advisory Structure. U.S. representatives have now been selected for the interim: (a) Planning Committee; (b) Science Steering and Evaluation Panels (both interior and environment); (c) Scientific

Measurements Panel (d) Site Survey Panel; (e) Pollution Prevention and Safety Panel; and (f) Technical Advisory Panel (analogous to the JOIDES TEDCOM). A new panel, interim Industry Liaison Panel, is currently in the process of being staffed; the mandate has already been approved. U.S. representatives chair or co-chair all of these panels. USSSP funds are made available to offset the costs incurred by U.S. panel chairs in fulfilling their duties.

USSSP supports the efforts of the U.S. interim Planning Committee co-chair
Through a contract to the University of Michigan established in Summer 2001, JOI/USSSP continues to provide financial support (salary, travel, and other costs) to Ted Moore as co-chair of the IODP iPC to implement the mandate specified by the IWG from September 1, 2001 through September 30, 2003. During this period, Moore, and his Japanese iPC co-chair, Hajimu Kinoshita, will lead iPC planning activities. They will oversee the IODP iSAS, administer the evaluation of scientific ocean drilling proposals and help establish the IODP Science Advisory Structure that will initiate on October 1, 2003. Joanne Reuss will provide programmatic and administrative support to Moore, the iPC, and she will also assist the iSAS Office at JAMSTEC.

US contribution to the IWG Support Office (IWGSO)
The IWGSO has continued to provide administrative, contractual, and logistical support to the International Working Group (IWG) and its designates in their efforts to outline the new IODP since November 30, 1999. Financial support for IWGSO is provided by the US, through JOI/USSSP, and by Japan, through JAMSTEC.

Since the last IWG meeting in Kobe (January 16-17, 2002), Japan, the Support Office has distributed high-resolution posters and images to Canada, Switzerland, and Spain for use in promoting IODP, assisted the Industry Liaison Working Group co-chairs in editing the Industry Liaison Working Group companion document to the Initial Science Plan, and incorporated the interim Planning Committee s comments on it after their March meeting. The IWG Support Office also submitted contributions to the *JOI/USSAC Newsletter*.

The IWGSO hosted exhibit booths at the fourth European ODP Forum held in Tromso, Norway (April 10-12) and the AGU spring meeting (May 28-31) in Washington, DC. IWGSO produce posters and informational fliers for the displays. At these meeting, IWGSO staff handed out IODP and OD21 Brochures, the OD21 Newsletter, the Initial Science Plan for IODP, the U.S. companion document to the ISP, and other information. Exhibit booths are being planned for the Western Pacific Geophysics Meeting, which will be held in Wellington, New Zealand, July 9-12, and the Geological Society of America annual meeting in Denver, Colorado, October 27-31.

For assistance in promoting IODP, please contact the IWGSO at iwgso@joiscience.org or 202-232-3900 x262. Promotional posters, brochures, and informational fliers that are regularly updated can be sent electronically, in printable PDF format, for this purpose.

Distinguished Lecturers Series for 2001-02

Over the past academic year, the following DLS lecturers have given talks at the institutions listed below. The series continues to increase in popularity and success.

Robert Dunbar, Stanford University
Southern Ocean Impacts on Global Climate: Clues from the Antarctic Margin

Columbus State University -- Columbus, GA, January 31, 2002
Duke University Marine Lab -- Beaufort, NC, April 3, 2002
State University of New York -- Albany, NY, May 3, 2002
Portland State University -- Portland, OR, October 24, 2002
State University of New York -- Stonybrook, NY, April 26, 2002

David Hodell, University of Florida
Late Pleistocene Evolution of the Ocean's Carbonate System: A Serendipitous Result from ODP Leg 177

WHOI -- WHOI, MA, May 3, 2002
Northwestern University -- Evanston, IL, May 10, 2002
University of California -- Santa Barbara, CA, March 6, 2002
University of Nebraska -- Lincoln, NE, March 8, 2002
Salem State University -- Salem, MA, May 1, 2002

W. Steven Holbrook, University of Wyoming
Methane Hydrates: Boon or Bane?

Texas A&M University -- College Station, TX, November 12, 2001
University of California Santa Cruz -- Santa Cruz, CA, February 5, 2002
University of Colorado -- Boulder, CO, April 25, 2002
University of Miami -- Miami, FL, March 25, 2002
Montana Tech -- Butte, MT, September 17, 2001

John Mahoney, University of Hawaii
The Nature, Origin, and Fate of a Giant Oceanic Plateau: Ontong Java Plateau

Trinity University -- San Antonio, TX, March 25, 2002
University of Texas at Arlington -- Arlington, TX, March 27, 2002
College of Charleston -- Charleston, SC, March 29, 2002
University of Wyoming -- Laramie, WY, April 22, 2002
New Mexico State -- Las Cruces, NM, April 24, 2002

Lisa Tauxe, University of California, San Diego
Hunting the Earth's Magnetic Field

Florida State University -- Tallahassee, FL, February 28, 2002

Colorado College -- Colorado Springs, CO, March 28, 2002
Fort Lewis College -- Durango, CO, March 29, 2002
Indiana University -- Bloomington, IN, April 1, 2002
Oberlin College -- Oberlin, OH, April 2, 2002

Michael Underwood, University of Missouri
Subduction Zone Megathrusts: Why Stratigraphy and Sedimentology Matter

Johns Hopkins University -- Baltimore, MD, February 18, 2002
Virginia Tech -- Blackburg, VA, February 21, 2002
East Carolina University -- Greenville, NC, February 22, 2002
University of Missouri -- Rolla, MO, November 14, 2002
University of Iowa -- Iowa City, IA, November 16, 2002
California State University -- Fresno, CA, April 29-30, 2002

Distinguished Lecturers Series for 2002-03

JOI/USSSP received 115 applications for DLS lecturers this year — the highest number ever. The lecturers and the venues for talks in the 2002-2003 academic year have been identified. They are listed below and are presented in the attached map. JOI is working with the speakers and the respective institutions to determine the dates of the individual lectures.

Barbara Bekins, USGS
The Subduction Squeegee

Western Michigan University -- Kalamazoo, MI
University of Tulsa -- Tulsa, OK
University of New Hampshire -- Durham, NH
University of Illinois -- Urbana, IL
Plattsburgh State University -- Plattsburgh, NY

Jerry Dickens, Rice University
Extreme Climates and Frozen Methane: The Global Carbon Cycle with Gas Hydrate

Wright State University -- Dayton, OH
Hobart & William Smith Colleges -- Geneva, NY
Wesleyan University -- Middletown, CT
Lawrence University -- Appleton, WI
University of Southern Mississippi -- Hattiesburg, MS

Patricia Fryer, University of Hawaii
Windows on Subduction Zone Processes

University of New Mexico -- Albuquerque, NM

University of Oregon -- Eugene, OR
University of Maine -- Orono, ME
College of William & Mary -- Williamsburg, VA
Syracuse University -- Syracuse, NY

Alan Mix, Oregon State University
The Icy Poles or the Muggy Equator: What Drives Natural Climate Change?

Huston-Tillotson College -- Austin, TX
University of Minnesota -- Duluth, MN
Radford University -- Radford, VA
North Dakota State University -- Fargo, ND
California State University — San Bernardino, CA

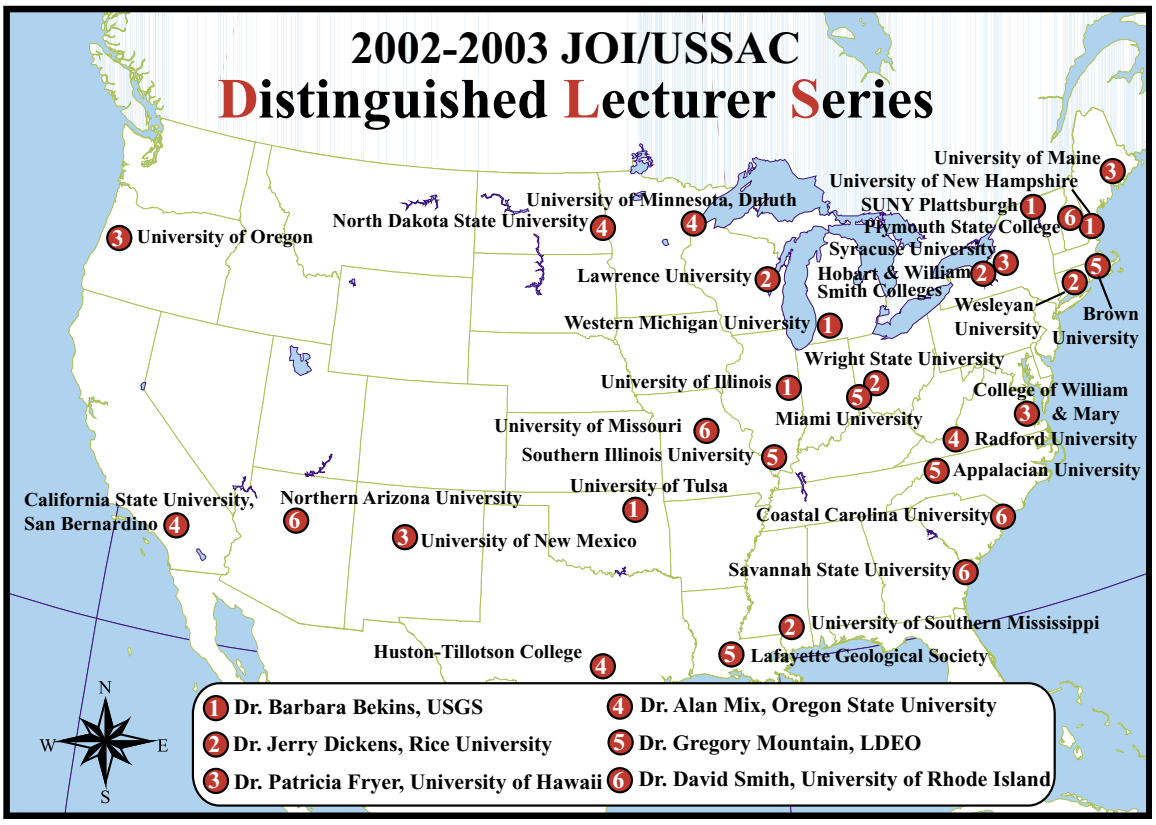
Greg Mountain, Lamont Doherty Earth Observatory
The Ups and Downs of Determining Ancient Sea Level Change

Lafayette Geological Society -- Lafayette, LA
Appalachian State University -- Boone, NC
Brown University -- Providence, RI
Miami University -- Oxford, OH
Southern Illinois University -- Carbondale, IL

David Smith, University of Rhode Island
Life in Marine Sediments: Probing the Limits of Earth s Deep Biosphere

Northern Arizona University -- Flagstaff, AZ
Coastal Carolina University -- Conway, SC
Savannah State University -- Savannah, GA
University of Missouri -- Columbia, MO
Plymouth State College -- Plymouth, NH

National distribution of the JOI/USSSP DLS presentations in academic year 02- 03 is shown below.



Promotion at U.S. ports of call of the *JOIDES Resolution*

Port call activities are being planned for visits of the JR to San Francisco and San Diego. Events currently scheduled for San Francisco (July 8-12) include a press conference and tour, VIP tour and reception, teacher symposium, student tours and activities, a science talk at the USGS, and general and university student tours. A tent with ODP materials, science posters, and hands-on education materials will be outside the JR to allow the general public to learn more about the program. Similar events are being planned for San Diego (September 6-10) with the help of Scripps.

Curriculum Enrichment

The Seafloor Chronicles

In February 2002, JOI/USSSP awarded Wolfgang Berger (California Space Institute) partial support ($15,419) to develop an online educational curriculum, titled The Seafloor Chronicles, that will highlight the scientific advances resulting form ODP and DSDP. The curriculum will be composed of learning modules that are linked to the USSSP website. These modules are specifically intended to provide a vehicle through which middle and high school teachers can gain knowledge of seafloor science and ocean drilling, but their impact and use is expected to be much broader. The Seafloor

Chronicles will also be distributed on CD-ROMs for educational outreach by JOI/USSSP.

Educational CD ROMs and posters

JOI continues to regularly distribute the educational CD-ROMs (ODP: Mountains to Monsoons and Gateways to Glaciation) as well as the poster, Blast from the Past, to scientists and educators. In addition, the poster has been selected for inclusion in a curriculum program being produced by Carolina Biological Supply Company (www.carolina.com). The program, titled "Science and Technology Concepts for Middle School," is being developed by the National Science Resources Center, which is jointly operated by the National Academy of Sciences and the Smithsonian Institution.

Educational video

In the summer and fall of 2001, JOI/USSSP began coordinating plans with Carolina Biological Supply Company (Carolina) to develop an educational video that highlights the ODP and several participating scientists. This video will complement existing Carolina videos that introduce middle and high school students to both scientific concepts and careers. Carolina staff will produce the video with advice and guidance from JOI. In February 2002, Carolina conducted and filmed nearly a dozen 15-minute scientist interviews as content for the video. Carolina is editing this footage and making plans to visit the *JOIDES Resolution* at the July 2002 San Francisco port call.

Internship Program

JOI/USSSP has employed two interns (Micah Nicolo and Christina Riesselman) since summer 2001. During their time at JOI, both have worked on education and legacy projects, as well as assisting with other JOI/USSSP administrative duties. Some of the USSSP projects the interns have assisted with include: developing a series of downloadable scientific presentations for the USSSP web page; using GIS and GMT software to create complex maps plotting such things as U.S. participation throughout ODP; updating and maintaining a comprehensive postcruise funding database; and editing USSSP sponsored workshop reports and the JOI/USSSP Newsletter.

Micah Nicolo graduated from Hobart William Smith College in May 2001 with a B.S. in Geoscience and a B.A. in Political Science. This fall, he will attend Rice University in Houston, TX and study paleoclimatology and geochemistry with Jerry Dickens. Christina Riesselman graduated from University of Nebraska-Lincoln in May 2001 with a B.A. in both Geology and English. This fall, she will attend Stanford University in Stanford, CA and study paleoclimatology with Robert Dunbar.

In response to advertisements on the JOI/USSSP listserver and in print, JOI received over 30 applications for the 2002-2003 internship program. There were many qualified applicants, and from those, JOI selected two new interns. Anthony Goodman was graduated from University of Michigan this April with a BS in Geology. Jennifer Anziano was graduated from Macalester College this May with a BA in Geology. Both interns have expressed strong interest in learning about science management before

they continue with grad school. The interns will begin at JOI on July 15, 2002. The term of their internship is one year.

ODP Undergraduate Student Trainee Program
Kimberly Artita, an undergraduate at the University of Hawaii, is currently sailing on Leg 203 as an ODP Undergraduate Student Trainee. Ms. Artita is the fourth U.S. student trainee and the eighth trainee overall to participate in the program. Another U.S. trainee may sail on Leg 205, Costa Rica.

World Oceans Day Event and Collaboration with AGI on Earth Science Week
JOI/USSSP staff represented ODP in a "Ocean Technology Fair," part of a week-long event on Capitol Hill to celebrate World Oceans Day in early June. This event showcased various types of ocean research to policymakers, scientists, and businesses. JOI/USSSP staff also attended a meeting held by AGI to discuss ways to make Earth Science Week more successful. Earth Science Week will be held October 13-19, 2002.

Schlanger Ocean Drilling Fellowship Program

At their February 2002 meeting, USSAC considered 19 shore-based fellowship proposals. Three one-year shore-based awards were granted, as follows:

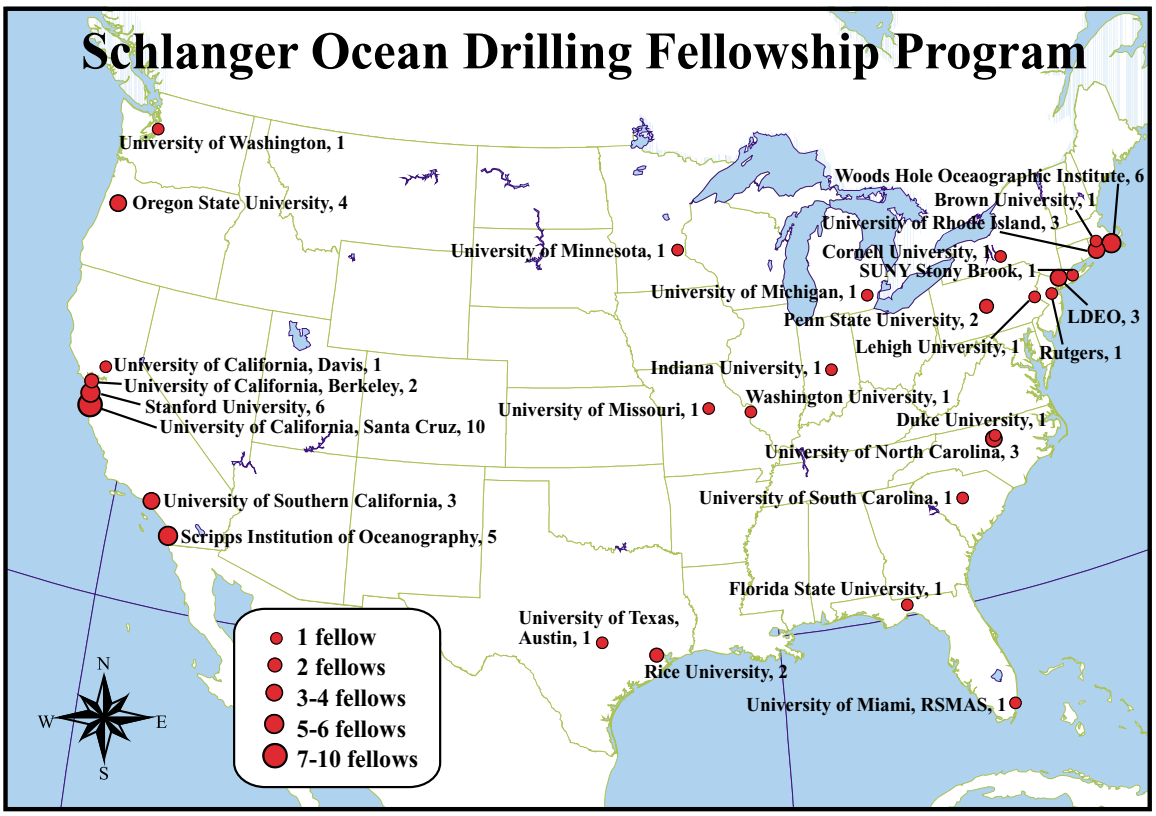
Heather Benway, Oregon State University
"Reconstructing pycnocline intensity in the Gulf of Panama to monitor low-latitude response to Neogene closure of the Panama Isthmus"
(ODP Legs 138, 165, & 202)

Michael Hutnak, Univ. of California, Santa Cruz
"The thermal and hydrothermal state of subducting lithosphere: Costa Rica margin"
(ODP Leg 205)

Matthew Makowski, MIT/WHOI
"Characteristics of aeolian organic matter in a terrestrial-to-marine depositional transect and implications for millennial-scale tropical climate change"
(ODP Legs 112 & 201)

For the April 15, 2002 fellowship application deadline, JOI received 18 shipboard and shore-based proposals. These proposals are being evaluated by the USSAC Fellowship Subcommittee, which will meet on June 12, 2002 to make award recommendations.

The national distribution of Schlanger Ocean Drilling Fellows is shown in the figure below.



JOI/USSSP presence at national meetings

JOI/USSSP will co-sponsor a joint ODP/IODP booth at the American Geophysical Union (AGU) Meeting, May 27-31, 2002, in Washington, DC. USSSP will also contribute to an ODP exhibit booth at the Geological Society of America (GSA) annual conference, October 27-30, 2002, in Denver, Colorado. USSSP plans to host an ODP Town Meeting on October 26 in conjunction with the GSA meeting to update the scientific community about plans for the future. In addition, USSSP will contribute to an ODP/IODP exhibit booth at the fall AGU Meeting, December 6-10, 2002, in San Francisco, CA, and will likely host another ODP/IODP Town Meeting at that time.

JOI/USSAC Newsletter

A 16-page spring issue of the *JOI/USSAC Newsletter* is being published and distributed this month. It can be viewed on-line, along with past newsletters, at www.joiscience.org/USSSP. In addition to general news about USSSP and ODP, this issue of the newsletter features an update on the planning process and progress for post-2003 scientific ocean drilling. The mailing list for the newsletter includes 1976 scientists in the U.S. and 329 non-US scientists.

JOI/USSSP website and listserver

The USSSP component of the JOI website (www.joiscience.org) continues to provide information to the scientific ocean drilling community. Maintaining, updating, and upgrading the website will continue as an integral component of JOI/USSSP activities. Recent additions to the site include background information for the Conference for U.S. Participation (CUSP) in IODP and the NanTroSEIZE workshop.

The JOI/USSSP email listserver has become a mainstay for rapid communication with a broad cross section of the U.S. scientific ocean drilling community, and, to a lesser extent, the international community. Since January 2002, sixteen messages have been sent via the listserver to notify the U.S. community about JOI/USSSP internship opportunities, Schlanger Ocean Drilling Fellowships, the Distinguished Lecturer Series, as well as various workshop and employment opportunities. The email list, which includes 1827 email addresses, is moderated at JOI to ensure that all the messages are relevant to USSSP, ODP, or other matters related to scientific ocean drilling. If you wish to be added to the listserver, or to distribute a message over it, please contact info@joiscience.org.

Site Augmentation Proposals

Funded
Andrew Fisher (University of California, Santa Cruz), "Design of the next generation of coring tools for *in situ* temperature measurements", $17,134.

Kathie Marsaglia (California State University, Northridge), "Web/CD Atlas of ODP Core Photographs," $31,810. This proposal was funded to provide an web-based atlas of sedimentary structures that can be used for training of ODP shipboard scientists, and provide a product that can also contribute to future educational efforts using ODP cores.

Kathryn Moran (URI) and Garry Greene (Moss Landing Marine Laboratory & Monterey Bay Aquarium Research Institute), High-resolution seismic reflection data for proposed sites in APL21 $9,050. APL21 may be implemented on ODP Leg 203, contingent upon successful PPSP review and availability of time.

In review/pending

Liviu Giosan (WHOI) and Roger Flood (SUNY at Stony Brook), "Mini-Workshop on Quaternary Sedimentation and Climate History of the Black, Marmara, and Aegean Seas," $12,000 requested; award pending a revised date for the meeting and identification of meeting venue.

Roland von Huene (Univ. Calif, Davis), Mini-Workshop on Costa Rica Seismogenic Zone Drilling Project, $24,700 requested. In review.

Planning Workshops

Funded
Harold Tobin (New Mexico Tech.), NanTroSEIZE: A Workshop on Drilling and Instrumenting the Nankai Trough Seismogenic Zone, $42,483. To be held July 21-23, 2002 at NCAR in Boulder, Colorado.

In review

Peter Clift (WHOI) and Peter Molnar (Univ. of Colorado), Proposal for an IODP Workshop for Planning Drilling of the Indian Ocean Fan Systems, requests $34,200 if held in Sri Lanka, or $13,440 if held in Colorado or WHOI.

Declined

A. F. Spilhaus, Jr. (American Geophysical Union), "Chapman Conference on Continent-Ocean Interactions," $29,169 requested. This proposal was not accepted for review because USSAC thought that: (a) the proposed budget request was not well balanced toward supporting participation of U.S. scientists; (b) the funding request for meeting support costs were considered unusually high; and most importantly, (c) the proposal was submitted to USSAC after the meeting had already been scheduled, thus precluding USSAC input.

Workshop Reports
A workshop report from “Opportunities for Geochemistry in Post-2003 Drilling” was completed in April by convenors Rick Murray, Dan Schrag, and Geoff Wheat. The report will be distributed electronically and possibly in paper format in the next two months.

A workshop report from “Science and Technology of Submerged Coral Drilling: A Workshop Report” was completed by Terry Quinn, A.W. Tudhope. The report will be distributed within the next two months.

Post-Cruise scientific research proposals

Twenty-five USSSP proposals were funded from January 16, 2002 through May 20, 2002. These proposals were from participants of ODP Legs 195 (4), 197 (11), 198 (6), and 199 (4).

Results symposia

Steven Clemens (Brown Univ.): "Partial Support for a Combined ODP Leg 184/SCOR Results Symposium: Asian Monsoons and Global Linkages on Milankovitch and SubMilankovitch Timescales," $38,689. *Marine Geology* approved a special publication of 360 pages titled “Asian Monsoons and Global Linkages on Milankovitch and Sub-Milankovitch Timescales.” The guest editors will be Clemens, Wang, and Prell. Publication is expected to occur in 2002.

Mark Cane (LDEO), Peter Molnar (Univ. Colorado) and Gerald Haug (ETH) submitted a proposal, “The role of ocean gateways for Plio-Pleistocene climate and the onset of major Northern Hemisphere Glaciation.” The proposal is in review, and if funded, the symposium will be held January 6-8, 2003 at Lamont-Doherty Earth Observatory, in NY.

6. Management and Operations Report

6.1 NSF Management Report

The FY 2002 ODP (1 October 2001 to 30 September 2002) Program Plan was approved at an initial funding level of $46,198,000. The Plan meets JOIDES requirements for science programs to be conducted in 2002, and NSF guidance with respect to budgeting fuel costs and continued planning for Arctic drilling. Following approval of the Plan, JOI identified approximately $1.3M in unobligated FY 2001 funds that primarily represent delayed spending for cork programs as part of the drilling off Costa Rica, and residual funds not required in 2001 for fuel. NSF has approved carrying forward these funds into FY 2002, with the remaining fuel funds to remain as a buffer against an unexpected rise in fuel prices above the budgeted $250/ton level. Based on increases in operations costs (insurance, etc) resulting from September 11 issues, NSF has subsequently increased the FY 02 budget by an additional $407,000. The present FY 02 Program Plan budget is therefore approved at a level of $47,985,259.

Contributions by all ODP members are expected to be consistent with schedules identified in MOUs and previously reported, though the FY 2002 contribution level for the PACRIM consortium has not been resolved. Australia, the Taiwan consortium, and Korea have committed to maintaining their previous level of contribution, but Canada is unable at present to commit to a 1/3 participation and is seeking additional funding. The total PACRIM contribution has not been identified. NSF will provide approximately 65% of FY 2002 Program Costs.

The present funding approval from the National Science Board of NSF for the prime contract to JOI will terminate at the end of U.S. Fiscal Year 2002. NSF instructed ODP managers to prepare a multiyear Program Plan that covers the final year of ODP drilling operations (2003) and phase-out of contractor activity (2004-2007). This plan was presented to and approved by EXCOM at the Santa Cruz meeting. NSF constituted a panel to review the formal version of this plan in May and which will now be considered by the National Science Board later this Summer. Although the panel was strongly supportive of the proposed activities identified in the plan, it did identify a few concerns that will have to be addressed by JOI and its subcontractors in implementing the plan. These have been communicated to JOI. It is expected that the contract phase-down plan will be consistent with the JOIDES recommendations and plans for termination of the ODP. NSF expects the plan to reflect the following considerations:

- Continuation of the strong scientific program which has characterized the ODP to date, with drilling and logging operations maximizing use of the JOIDES Resolution in 2003, but allowing sufficient time to meet all requirements (vessel and logging) for subcontract completion prior to the end of FY 2003. A provisional target budget of $45.3M has been identified for 2003 scientific drilling based on this plan. Initial out-year budgets (2004-2007) have been identified based on JOIDES and contractor planning and will

be subject to yearly re-negotiation. No international contributions for the 2004-2007 period are expected.

- An orderly termination and phase-down of operations, including completion of the legacy documentation identified by JOIDES.
- Continuation of good business practice in contract and program management that has characterized ODP to date.
- Continuation of operationally and environmentally safe procedures and practices.
- Preservation of ODP scientific and physical assets.
- Orderly phase-down of personnel assets.

To the extent possible it is expected that the responsibility for ODP scientific and physical assets will be transferred to appropriate IODP contractor organizations as required.

NSF and JOI have discussed the requirements for the next Performance Evaluation Committee and decided to schedule this activity in 2004. One objective of the review will be to examine status and progress of phase down activities. Further discussion of the mandate and procedures for the PEC will occur at the EXCOM meeting.

6.2 JOI Management and Operations Report

1. NSF Panel Review of ODP 5-year Program Plan

JOI has received comments from the National Science Foundation (NSF) panel that reviewed the latest ODP 5-year Program Plan. The panel report praised the program and its accomplishments. It acknowledged that the last year of drilling addresses important science and has a well-developed plan. The majority of the panel's comments focused on phase out and legacy issues.

The following recommendations were made:

- That JOI enhance the program for legacy creation and preservation, and for information transition to a successor. The Panel recommends that this task be assured - that all data collected by ODP/DSDP be archived properly and be available for future retrieval.

- That JOI be prepared to continue and expand critical components of existing programs necessary for on-going scientific inquiry until a successor is in place. The Panel is concerned with the precipitous decline to a zero budget of all components (except Publication Services) in the ODP-TAMU plan. Unless actions are taken to ensure continuity if the IODP transition lags, additional resources may be needed to ensure the continuous availability of the ODP data, website, and core repository materials.

- That more emphasis, both programmatic and fiscal, be placed on the thoughtful and thorough archiving of the ODP and DSDP data.

- That ODP immediately generate a complete inventory of all data, documenting their status in terms of migration into the digital domain; migration into the JANUS system; incorporation into report generation for archives; and the strategy for their archive.

- That provisions for active functional operation of JANUS in the U.S. during the transitional period be spelled out and incorporated into the transition plan.

- That JOI/ODP work closely with NSF to ensure a smooth transition and continuation of core repository activities required by the scientific community, extending the higher repository funding levels of FY04 to additional years as necessary.

- That brief summary sheets of each technology/engineering device be published.

- That complete sets of blueprints must be provided in hard copy to an appropriate library (TAMU?) and digital forms of these blueprints must be included as part of the digital legacy previously discussed.

- That all documents relating to the operation of the specialized laboratory equipment and analytical/data reduction procedures be archived in digital form and be provided to the scientific community in a readily available form on the ODP website and in the JANUS database.

- That JOI identify a repository for the ODP Leg volumes and make arrangements for them to be transferred, if necessary.

- That the ODP website be kept operational in the U.S. throughout the ODP to IODP transitional period, to prevent a hiatus in data dissemination.

- That a detailed list giving all vital location, DSDP/ODP Hole Number, and other critical general information, be constructed and made widely available as part of "ODP Accomplishments" and on the ODP website.

- That special care be taken so that all engineering and hole characterization information is compiled accurately and completely, archived and published.

- That a system be developed in which non-drilling community scientists can record their use of the holes, so that future drilling and non-drilling scientists are able to assess hole quality, in-place instrumentation, previous research, and future plans.

JOI has discussed these recommendations with NSF. NSF has requested that JOI prepare a letter responding to several of the issues raised in the panel report.

2. Arctic Planning

Regarding efforts to develop logistical and operational plans for Arctic drilling expedition to the Lomonosov Ridge, the following progress was made during the first quarter of calendar 2002:

- NSF approval was given to JOI, in mid-February, to enter into contract negotiations with the Swedish Polar Research Secretariat (SPRS).

- After concluding negotiations, JOI and SPRS signed a contract in late February. The contract, for $148,047, is titled, "Services to Develop and Implement Plans for an Ocean Drilling Expedition to the Lomonosov Ridge, Central Arctic Ocean" and the period of performance is from February to December 2002.

- A kick-off meeting of SPRS and JOI personnel was held in February, in Washington DC. The SPRS representatives independently met with Polar Program personnel during a visit to the NSF.

- SPRS personnel participated in the AGU/Ocean Sciences ASLO meeting in Hawaii, Feb. 11-14. This meeting is where Arctic researchers and vessel operators met to coordinate field programs and affiliated activities.

- A planning workshop convened by the SPRS was held in Calgary, Canada on March 4-6. The purpose of the workshop was to bring together people with experience and knowledge in various fields related to this project and to begin to prepare for the detailed plans for the operations, including ships, operational strategies, management and indemnification and liability. A workshop report is being prepared.

- A March 19th meeting was held involving the following people:

  Markku Mylly, Director, Traffic Dept., Finnish Maritime Admin. (FMA)
  Hakan Gustafsson, Operations Manager, Finnish Maritime Admin.
  Rune Lyngvi, Chartering Manager, DSND
  Roy Olof Jaan, Deputy Director, Swedish Maritime Admin.
  Alexey Turchin, Director General, INTARRI (International Arctic and Antarctic Research Institute), St. Petersburg
  Anders Backman, Head of Ship Operations, Swedish Maritime Admin.
  Anders Karlqvist (Director, SPRS)
  Ulf Hedman (Logistics Operator)
  Kate Moran (SPRS subcontractor)
  Jan Backman (lead science proponent)

According to a report from the SPRS, the following occurred:

- The FMA and DSND indicated a willingness to have Botnica participate in the expedition. They stated that Botnica is capable of conducting the expedition and appropriate, given their understanding of the expedition. DSND and the FMA said that Botnica's dynamic positioning system is robust and will work under the anticipated ice conditions.

- Regarding scheduling, DSND and FMA indicated verbally that they would make Botnica available for an expedition during Aug./Sept '04.

- According to the SPRS, the next steps for a firmer commitment are:

  - SPRS should send a letter of request to DSND to use Botnica. This letter was sent by SPRS's Dr. Anders Karlqvist to Mr. Lyngvi, the Chartering Manager of DSND Subsea AS, on March 26, 2002, and copied to JOI.

  - DSDN will review the request with the FMA to decide if any modification is needed to their charter agreement (between FMA and DSND), or if additional equipment or outfitting are required. DSND will respond to the request within a few weeks.

- DSND will firmly commit Botnica, once platform operating funding is confirmed from a funding agency (or agencies) affiliated with IODP (e.g., IWG approval, possibly at Jan. '03 meeting)

- Contract details can be negotiated with a yet-to-be-determined implementing organization in mid to late 2003.

- A shakedown cruise (and opportunity to test the drilling system) can be done under contract with DSND as an "add-on" to a commercial investigation or with FMA before/after Baltic icebreaker season (fall preferred).

- No apparent insurance and liability issues arose at the meeting. FMA assumes responsibility and will provide coverage (they may need to purchase additional insurance, upon review this with their insurance company).

- Russian meeting participant Mr. Alexey Turchin discussed the possible use of nuclear ice breakers with Russian colleagues. He anticipates no insurmountable problems in Russia being able to make a NIB commercially available in 04. He recommended that a similar request letter be sent to Mr. Gorchkovsky (Director, Northern Sea Route Administrations) and Mr. Mihailichenkov (Director, Northern Sea Route Users Association) requesting use of an Articka-class NIB for Aug-Sept, '04. This will begin the official process. Mr. Turchin has agreed to work with SPRS as the coordinator of the negotiations between the two groups (SPRS & the NSRA). He will meet key reps. on March 27 in Russia and will present the details of the SPRS request.

- On March 20th, in Yokohama, JOI relayed to SCICOM and most of the iPC members the progress that had been made on Arctic planning. The Microsoft Power Point presentation (8.8 megs) presented to SCICOM can be downloaded from: http://www.joiscience.org/arctic.ppt

3. JOI Comments on the draft charge for PEC VI

JOI is responsible for convening the Performance Evaluation Committee (PEC) as part of its contract with NSF. Once the Terms of Reference (TOR) have been agreed to in EXCOM, JOI drives the process. Therefore, some of the proposed wording of the TOR needs clarification. For example, Item 3 prescribes that the JOI Board Chair or the JOI President will brief the committee. This is the responsibility of the JOI President, who might want the ODP Director to brief the committee and to oversee the committee work. Item 5 prescribes direct communication between the PEC committee and subcontractors. Reports should come to JOI who will pass them on to its subcontractors. Item 6 prescribes a particular communication path. Communications with subcontractors need to be held with representatives of the prime contractor present. At the very least, this will reduce the opportunity for miscommunication. An

alternative is to have all reporting come to JOI and all discussions with JOI personnel, who will in turn work with the subcontractors. Item 8 prescribes that the JOI President will request written reports; work with the PEC Chair to make a presentation to the Board of JOI within two months; etc. Upon receiving the PEC s report, it is JOI's job to decide what has to be done, and by whom. One way to read Item 8 has the PEC Chair mandated to give a report to the BoG. It is the prerogative of the President and Board Chair to invite presentations to the full Board.

4. Port Call Preparations

Port call activities are being planned for visits of the *JOIDES Resolution* to San Francisco and San Diego, CA. Events currently scheduled for San Francisco (July 8-12) include a press conference and tour, VIP tour and reception, teacher symposium, student tours and activities, a science talk at the US Geological Society, and general and university student tours. A tent with ODP materials, science posters, and hands-on education materials will be outside the ship to allow the general public to learn more about the program. Similar events are being planned for San Diego (September 6-10) with the help of Scripps Institution of Oceanography.

5. DOE and HYACINTH Update

The primary accomplishment of the period Jan through April 1 was the deployment of tools and measurement systems for testing on ODP Leg 201 to study hydrate deposits on the Peru margin as part of other scientific investigations, and in preparation for the future deployments of these systems on ODP Leg 204, Hydrate Ridge, offshore Oregon.

During January of 2002, Dr. Gerald Dickens, together with ODP engineers and ODP technical staff, coordinated the final design and purchase of components required to construct and deploy the PCS Gas Manifold on ODP Leg 201.

Dr. Dickens sailed on Leg 201 (January 28 through April 1, 2002) to lead the testing and use the gas manifold with the Pressure Coring System (PCS) during more than 20 deployments of this ODP pressure coring tool. The results of these deployments are currently being tabulated, but early reports indicate that the system worked well.

Training for five persons involved in the deployment and use of the FLIR SC2000 infrared thermal imaging system was scheduled at the Infrared Training Center (ITC) in Billerica, MA from January 14-18, 2002.

The FLIR SC2000 system was delivered to Dr. Rack on January 14, 2002 for use in the training. Dr. Rack then hand-carried the system back to JOI in Washington, DC, and then on to San Diego, CA for use on Leg 201.

Dr. Frank Rack (JOI) participated in the ODP Leg 201 portcall in San Diego, California from January 27, 2002 until February 1, 2002, when the ship departed to begin the

cruise. Dr. Rack worked with ODP technical staff, Leg 201 shipboard scientists, and Dr. Philip Long from the DOE Pacific Northwest National Laboratory (PNNL) to ensure that the proposed data acquisition, handling, and use of the FLIR Infrared Thermal Imaging System was understood by all of the participants in this deployment.

The FUGRO pressure corer (FPC), one of the HYACINTH pressure coring tool and two FUGRO engineers sailed on the D/V JOIDES Resolution during ODP Legs 201 for field-testing of this coring system at sites located offshore Peru. The HYACINTH project is a European Union (EU) funded effort to develop tools to characterize methane hydrate and measure physical properties under in-situ conditions. The opportunity to test these tools on the D/V JOIDES Resolution was negotiated as part of a cooperative agreement between the HYACINTH partners and JOI/ODP.

Kevin Grigar (ODP engineer) traveled to Clausthal from April 8-12 to observe testing of the Hyace Rotary Corer and exchange information with the HYACINTH engineers who will be participating on ODP Leg 204.

There was a meeting in College Station, on April 25 with Herman Zuidberg (FUGRO) and Peter Schultheiss (GEOTEK) to review the HYACINTH testing conducted on ODP Leg 201, to establish a firm understanding of the lessons learned, and to prepare for the deployments of the two HYACINTH pressure coring tools, the shear transfer, storage, and logging chambers and the GEOTEK vertical multi sensor core logger (v-MSCL) on Leg 204.

The schedule of HYACINTH work over the next few weeks will be as follows:

- 21 May - TuV testing and certification of equipment at TU Clausthal. The TuV documents should be received about two weeks later. Copies will then be forwarded to ODP.

- 27 May - Francis and Schultheiss arrive Clausthal with Geotek van.

- 28-30 May - Run through whole process at TU Clausthal - coring with HRC, transfer of core under pressure into STC, shearing core, transfer of core from STC into LC.

- 31 May - Francis and Schultheiss return to UK with Geotek van and items of equipment indicated in status report.

- 3-10 June - Testing core logging with LC and ODP-LC at Geotek, followed by mid-June Air freight to San Francisco for Leg 204.

Discussions were held between ODP engineers and FUGRO engineers regarding the proposed modifications to the FUGRO Piezoprobe tool for use with the ODP APC/XCB bottom hole assembly (BHA) on ODP Leg 204 (July 8 through September 6, 2002). A meeting was held in College Station, TX on February 28, 2002 between

ODP engineers (Mike Storms, Kevin Grigar, and Gene Pollard) and FUGRO engineer (John Boyce) to discuss the lay out, space out, and completion of crossover subs for the piezoprobe deployment and to outline possible operational scenarios for the deployment and testing of the tool on Leg 204. A second meeting was held at the FUGRO offices in Houston on March 7, 2002. In attendance were Gary Humphries, Bruce Francis, and John Boyce (FUGRO) and Kevin Grigar, Michael Storms, and Gene Pollard (ODP). Following this meeting additional drawings and technical specifications regarding the tool and the ODP BHA were exchanged.

Dr. Frank Rack participated in the "Naturally Occuring Gas Hydrate Data Collection Workshop" of the Chevron/Texaco Gulf of Mexico Joint Industry Project (JIP) on March 14-15, 2002 at the Adam's Mark Hotel in Houston, TX. During this meeting, Dr. Rack met with William Gwilliam (DOE/NETL) to discuss various aspects of the cooperative agreement between JOI and DOE/NETL and exchange information about the status of the various tasks in the JOI project. Dr. Rack contributed to discussion and presented an ODP case study in Breakout Session C - "Drilling In and Modeling of Naturally Occurring Gas Hydrates".

Dr. Frank Rack provided an oral presentation entitled, "Sampling Tools and Downhole Measurements for ODP Leg 204" at the "Methane Hydrates Interagency R&D Conference" held at the Renaissance Hotel in Washington, DC. An electronic abstract and copy of the PowerPoint slides of this presentation were provided to DOE/NETL.

Dr. Rack attended the 4th International Conference on Gas Hydrates in Yokohama, Japan from May 20-24 to discuss precruise planning for Leg 204 and possible collaborations among ongoing gas hydrate programs relevant to ODP and IODP.

SCIENCE OPERATOR'S EXCOM REPORT

Review of Activities
January 2002 through June 2002

Executive Overview

As ODP approaches the last year of seagoing operations, a major emphasis for the Science Operator is on all those activities that support the scientific objectives of each leg. The last five months have been indicative of this commitment, both in terms of implementing legs, as well as planning for future legs that require enhanced engineering. It is very exciting for the program that many of the legs that have recently concluded, or that are scheduled, represent new research initiatives that require enhanced drilling and sampling technologies.

The three legs that have been implemented since the last EXCOM meeting have all been very successful. Leg 201, a leg whose primary objective was to prepare a hole in basaltic basement for a geophysical installation, succeeded in setting the casing and preparing the hole, even though the ship experienced hostile sea conditions due to very large swells from North Pacific storms. Moreover, Leg 199/200 port call activities were concluded one day ahead of schedule providing time for an additional scientific objective. The additional time was used to sample the depositional record of the Nu'uanu Landslide, a catastrophic landslide originating from the flank of the island of Oaha approximately two million years ago. Leg 201 was a leg devoted to microbiological research and objectives. In order to support the objectives of the leg, a newly designed and built radioisotope van was installed during the Leg 200/201 port call. In addition, during Leg 201 engineering tests of the Pressure Core Sampler, APC Methane tool, and Davis-Villinger Temperature and Pressure Probe were conducted. Although these tools performed well and enhanced the scientific results of Leg 201, the primary objective was to rigorously test these tools in preparation for full deployment on Leg 204 (Gas Hydrates/Cascadia Margin). Leg 201 was a great success; the microbiological capabilities of the JR performed above specifications and the new tools all tested well. Leg 202 is still underway, but the cruise has been very successful, and total recovery on the leg is projected to be approximately 6800 m. These cores have been collected along a north-south transect that extends from the roaring 40's to the equator with a goal to assess climate and oceanographic changes in the southeast Pacific over Neogene time.

Of the eight remaining legs of the ODP (Leg 203 – 210), six of those legs (Legs 203, 204, 205 206, 209, 210) require the utilization of technological enhancements, and/or demanding drilling installations requiring the necessity for extensive engineering. On Legs 203 (Equatorial Pacific Ion), 205 (Costa Rica), 206 (Fast Spreading Crust), 209 (Mid-Atlantic Ridge Peridotite) and 210 (Newfoundland Margin), long strings of casing will be required to stabilize the holes in order to

achieve the scientific goals of these legs. In addition to these requirements, on Leg 205 CORKS and a new fluid sampler will be deployed in several holes, and the Advanced Diamond Core Barrel and Hard Rock Reentry System may be required on Legs 206 and 209. Finally, Leg 204 (Gas Hydrates) is shaping up to be the most complex and technologically demanding leg that ODP has ever carried out. A wide selection of sampling and sensing tools will be deployed throughout the leg that have required advanced engineering support in preparation of the leg and will require the same kind of support during the leg. In particular, the Program's Pressure Core Sampler and a new percussion coring/pressure sampling system developed by the HYACE/HYACINTH consortium will be used extensively during the leg requiring the support of five engineers.

Introduction

In an effort to codify relevant information and to streamline the summary of the Science Operator's activities, as much information as possible is presented in tabular form. These data are presented by functional department.

Science Services

Schedule of Science Operations for the *JOIDES Resolution*: January, 2002 – September, 2003

	Leg	Port (Origin)	Dates [€]	Total Days (port[†]/sea)	Days at Sea (transit/on site)	TAMU Contact	LDEO Contact
201	Peru Biosphere	San Diego	28 January – 1 April '02	63 (5/58)	23/35	J. Miller	G. Guerin
202	SE Paleoceanography	Valparaiso	1 April – 1 June '02	61 (5/56)	20/36	P. Blum	U. Ninnemann
203	Eq. Pac. ION	Balboa	1 June – 8 July '02	37 (5/32)	16/16	T. Davies	A. Buysch
204	Gas Hydrates[*]	San Francisco	8 July– 6 September '02	60 (5/55)	7/48	F. Rack	D. Goldberg, S. Barr
205	Costa Rica	San Diego	6 September – 6 November '02	61 (5/56)	11/45	A. Klaus	K.T. Moe
206	Fast Spreading Crust	Balboa	6 November – 5 January '03	60 (5/55)	6/49	G. Acton	F. Einaudi
	Transit	Balboa	5 January – 13 January '03	8 (2/6)	6/0	N/A	N/A
207	Demerara Rise	Barbados	13 January – 8 March '03	54 (3/51)	13/38	M. Malone	B. Rea
208	Walvis Ridge	Rio de Janeiro	8 March – 9 May '03	62 (5/57)	18/39	P. Blum	P. Gaillot
209	MAR Peridotite	Rio de Janeiro	9 May – 10 July '03	62 (5/57)	17/40	J. Miller	G. Iturrino
210	Newfoundland Margin	Bermuda	10 July – 9 September '03	61 (5/56)	6/50	A. Klaus	H. Delius
	Transit	St. John's	9 September – 21 September '03	12 (1/11)	11/0	N/A	N/A
	Demobilization[‡]	Galveston	21 September – 30 September '03	9 (9/0)	0/0	N/A	N/A

Notes:
€ Start date reflects the first full day in port. This is the date of the ODP and ODL crossover meetings. The JR is expected to arrive late the preceeding day. Port call dates have been included in the dates which are listed.
† Although 5 day port calls are generally scheduled, the ship sails when ready.
* A mid-leg port call will occur for Leg 204.
‡ Demobilization assumes a seven day (+2 day port call) period tentatively scheduled for Galveston.

15 February 2002

Co-Chief Scientists and Cruise Staffing for Science Operations

Co-Chief Scientists for Legs 201-210:

	Leg	**Co-Chief Scientists**
201	Peru	S. D'Hondt University of Rhode Island B. Jorgensen Max Planck Institute for Marine Microbiology
202	SE Paleoceanography	A. Mix Oregon State University R. Tiedemann GEOMAR, Research Center for Marine Geosciences
203	Eq. Pac. Ion	J. Orcutt University of California, San Diego A. Schultz Cardiff University
204	Gas Hydrates	G. Bohrmann GEOMAR Forschungszentrum fur Marine Geowissenschften der Christian-Albrechts-Universitat zu A. Trehu Oregon State University
205	Costa Rica	J. Morris Washington University H. Villinger Universität Bremen
206	Fast Spreading Crust	D. Teagle University of Southampton D. Wilson University of California, Santa Barbara
207	Demerara Rise	J. Erbacher Bundesanstalt fur Geowissenschaften und Rohstoffe D.C. Mosher Geological Survey of Canada – Atlantic
208	Walvis Ridge	D. Kroon Vrije Universiteit J. Zachos University of California, Santa Cruz
209	MAR Peridotite	P. Kelemen Woods Hole Oceanographic Institution E. Kikawa Japan Marine Science & Technology Center (JAMSTEC)
210	Newfoundland Margin	J.-C. Sibuet IFREMER B. Tucholke Woods Hole Oceanographic Institution

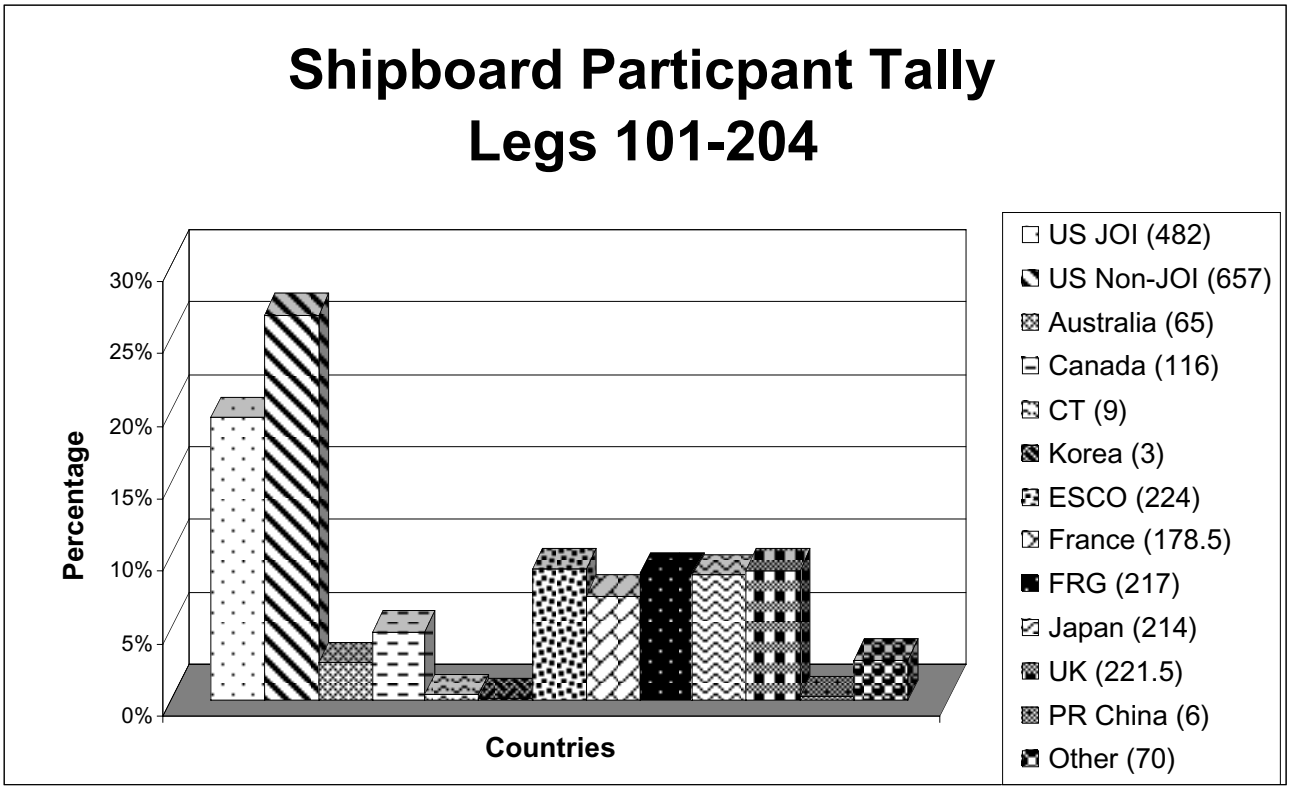
Scientific Party Staffing:
Staffing through Leg 205 is completed and staffing for Legs 206 - 207 is in progress.

Tabulated below are the numbers of applications on file as of April 30, 2002.

Legs	Total Applicants	U.S. Applicants	U.S. Students	Non-U.S. Applicants	Non-U.S. Students
203	21	8	3	8	2
204	69	19	12	26	12
205	43	10	10	15	8
206	16	4	1	7	4
207	51	11	4	25	11
208	32	7	3	15	7
209	17	3	1	10	3
210	21	5	1	12	3

Leg 205 is the last leg in ODP concerned with the installation of downhole instrument packages or CORKs, rather than coring. Legs 206-210 are focussed on more "traditional" ODP operations – making hole and recovering core. This, coupled with the fact that they are the last legs scheduled for ODP, has stimulated community interest in sailing on *JOIDES Resolution* and resulted in a steady flow of applications for these legs.

Shipboard Participant Tally:
Please reference the table below for a compilation of all sailing participants since Leg 101 through Leg 204.



Status of Lab Stack

Microbiology:
Leg 201 (February-April 2002), which focused on deep biosphere studies along the Peru margin, was the first leg dedicated entirely to microbiological objectives. The sites selected had all been occupied and cored previously by ODP (on Legs 112 and 138) so the basic litho- and biostratigraphy are already known. This enabled us to reduce the shipboard activities in those areas to a minimum and to focus on geochemical and microbiological studies. This departure from more usual ODP activities was reflected in the make up of the shipboard science party which included 15 geochemists and microbiologists, rather than the usual three or four representatives of these disciplines.

The use of radioisotopes on Leg 201 was a new development for ODP. A new van, built to UNOLS standards and specially equipment for radio isotope work was installed on *JOIDES Resolution* during the San Diego port call and was be used during Leg 201. It will also be used on Leg 204. The van will then be removed from the ship and stored for future use in IODP.

Acquisition and outfitting of the radio isotope van was the culmination of the project to add a microbiological capability to the *JOIDES Resolution* that began with a temporary facility mounted on top of the laboratory stack for Leg 185. We now have facilities for conducting quantitative contamination tests on the cores, for extensive microbiological sampling and for initial processing, including radio isotope inoculation and incubation, of those samples prior to shipment to shore labs around the world, as well as for making the associated chemical

measurements. By all reports, Leg 201 was highly successful and utilized the full range of the new facility.

Status of Projects

Digital Imaging:
A GeoTek system capable of imaging four core sections at each pass was installed on *JOIDES Resolution* at the beginning of Leg 198 (end of August 2001). This was a joint project between Science Services and the Information Services departments. Now that the hardware is installed and operating, the next phase of the project involves primarily software development. The Information Services Department has taken the lead in this phase of the project and progress is reported in that part of this report.

Drilling Services

Summary of Leg Operations: Legs 199, 200, 201

	Leg 199 Paleogene Pacific 24 October — 17 December '01 Honolulu - Honolulu	Leg 200 H2O Observatory 17 December – 28 January '02 Honolulu – San Diego	Leg 201 Peru Biosphere 28 January – 1 April '02 San Diego - Valparaiso
Transit/Onsite (day)	14.4/34.6	9.3/28.4	22.6/33.2
Sites	8	2	7
Holes	21	8	33
Water Depth (m)	4837-5406	4255-4978	162-5099
Deepest Penetr. (m)	277	175	422
Cored Interval (m)	2465	289	3179
Tot. Recov. (m,%)	2197 (89.1%)	100 (34.7%)	2837 (89.2%)
APC Recov. (m,%)	1881 (101.4%)	18 (90.3%)	2638 (91.3%)
XCB Recov. (m,%)	316 (51.8%)	14 (23.3%)	191 (51.5%)
RCB Recov. (m,%)	0	69 (32.7%)	0
MDCB Recov m,%)	0	0.2 (110%)	0
PCS Recov (m,%)	0	0	15 (51.5%)
Fugro PC Rec (m,%)	0	0	4 (50.9%)

Review of Operations

Leg 199 (Paleogene Pacific):
- The objective was to core to basement at each of eight high-priority sites.
- Eight sites (21 holes) were cored in water depths from 277-2465 m.

- Despite Eocene chert, which diminished core quality and quantity, 2197 m of core were recovered (89.1%).
- Chert destroyed two 11-7/16 in APC/XCB roller-cone bits and 34 hard-formation XCB cutting shoes.
- Two holes were logged with three tool runs to the bottom of the hole.

Leg 200 (H2O Observatory):
- Primary objective: establish an Ocean Seismic Network (OSN) ION cased hole to emplace a broadband seismometer.
- Secondary objective (if time permitted): determine the depositional history of the Nu uanu Landslide, a catastrophic landslide from Lo olau Volcano on the island of Oahu ~2 Ma.
- Established Site 1224D as OSN/ION reentry hole cased with 20 in to 25.5 mbsf and 10-3/4 in casing to 58.5 mbsf (30 m into basement). Total depth is 64.70 mbsf.
- Cored Hole 1224F, following the deployment of a free fall funnel, to 174.5 mbsf in flows and altered basalt (16.9% recovery).
- Cored Nu uanu Landslide to 41 mbsf through multiple slides and pyroclastic episodes.
- Intense storms in the North Pacific led to consistent heave of >4 m, resulting in 6.1 days waiting-on-weather.

Leg 201 (Peru Biosphere):
- The objective was to explore the distribution, activities, community structure, phylogenetic affinities, and global biogeochemical consequences for microbial communities buried in deep-sea sediments.
- Core handling procedures were changed to expedite core delivery to the science party, and science objectives were achieved at all seven sites.
- The ODP Pressure Core Sampler (PCS) was run 17 times, and 14 runs (82.3%) obtained a pressurized core. Only one of the three failures was due to a tool design problem, which has been corrected for future deployments.
- The HYACE Fugro Pressure Corer (FPC) was field tested seven times in preparation for deployment on Leg 204. Six runs obtained some core recovery, but none of the runs retained a pressurized core back to surface. Based on lessons learned, the tool is being modified by the HYACE team and it will be ready for deployment on Leg 204.
- Undisturbed APC cores were obtained to a significantly greater depth than normal by heavy use of the APC drill-over technique. The APC core barrel was drilled-over 69 times (21.4% of APC runs).
- The risk to the coring equipment was minimized by utilizing the Active Heave Compensator; nevertheless, 10 sections of APC core barrel, 4 core barrel shoe subs, and 11 APC cutting shoes were lost.
- The DVTP tool was run 26 times and successfully recorded temperature data 21 times (80.8%).
- The DVTP-P was run 12 times and successfully recorded pressure data 9 times (75.0%).
- The APC-Methane tool was run on at least one hole at each site, and measured the change in pressure when free methane starts to out gas from the core.

Review of Engineering Development Projects

The ODP/TAMU developmental engineering projects are divided into two categories: surface equipment and downhole instruments. The first category includes Active Heave Compensation (AHC) and the Rig Instrumentation System (RIS), two pieces of equipment that were installed in the fall of 1999. These systems are functioning and continue to undergo refinements as they are incorporated into the daily drilling operations of the *JOIDES Resolution*. The second category consists of downhole tool development projects that are currently underway and include: Davis-Villinger Temperature and Pressure Probe (DVTPP), Memory Drilling Sensor Sub (DSS), APC Methane Tool (APCM), Fisseler Water Sampler (FWS), and the Pressure Core Sampler (PCS).

Active Heave Compensator (AHC) Operational Review

Weight-on-Bit Filter:
Because the AHC imparts significant dynamic forces to the derrick-mounted load cells, there are large variations in the weight-on-bit (WOB) indicator used by the driller. These large variations make it more difficult for the driller to effectively control the WOB because of excessive needle bounce. The WOB filter system consists of an electronics package with accelerometers on the top drive, a data processing electronics package with accelerometers and pressure transducers on the rig floor, and digital WOB and Drill String Weight meters in the driller's console. The installation was started during Leg 201 and completed at the Leg 202 port call. Debugging and initial data evaluation was performed during Leg 202. The operational trials will take place during Leg 203.

AHC Hydraulic Bundle Update:
Crew suggestions regarding strategic placement of valves at the ends of the AHC hydraulic hoses to contain spillage and facilitate inspection or replacement of the AHC hydraulic system were implemented during the Leg 201 port call. This included replacement hoses with blind closures and bleeder valves, and two high-pressure ball valves to facilitate drainage of the AHC Filter System during filter changes.

Moreover, the hose bundle covers are exhibiting signs of wear and new specifications have been prepared for lace-on, vinyl impregnated, nylon covers that provide great wear resistance and spill containment. These old bundle covers will be replaced with covers made from improved material and this activity will be phased in during the next several port calls.

Tracer Pump Automation:
The microbiology goals of Leg 201 required that tracer material be continually pumped downhole at a fixed concentration based on the mud pump flow rate. To prevent two technicians from continuously monitoring and adjusting the tracer pump flow rate, the operation was automated by putting the tracer pump under control of the Rig Instrumentation System computer. The automatic system was installed during the Leg 199 port call and tested during the course of Leg 199. The system worked flawlessly during Leg 201.

Downhole Measurement Technology

Davis-Villinger Temperature and Pressure Probe (DVTPP):
The purpose of this project is to incorporate pore pressure measurements into the DVTP. The prototype DVTP with pressure (DVTPP) was developed by Pacific Geosciences Center in Canada and first deployed on Leg 190. Though the deployment confirmed the viability of the measurement, significant improvements were required to bring the tool up to operational status. The tool underwent a redesign to address corrosion and assembly issues.

A redesigned DVTPP, using the prototype electronics, was deployed 12 times on Leg 201. The first three runs experienced problems with filter plugging and spikes in the pressure reading. A new filter scheme was developed to resolve the plugging, and the elimination of an intermittent internal leak in the pressure transducer line took care of the pressure spikes. The temperature measurement never functioned properly because of a corrupted setup file in the prototype data logger. The prototype electronics will be replaced with new, upgraded electronics for Leg 204. Overall, the pressure measurement functioned as designed and recorded valid lithostatic pore pressure on five runs, and recorded hydrostatic pressure on four runs. The four runs that only recorded hydrostatic pressure occurred because of inadequate probe insertion in the sediments (lack of an effective seal). A second standard DVTP will be converted to a DVTPP, providing two operational tools for Leg 204.

APC Methane Tool (Temperature, Pressure, Conductivity):
The APC Methane (APCM) tool monitors the effects of gas exsolution in cores from the time the core is cut until it reaches the deck by recording temperature, pressure, and conductivity in the core headspace with sensors mounted in the APC piston. The APCM tool is a joint development between ODP-TAMU and MBARI.

The tool was deployed eight times on Leg 201 to establish baseline data for deployment on Leg 204. In general, the tool was inserted in the coring string when the first APC Temperature tool was deployed (around Core 5) and remained in the string until APC coring was suspended. The average tool run collected 12 hr (8 to 10 cores) of 1-s data. Excellent data were obtained on the first three runs, which clearly indicated variations in gas concentrations among individual cores. The data degraded significantly on the fourth run when the tool experienced excessive shock and vibration. The data quality for the remaining runs was poor because of noisy signals. The electronics will undergo additional hardening for Leg 204.

Pressure Core Sampler (PCS):
The PCS is a free-fall deployed, hydraulically actuated, wireline retrievable pressure coring tool for retrieving core samples maintained at bottom-hole pressures. Modifications of the tool design were made to improve drilling capabilities and extend performance, primarily in the rotary coring mode. The design work focused on the cutter design and modifications to improve core recovery. The major changes aimed at improving core recovery included extending the cutter .5 meter ahead of the bit, increasing flow to the cutter and enlarging the inner diameter of the core barrel. Testing of the PCS cutters and modifications was conducted at the Maurer Drilling Research Center in Houston prior to deployment on Leg 201.

Two complete tools and a spare pressure barrel were sent to Leg 201. The tool was deployed 17 times, 10 times at a gas hydrate site. Full closure was not achieved on two runs (no pressure). One run did not achieve pressure because of chert blocking the ball valve and the other run was because of failure to pressure up the actuation mechanism. Of the 15 successful closures, 12 recovered at least 67% of hydrostatic pressure, and seven of those recovered greater than 98%. Ten runs recovered the full 1-m core and only two recovered no appreciable core. Where full closure occurred (15 runs), gas was collected and methane was present in 11 of those samples. Calculated hydrostatic pressures at the bottom of the holes ranged from 600 to 8000 psi, depending on the depth.

A significant upgrade for Leg 204 will be to incorporate the APCM tool package into the PCS. This will provide for continuous recording of pressure, temperature, and conductivity at the top of the pressure core barrel.

Jerry Dickens at Rice University was instrumental in the gas sampling manifold design for Leg 201. The system consisted of an ice bath for the pressure core barrel, instruments to continuously monitor the PCS internal pressure, and a manifold assembly to safely transfer the PCS gases to a gas bubbling chamber where the gas volume was measured and samples taken for analysis. The manifold system handled two PCS core barrels at a time and the system performed well throughout Leg 201.

Memory Drilling Sensor Sub (DSS):
The DSS will provide data from sensors packaged in its collar wall. These sensors measure weight on bit, torque on bit, annulus pressure, pipe pressure, and annulus temperature. The DSS will be an 8-1/4 in OD memory sub with a 4-1/8 in through-bore to allow for core retrieval. It will be positioned in the Bottom Hole Assembly (BHA) on top of the Outer Core Barrel. Phase I, the preliminary design, was completed in February. Phase I included a detailed design layout, load and stress analysis, material specifications, expected sensor accuracy, and testing and calibration requirements.

A subcontract was issued to APS Technology for Phase II work on December 12, 2001. The first two stages (Mechanical Design and Electronics Design) were completed, reviewed by ODP, and accepted. The last two stages (Manufacturing of Test Article and Preliminary Testing and Sub Manufacture System Integration and Testing) are on hold pending additional funding found through programmatic savings.

Fisseler Water Sampler:
Joris Gieskes at Scripps modified the Fisseler Water Sampler as part of a collaborative project. The upgrade is intended to improve upon the Water Sampler Temperature Probe (WSTP) by controlling the pressure differential and rate of sample intake. The upgraded tool was delivered to ODP in March of 2002. New electronics and software will now have to be developed to adapt to the changes made at Scripps.

Labview Software Interface for Downhole Tools:
The communication software for current ODP downhole tools was written for DOS operating systems. These programs are being converted to Labview for Windows to create a commonality

in support software for all downhole measurement tools. The communication and analysis software for the DVTP tool has been rewritten in Labview and is operational on the ship. Work on the APCT tool and WSTP have commenced. The communication software will be integrated into the base Labview program so that it will have the same software front-end as the DVTP. Project completion is expected by the end of calendar 2002.

Information Services

Digital Imaging System (DIS)

The Geotek imaging system was successfully deployed during Legs 198 – 201. A second contract with Geotek, Ltd. focused on updating the original digital acquisition software and developing a new analytical software application for ODP usage. The software was successfully installed and tested during the Leg 202 port call. Updates to the existing acquisition software included bar code reading capability, automatic file name generation, a new file structure (XML) to store meta data, creation of TIFF files instead of BMP files, and creation of a RGB (Red, Green, Blue) text file which is uploaded into the Janus database. During port call, all updates were tested and appropriate lab technicians were trained.

The upgrade project has been a success with the addition of these new analytical capabilities. Final adjustments to the application will take place after its thorough use on Leg 202. Any further enhancements to the product must be accomplished through a negotiated contract with Geotek since the software is proprietary software.

Status of Migration of Historical ODP Data into the Janus Database

Significant progress has been made on our data migration projects (migrating old ODP data: legs 101 - 170 to the Janus database) as seen in the following narrative and tables. It is expected that most of the data that needs to be migrated will be migrated by the end of FY04. The level of progress is impressive when one considers that the work to date has taken place with only one dedicated FTE augmented by TAMU graduate students. To recap our progress, ODP data gathered prior to Leg 171 have been migrated following a prioritization established in September of 1998. All MST (GRAPE, P-Wave, Magnetic Susceptibility, and NGR) data and all color reflectance data have been migrated. Physical Properties data are nearly complete (Thermcon-100%, MAD-98%, PWS-89%, and Shear Strength-86%). These data should be completely migrated by June 2002. Migrating chemistry data is underway. Nearly all (96%) of XRF data and over 50% of carbonate have been migrated. Remaining chemistry data (Interstitial Water, and Gases) have not yet been migrated. Our target completion date for these data is February 2003.

Migration of Paleontology data effectively began in January of this year. A complete work plan has been created for this project. Four groups of data will be migrated during the project duration: Paleo Investigations - Taxa, Datum List (Numerical Ages), Age profile (Geologic Ages, Zones), and Numeric Age-Depth Models. At present, one FTE is assigned to this project. It is estimated that the number of person-months to complete this job is between 75 and 83

months. With only one FTE dedicated to this project, not all Paleontology data will be migrated by the end of FY04. To complete this project by the end of FY04, it will take about 2.3 FTE. However, it is not just a matter of funding the additional FTE's, but one of finding available candidates with appropriate training (MA or PhD level education) and experience to do the job.

The migration of Paleomagnetic data has not been started, but we intend to assign one person (less than 1 FTE) to work on the project, starting in early summer. We anticipate that these data will be migrated by the end of FY04.

Any other remaining data collected during ODP have not been identified as candidates for migration to the Janus database, for one of two reasons: they are not digitally available or they may be in formats no longer supported by ODP. Therefore, at this time, there are no plans to migrate the visual core data or DSDP data to the Janus database.

The recent migration efforts undertaken by ODP have been very successful, given the resources available to perform the work. The prioritization plan established in 1998 is in place and we are on target to have all significant digital data migrated into Janus by the end of FY04. The only issue remaining is one regarding the level of effort that should be applied to the migration of paleontology data and this is under discussion and a mechanism will be found to migrate all the ODP paleontology data into Janus in a timely fashion.

ODP Data Migration Projects - Overview

Project	Data Type	Status % Complete	Target/Completion Date
A	MST — GRAPE, P-Wave, Magnetic susceptibility, Natural gamma, and Color Reflectance	100%	August 2001
B	Physical Properties - Thermal conductivity, Moisture & Density, PWS, Shear strength	94%	June 2002
C	Chemistry - Carbonates, Interstitial water, Gases, XRF, XRD	75%	September 2003
D	Paleontology	6%	
E	Miscellaneous - Paleomag, Downhole temperature, Splicer, Mcd	6%	September 2004

Notes: (1) No core description data will be migrated.
(2) No DSDP data will be migrated.
(3) No contributory (post-cruise) data will be migrated.

MST and Color Reflectance Data Migration

Start Date: September 1998
Completed
Completion Date: August 2001

170	169	168	167	166	165	164	163	162	161	160	159	158	157	156	155	154	153	152	151	150	149	148	147	146	145
x	x	x	x	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	o	x	x	x
x	x	x	x	X	x	x	o	x	x	x	x	x	x	x	x	x	o	x	x	x	x	o	x	x	x
x	x	x	x	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	o	x	x	x
x	x	x	x	X	x	x	x	x	x	x	x	x	x	x	x	x	o	x	x	x	1				
x	x	x	o	X	x	x	o	o	x	x	x	o	x	x	o	x	2								

144	143	142	141	140	139	138	137	136	135	134	133	132	131	130	129	128	127	126	125	124	123	122	121	120	119
x	x	o	x	O	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
x	x	o	x	O	x	x	o	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
x	x	o	x	O	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

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118	117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101
o	x	x	x	X	x	x	x	x	o	x	x	o	x	x	x	o	x
o	x	x	x	X	x	x	o	x	o	x	o	o	o	o	o	o	o
x	x	x	x	X	o	o	x	x	o	o	x	x	x	x	o	o	o
																	1
																	2

Legend:

- x Migration to Janus database completed
- o Data not acquired by ODP
- 1 NGR acquisition started Leg 150
- 2 Reflectance acquisition started Leg 154
  Magsus Leg 104-130 in S1032

Completed = 210 = 100 %

Remaining = 0

Oct. 3, 2001

Physical Properties Data Migration

Start Date: December 1999
Current: April 2002
Target Completion Date: June 2002

Leg / Data	170	169	168	167	166	165	164	163	162	161	160	159	158	157	156	155	154	153	152	151	150	149	148	147	146	145
Thermcon	x	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
MAD	x	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
PWS			x	x	x		x		x	x	x	x	x	x	x	x	x	x		x	x		o	x	x	x
Shear Strength		O	x	o	x		x	o	x	o	x	x	o		x	x	x	o	x		o		o	o	x	

Leg / Data	144	143	142	141	140	139	138	137	136	135	134	133	132	131	130	129	128	127	126	125	124	123	122	121	120	119
Thermcon	x	X	o	x	x	o	x	o	x	x	x	o	o	x	x	x	x	x	x	x	x	x	x	x	x	x
MAD	x		o	x	o	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
PWS	x		o	x	o	x	x	x	x	x	x	x	x	x	o	x	x	x	x	x	x	x	x	x	x	x
Shear Strength	x	O	o	o	o	o	x		x	x	x	x	x	x	o	x	x	o	x	x	x	x	x	x	x	x

Leg / Data	118	117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101
Thermcon	x	X	x	x	x	x	x	x	x	x	x	x	o	x	x	x	o	x
MAD	x	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	o	x
PWS	x	X	x	x	x	x	x	x	x	x	x	x	x	x	x	x	o	x
Shear Strength	o	X	x	x	x	x	x	x	x	o	x	x	o	x	x	x	o	x

Legend:

- x Migration to Janus database completed
- o Data not acquired by ODP, or bad files or no data found

Completed = 230 = 94 %

Remaining = 15

59

Chemistry Data Migration

Start Date: April 2001
Current: April 2002
Target Completion Date: September 2003

Leg / Data	170	169	168	167	166	165	164	163	162	161	160	159	158	157	156	155	154	153	152	151	150	149	148	147	146	145
Carbonates	x	x	x	x	x	x	x	o	x	x	x	x	x	x	x	x	x	o	x	x	x	x	x	x	x	x
Interstitial Water	x	x	x	x	x	x	x	o	x	x	x	x	x	x	x	x	x	o	x	x	x	x	o	o	x	x
Gases	x	x	x	x	x	x	x	o	x	x			o					o					o	o		
XRF	o	x	x	o	x	x	o	x	o	x	o	o	x	x	o	x	o	x	x	x	x	x	x	x	o	x
XRD													o										o		o	o

Leg / Data	144	143	142	141	140	139	138	137	136	135	134	133	132	131	130	129	128	127	126	125	124	123	122	121	120	119
Carbonates	x	x	o	x	o	x	x	o	o	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Interstitial Water	x	x	o	x	o	x	x	o	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Gases	o		o		o	o		o								x	x	x	x	x	x	x	x	x	x	
XRF	x	x	x	x	x	x	x	x	x	x	x	o	o	o	x	o	x	x	x	x	x	x	o	x	x	x
XRD		o	o	o	o		1																			

Leg / Data	118	117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101
Carbonates	x	x	x	x	x	x	x	x	x	o	x	x	o	x	x	x	o	x
Interstitial Water	o	x	x	x	x	x	x	x	x	o	x	x	o	x	x	x	o	x
Gases	o							o		o			o			o	o	
XRF	x		x	x	x	x	o	x	o	x	o	o	x	o	o	o	o	o
XRD																		1

Legend:

x Migration to Janus database completed.

o Data not acquired by ODP or bad files.

1 Data in unreadable pro-350 format.

Completed = 185 = 75 %

Remaining = 61

Paleontology Data Migration

Start Date: December 2001
Current: April 2002
Target Completion Date: **

Leg / Data	170	169	168	167	166	165	164	163	162	161	160	159	158	157	156	155	154	153	152	151	150	149	148	147	146	145
Sample investigation	x	x	o		o		o	o	o	o	o	o	o	x							x		o	o		
Range charts	x	x	o		o	o	o	o	o	o	o	o	o	x							x		o	o		
Datum depths	x	o					o	o					o										o	o		
Age model		o					o	o					o							x	x		o	o		

Leg / Data	144	143	142	141	140	139	138	137	136	135	134	133	132	131	130	129	128	127	126	125	124	123	122	121	120	119
Sample investigation			o		o			o																		
Range charts			o		o			o															x			
Datum depths			o		o			o																		
Age model			o		o			o																		

Leg / Data	118	117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101
Sample investigation										o			o	x			o	
Range charts	o									o			o	x			o	o
Datum depths	o									o			o				o	
Age model										o			o	x			o	

Legend: x Migration to Janus database completed
o Data not acquired by ODP, or bad files or no data found

Completed = 15 = 6 %
Remaining = 224

** About 10 legs of Paleontology data will get migrated per year with current staffing

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Miscellaneous Data Migration

Start Date: March 2001
Current: April 2002
Target Completion Date: September 2004

Leg / Data	170	169	168	167	166	165	164	163	162	161	160	159	158	157	156	155	154	153	152	151	150	149	148	147	146	145
Paleomag																										
Downhole temp	x	X	x	x	x		x		x	x	x			x												
Splicer				x																						
mcd				x					x	x	x						x									

Leg / Data	144	143	142	141	140	139	138	137	136	135	134	133	132	131	130	129	128	127	126	125	124	123	122	121	120	119
Paleomag			o		o																					
Downhole temp																										
Splicer																										
mcd																										

Leg / Data	118	117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101
Paleomag																	o	
Downhole temp																		
Splicer																		
mcd		X																

Legend: x Migration to Janus database completed
o Data not acquired by ODP, or bad files or no data found

Completed = 17 = 6 %
Remaining = 260

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ODP Data Archive at NGDC

The National Geophysical Data Center (NGDC) is the designated organization responsible for the archiving of the ODP digital data. After several meetings JOI, ODP/TAMU and NGDC have defined a model for how the ODP digital data will be archived. The model calls for extracting data from the Janus database using the pre-defined Janus web queries and saving the data as ASCII text files. Along with the ASCII text data files, ODP will produce a data flowchart for each data type, meta data files, and calibration files. These files will provide a guide or "roadmap" to aid in the effective us of the ASCII text files.

Mirror Sites

Web Mirror Sites. Web mirror sites that contain all the e-publication products of ODP continue to operate successfully in Australia, the Federal Republic of Germany, and the United Kingdom. However, the United Kingdom mirror site has filled the available assigned disk drive and at a minimum requires more disk capacity. None of these sites mirror the Janus database. The sites are updated at the end of each week and are listed below.

Australian mirror site: http://www.agso.gov.au/odp (Australian Geological Survey Organisation)

Federal Republic of Germany mirror site: http://odp.pangaea.de/ (Institute for Marine Environmental Sciences [MARUM] and Alfred Wegener Institute for Polar and Marine Research [AWI])

United Kingdom's mirror site: http://owen.nhm.ac.uk/odp/ (The Natural History Museum, London)

Publication Services

Volume Production

The *Proceedings of the Ocean Drilling Program* volumes are produced electronically and distributed in three formats. A printed booklet (containing the table of contents to the entire volume and a summary chapter) is accompanied by a CD-ROM that contains all volume chapters and core description information (*Initial Reports* only) in PDF format and selected tabular material in ASCII format. The volumes are also published on the ODP/TAMU Web site. Chapter material is presented in both HTML and PDF formats, core description information (*Initial Reports* only) in PDF format, and selected tabular material in ASCII format.

The *Initial Reports* volume booklet/CD-ROM package and the Web publication formats are distributed approximately one year postcruise. For the *Scientific Results* volumes, papers are published individually on the Web in order of acceptance. The booklet/CD-ROM package is produced and distributed after completion of the leg synthesis paper, which is produced by the Co-chiefs, and is scheduled to be distributed four-years postcruise.

Initial Reports

From November 2001 through April 2002:

The following booklet/CD-ROM sets were distributed: 192 (November 2001); 193 (January 2002); 194 (March 2002).

The following volumes were made available online: 192 (November 2001); 193 (February 2002); 194 (March 2002); 196 (April 2002).

From May 2002 through October 2002:

The following booklet/CD-ROM sets are expected to be distributed: 195 (July 2002); 196 (May 2002); 197 (August 2002); 198 (October 2002).

These volumes are also expected to be available online in HTML and PDF format during the same time period.

Scientific Results

From November 2001 through April 2002:

Publication of online volumes began for volumes: 179 (March 2002); 181 (January 2002); 182 (January 2002).

The following booklet/CD-ROM set was distributed: 175 (March 2002).

From May 2002 through October 2002:

Publication of chapters online is expected to begin for volumes: 183, 184, 185, and 186. Chapters from other volumes will be published when manuscripts have been accepted and processed for publication.

The following booklet/CD-ROM set is expected to be distributed: 180 (August).

Publication of the booklet/CD-ROM sets for *Scientific Results* volumes 171A, 176, 177, 178, 179, and 181 are delayed because the leg synthesis papers were not received by submission deadlines.

ODP/TAMU Web Site

Overall Site User Statistics:

The number of site visitors (defined as single computers accessing the site that did not originate from ODP/TAMU) and the number of pages (or files) accessed at the ODP/TAMU Web site increased by 40% and 68%, respectively, between the 12-month periods ending in April 2001 and April 2002. In the 12-month period ending in April 2002, there were 691,541 visitor sessions, or 57,628 visitors per month (see Table 1; all tables appear at the end of this section). Statistics for the German mirror site are listed in Table 2. At this time there are still no user data available from the mirror sites in Australia and the United Kingdom.

ODP *Proceedings* Online Publication Statistics:

As of 30 April 2002, 35 *Initial Reports* volumes and 32 *Scientific Results* volumes were published in HTML and PDF formats on the ODP/TAMU Web site. Tables 3 and 4 show user statistics for the period of January 2001 through April 2002 for the *Initial Reports* and *Scientific Results*, respectively. Figure 1 (all figures appear at the end of this section) shows the total number of user sessions for each online volume for the period of January 2000 through April 2002.

A total of 48,145 unique users accessed the *Proceedings* online volumes between January 2001 and April 2002 (see Tables 3 and 4). From the calendar year 2000 to 2001, access to the volumes increased by 78%. And, access rates have continued to rise to higher even levels during the first four months of

2002. *Initial Reports* volumes were accessed during 40% of the user sessions and *Scientific Results* volumes during 60% of the sessions.

A total of 18,989 unique users accessed the *Initial Reports* online volumes between January 2001 and April 2002, or an average of 1,187 users per month (see Table 3). An average of 37 unique users accessed each volume per month for the period of January 2000 through April 2002. This user rate has remained stable as more volumes are published online.

A total of 29,156 unique users accessed the *Scientific Results* online volumes between January 2001 and April 2002, or an average of 1,822 users per month (see Table 4). An average of 66 unique users accessed each volume per month for the period of January 2000 through April 2002. Unlike the *Initial Reports* volumes, the user rate for online *Scientific Results* volumes has increased over time. Although the *Scientific Results* volumes have historically been touted as gray literature, these data illustrate the value in this free online peer-reviewed publication venue that is accessible to researchers around the world.

The number of individual users of the *Proceedings* volumes continues to rise on the ODP/TAMU Web site. On average, 50% to 60% of the users who access the *Proceedings* volumes from this site are from the United States. In April 2002, countries with 1% or more site visits included United States, United Kingdom (6.9%), Germany (6.4%), Japan (6.1%), Australia (4.3%), Canada (3.8%), France (3.1%), Italy (3.0%), People s Republic of China (1.9%), Spain (1.7%), The Netherlands (1.4%), and the European Union (1.1%).
Users representing all member countries except Iceland have accessed the online *Proceedings* volumes within the last six months. In addition, users from 65 other nations have used the online volumes during this period. Examination of the top 75 nations and the top 50 institutions accessing the online *Proceedings* volumes illustrates that the use of these publications is broader than the constituency of the ODP membership and extends worldwide.

Leg-Related Postcruise Publications

Since Leg 160, when the publication policy changed and scientific party members were allowed to publish their postcruise research results in either books and journals or the *Scientific Results* volumes, it has been important to track the number of papers projected and published in the different venues. Table 5 reflects the number of ODP-related papers that are projected for, submitted to, in press, or published in *Scientific Results* volumes and books/journals for Legs 160 through 193. Projected statistics are generated at the time of the second postcruise meeting. The other data on book/journal publications are based on the information ODP receives from the scientific participants from each leg. (There is no guarantee the counts are complete.) For Legs 160 through 193, 462 papers (or 57% of all published papers tracked) have been published in the *Scientific Results* volume and 355 papers (or 43% of all published papers tracked) have been published in books and journals.

Figure 2 shows the total number of submitted, in press, and published papers per leg. For Legs 101 through 159, only *Scientific Results* papers were tracked. Beginning with Leg 160, papers published in books and journals were also tracked. All legs through 178 have passed the four-years postcruise mark. Legs through 186 have passed the 28-months postcruise mark, which is the date when all *Scientific Results*, journal, and book submissions are due (187 deadline = 13 May 2002).

The average number of publications per leg has remained relatively constant since the beginning of ODP. However, the range of time over which postcruise research papers are published has expanded since the Publication Services Department began tracking papers published per month with Leg 169 (the first *Scientific Results* volume published in the electronic format). The Publication Services Appendix graphs the publication history relating to Legs 169 through 186. Each graph illustrates the breakdown of papers by *Scientific Results* and book/journal categories. 340 papers have been published related to Legs 169 through 186. 8% (28 papers) were published by 28-months postcruise, 67% (226 papers) were published between 29-months and four-years postcruise, and 25% (86 papers) were published later than four-years postcruise. All of the publications that were published by 28-months postcruise were in journals or books (this equates to an average of 2 papers per leg). Thus, while a few scientific participants are taking advantage of the policy revisions that allow authors to publish papers shortly after the moratorium has ended, a growing number of publications are now received past the four-year postcruise deadline.

Leg-related Citation Lists:
Authors from Leg 160 and beyond have been required to provide ODP/TAMU with copies of all citations from papers published in books or journals during the first 48 months postcruise. ODP/TAMU posts these citations on the ODP Publications Web site (http://www-odp.tamu.edu/publications/, click on Leg-Related Citations).

The Publication Services Department began collecting leg-related citations in January 1999. The citation lists now include 631 citations, of which 505 are submitted, in press, or published papers and 126 are conference abstracts. Of the 505 papers, 197 have abstracts reproduced on the ODP/TAMU web site. (ODP requests abstract reprint permission from all publishers, but only receives it 39% of the time.) The numbers of citations listed per leg depend on whether authors notify ODP once their papers have been accepted for publication; whereas, the availability of abstracts depends on whether publishers permit their reproduction.

We know the leg citation lists are not complete despite efforts by the Publication Services staff and the Staff Scientists to remind scientific party members of their publication obligations. The success of the leg-related citation lists is dependent upon authors submitting all published citations and a reprint of each publication to ODP, as outlined in the ODP Policy.

ODP Proceedings Distribution

The Department has sold DSDP and ODP volumes for a cumulative revenue of $9,569.38 between November 2001 and April 2002. This revenue supports a portion of the cost budgeted for the printing and distribution of new volumes. The Department has continued to distribute free sets of volumes to academic institutions that do not already have accessible sets of DSDP and ODP volumes (institutions pay shipping costs). Between November 2001 and April 2002, two institutions (University of Sierra, Italy, and Max-Planck Institute, Germany) were sent 325 ODP and 111 DSDP volumes. Total value for the books in these shipments equals $22,099.

DSDP and ODP Citation Database

The Citation Database, which contains more than 18,000 ODP- and DSDP-related citations, has been produced by the American Geological Institute (AGI). ODP/TAMU receives a CD-ROM annually that is used to generate citation reports and statistics for the program. In addition to this report, Publication Services also provides statistics for member country offices and individual authors who request citation data. This database is also being developed in a Web-based format that is updated on a weekly basis from the GeoRef database. ODP/TAMU is conducting a final review of the online database and expects to release the product in 2002. Users will be able to access the database via the Internet and also download data into common bibliographic software.

Overview of the Database:
AGI indexes and records citations from approximately 3000 foreign and domestic publications, as well as citations from books, other citation databases, and publications arising from meetings. To create the Citations from Deep Sea Drilling Project and Ocean Drilling Program Research database (or DSDP/ODP citation database), AGI used a series of key words to extract a subset of citations related to DSDP and ODP research from the AGI GeoRef database. In late 2000, ODP set up a draft of the database on the Web and asked the ODP scientific community to review the database contents and provide any ODP-related citations that were missing. These were added to the AGI as of the end of 2001.

As of 28 February 2002, the database contained 18,367 records. These can be divided into program proceedings and nonproceedings citations (42% and 58%, respectively). See Database Parameters for the definition of program proceedings. The bulk of this summary focuses on the nonproceedings citations in the database through 2001.

Database Parameters:

- AGI indexes and records citations from approximately 3000 foreign and domestic publications, in addition to books and publications arising from meetings. AGI also obtains citation information from international data-exchange partners in Canada, China, the Czech Republic, Finland, France, Germany, Hungary, Italy, the Netherlands, New Zealand, Poland, Russia, and Spain. There is no guarantee that this covers all publication venues for ODP or DSDP research, but scientific publications throughout the world are represented.
- There is often a time lag between the date new papers are published and the date they are input into the GeoRef database. The length of the time lag varies depending on the source from which AGI gets its information. As a result, the DSDP/ODP citations database does not contain a complete listing of citations from 2001. It is possible that some citations are still pending from 2000 as well.
- The program proceedings citations include publications produced and published directly by DSDP or ODP. This includes *ODP Proceedings* and *DSDP Initial Reports* series publications, as well as Scientific Prospectus, Preliminary Report, and Technical Note publications. It does not include other Program publications, such as the *JOIDES Journal.*
- Most of the information presented in this report is based on author affiliation (institution and country of contributing authors). AGI did not begin recording author affiliation information until 1975, so this information is absent from many records. Affiliation is also absent from some records simply because there are many publication venues that do not require an author to supply such information. In addition, some authorships, such as Shipboard Scientific Party, cannot be given author affiliations because the author is a group of individuals from a variety of countries. A small

percentage of the citations in this database do not have author affiliation data. The majority of these records are nonproceedings citations. AGI has no plans to update these records in their master database except when ODP/TAMU supplies AGI with the information to complete those data fields. Although 1,915 records of the citations in the ODP/DSDP citation database do not contain country affiliation information, this database represents the best and most accurate record available of the science produced in the scientific literature.

- Since this database contains citations for meeting abstracts and proceedings, a single citation may indicate where a paper/abstract was presented as well as where it was published after the meeting. So, a single record may represent double dissemination into the scientific community.

Author Information:
Authors from 78 countries have contributed to DSDP and ODP nonproceedings publications (see Table 6). Scientists from countries that have been members of either DSDP or ODP authored 8,471 non-proceedings publications (see Table 7). Most of these nonproceedings publications were published by first authors from the United States (58%). See Publication Categories for breakdown by publication type.
The nonproceedings publications are sorted into three major categories: serial publications, professional meeting publications, and miscellaneous publications. Serial publications include periodic journals, special publications produced as part of a series, and serial publications produced by governments, organizations, and/or institutions. Professional meeting publications include the initial publications of abstracts and/or proceedings for these meetings. This does not include papers, abstracts, and/or proceedings subsequently published in journals or other special publications. Miscellaneous publications include books, maps, etc.

Citation Distribution in Geoscience Publications:
ODP- and DSDP-related science has appeared in 778 serial publications. Many of these citations represent abstracts of papers that were given at professional meetings. See Table 8 for a list of the serial publications with 35 or more program-related citations. A complete list of serial publications is available upon request.

Figure 3 displays the number of nonproceedings citations accounted for in the DSDP/ODP citations database vs. the total number of citations from ODP and DSDP. Proceedings citations include *DSDP Initial Reports* and *ODP Proceedings* volumes, as well as the ODP Technical Notes, Scientific Prospectus, and Preliminary Reports series.

Table 1. Web User Statistics for ODP/TAMU Main Entry Points*

	May 01	Jun 01	Jul 01	Aug 01	Sep 01	Oct 01	Nov 01	Dec 01	Jan 02	Feb 02	Mar 02	Apr 02	TOTAL
Total for ODP/TAMU site	**43,989**	**50,371**	**55,994**	**57,756**	**52,000**	**55,628**	**64,120**	**57,753**	**47,057**	**68,115**	**72,528**	**66,230**	**691,541**
Totals for specific pages:													
ODP/TAMU home page	8,926	8,921	8,005	8,667	20,011	10,690	9,210	7,244	7,393	8,820	8,660	9,087	115,634
Publication Services	1,752	1,761	1,816	1,857	1,723	2,008	2,223	1,589	1,624	1,963	2,086	2,209	22,611
Cruise Information	1,112	1,082	1,186	1,213	1,494	1,632	1,566	1,169	1,328	1,549	1,425	1,639	16,395
Janus Database	1,187	1,156	1,145	1,169	1,265	1,369	1,618	1,456	1,245	1,488	1,580	1,657	16,335
Operations Schedule	708	761	626	774	908	899	901	722	1,090	910	847	882	10,028
Science & Curation	582	551	485	552	614	657	685	520	539	616	643	665	7,109
Cruise Participation	398	332	280	324	377	405	396	328	373	460	449	454	4,576
Site Maps	444	452	423	487	589	594	650	455	450	565	625	670	6,404
JOIDES Resolution drill ship	466	408	444	536	629	624	588	460	493	660	576	589	6,473
Search	873	740	789	824	777	961	1,076	770	810	952	962	993	10,527
Drilling Services	767	586	583	651	815	892	970	717	716	919	905	901	9,422
Sample request form	302	315	254	299	323	324	377	250	319	346	334	421	3,864
Staff Directory	429	495	489	478	489	595	581	424	483	527	546	564	6,100
ODP/TAMU positions	354	436	516	569	339	372	383	374	312	518	745	1,138	6,056
Life onboard *JOIDES Res.*	609	487	612	675	929	815	926	673	672	883	823	886	8,990
Leg 199 photos							1,003	935	237				2,175
Leg 200 photos								387	1,129	702	270		2,488
Leg 201 photos										929	1,364	775	3,068
Leg 202 photos												705	705

Notes: * = numbers represent unique-computer sessions that originate outside ODP/TAMU; each session may result in multiple page views and/or database requests; mirror sites are not included. † = see "Volume Production" section for statistics on unique-computer sessions for each volume.

Table 2. Web User Statistics for German Mirror Site.

	May 01	Jun 01	Jul 01	Aug 01	Sep 01	Oct 01	Nov 01	Dec 01	Jan 02	Feb 02	Mar 02	Apr 02	TOTAL
German mirror site	282	524	787	1,000	1,367	1,865	2,633	2,853	2,895	3,591	1,821	3,045	**22,663**

Note: * = German mirror site went online in Jun 2000. No data are available for mirror sites in Australia and the United Kingdom.

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Table 3. 2001–2002 *Initial Reports* Web Publication User Statistics.*

Vol	Jan 01	Feb 01	Mar 01	Apr 01	May 01	Jun 01	Jul 01	Aug 01	Sep 01	Oct 01	Nov 01	Dec 01	Jan 02	Feb 02	Mar 02	Apr 02	Total	Date of Web Publication
166†	39	38	48	44	46	44	43	34	50	55	90	45	49	57	42	43	**767**	1 Oct 1997
167†	30	30	37	32	36	38	56	76	49	36	49	27	42	41	40	49	**668**	13 Feb 1998
168†	21	34	18	20	31	47	36	48	37	36	27	29	24	24	26	28	**486**	23 Feb 1998
169†	30	38	25	27	31	47	44	53	73	59	27	31	30	38	28	27	**608**	17 Apr 1998
169S†	18	21	14	13	17	21	25	35	30	26	28	17	21	20	12	16	**334**	10 Apr 1998
170†	27	31	18	25	20	41	39	44	31	37	51	24	38	35	46	44	**551**	24 Apr 1998
171A†	25	24	17	28	24	33	22	41	28	31	23	25	23	29	22	22	**417**	26 Jun 1998
171B†	36	36	25	14	20	34	53	31	36	26	23	23	36	44	39	26	**502**	26 Jun 1998
172†	22	41	28	17	27	51	30	48	44	40	26	30	36	48	42	27	**557**	31 Jul 1998
173†	23	32	18	19	25	34	33	50	36	31	35	36	33	36	24	32	**497**	4 Sep 1998
174A†	26	28	33	40	31	41	32	58	45	39	29	29	28	33	36	35	**563**	31 Dec 1998
174B†	17	25	13	18	11	25	30	38	25	15	21	17	23	25	20	20	**343**	31 Dec 1998
174AX†	17	15	10	11	18	13	24	37	28	27	23	19	20	22	13	26	**323**	31 Dec 1998
174AXS	14	14	15	28	24	29	24	29	23	26	26	16	19	18	15	23	**343**	28 Dec 1998
175†	44	45	34	32	52	53	66	67	28	42	38	37	44	63	46	51	**742**	9 Feb 1999
176**	25	21	20	13	20	21	31	44	15	32	16	15	14	23	19	34	**363**	30 Jun 1999
177**	27	33	35	22	66	67	72	54	76	53	43	40	23	41	45	44	**741**	28 May 1999
178**	39	36	47	23	28	64	59	95	38	77	43	41	29	55	55	71	**800**	31 Aug 1999
179**	20	18	19	39	60	69	64	66	47	60	58	53	38	61	37	33	**742**	23 Jul 1999
180**	35	41	38	28	40	56	70	46	29	36	38	21	32	51	61	53	**675**	4 Feb 2000
181**	30	21	21	17	30	44	64	41	18	42	28	36	28	39	36	45	**540**	12 May 2000
182**	29	32	13	26	24	35	46	74	36	56	26	25	24	25	23	38	**532**	26 May 2000
183**	35	31	26	23	51	35	60	61	35	37	24	22	29	36	46	62	**613**	9 Jun 2000
184**	29	27	32	37	51	98	74	56	44	101	39	33	35	48	35	46	**785**	12 Jun 2000
185**	33	42	42	46	45	73	54	56	60	60	51	31	36	64	41	75	**809**	19 Sep 2000
186**	33	43	24	47	62	53	63	55	37	28	38	32	36	38	21	33	**643**	28 Jul 2000
187**	58	60	30	25	24	32	24	29	20	15	23	16	17	26	27	31	**457**	9 Jan 2001
188**			88	97	56	47	55	58	35	53	38	25	25	43	35	42	**697**	5 Mar 2001
189**					145	125	98	85	66	71	50	39	47	72	67	71	**936**	2 May 2001
190**						46	88	94	152	106	89	33	56	84	59	88	**895**	29 Jun 2001
191**									92	81	41	18	20	24	27	32	**335**	3 Sep 2001
192**										14		61	61	44	46	37	**263**	16 Oct 2001
193**														107	77	47	**249**	12 Feb 2002
194**															36	143	**201**	28 Mar 2002
196**																52	**52**	30 Apr 2002
Month Total:	782	857	788	811	1,115	1,416	1,479	1,603	1,363	1,448	1,161	946	1,016	1,414	1,244	1,546	**18,989**	

Notes: See Figure 1 for total use per volume for January 2000-April 2002. * = numbers represent unique-computer sessions that originated outside ODP/TAMU to the entry page of a volume; each session may result in multiple page views. Hits to mirror sites are not included. † = volumes in PDF format. ** = volumes in PDF and HTML formats.

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Table 4. 2001–2002. *Scientific Results* Web Publication User Statistics.*

Vol	Jan 01	Feb 01	Mar 01	Apr 01	May 01	Jun 01	Jul 01	Aug 01	Sep 01	Oct 01	Nov 01	Dec 01	Jan 02	Feb 02	Mar 02	Apr 02	Total	Date of Web Publication
150X	61	49	85	59	43	76	76	84	48	122	69	45	61	67	83	70	**1,098**	7 Aug 1998
152	92	70	77	66	98	140	69	106	52	74	87	61	43	66	73	67	**1,241**	8 Jul 1998
154	58	74	78	72	92	84	105	98	42	106	74	60	69	90	79	70	**1,251**	1 Oct 1997
155	81	104	88	104	80	90	72	86	59	88	84	62	65	71	74	76	**1,284**	15 May 1998
156	59	50	76	74	55	63	81	62	66	80	42	45	47	65	63	66	**994**	21 Aug 1998
157	94	69	92	69	75	65	107	95	65	73	65	46	57	69	73	75	**1,189**	14 Aug 1998
158	51	56	73	45	54	51	61	80	41	54	53	48	67	72	57	60	**923**	15 May 1998
159	63	75	95	49	59	65	66	76	45	70	70	59	67	81	55	75	**1,070**	31 Dec 1998
159T	40	22	39	18	30	35	50	56	29	41	33	32	40	32	38	37	**572**	31 Dec 1998
160	159	157	125	106	120	140	126	115	186	177	124	110	129	174	180	107	**2,235**	9 Nov 1998
161	79	86	85	92	103	71	101	134	71	77	62	58	66	93	87	86	**1,351**	19 Mar 1999
162	51	29	47	26	57	56	60	46	36	44	62	32	23	40	38	37	**684**	20 Aug 1999
163	28	26	31	24	34	40	56	82	21	47	57	24	16	38	56	39	**619**	19 Sept 1999
164	56	38	53	53	76	97	216	97	66	81	67	35	49	70	88	105	**1,247**	19 May 2000
165	42	37	44	31	38	49	76	52	33	61	64	48	30	52	46	60	**763**	26 May 2000
166	26	29	29	42	43	44	63	47	38	74	35	28	20	46	34	27	**625**	29 May 2000
167	36	42	51	29	42	45	69	62	34	84	74	34	47	54	38	50	**791**	31 Jul 2000
168	31	27	34	24	30	27	48	38	21	44	35	25	37	55	38	31	**545**	4 Aug 2000
169	48	37	50	37	40	50	46	73	10	41	44	39	42	53	35	31	**676**	15 Apr 2000
169S	29	21	29	24	22	25	28	23	26	28	33	24	24	27	26	26	**415**	8 Aug 2000
170	46	32	35	27	35	31	48	63	68	69	49	32	24	49	52	35	**695**	20 Jun 2000
171A	44	33	44	20	37	28	26	40	28	29	28	24	20	33	40	31	**505**	2 Aug 2000
171B	44	60	46	49	55	77	63	63	41	44	44	38	46	43	41	40	**794**	4 Jul 2000
172	42	41	35	41	45	46	54	58	39	57	48	37	230	56	55	45	**929**	1 Sep 2000
173	42	33	39	40	71	46	40	82	57	55	63	32	42	40	37	43	**762**	2 Oct 2000
174A	28	25	28	29	32	32	27	41	41	56	31	18	24	27	40	32	**511**	29 Sep 2000
174B	32	29	27	25	39	29	30	38	19	38	30	21	24	31	34	23	**469**	5 Jan 2001
175	109	90	114	112	145	82	110	97	52	112	90	32	47	82	61	52	**1,387**	10 Jan 2001
176											45	17	33	40	38	55	**228**	18 Dec 2001
177						30	104	61	55	56	43	36	29	43	75	53	**585**	28 Jun 2001
178					72	118	144	111	75	146	93	73	44	95	72	106	**1,149**	29 May 2001
179											22	13	19	29	26	30	**139**	In press
180							101	140	78	78	72	36	43	72	86	56	**762**	16 Jul 2001
181											6	8	25	62	64	53	**218**	30 Jan 2002
182											64	52	64	88	107	75	**450**	29 Jan 2002
Month Total:	1,571	1,441	1,649	1,387	1,722	1,832	2,323	2,306	1,542	2,206	1,962	1,384	1,713	2,105	2,089	1,924	**29,156**	

Notes: See Figure 1 for total use per volume for January 2000-April 2002. * = numbers represent unique-computer sessions that originated outside ODP/TAMU to the entry page of a volume; each session may result in multiple page views. Hits to mirror sites are not included. Volume 169 and beyond = volumes published chapter by chapter in the order of acceptance in PDF and HTML formats; date indicates when first paper was published.

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Table 5. ODP-related peer-reviewed papers projected, submitted, in press, and published in *Scientific Results* volumes vs. books or journals.

	SR Volume				Journal or Book			
Leg	**Projected***	**Submitted**	**In Press**	**Published**	**Projected***	**Submitted†**	**In Press†**	**Published†**
160	62			58	2		1	28
161	47			46	6	2	0	10
162	24			46	32	3	1	32
163	22			17	4	0	0	5
164	35			44	18	0	0	9
165	26			22	2	0	1	11
166	28			21	7	10	0	12
167	40			33	11	0	0	8
168	17			14	47	0	0	27
169S	0			1	28	0	0	25
169	14			10	29	0	1	13
170	6			7	15	0	0	12
171A	1			3	16	0	0	10
171B	15			11	43	1	2	44
172	8			12	36	8	1	4
173	8			12	19	0	0	26
174A	8		1	6	17	4	1	14
174B	1			2	5	0	0	1
175	14			24	24	0	0	18
176	17		9	5	20	0	0	8
177	7	7	3	5	44	23	0	3
178	8	2	5	32	44	2	0	6
179	15	2	2		8	1	0	1
180	15		4	22	25	1	0	6
181	21	1	6	4	25	9	0	2
182	13	6	5	5	37	3	1	5
183	15	5	10		25	17	0	3
184	23	18	1		34	11	12	1
185	9	9	2		29	2	0	3
186	19	17			11	1	0	0
187	4	0			15	0	0	1
188	16	15 Jul 02**			19	0	0	2
189	11	23 Sep 02**			50	1	0	3
190/196	May 02‡	18 Nov 02**				3	0	2
193	Fall 02‡	5 May 03**				1	0	0

Notes: * = estimated number of papers at second postcruise meeting. Submitted data = number of papers received (and in peer review) as of 30 April 2002. = number of published papers ODP has received from authors or has identified in journals. = date of second postcruise meeting. ** = deadline when initial submissions are due (28 months postcruise).

Table 6. Number of "nonproceedings" publications contributed to by authors from each country.

Country	Number of publications	Country	Number of publications	Country	Number of publications
Argentina	28	Greece	9	Peru	2
Australia	261	Hungary	5	Philippines	4
Austria	18	Iceland	4	Poland	10
Barbados	2	India	91	Portugal	3
Belgium	47	Indonesia	2	Puerto Rico	7
Botswana	1	Ireland	3	Romania	1
Brazil	19	Israel	18	Saudi Arabia	1
Bulgaria	1	Italy	242	Senegal	1
Canada	658	Jamaica	6	Seychelles	1
Chile	6	Japan	577	Slovak Rep.	1
Chinese Taipei	11	Korea	14	Solomon Is.	2
Colombia	5	Lebanon	1	So. Africa	19
Costa Rica	3	Malaysia	1	Spain	65
Cuba	2	Malta	2	Sri Lanka	1
Cyprus	6	Mexico	43	Sweden	120
Czech Republic	3	Morocco	2	Switzerland	179
Denmark	71	Namibia	1	Tanzania	2
Dominican Rep.	1	Netherlands	177	Tonga	2
Ecuador	1	N. Caledonia	3	Trinidad/Tobago	2
Egypt	1	New Zealand	104	Tunisia	4
Estonia	1	Nigeria	4	Turkey	8
Fiji	1	Norway	180	Venezuela	2
Finland	9	Oman	3	UK	1,080
France	936	Pakistan	2	Un. Arab Em.	1
Fr. Polynesia	2	P. New Guinea	3	USA	5,628
Germany	1,008	PR China	71	USSR*	235

Notes: These figures only account for citations with author affiliation data (see "Database Parameters"). Numbers include serial publications, meetings, and miscellaneous publications (see "Publication Categories"). * = USSR includes USSR, Russian Federation, and Ukraine totals.

Table 7. Number of "nonproceedings" publications based on country affiliation of first author.

	Publication Type			
	Serial	Meeting	Misc.	**Total**
Australia	53	79	1	**133**
Belgium	3	8	0	**11**
Canada	153	251	2	**406**
PR China	26	7	0	**33**
Denmark	14	14	0	**28**
Finland	2	4	0	**6**
France	270	275	14	**559**
Germany	278	368	14	**660**
Greece*	3	4	0	**7**
Iceland	1	0	0	**1**
Ireland	2	1	0	**3**
Italy	56	50	1	**107**
Japan	217	133	27	**377**

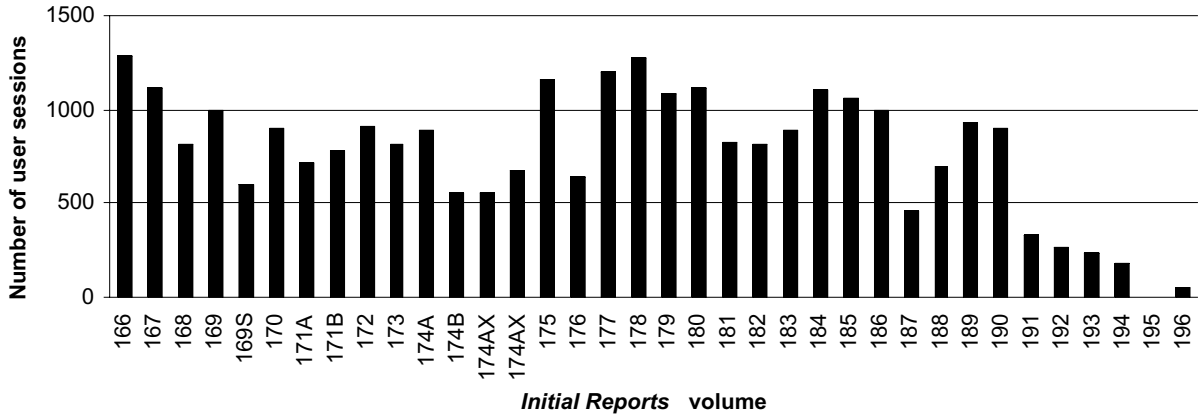
	Publication Type			
	Serial	Meeting	Misc.	**Total**
S. Korea	7	4	0	**11**
Netherlands	61	31	0	**92**
Norway	59	40	0	**99**
Portugal	1	1	0	**2**
Spain	20	12	0	**32**
Sweden	47	30	0	**77**
Switzerland	41	51	0	**92**
C. Taipei	5	2	0	**7**
Turkey*	2	1	0	**3**
UK	335	279	9	**623**
USA	2,017	2,810	103	**4,930**
USSR*, †	117	50	5	**172**
Total	**3,790**	**4,505**	**176**	**8,471**

Notes: Serial = serial publication; Meeting = meeting publication, Misc. = books, maps, etc. * = no longer member countries. † = USSR includes USSR, Russian Federation, and Ukraine totals.

Table 8. Serial publications with 35 or more DSDP- and ODP-related citations, 1969—2001

Serial Title	Total
EOS	1,469
Abs/prog GSA	868
AAPG Bulletin	296
Earth & Planetary Sci Letters	248
J Geophysical Research	226
Nature (London)	221
Marine Geology	218
Geology (Boulder)	206
Geotimes	193
Intl Geological Congr, Abs (Congres Geolog Intl, Resumes)	159
Geol Soc Special Publ (London)	152
Paleoceanography	143
Terra Nostra (Bonn)	139
Marine Micropaleontology	138
Prog/Abs - Geol Assoc Canada; Mineral Assoc of Canada; Canadian Geophys Union, Joint Ann Mtg (GAC/MAC/CGU)	138
Palaeogeogr, Climatol, Ecology	116
Geochim et Cosmochim Acta	100
Science	98
Annual Mtg [Ext] Abs - AAPG/SEPM	83
GSA Bull	80
Terra Abstracts	78
Geophysical Research Letters	72
Micropaleontology	71
Comptes-Rendus Seances de l'Acad Sci, Ser 2: Mecanique-Physique, Chimie, Sci de l'Univers, Sci de la Terre (several vol title changes)	70
Bull Soc Geologique de France [Huitieme Ser.]	67
Chemical Geology	67
JOIDES Journal	59
AAPG Memoir	52
Prelim Rpt - Ocean Res Inst, Univ Tokyo	52
Organic Geochemistry	51
Palynology	49
USGS Open File Report	49
Geophysical Monograph	48
Maurice Ewing Series	47
J Conference Abs	45
J Foraminiferal Research	43
Spec Publ - Soc Econ Paleon Mineralogists (SEPM) [Soc Sedimentary Geol] [3 titles]	43
Sedimentary Geology	41
Canadian J Earth Sci - J Canadien des Sciences de la Terre	39
Spec Paper - GSA	36
Tectonophysics	36
Abs Geol Soc Australia	35
Trudy - Geol Inst, Akad Nauk SSSR	35

Figure 1. Number of user sessions per *Proceedings* volume (January 2000—April 2002).



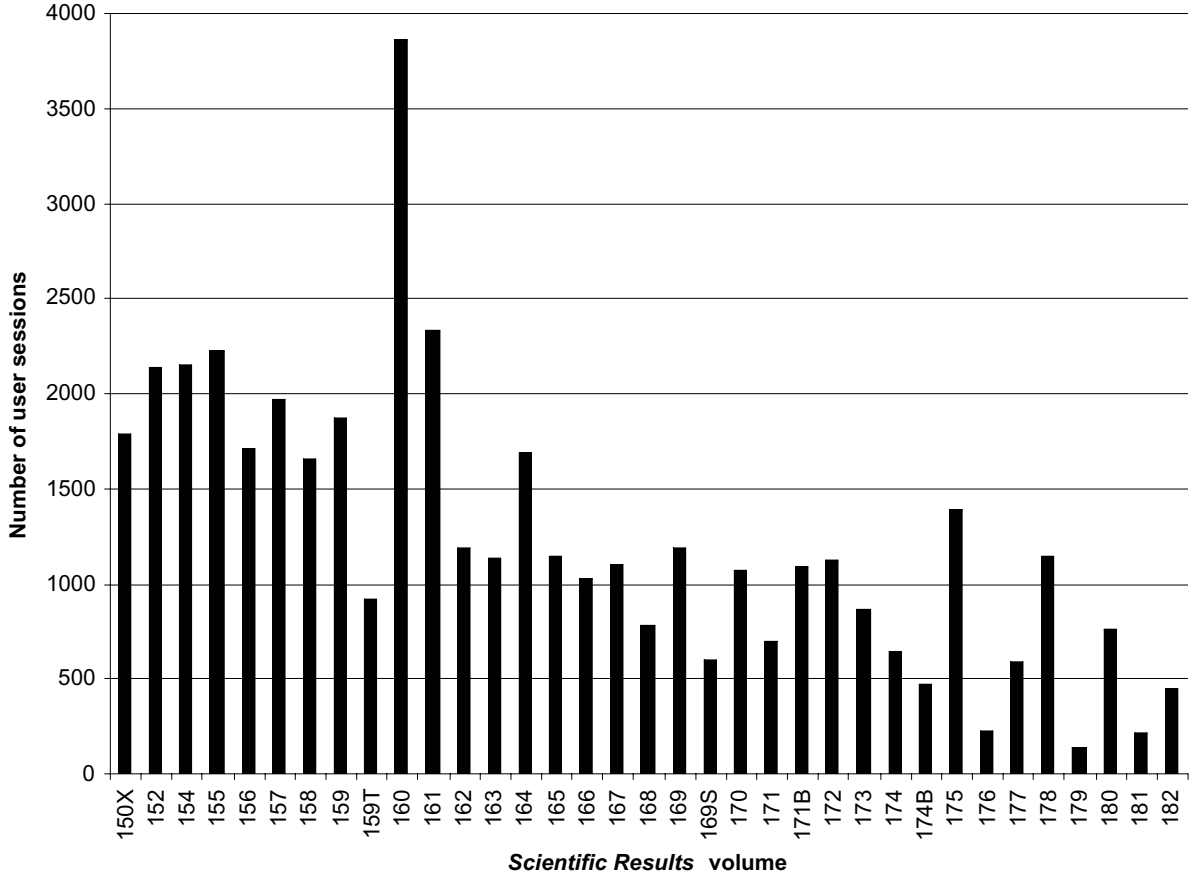
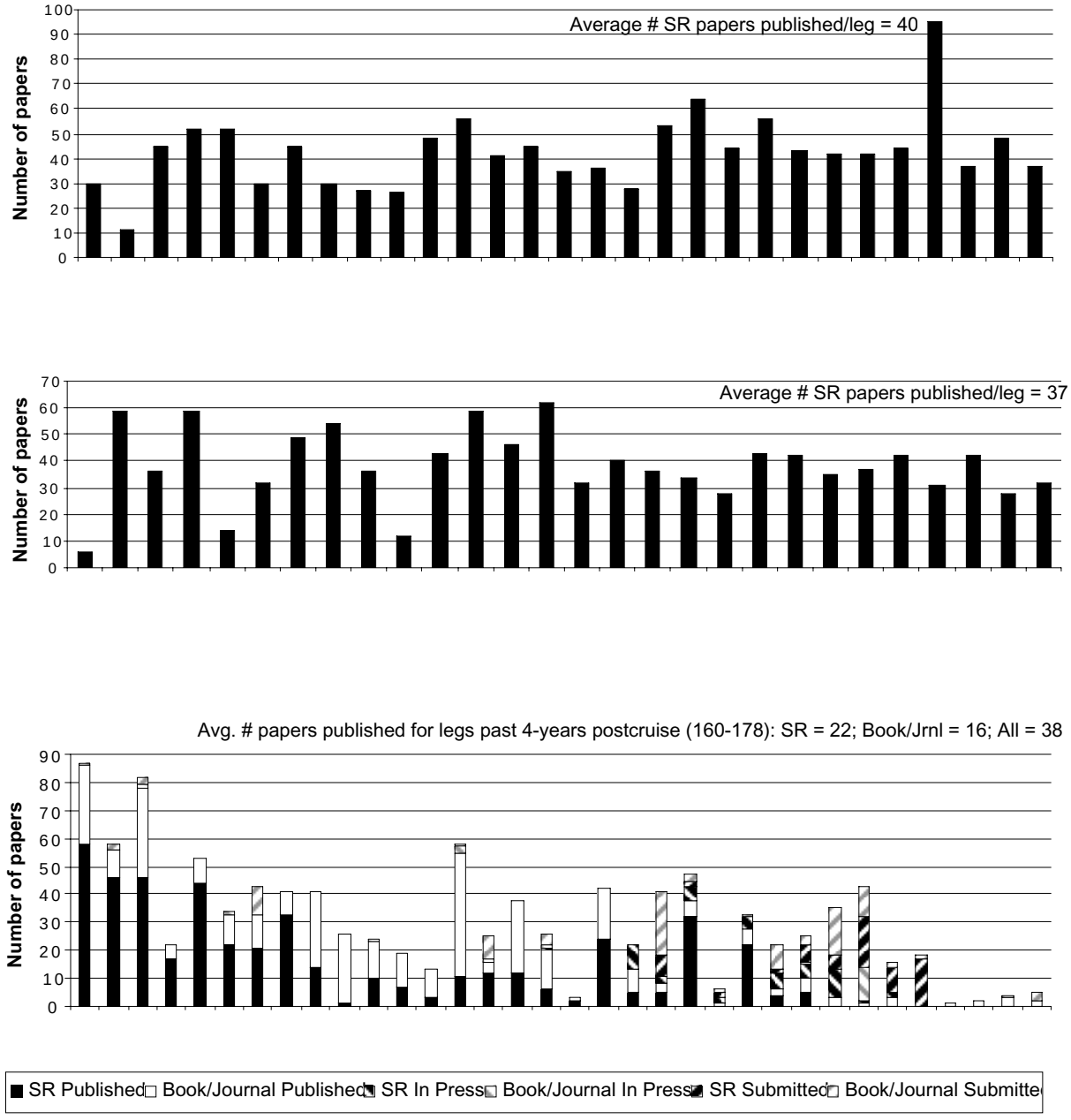
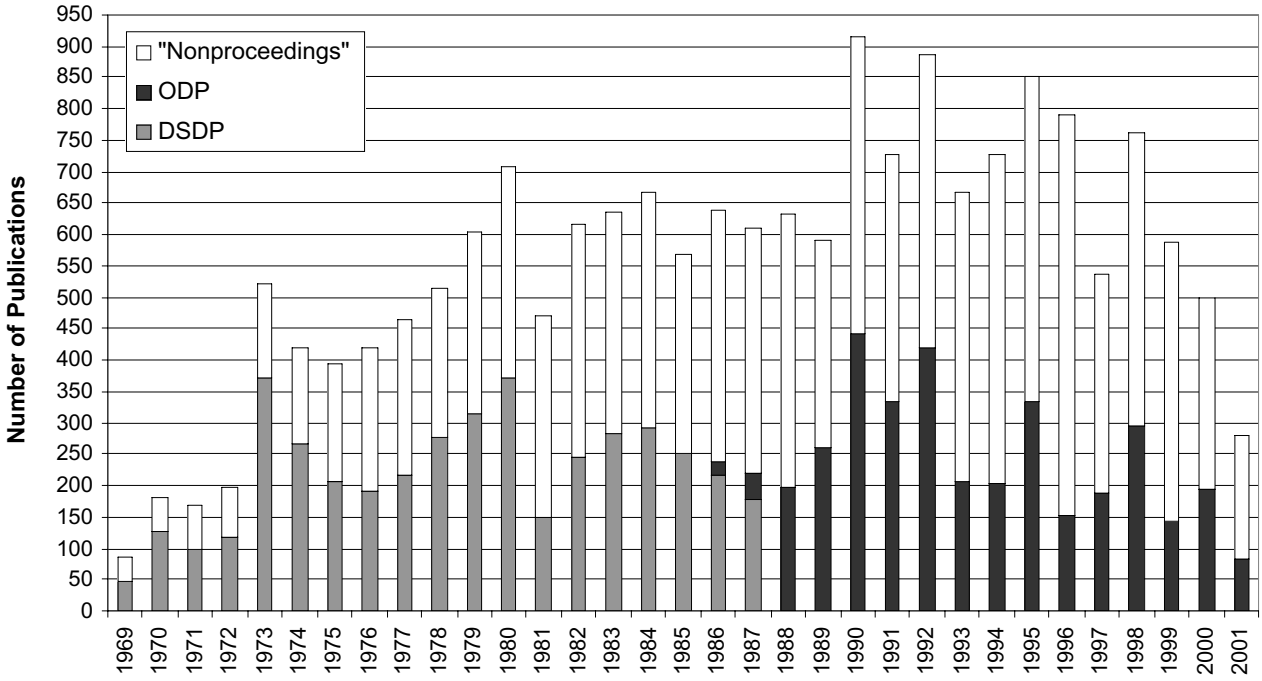


Figure 2. Number of published and in press papers on record per leg.



Note: Data on papers submitted, in press, or published in books/journals is provided by authors and may not be complete or up-to-date.

Figure 3. Number of "proceedings" and "nonproceedings" citations per year.



Public Information

Port Call Activities:

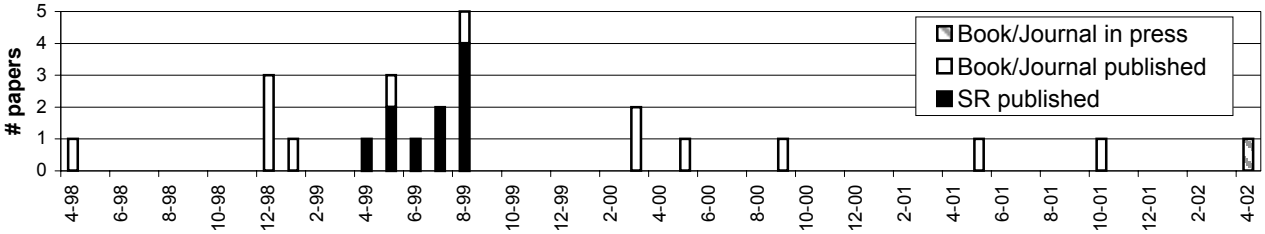
At the San Diego port call at the end of January we did not engage in extensive activities because a programmatic decision was made to target the next San Diego port call (Leg 204/205); September 2002) as a major event. We did, however, host five visitors from NASA's Extraterrestrial Life research group who were interested in familiarizing themselves with the ODP microbiological initiative. Dr. Steve D'Hondt, along with Steve Bohlen and Jeff Fox, gave the NASA visitors an extensive tour of the ship. A journalist from Nature joined this tour and he later filed a report in Nature about ODP and plans for IODP. In addition, Steve Bohlen and Jeff Fox gave a tour of the labstack and a review of ODP operations to visitors from NSF – Drs. Bruce Malfait and Jim Yoder from Ocean Sciences and Dr. Christine Boesz, the Inspector General for the NSF.

No port call activities for the public were carried out in Valparaiso (Leg 201/202), nor are any planned for Balboa (Leg 202/203).

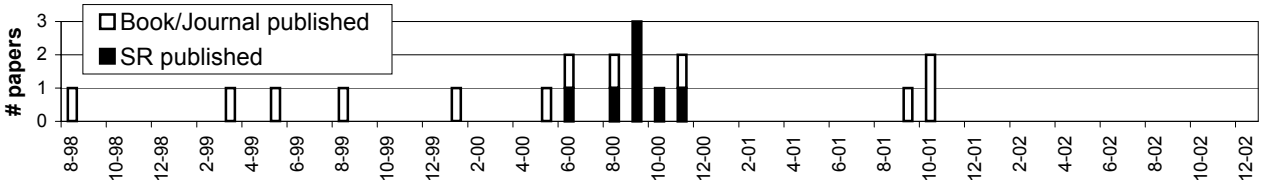
Public Information Requests:

During the last six months, ODP/TAMU has responded to 34 requests for scientists, news media, television producers, universities, K-12 schools, government administrators and publishers. The material distributed includes: general PR packages, slide sets, B-roll footage, ODP video Planet in Motion, and the Cretaceous-Tertiary Impact Poster

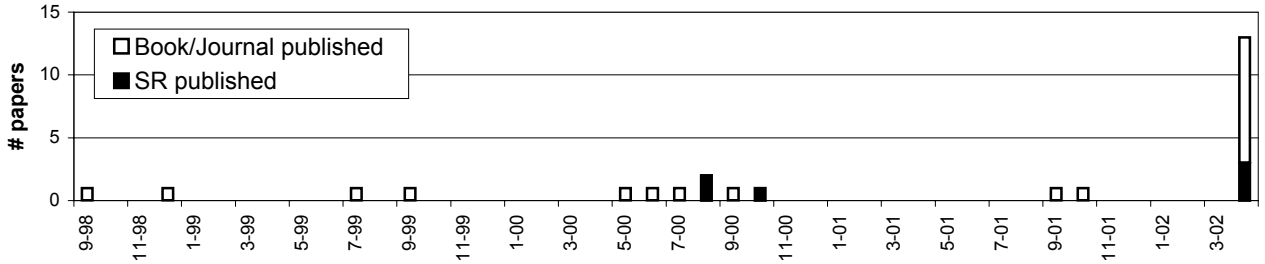
Leg 169 (23 published) 1-yr pc = Oct 97; 28-mo pc = Feb 99; 4-yr pc = Oct 00 (pc= postcruise)



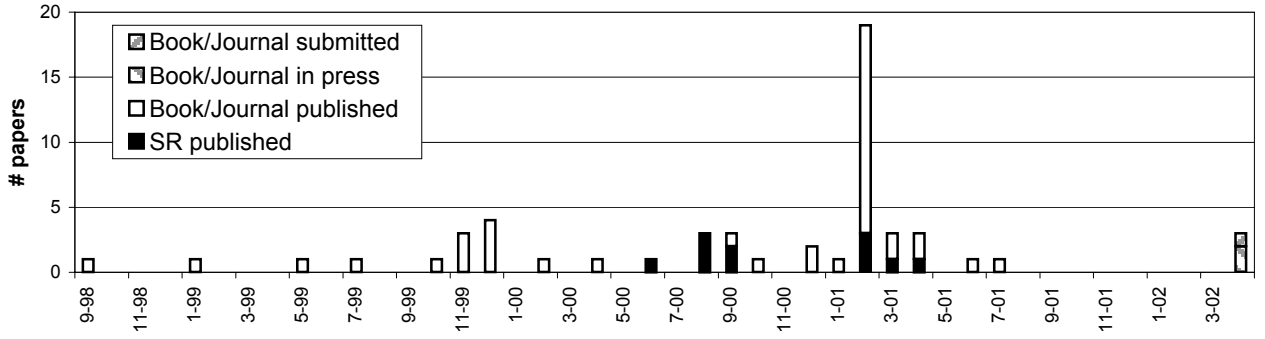
Leg 170 (19 published) 1-yr pc = Dec 97; 28-mo pc = Apr 99; 4-yr pc = Dec 00



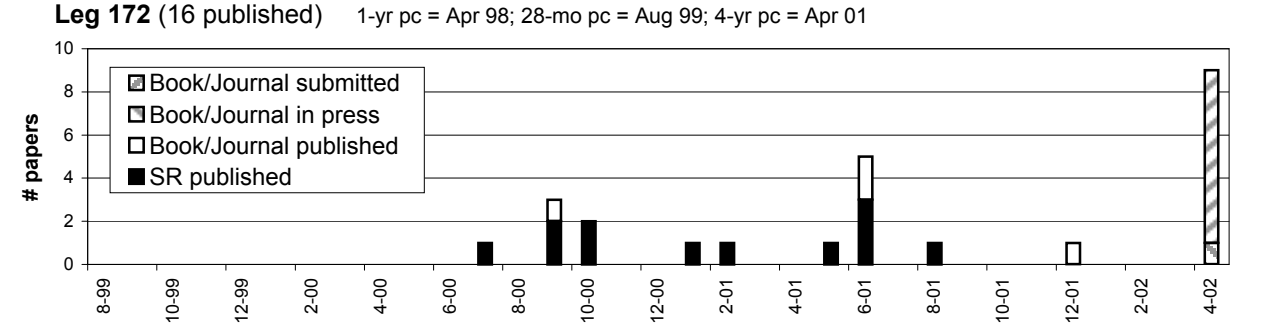
Leg 171A (13 published) 1-yr pc =Jan 98; 28-mo pc = May 99; 4-yr pc = Jan 01



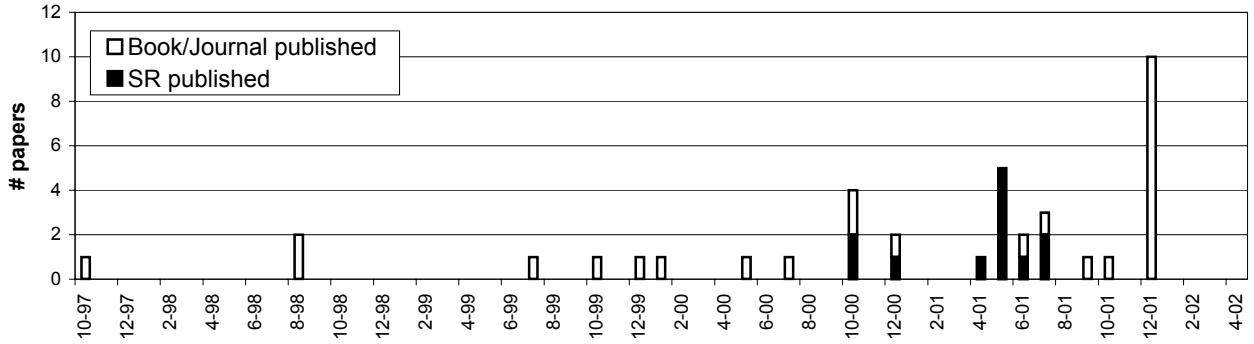
Leg 171B (55 published) 1-yr pc = Feb 98; 28-mo pc = Jun 99; 4-yr pc = Feb 01



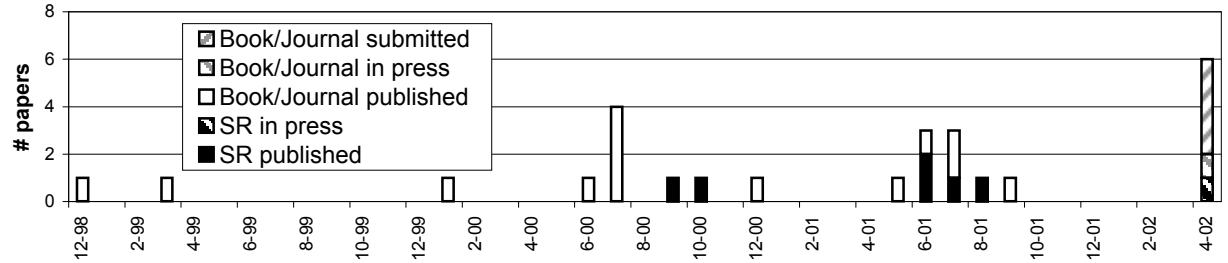
Leg 172 (16 published) 1-yr pc = Apr 98; 28-mo pc = Aug 99; 4-yr pc = Apr 01



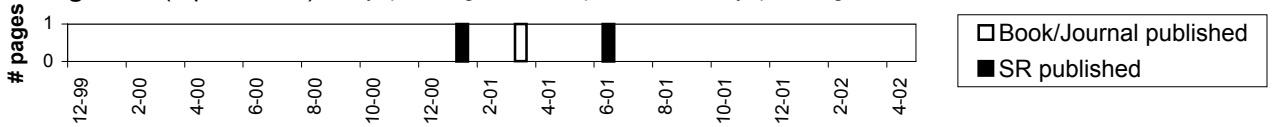
Leg 173 (38 published) 1-yr pc = Jun 98; 28-mo pc = Oct 99; 4-yr pc = Jun 01



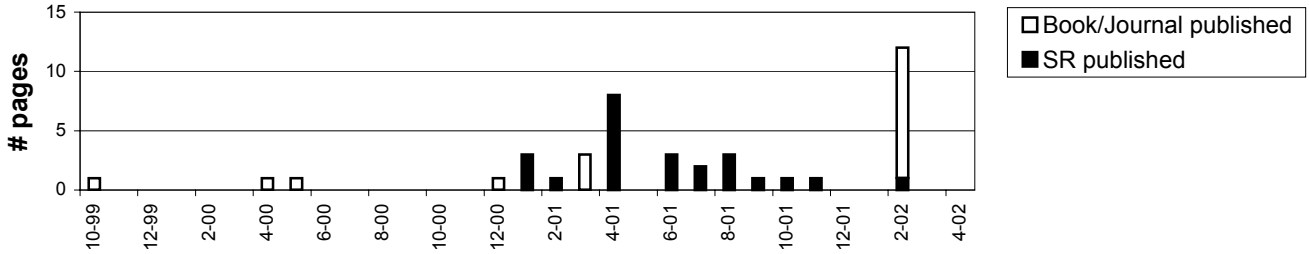
Leg 174A (20 published) 1-yr pc = Jul 98; 28-mo pc = Nov 99; 4-yr pc = Jul 01



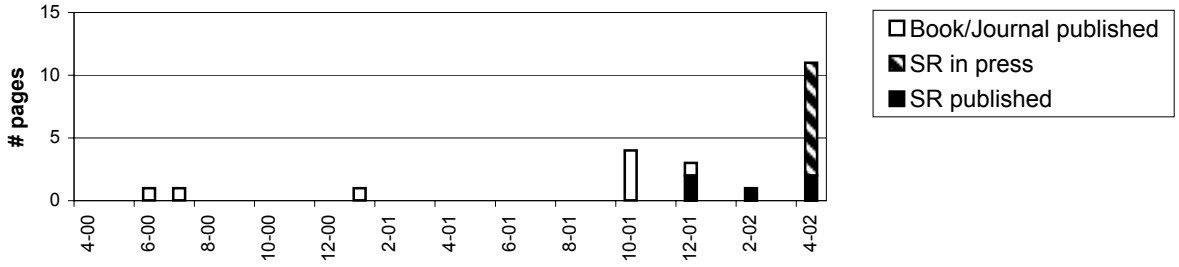
Leg 174B (3 published) 1-yr pc = Aug 98; 28-mo pc = Dec 99 ; 4-yr pc = Aug 01



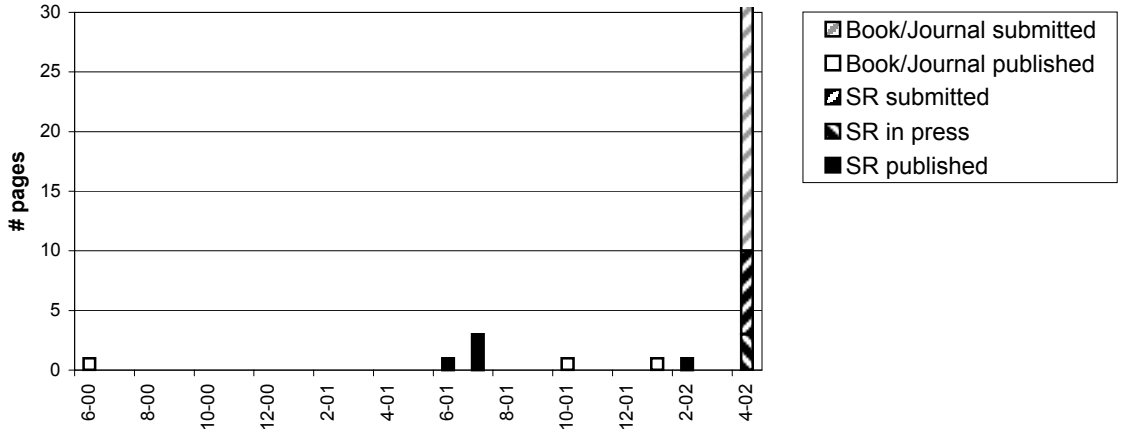
Leg 175 (42 published) 1-yr pc = Oct 98; 28-mo pc = Feb 00; 4-yr pc = Oct 01



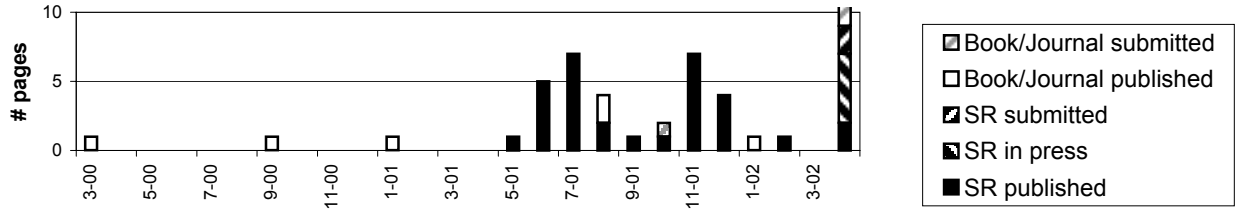
Leg 176 (13 published) 1-yr pc = Dec 98; 28-mo pc = Apr 00; 4-yr pc = Dec 01



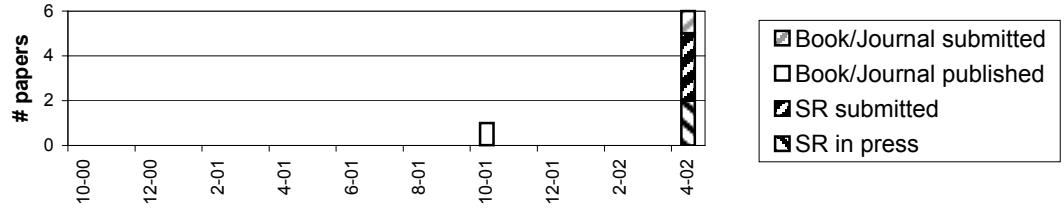
Leg 177 (8 published) 1-yr pc = Feb 99; 28-mo pc = Jun 00; 4-yr pc = Feb 02



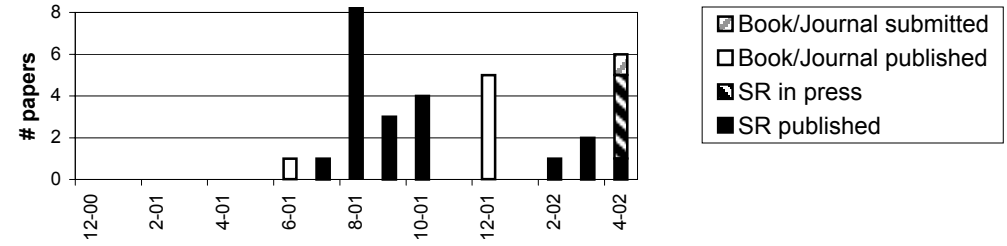
Leg 178 (37 published) 1-yr pc = Apr 99; 28-mo pc = Aug 00; 4-yr pc = Apr 02



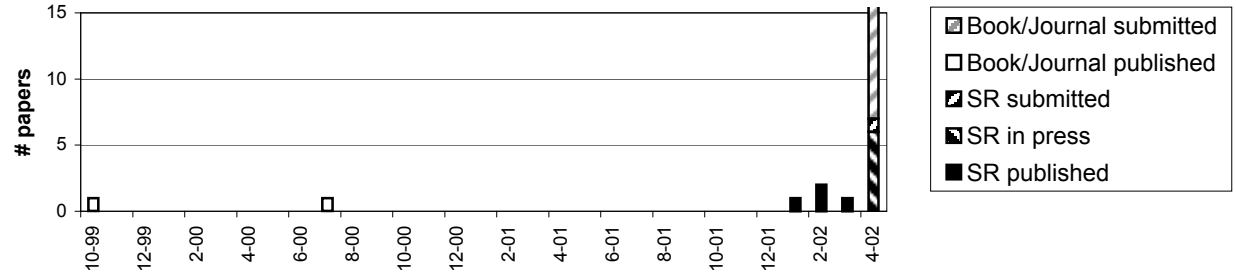
Leg 179 (1 published) 1-yr pc = Jun 99; 28-mo pc = Oct 00; 4-yr pc = Jun 02



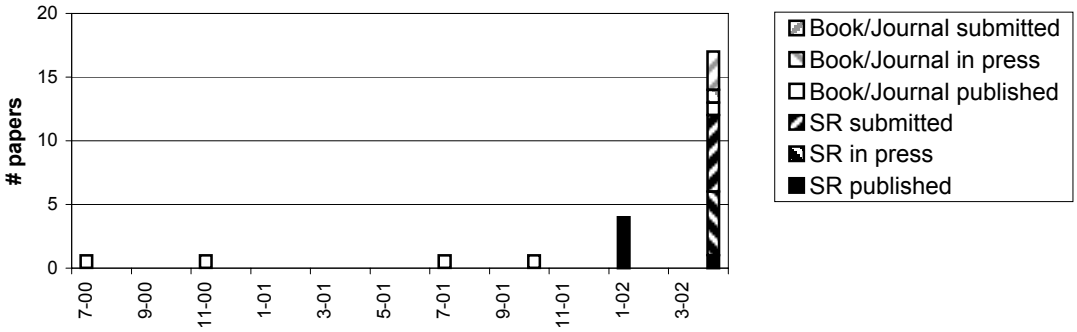
Leg 180 (27 published) 1-yr pc = Aug 99; 28-mo pc = Dec 00; 4-yr pc = Aug 02



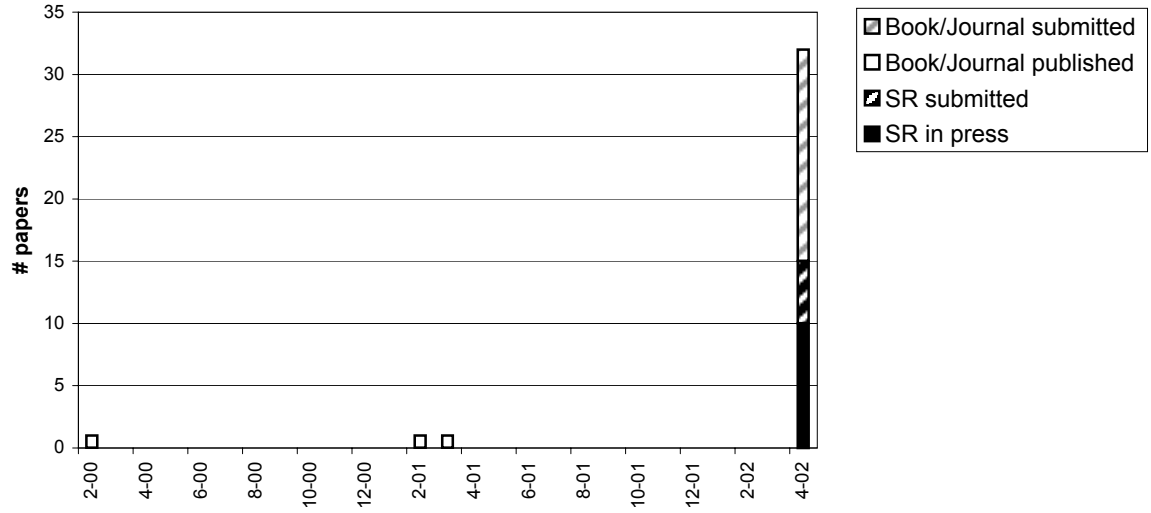
Leg 181 (6 published) 1-yr pc = Oct 99; 28-mo pc = Feb 01 ; 4-yr pc = Oct 02



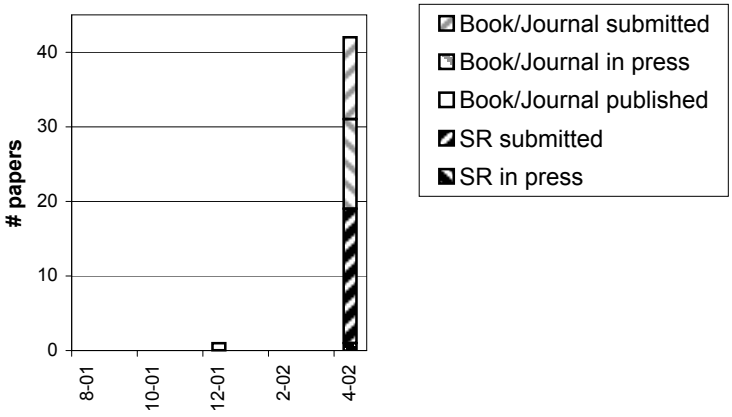
Leg 182 (10 published) 1-yr pc = Dec 99; 28-mo pc = Apr 01; 4-yr pc = Dec 02



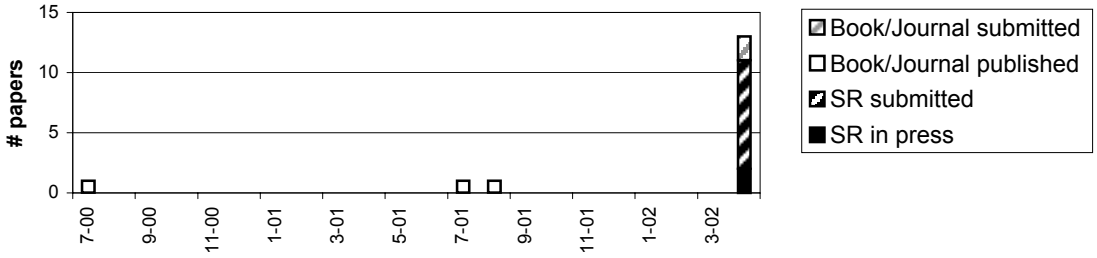
Leg 183 (3 published) 1-yr pc = Feb 00; 28-mo pc = Jun 01; 4-yr pc = Feb 03



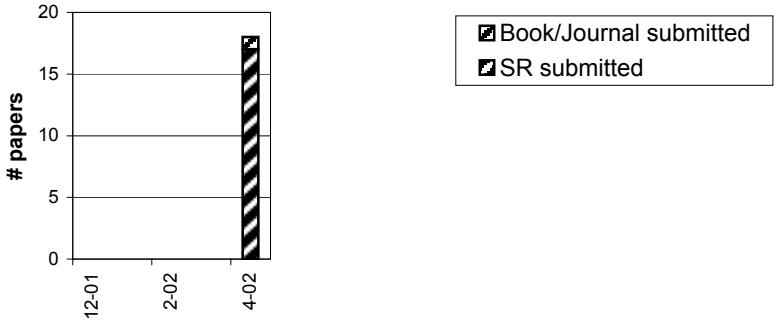
Leg 184 (1 published) 1-yr pc = Apr 00; 28-mo pc = Aug 01; 4-yr pc = Apr 03



Leg 185 (3 published) 1-yr pc = Jun 00; 28-mo pc = Oct 01; 4-yr pc = Jun 03



Leg 186 (0 published) (1-yr pc = Aug 00; 28-mo pc = Dec 01; 4-yr pc = Aug 03)



6.4 LDEO Borehole Research Group

Executive Summary

Leg 200 H2O
The primary objective of Leg 200 was to drill a reentry hole within 2 km of the H2O junction box for the installation of a borehole seismometer. The character of the basement interval is well imaged by the logs, identifying a thick basalt flow overlying low-velocity pillows and breccias. This borehole information will assist in planning for future seismometer emplacement.

Leg 201 Peru Biosphere
Leg 201 was designed to sample the microbial biosphere of deep marine sediments and the ocean crust. The Triple Combo was run at all logged holes and was useful for fine scale core-log integration at all sites and completing the incomplete sedimentary column at Sites 1228 and 1229. The FMS/Sonic was added at Hole 1230A in order to use the velocity log and the FMS images to detect and characterize hydrate-bearing intervals. The log data delineate several intervals where gas hydrate may also have been present but not recovered in the core.

Leg 202 SE Paleoceanography
Leg 202 was underway at the time of this report. Its objective is to assess climate and oceanographic changes in the southeast Pacific in the Neogene. To date, two holes have been logged. Using the downhole log records as a depth reference, the core measurements were mapped to equivalent log depths (ELD) using Sagan in order to more precisely identify the size and position of core breaks. As a result, we are able to identify the cycles missing in core records, improving the prospects for developing an orbitally tuned age model.

Drillstring Measurements System (DMS)
The DMS project consists of two collaboratively engineered devices — the Downhole Sensor Sub (DSS) and the core barrel Retrievable Memory Module (CB-RMM) — that interface downhole to provide near real-time engineering data. Phase I of this project is underway with the DSA-XM tool modifications. Circuit prototyping has been completed and tool modifications are on track for Leg 204 deployment. Phase II (CB-RMM) will involve extending the DSA-XM to retrieve data from the DSS and is pending available funding.

Legacy Project
Fourteen legacy documents summarizing tools, tool strings, and software packages developed and employed by ODP Logging Services have been completed to date and several others are under development. In addition, user manuals and operations handbooks are being updated.

RAB Coring Project
This project is a joint effort among ODP Logging, Schlumberger, and TAMU to provide limited coring capabilities during RAB tool deployments. It is one component of the DOE Gas Hydrate program that was awarded to JOI for Leg 204 and other ODP activities. Tool design and assembly are on schedule and field testing is scheduled for June 14.

- **MANAGEMENT**

The revised FY 03 budget was submitted to JOI. The FY 04-07 Phase-out plan was revised and submitted to JOI (for NSF s 3/1/02 deadline). A summary of LDEO phase-out activities was also prepared for the ODP Director at JOI.

Saneatsu Saito resigned his position as Chief Scientist in the ORI logging group to work full-time for JAMSTEC. He was replaced by Yasuyuki Nakamura effective April 1.

At the January ODP managers meeting, JOI and the operators agreed on a policy whereby ODP representatives could attend specific iSAS meetings as invited guests. Under this policy, panel chairs would request approval for each meeting guest from the iSAS Office and the operators.

II. STANDARD LOGGING OPERATIONS

Leg 200 H2O
The primary objective of Leg 200 was to drill a reentry hole within 2 km of the Hawaii-2 observatory (H2O) junction box for the installation of a borehole seismometer. Logging operations were conducted in Hole 1224F. The character of the basement interval is well imaged by the logs, identifying a thick basalt flow overlying low-velocity pillows and breccias. This borehole information will assist in planning for future seismometer emplacement.

The first ODP test run of the 3-component WST was planned for this leg to record the zero-offset vertical seismic profiles. When the WST-3 tool was in the drill pipe at a water depth of 1057 m, it was clamped to the pipe to conduct the test. Unfortunately, no source signals were generated or detected by the blast phone or the WST-3. Problems were identified and isolated with the air gun sources and the downhole telemetry; however, the experiment was terminated because limited time remained on site.

Leg 201 Peru Biosphere
Leg 201 was designed to sample the microbial biosphere of deep marine sediments and the ocean crust. Five holes were logged during Leg 201. Sites 1225 and 1226 in the Equatorial Pacific were aimed at open ocean locations composed mostly of biogenic sediments with low biological activity. Sites 1228 and 1229 on the Peru shelf consisted of primarily terrigenous sediments, extremely rich in organic material. Site 1230 was at

the transition between the accreted sediments and the continental shelf. Its objective was to investigate the differences in the biologic community associated with the presence of gas hydrate. The Triple Combo was run at all five sites. The FMS/Sonic was added to the logging program at Hole 1230A in order to use the velocity log and the FMS images to better characterize the hydrate deposit in this location.

At Sites 1225 and 1226, core recovery was over 90%, and core measurements of density and porosity agree very well with logs, making possible fine scale core-log integration. Because of the low recovery below 100 mbsf at Sites 1228 and 1229, logs were crucial in completing the sedimentary column. At Site 1230, logs were instrumental in compensating for the low recovery in some sections, but were also of primary importance in detecting hydrate-bearing intervals. Gas hydrate was found in two cores, and its presence was inferred in three other cores. The resistivity and FMS logs and the velocity data delineate several additional intervals where gas hydrate may also have been present.

Leg 202 SE Paleoceanography

Leg 202 was underway at the time of this report. Its objective is to assess climate and oceanographic changes in the southeast Pacific in the Neogene. To date, two holes have been logged. The lithology and physical property changes recorded in sediments at Sites 1238 and 1239 provide evidence for orbitally paced climate, upwelling, and paleoproductivity changes within the eastern reaches of the equatorial cold tongue throughout the last ~11 m.y. The downhole density and natural gamma ray logs match core measurements down to the sub-meter scale over the length of the holes at both sites. Using the downhole log records as a depth reference, the core measurements were mapped to equivalent log depths (ELD) using Sagan in order to more precisely identify the size and position of core breaks within the XCB section. Despite the high recovery, after mapping to the logs, the resulting gaps between cores (~1-3 m) are similar in scale to the dominant cycle length in the density and natural gamma-ray records. As a result, we are able to identify the cycles missing in core records, improving the prospects for developing an orbitally tuned age model based on sediment physical properties.

III. SPECIALTY TOOLS AND ENGINEERING DEVELOPMENTS

Drillstring Acceleration Tool Project

The DSA was ruggedized for use with the Fugro FPC (HYACINTH). All modifications were completed in time for the Leg 201 deployments. A modified tool (DSA-XM) will be deployed during Leg 204 (see DMS below) with both HYACINTH and ODP core barrels.

Drillstring Measurements System (DMS)

The Drillstring Measurement System (DMS) project consists of two collaboratively engineered devices — the Downhole Sensor Sub (DSS) and the core barrel Retrievable Memory Module (CB-RMM) — that interface downhole to exchange data and provide near real-time engineering data. The first phase of this project involves the modification

of the DSA. The tool will be fitted with non-volatile memory that can be removed from the tool and placed in a reader attached to a desktop PC. The tool, renamed DSA-XM, will be deployed on Leg 204. The modifications will ensure that acquired data will be stored despite any potential loss of tool power. In addition, the memory configuration change will allow for much faster data transfer rates and thus increased tool turn-around time. To date, the circuit prototyping has been completed and the modifications are on track for the Leg 204 deployment. The budget for this first stage of development is $8,658. Phase II of this project (CB-RMM) will involve extending the DSA-XM to retrieve data from the DSS. The budget for the second stage of the project ($41,342) is pending available funding.

Legacy Project
Collection of digital and paper copies of drawings and schematics continued. Fourteen legacy documents summarizing tools, tool strings, and software packages developed and employed by ODP Logging Services have been completed to date and several others are under development. User manuals for the TAP and DSA tools are being updated, as well as the operations handbook for Logging Staff Scientists.

RAB Coring Project
This project is a joint effort among ODP Logging Services, Schlumberger, and Texas A&M to provide limited coring capabilities during RAB tool deployments. Recent advances in battery technology have provided an opportunity to reformat the internal design for an 8-inch RAB tool. By placing reduced size batteries in the drill collar wall, a small diameter core barrel can pass through the RAB, and thus allow limited coring while making geophysical logging measurements. Schlumberger is redesigning the RAB tool. TAMU is providing the MDCB coring apparatus. The effort is one component of the DOE Gas Hydrate program that was awarded to JOI (F. Rack) for Leg 204 and other ODP activities. Tool design and assembly are on schedule and field testing is scheduled for June 14 at the Schlumberger test facilities in Texas.

High Resolution Depth Counter
The new depth counter was installed and tested on the drillship in San Diego during the Leg 201 port call. The system is working as designed and should improve the depth resolution of high-resolution logging tools, such as the Multisensor Gamma Tool (MGT).

HYACE/HYACINTH
The DSA was successfully run with the Fugro Pressure Core sampler (FPC) on each of the seven pressure core deployments during Leg 201. The data acquired by the DSA was initially processed by shipboard personnel and has since been delivered to Fugro engineers in the Netherlands for characterization of the FPC drilling performance. The DSA worked flawlessly with the FPC and the data will be used to improve the FPC design. The FPC and DSA will be deployed on Leg 204 and the results compared with those from Leg 201

TAP Tool Replacement
Machining of parts to replace the TAP tool lost on Leg 194 has been completed. PC boards, primary sensors have been purchased and assembled. Anticipated completion date for the TAP tool replacement project is Q3 FY 02.

IV. SHIPBOARD LOG ANALYSIS

CLIP (Splicer/Sagan)
ODP Logging Services personnel have successfully demonstrated the use of Splicer and Sagan over a Unix network using a Mac OS X workstation with an X-windows emulator. Instructions for running the software in this configuration are available on the CLIP web page (http://www.ldeo.columbia.edu/BRG/ODP/ODP/CLIP/clip.html). This will allow users who have access to a Unix network but do not have a Unix workstation, to make use of CLIP software from their desktop.

V. SHOREBASED LOG ANALYSIS

The following holes were processed and prepared for inclusion in the database:

ODP Conventional Date
Leg 201 - Holes 1225A, 1226B, 1228A, 1229A, 1230A

FMS Processing
Leg 199 - Holes 1218A, 1219A
Leg 200 - Hole 1224F
Leg 201 - Hole 1230A

Temperature Processing
Leg 195 - Hole 1201D

Training and Visitors
Andre Rousseau (Universite Bordeaux — France) visited Aachen to discuss sonic logs in basement sections.

VI. DATABASE

The ODP Log Database has been updated through Leg 201 including Schlumberger original and processed data (conventional, geochemical, and FMS), specialty tools (borehole televiewer, multi-channel sonic, and temperature), borehole images, and sonic waveforms.

Historical Data Migration
The review of all ODP proprietary data transferred to Unix was completed in January. The table of contents and complete inventory were also prepared.

Detailed documentation was prepared to accompany backup tar tapes of processed data currently available online through the ODP Logging website. These processed data files will data be sent to NGDC for archiving.

Post Cruise Distribution of Log Data
The Leg 193 and 194 Data CDs have been completed and duplicated. The Leg 196 Data CD was completed and sent out for duplication in early May.

VII. PUBLICATIONS AND REPORTS

Gaillot, P. and Rea, B., Leg 199: Paleogene equatorial transect. Downhole Measurements, Leg 199 Initial Reports, ODP - TAMU, 2002.

Haggas, S. L., Brewer, T. S. and Harvey, P. K., Architecture of the volcanic layer from the Costa Rica Rift, constraints from core-log integration, Journal of Geophysical Research 107 (B1) 2002.

6.5.1 JOIDES EXCOM Public Affairs Subcommittee

JOI staff continue to work with the JOIDES Office to solicit, edit and layout contributions to Greatest Hits, Volume 2 as requested by EXCOM. After an international call for submissions, a preliminary review process occurred. Those selected were edited to better reach the target audience, which includes policymakers and members of the press. Completed hits are available on the JOI website at <http://joiscience.org/Greatesthits2/>. After an international review process, a smaller selection of hits will be published in hard copy.

As a joint ODP-USSSP activity, plans are underway for port call activities in San Francisco and San Diego. Currently scheduled events for San Francisco (July 8-12) include a press conference and tour, VIP tour and reception, teacher tours, student tours and activities, and general and university student tours. A tent with ODP materials, science posters, and hands-on education materials will be outside the JR to allow the general public to learn more about the program. Similar events are being planned for San Diego (September 6-10) with the help of Scripps. This port call will likely focus on the history of ocean drilling.

ODP and IODP were represented at the 2002 Spring American Geophysical Union meeting through a booth and by a public affairs presence in the press room.

JOI/USSSP staff represented ODP in a "Ocean Technology Fair," part of a week-long event on Capitol Hill to celebrate World Oceans Day in early June. This event showcased various types of ocean research to policymakers, scientists, and businesses.

JOI staff have continued to inform members of press of ODP activities through press releases, ship tours, and information requests. A press release about Leg 199 sparked stories in Sea Technology, Oceanspace, Offshore Magazine, and Quadnet. Leg 201 has been featured in Oceanspace, Science, and updates from the National Science Foundation. Press releases on Legs 200 and 203 were released after this report was submitted.

JOI is working with TAMU to allow interested members of the media to visit the JR during Leg 204, sparking numerous stories. In addition, JOI staff have answered a variety of queries from the media about the program by providing information, slides, and video footage.

JOI carried out EXCOM Motion 02-1-3 to work with JAMSTEC and ECORD/JEODI to develop a transition plan for public affairs for the period 2002-2004. The plan will be presented at the meeting in Granada.

6.5.2 Approval of the Charge for PEC VI

(From Executive Committee minutes, Santa Cruz)

5.4 PEC VI
Harrison introduced the topic regarding the next Performance Evaluation Committee PEC VI). It is a responsibility of EXCOM to help in the preparation of the PEC VI mandate and Harrison suggested that a charge should be formulated at this meeting and reviewed at the next meeting in Granada. EXCOM should compile a list of items for inclusion in the PEC VI activity proposal. Harrison invited suggestions for the proposed activities of PEC VI and Malfait suggested that a primary task would be to examine the implementation of the Phase-out activities including the legacy and that the timing of various future events was important. He added that the status of the phase-out should be included because international members of the PEC VI could then have an input into the phase-out process even though it is a purely US funded operation. Pisias noted that the majority of these activities would occur in 2004 so the PEC VI should be started as soon as possible to be useful. Falvey reminded the committee of the European concerns regarding the PEC V and referred to a consensus from EXCOM meeting in College Station in 2000. It was suggested that maybe the PEC could start discussions or deliberations at the beginning of the fiscal year, possibly in Oct 2003 so that it could report back to JOI in the first quarter, i.e. early 2004 in order to be useful in terms of implementing the phase down. Falvey stated that at the time at which the PEC V reported at the EXCOM meeting in College Station 2000, there had been concern about the activities and subsequent report of the PEC V, so in setting up the PEC VI could it be ensured that those concerns are at least noted and that some action is taken to correct the basis of those concerns. Harrison recommended that PEC VI should start at the beginning of the fiscal year 2004 and with EXCOM s permission he would put together a subcommittee of himself, Beiersdorf, and Tokuyama to write a formal terms of reference in collaboration with NSF. Malfait clarified that this would also be in collaboration with JOI, as they were the ones who conducted the actual review. Harrison affirmed that this was the intention.

SIXTH ODP PERFORMANCE EVALUATION COMMITTEE

TERMS OF REFERENCE
(Revised, 5/7/2002)

Terms of Reference for the evaluation will embody the following general procedures and criteria.

(1) The committee will consist of international experts in the fields of science, engineering and management to be appointed by the President of JOI in consultation with NSF, the JOI Board of Governors, and JOIDES. An eminent scientist who should be knowledgeable about ODP, but not currently active in the program should chair the committee.

(2) The committee is charged with addressing the following specific issues, as well as other items considered important by the committee.

- The committee should assess to what extent the goals set up in the Long Range Plan have been achieved.
- The committee should examine all aspects of the phase out program.
- The committee should look at all aspects of the phase out as it impacts the commencement of the new IODP drilling program.
- The committee should assess provisions to present and preserve the legacy of ODP. This should include the legacy of cores and core repositories, the legacy of tools and techniques, the legacy of databases and the scientific legacy. Since the science will not be completed for several years after the formal end of ODP, it is necessary to ensure that adequate plans are in place for carrying out this task until the end of the program in the absence of an international oversight group.
- The committee should assess the effectiveness of the JOIDES scientific advice structure, which was changed in the middle of ODP on the advice of a previous PEC, to make sure that it is an appropriate model for the IODP, and if not, suggest changes.
-

These individual tasks are not separate. For instance, there is a great deal of connection between the second and third tasks.

(3) The President of JOI Inc. will brief the committee in advance of any scheduled performance evaluation.

(4) The committee will decide its own interview process. It is expected that the committee will visit JOI Headquarters in Washington DC, and the main subcontractors at TAMU and LDEO. The committee should also visit and interview some members of the past JOIDES advisory structure and the ODP community, taking special care to include non-US personnel in their formal interview sessions. In connection with interviews, the evaluation committee should explore the views of persons interviewed regarding ODP legacy issues and how the transition into the new program will affect their activity.

(5) The committee will transmit in writing to the subcontractor being evaluated the scope and procedures of evaluation, together with any questions to be answered. Copies of such correspondence will be furnished to the President of JOI who will inform the Board of Governors.

(6) After completion of each evaluation, the Chairman of the PEC will discuss the committee's findings with the senior official of the subcontractor and/or the subcontractor's staff, as mutually agreed. The contents of this discussion

shall be communicated to the President of JOI, who shall inform the Board of Governors.

(7) Within two months of completion of site visits, the Chairman of the PEC shall submit the Performance Evaluation Report to the President of JOI. The report shall consist of a descriptive section outlining activities, a section dealing with observations and impressions, and a section on conclusions and recommendations. The report shall be accompanied by an executive summary.

(8) The report will be transmitted to the subcontractors with a request for written comments, including plans for any action required. The President of JOI, after having received the subcontractor s comments and plans, will arrange with the Chairman of the PEC to present the final report and implementation recommendations to the Board of Governors. The President will then transmit a copy of the report and implementation plans to NSF. This should occur within two months after receipt of the report from the Performance Evaluation Committee. Those recommendations requiring consultation between JOI and NSF will be reviewed by these organizations prior to implementing action.

(9) Since there will be no international oversight group in existence during the operation of PEC VI it is especially important that the committee seek input from the non-US drilling community, which should include visiting some of the supporting countries to conduct interviews.

(10) The foregoing procedures for performance evaluation will be refined and/or modified as experience is gained. The ultimate objective is to achieve a reliable and effective evaluation system that will best serve the international scientific community, JOI, NSF, and the other non-US agencies that have helped to fund the ODP over the past two decades.

7. Relationships with Other Organizations

7.1 Post ODP prospects for the *JOIDES Resolution*

At this time JOI has nothing to report.

8. IODP Planning

8.2 iPC Activities

Interim Planning Committee Report
Results Following from the iPC Meeting
Yokohama, Japan, 20-22 March 2002

Developing the IODP

New Advisory Panels

I.

Interim Pollution Prevention and Safety Panel (iPPSP)

1. Membership of iPPSP approved with the advice and consent of iPPSP Chair (Barry Katz).

The first Meeting of iPPSP is scheduled for 11-12 June 2002, overlapping with meeting of the JOIDES PPSP. Panel will review mandate and draft document Recommendations of iPPSP Roles, Responsibilities, Requirements, Review Process, and Timelines for Riser Drilling."

Interim Technical Advice Panel (iTAP)

II. Mandate for the iTAP approved (Attachment 1)
III. Chair of iTAP (Dr. Kathryn Moran) appointed
IV. Ten members of iTAP appointed (Attachment 1; nominations for other members await first iTAP meeting)
V. The first meeting of iTAP is scheduled for 8-10 July 2002, overlapping with the JOIDES TEDCOM meeting

Interim Industrial Liaison Panel (iILP)

- Mandate for the iILP approved (Attachment 2)
- Co-Chairs of iILP appointed (Dr. Harry Doust, Vrije Universiteit; and Dr. Allan Huffman, Conoco Inc.)
- Nominations for membership received and await final selection.
- The first meeting of the iILP has not been scheduled

Industry Brochure

The information brochure Opportunities for Scientific and Industry Cooperation , to be used as an introduction to the IODP Initial Science Plan for industry scientists, engineers, and managers, was approved by the iPC.

The Guide to IODP

The iPC discussed at length the nature of complex drilling programs (those involving more than one platform and/or more than one leg of drilling), how they should be developed, how they should be reviewed, and how they might be executed. These discussions will continue and results will be incorporated in a Guide to IODP being drafted by an iPC working group (Suyehiro and Austin).

iSAS Panel Recommendations

Interim Scientific Measurements Panel (iSciMP).

- The iPC received recommendations from the iSciMP regarding the use of digital images for core archiving purposes and the maintenance of Micropaleontological Reference Centers.
- The iSciMP will address the issue of IODP sample and data distribution policy at their next meeting.
- The second meeting of the iSciMP is scheduled for 17-19 June, 2002

Interim Site Survey Panel (iSSP)

(1) The iSSP recommended a two-tiered approach to site survey requirements for riser-based drilling, involving both regional surveys for scientific purposes and general site location, and more detailed surveys for safety purposes and specific site location.

(2) Upon the suggestion of the iSSP, iPC requests that the Panel undertake a thorough evaluation of the requirements and procedures of an IODP data bank.

(3) The iPC approved the nomination of Andr Droxler as the new co-chair of iSSP.

(4) The second meeting of the iSSP is scheduled for 22-24 July 2002.

<u>IODP Proposals</u>

Grouping of Proposals

The iPC reviewed the five proposals passed forward by the iSSEPs to the iPC. Of these one was considered ready to be ranked for IODP drilling, one required minor revision before being ready to rank; and three needed to address substantive questions before being ranked.

Ranking of Mission Specific Platform (MSP) Proposals

The iPC discussed the IWG request that in August 2002 they rank (MSP) proposals that are passed to the iPC from the iSSEPs. It was decided that in this ranking process iPC would adopt the JOIDES conflict-of-interest rules.

Attachment 1

A. interim Technology Advice Panel (iTAP)

A.1 General Purpose: The interim Technology Advice Panel (iTAP) will advise the iPC and, through the iPC, the IWG (and the management office) on matters related to the technological developments necessary to meet the scientific objectives of the IODP Initial Science Plan.

A.2 Mandate: The iTAP will identify long-term (2-5 year lead time) technical needs and recommend ways to meet those needs. Appropriate topics of concern may include:

1 Advice and recommendations on performance requirements for specific technological needs.

2 Assessment of whether commercial off-the-shelf technology can most optimally meet those needs or whether they require research and development within IODP.

3 Recommendations concerning the appropriate mode for pursuing such research and development (i.e., through IODP, universities, industry, or joint ventures).

4 Advice and recommendations on the process and procedures for developing and evaluating program contracts in support of technical design and innovation.

5 Regular review of the progress made by iSAS and the science community in planning for the technological needs of IODP.

A.3 Meetings: The iTAP should meet twice per year or as required and approved by the iPC co-chairs. The iTAP may hold its meetings separately or in conjunction with the iSciMP when appropriate.

A.4 Membership: The iTAP will consist of fifteen to eighteen members, with a nominal term of three to five years for individual members. Each IWG member may name one representative to the iTAP and nominate other candidates for membership. The iPC will select and approve all other iTAP members from the additional nominees based on the expertise needed on the panel. Members of iTAP should specialize in the fields of marine operations on a variety of platforms, down-hole logging and instrumentation, drilling technology (including mining technology and drilling under extreme conditions), geotechnics and other disciplines as necessary. To meet the need for added breadth of expertise and the receipt of technical advice in a timely manner, the iTAP may recommend the establishment of working groups to address specific technological issues.

A.5 Liaisons: To ensure that iTAP members stay fully apprised of the scientific objectives of the IODP as well as the progress of the scientific program, the iPC Co-chairs or their designates will brief the iTAP at least once per year on the status of the science program. In addition, liaisons from the operators, the management office, the interim Industrial Liaison Panel, the data centers and other cooperating scientific programs may regularly attend iTAP meetings. The iTAP Chair should attend iSSEPs meetings as a liaison.

A.6 Chair: The iPC will appoint the iTAP Chair.

ITAP Members as of May 2002

Yusai Arai (Japan)
Dave Huey (US)
Masahiro Kamata (Japan)
Vincent Maury (France)
Kate Moran (US)
Frank Schuh (US)
Alister Skinner[1] (UK)
Axel Sperber[1] (Germany)
Sigmund Stokka[1] (Norway)
Brian Taylor[1] (Canada)

[1] Also a member of TEDCOM

Attachment 2

B. Interim Industrial Liaison Panel (iILP)

B.1 General Purpose: To facilitate ongoing communication and cooperative scientific activities between IODP and selected industries, with the goal of benefiting IODP science and technology and maximizing economic benefits from sharing resources, such as drilling of sites for shared scientific and technical goals, development of joint drilling/sampling technologies, and the development of improved downhole measurement/observatory capabilities. Industrial sectors of interest include oil & gas companies (e.g., offshore deepwater technology, petroleum geology, and engineering), mining (e.g., understanding potential economic targets), microbiology (e.g, development of new enzymes, etc.), insurance industry (e.g., hazards and climate predictions) and research and development organizations in these fields.

B.2 Mandate: The iILP will:
1. Develop effective links between academic and industry scientists with mutual research and technical/engineering interests,
2. Identify barriers to industry participation in IODP and recommend solutions for overcoming these barriers,
3. Develop mechanisms for sharing industry data/expertise/resources between IODP and industry scientists,
4. Act as the liaison group for IODP to industry and selected industry associations, and promote IODP educational and outreach activities within selected industry professional organizations,
5. Assist with the identification of scientists and engineers from industry to serve on panels, committees and working groups of IODP,
6. Define industrial priority research within the IODP context and facilitate communication and cooperative scientific and technical development activities between IODP and industry,
7. Assist iPC in the establishment of interim Detailed Planning Groups for complex multiple-platform, multiple-leg drilling programs and/or interim Program Planning Groups as needed.

B.3 Meetings: The iILP should meet twice per year. The iILP may hold its meetings separately or in conjunction with other iSAS panels or professional societies as appropriate.

B.4 Membership.
The iILP will consist of 15 members representing as many IWG member nations as possible to maintain reasonable size and balance of expertise and research interests, with an ideal goal of about two thirds of the members from industry and one third from academia. Nominations will be solicited from the JOIDES and OD21 science advisory structures, industry colleagues, and national ODP offices. The iPC Co-chairs will consult the iILP Chair and recommend candidates for membership as needed. Academic iILP members should have experience in scientific ocean drilling and

scientific expertise related to industry interests or else an active involvement in academic/industrial collaborations. The iPC will approve the iILP membership.

B.5 Liaisons: To ensure that iILP members stay fully apprised of the scientific objectives of the IODP as well as the progress of the scientific programs, the iPC Co-chairs or their designates will brief the iILP at least once per year on the status of the science program. In addition, the iILP should establish liaisons with the iSSEPs and the iPC.

B.6 Chair: The iPC will appoint the iILP Chair.

8.5 iSAS Office Report

Current Activities of the iSAS Office

➢ Drilling Proposals
- 2nd iSAS deadline: **1st April, 2002**
  - ✧ **7** new proposals and **25** updated or revised proposals
  - ✧ Transferred proposals: **67**
- iSSEPs evaluate: **32** proposals (June 2002@Santa Cruz, CA, USA)
- Next dead line: **1st October, 2002**

➢ Committees and Panels Meetings
- **iPC**
  - 1st meeting: Portland, Oregon USA, 29-30 August 2001 (w/SCICOM)
  - 2nd meeting: Yokohama, Japan, 20-22 March 2002 (w/SCICOM)
  - 3rd meeting: Ghent, Belgium, 27-29 August 2002 (w/SCICOM)
- **iSSEPs**
  - 1st meeting: Yokosuka, Japan, 14-17 November 2001 (w/SSEPs)
  - 2nd meeting: Santa Cruz, California, USA, 6-9 June 2002
- **iSciMP**
  - 1st meeting: Honolulu, Hawaii USA, 17-19 December 2001 (w/SciMP)
  - 2nd meeting: College Station, Texas, USA, 17-19 June 2002 (w/SciMP)
- **iSSP**
  - 1st meeting: Beijing, China, 25-27 February 2002
  - 2nd meeting: Palisades, NY, USA, 22-24 July 2002
- **iPPSP**
  - 1st meeting: Barcelona, Spain, 11-13 June 2002 (w/PPSP)
- **iTAP**
  - 1st meeting: San Francisco, California, USA, 8-10 July 2002 (w/TEDCOM)

100

Active Proposals statistics

	Transferred from JOIDES/ODP	Newly submitted Oct. 1st 2001 deadline	Newly submitted Apr. 1st 2002 deadline	Total
Proposal Number	67	11	7	85
iSSEPs: Nov. 2001	11	11		22
iPC: Mar. 2002	5			5
iSSEPs: Jun. 2002	22*	3**	7***	32

* including five MSP proposals (# 519, 533, 548, 564, 581)
** including two MSP proposals (# 602, 610)
*** including three MSP proposals (# 615, 616, 617)

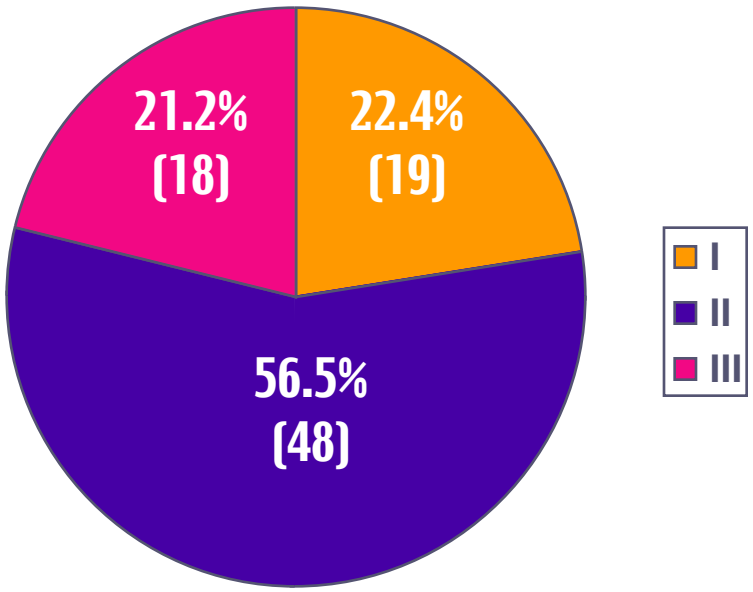
Lead Proponents by Country

(as of 1st April 2002)

Australia	2
Belgium	1
Canada	4
France	4
Germany	7
Ireland	1
Japan	13
The Netherlands	1
New Zealand	2
Norway	2
South Korea	1
Sweden	1
United Kingdom	1
United States	45
Total	85

Three Broad Scientific Themes for IODP Initial Science Plan

I: The deep biosphere and the subseafloor ocean
II: Environmental change, processes and effects
III: Solid earth cycles and geodynamics



Total Proposal Number: 85

Active Proposal List

	Proposal #	Short Title	Theme	Lead Proponent
1	455-Rev3	Laurentide Ice Sheet Outlets (LISO)	2	Piper
2	477-Full2	Okhotsk/Bering Plio-Pleistocene	2	Takahashi
3	478-Full4	Eastern Nankai Subduction	3	Tokuyama
4	482-Full3	Wilkes Land Margin	2	Escutia
5	489-Full3	Ross Continental Shelf	2	Barrett
6	491-Full3	Cretaceous S. Atlantic Accretion	3	Hinz
7	503-Full2	Weddell Basin	2	Jokat
8	505-Full4	Mariana Convergent Margin	1	Fryer
9	512-Full2	Oceanic Core Complex	3	Blackman
10	513-Full2	Scott Plateau Paleoceanography	2	Opdyke
11	514-Full3	Maldives Sea Level	2	Droxler
12	515-Full	Black + Marmara Seas Sediments	2	Flood
13	519-Full2	South Pacific Sea Level	2	Camoin
14	520-Full3	Kyushu-Palau Ridge	3	Ohara
15	521-Full5	Indus Fan	2	Clift
16	531-Pre2	Max Spreading Rate Core Complex	3	Snow
17	532-Full	Kane Megamullion	3	Tucholke
18	533-Full3	Arctic _ Lomonosov Ridge	2	Backman
19	535-Full2	735B Deep	3	Dick
20	537-Full4	Drilling Proto-Seismogenic zone	3	von Huene
21	539-Full2	Blake Ridge Gas Hydrates	1	Holbrook
22	541-Full	Chilean Fjord Sediments	2	Anderson
23	542-Pre	Hikurangi Plateau LIP (SW Pacific)	3	Mortimer
24	543-Full2	CORK in Hole 642E	2	Harris
25	545-Full2	Juan de Fuca Flank Hydrogeology	1	Fisher
26	547-Full3	Oceanic subsurface biosphere (OSB)	1	Fisk
27	548-Full2	Chixculub K-T Impact Crater	2	Morgan
28	549-Full3	Northern Arabian Sea Monsoon	2	von Rad
29	550-Full	Carbonate Clinoforms, NW Aust/.	2	Bradshaw

30	551-Full	Hess Deep Plutonic Crust	3	Gillis
31	552-Full3	Bengal Fan	2	France-Lanord
32	553-Full	Cascadia Margin Hydrates	1	Hyndman
33	554-Full4	Gulf of Mexico Hydrates	1	Kennicutt
34	555-Full3	Continental Collision, Crete	1	Kopf
35	556-Pre	Malvinas Confluence	2	Wefer
36	557-Full2	Storegga Slide Gas Hydrates	1	Andreassen
37	560-Full	Return to Woodlark Basin 1108	3	Taylor
38	561-Full3	Caribbean Large Igneous Province	3	Duncan
39	562-Full2	J Anomaly Ridge Transect	2	Norris
40	564-Full	New Jersey Shallow Shelf	2	Miller
41	565-Pre	Eucla Carbonate Platform	1	Feary
42	566-Full3	Nankai Trough Gas Hydrates	1	Ashi
43	567-Full	South Pacific Paleogene	2	Rea
44	568-Pre	Northern Nicaragua Rise	2	Droxler
45	569-Full	CO2 Sequestration	1	Goldberg
46	570-Full	East Pacific Rise Crust	3	Haymon
47	572-Full3	Late Neogene-Quaternary climate records	2	Channell
48	573-Full2	Porcupine Basin Carbonate Mounds	1	Henriet
49	574-Full	Rainbow Hydrothermal Field, Mid Atlantic Ridge	1	Fouquet
50	575-Full3	Gulf of Aden African Climate	2	deMenocal
51	576-Pre2	S. Barbados Accretionary Prism	1	Deville
52	578-Pre	Marmara Sea Gateway	2	Hiscott
53	579-Pre	Pacific Climate Variability - Skan Bay	2	Anderson
54	581-Full2	Late Pleistocence Coralgal Banks	2	Droxler
55	584-Full2	TAG II Hydrothermal	1	Rona
56	585-Full	Murray Ridge Deep Drilling	2	Clift
57	586-Full2	Hawaiian Coral Reefs and Basalts	2	Rubenstone
58	587-Pre	Gulf of Mexico Mini-Basin	2	Nelson
59	588-Full	Arctic-Atlantic Cretaceous Gateway	2	Gradstein
60	589-Full3	Gulf of Mexico Overpressures	1	Flemings
61	590-Pre	Coop. JOIDES-Industry GoMex	3	Armentrout

62	591-Full	Conical/Desmos Hyd., PNG	1	Herzig
63	592-Pre2	Shallow Water Dogger Bank	2	Andriessen
64	593-Full	Gulf of Mex. Neogene Climate	2	Flower
65	595-Full3	Indus Fan Riser + Non-Riser	2	Clift
66	596-Pre2	Rockall-Hatton Cretaceous Hotspot	3	Morrissey
67	597-Full	S. Alaska High-resolution Sediments	2	Jaeger
68	600-Pre	Canterbury Basin	2	Fulthorpe
69	601-Pre	Iheya Ridge	1	Takai
70	602-Pre2	Tropical Epeiric Seas	2	Edgar
71	603-Pre	Nankai Trough	3	Kimura
72	604-Pre	Ulleung Basin	2	Lee
73	605-Pre	Asian monsoon	2	Tada
74	606-Pre	Mesozoic Greenhouse	2	Nishi
75	607-Full	New Jersey Slope	1	Dugan
76	608-Pre	NW Pacific/ Cretaceous Greenhouse	2	Hasegawa
77	609-Pre	Himalaya-Bengal system	2	Spiess
78	610-Full2	W Florida Margin	2	Mallinson
79	611-Pre	Pacific Warm Pool	2	Stott
80	612-Pre	Geodynamo	3	Yamazaki
81	613-Pre	NW Pacific Margin Transect	2	Hoyanagi
82	614-Pre	Izu-Bonin Arc	3	Tamura
83	615-Pre	NW Pacific Coral Reefs	2	Matsuda
84	616-Pre	North Carolina Margin	2	Bralower
85	617-Pre	Hudson Bay and Strait	2	White

8.7 European initiative

Report from the European Consortium for Ocean Research Drilling
Compiled by Mary von Knorring

Since January 2002, the European organisations interested in the participation in IODP have focused on finalizing the organization of a European Consortium for Ocean Research Drilling (ECORD). The work has in part been carried out by representatives for the European funding agencies (ECORD interim Council) and in part by the EU Network JEODI.

Since the last EXCOM meeting, the ECORD interim Council has held two meetings (18 April in London and 3 June in Stockholm). In addition task groups have been set up for preparing documents for the interim Council. At the recent IWG meeting, IWG formally recognized ECORD as the consortium mechanism for providing IODP with Mission Specific Platforms. Following this, the ECORD interim Council has asked the current Lead Agencies to recognize ECORD's future role as a Lead Agency and the MSPs to be considered a core capability of IODP.


IWG Meeting, Stockholm, June 2002

Tasks for the ECOD Council have been agreed upon, as well as a set of principles for ECORD complementary to the IODP principles. Tasks for the European Science and Operations Committee (ESOC) have also been defined.

ECORD has prepared a call for expression of interest to become the European Management Agency (EMA) as well as European Science Operator (ESO). The call will close on September 10th, and it is anticipated that both agencies are operational before the end of the year 2002.

The Swedish Polar Research Secretariat, contracted by JOI, is currently working on the detailed planning for the ARMADA project, which will enable the Arctic drilling project on the Lomonosov Ridge. This will be one of the first Mission Specific Drilling operations carried out by ECORD in the framework of IODP. The drilling operation is planned to be carried out in August 2004.

So far, organizations from ten European countries have signed a Heads of Agreement for participation in a European consortium for IODP. Before the end of the year, additional signatures are anticipated from at least three present ODP members. Contacts have been made with a number of Eastern European countries about possibilities to join the ECORD. An ongoing dialogue is held with the European Commission in order to identify mechanisms in the new 6th Frame Work Program for funding the platform operation costs for MSPs.

Memoranda defining the individual European member organizations' and countries' participation in ECORD and also ECORD's participation in IODP are currently being prepared.

An oral report on advances by the JEODI network will be given in Granada.

8.8 U.S. Plans

IODP - U.S. Country Report — EXCOM, Granada Spain - June 2002

NSF and MEXT met at NSF May 16 and 17 in preparation for the IWG meeting in Stockholm, Sweden, June 4 - 5. Discussions included the Memorandum between MEXT and NSF Concerning Cooperation on IODP and the Memorandum between MEXT, NSF and other members of IODP. Significant progress has been made on the content of these draft documents.

Progress continues to be on track with the acquisition process for the assets (non-riser vessel, repositories, etc.) which NSF intends to make available for IODP and for non-riser operations to begin in early 2005. The Ocean Drilling Program (ODP) in the Division of Ocean Sciences (OCE) is fortunate to have acquired John Walter of NOAA as a visiting scientist/engineer to help with this process. John has experience with government contracting and ship acquisition.

As planning and preparations for U.S. participation in IODP go forward, discussions within the U.S. Congress concerning the NSF budget have been very positive. Members of the Science Committee for the House of Representatives has introduced legislation to place the National Science Foundation (NSF) on a track to double the agency's budget in five years.˚ The bill authorizes a 15 percent increase for NSF for each of the next three years. From these actions we are hopeful that when the budget bills are finally passed NSF will actually see a significant budgetary increase.

Based on the JOIDES Science Committee s (SCICOM) highest priority ranking of a proposal to drill on the Lomonosov Ridge, funds were approved in the FY2002 ODP Program Plan to begin the planning effort required to develope logistical and operational plans for Arctic drilling to the Lomonosov Ridge. Planning efforts by representatives of both ODP and the Joint European Ocean Drilling Initiative (JEODI) are now underway to mount a field program in 2004 under the auspices of IODP. In mid-February NSF approval was given to JOI to enter into a contract with the Swedish Polar Research Secretariat for Services to Develop and Implement Plans for an Ocean Drilling Expedition to the Lomonosov Ridge, Central Arctic Ocean. In March JOI briefed iPC and SCICOM on the progress for Arctic drilling (a Microsoft Powerpoint presentation can be downloaded from http://www.joiscience.org/arctic.ppt).

NSF fas received and is reviewing a five year Program Plan for the Ocean Drilling Program from JOI for the final year of operations (FY 2003) and the phase-out of contractor operations (2004 — 2007). This is in preparation to a request to the National Science Board for funding authorization during this five year period. As an important element of the proposed phase-down activities it is expected that the long-term responsibility for ODP scientific and physical assets will be transferred to appropriate

IODP contractors organizations as required during development and implementation of the IODP program.

The U.S. ODP Science Advisory Committee (USSAC) is sponsoring several workshops this year that bear on IODP. These include a workshop this June in Washington, D.C. to help to define the characteristics, essential elements, and tasks of a program that will foster and sustain the full range of research and educational activities needed for successful U.S. participation in the IODP.

A U.S. ODP Science Support Program (USSSP) hosted international workshop, will be held in late July, related to potential riser driller in Japan s Nankai trough. As explained in the words of the conveners the purpose of the workshops is: To explore and better define the scientific opportunities created by access to the seismogenic zone of a subduction megathrust... The conveners for this international workshop are Harold Tobin, Gaku Kimura, Hitoshi Mikada, Pierre Henry, Shuichi Kodaira. A venue has not yet been determined.

A third USSSP workshop/tutorial/short course is being planned for later this fall to help the U.S. scientific drilling community better understand riser drilling and the site development requirements for robust drilling programs. This will hopefully also stimulate the submission of proposals to conduct site surveys and regional geophysical studies that ultimately lead to scientific riser drilling.

9. ODP Legacy Plans

9.2 Technical Data Sheets

These summaries are posted on-line as follows:

LDEO URL: http:/www.ldeo.Columbia.edu/BRG/ODP/legacy.html
TAMU URL: http://www-odp.tamu.edu/publications/tnotes/tn31/INDEX.HTM

9.3 Publications Database

Citation Database: http://odp.georef.org/dbtw-wpd/qbeodp.htm The database is functional, and AGI is updating the citations on a regular basis. We are waiting for ISI to resolve one problem related to the download feature into bibliographic software, and TAMU plans to write a readme file. Once these two issues are finalized a request for review will be sent to a select group of representatives from the ODP member countries and the ODP member offices. Their feedback will be used to determine if any refinements are needed to the system, and after that the database will be released to the ODP community.

9.4 ODP's Greatest Hits

Status of Greatest Hits Volume 2 on May 7th 2002

Manuscripts received to date

Posted on web page	14
In final layout stage	7
Waiting for authors to sign off	5
In final editing stage	10
Rejected	2
Total	**38**

Contributions by Country

Australia	**2**
Canada	**1**
Germany	**2**
Japan	**3**
Norway	**1**
Portugal	**1**
Russia	**2**
Switzerland	**2**
U.K.	**7**
U.S.A.	**17**

9.6 SCICOM and SSEPs Suggestions

Joint SSEPs and iSSEPs Meeting
14-17 November 2001, Yokosuka, Japan

Legacy Discussions

On Wednesday, November 14, 2001, the four SSEPs (JOIDES and interim ISSEP and ESSEP) met in joint session to discuss SSEPs contributions to the ODP legacy. The discussion was led by JOIDES ISSEP chair Julie Morris, and followed the agenda discussed with SCICOM and iPC in August 2001. This first session covered the range of legacy activities the SSEPs wished to pursue, and emphasized those considered most important by the four panels (hereafter just called SSEPs). Paramount to the SSEPs was the matter of providing insight and guidance to the interim and future SSEPs, and providing input to iPC regarding time lines and protocols for IODP proposals, particularly those for large, multi-year and multi-leg projects (including riser and riserless drilling). As a result of this preliminary discussion, three working groups were formed to address: 1) SSEPs structure and procedures, chaired by iISSEP chair Hitoshi Mikada; 2) the SSEPs and PPGs, chaired by JOIDES and interim ESSEP members Liz Screaton and Juergen Thurow; and 3) The role of the SSEPs in long-term projects, chaired by JOIDES and interim ISSEP member Benoit Ildefonse.

On Thursday morning, November 15, 2001, the working groups met separately for approximately 2 hours. All SSEPs members attended working groups, selecting areas of their greatest expertise or concern. The chairs of the working groups then reported to the combined SSEPs in a wide ranging discussion for the rest of the morning. As JOIDES ISSEP chair only, with no proposal responsibilities, Morris synthesized the results of the SSEPs and working group discussions. This synthesis was presented to the joint SSEPs in their meeting on the morning of Saturday, November 17, 2001, leading to a consensus of opinion. The following is a series of recommendations, actions and issues that the SSEPs wish to bring to the attention of SCICOM and iPC.

SSEPs Legacy Discussions and Actions

iSSEPs Structure and Procedures (Hitoshi Mikada, chair)

- the SSEPs debated possible alternative panel structures, but concluded that the current 2-panel structure (E- and I-iSSEPs) should be used during the interim, and note the critical role of joint working groups in nurturing interdisciplinary proposals.

- recommend that Japan and the U.S. coordinate panel rotations during the interim to ensure necessary expertise on the panel through the rotation cycle, with coordination

with other member countries where feasible. iSSEP chairs should be consulted about expertise needed on panel.

- recommend that the iSAS office approve guest invitations to iSSEP meetings as deemed necessary by iSSEP chairs, to ensure necessary expertise

- will work with the iSAS office to increase time between proposal deadlines and panel meetings to ~6 weeks, to better allow iSSEP members to read proposals and prepare presentations for the large number of proposals coming through the system.

- iSSEPs have revised the proposal review form to allow clearer communication with proponents. The iSAS office has received copies of this new form.

- iSSEPs will consider new systems for grouping proposals and will determine whether or not to group all proposals transferred from ODP to the iSAS office, or a subset thereof. The iSSEP chairs will report to iPC after the spring iSSEP meeting.

- recognize that scientific assessment of proposals is the mandate for the iSSEPs, but note the need for greater technical expertise at panels to alert proponents to possible technical problems early in the review process. There is also a need for guidance on logging and operations matters during the interim, which cannot be provided by ODP contractors without concerns regarding conflict of interest. It would also be helpful to the program if technical panels receive early information about high priority technical developments required to advance the science. The SSEPs recommendations are that:

1. iSSEP liaison should attend the annual joint meeting of Technical Advisory Panel and iSciMP
2. liaison from TAP/iSciMP attend iSSEPs meetings

- to improve coordination with other scientific initiatives and organizations, the SSEPs recommend that the iSAS office add a small section to the proposal cover sheet that asks if a companion to the iODP proposal has been submitted to any other organization. If the answer is yes, the next question would ask for the name of the organization to which a companion proposal is or will be submitted, and the title of the proposal. If there is a companion proposal to the International Continental Drilling Program, for example, then iSSEP chairs can invite an ICDP watchdog to the SSEPs meeting. This would allow better coordinate between the two drilling programs at the proposal level as well as the iPC level.

- recommend that iSSP establish more consistent liaison with iSSEPs, ideally in the form of permanent liaison with 2-3 year terms. iSSEP and iSSP chairs should exchange watchdog assignments and panel reviews at the earliest opportunity following proposal submittal and panel meetings, respectively in order to facilitate effective communication.

SSEPs and PPGs (Liz Screaton and Juergen Thurow, chairs)

- urgently request SSEP chairs and PPG chairs to finalize outstanding PPG reports and post on web site for use in interim and IODP proposal preparation

- endorse an important role for PPGs in the future program, and believe that the interim is an important time to establish some PPGs to provide guidance early in IODP.

- recognize that the PPGs often have dual roles as both proponent group and advisory group, but consider the overlap manageable

- recommend that PPG minutes be posted on web site before iSAS office approves a request for a next PPG meeting

- recommend that PPG chairs report to SSEPs after final PPG meeting, rather than earlier in the PPG lifetime.

- recommend that PPG proposals may originate from the scientific community as well as iSSEPs, SCICOM and iPC. PPG proposals should include a brief description of the need for, focus of, and expected product from PPG to facilitate easy evaluation by iPC and the SSEPs

- believe that SSEP involvement in staffing PPG must occur early in process, and that knowledgeable SSEP liaison or chair should attend all PPG meetings, to better inform PPGs about their role in the advisory structure

- the iSSEPs will form a sub-committee to evaluate the proposal pressure relative to the Initial Science Plan to identify any gaps that might indicate the need for a PPG.

SSEPs and Long-term projects (Benoit Ildefonse, chair)

- iSSEPs already are receiving multi-leg, MSP and riser proposals. IODP guidelines to proponents for preparation and evaluation of such proposals must be established with all deliberate speed

- emphasize that any long-term MSP or riser programs require commitment to site surveys, technical developments, and science funding as well as drilling. A mechanism to ensure that these essential activities are funded and carried out in timely manner and integrated fashion during IODP must be developed. Development of such a mechanism is regarded as critical to the success of the future program

- iSSEPs recognize the need for a new proposal format for long term projects, and will make recommendations to iPC after the spring iSSEP meeting

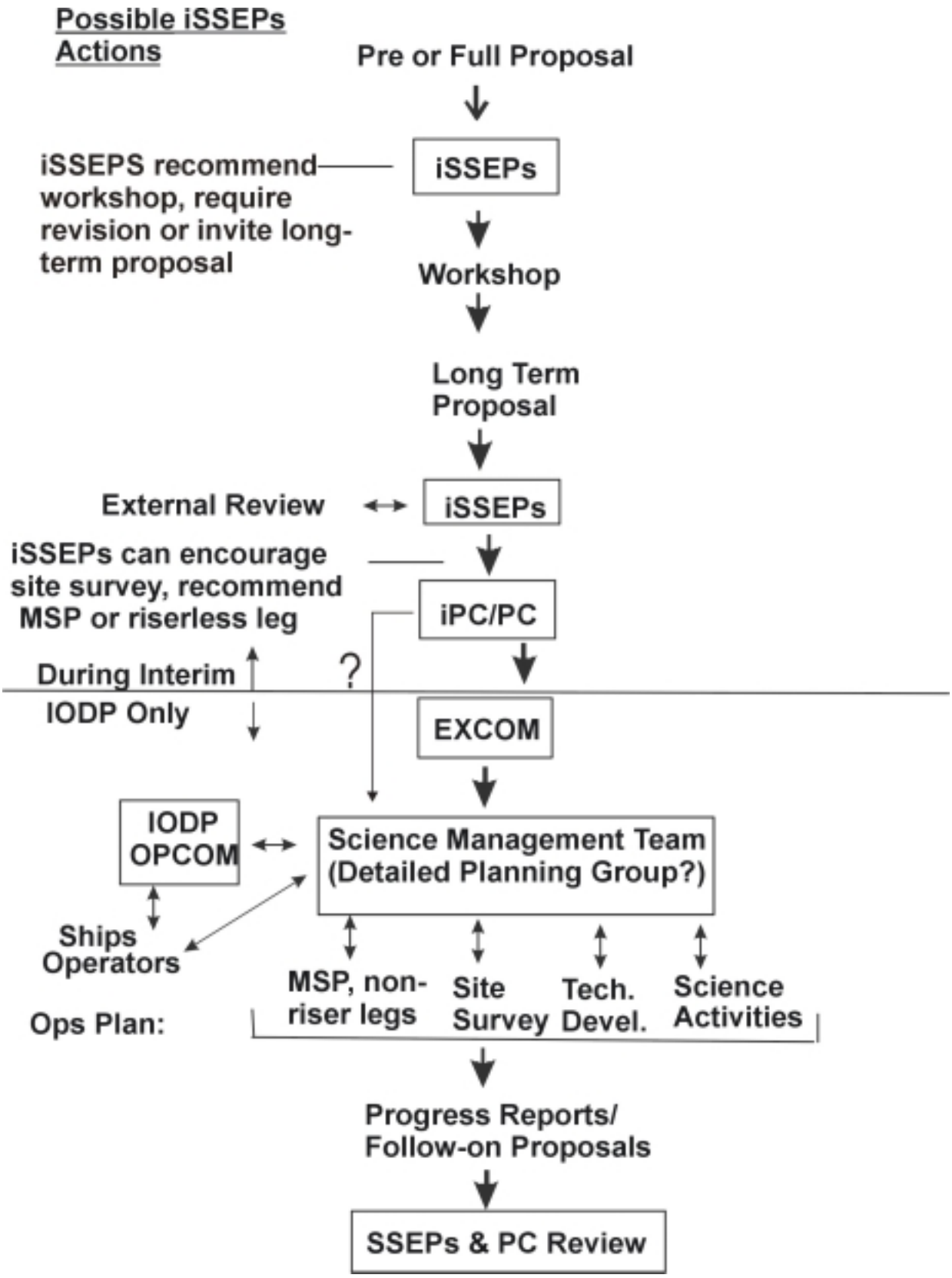
- recommend that the iSAS office annually forward to iPC proposals for long term projects, for information purposes and discussion.

- encourage workshops as part of the process necessary to develop a proposal for a long term project, to ensure maximum expertise and input, community support, and an open process. Some mechanism for funding such workshops, during the interim and in IODP must be established.

- the SSEPs attach a preliminary flowchart as a suggestion for the path that proposals for long-term projects might follow through the IODP structure, during and after the interim period, for iPC consideration. While certainly not intended to be a final recommendation, it does highlight some issues of importance to the iSSEPs, mentioned during the group discussions. For example:

* What is the optimal format for a proposal for a long-term project? A longer page limit? An additional introductory section that provides an overview of the entire project? A series of stand-alone proposals for individual legs?
* What constitutes a long term project? A series of thematically linked but geographically separate drilling legs? Geographically and thematically linked legs? A series of legs where each is dependent in part on the accomplishments of previous legs, not all of which may be competitive as a stand-alone proposal?
* Should IODP fund proposal development workshops, or should this be left to other funding agencies? If IODP, what is the mechanism for funding workshops during the interim?
* During the interim, and in the absence of an EXCOM equivalent, what is the mechanism for approving and funding any DPGs deemed necessary for timely progress in the development of multi-leg, MSP and riser drilling programs?
* When IODP makes a commitment to a long-term, multi-leg project, what is the mechanism for ensuring that other funding entities also make the commitment to site surveys, technical development and science support, critical to timely progress and success?
* What is the optimal structure of a DPG, and the terms of appointment and member rotation schedule necessary to provide planning over a 5-year time frame?
* Following one in a series of drilling legs, what is the appropriate way for the DPG/proponents to move forward? A new proposal that goes through the entire review process? A progress report?
* What is the appropriate mechanism within IODP for oversight of long term projects? Successive proposals that go to the SSEPs and proceed through normal channels? An oversight committee formed following DPG formation, perhaps including members from SSEPs, PC, TAP, SSP that reviews progress reports and either approves the next stage or requires panel review?

The SSEPs recognize that many of these issues are not directly within their purview. As scientists and panel members, however, they feel very strongly that these are important issues in need of resolution. The submission already of proposals for long-term multi-leg projects highlights the urgency of establishing guidelines for proponents and panel members.


Possible iSSEPs Actions
Pre or Full Proposal
iSSEPS recommend workshop, require revision or invite long-term proposal
iSSEPs
Workshop
Long Term Proposal
External Review
iSSEPs
iSSEPs can encourage site survey, recommend MSP or riserless leg
iPC/PC
During Interim
IODP Only
?
EXCOM
IODP OPCOM
Science Management Team (Detailed Planning Group?)
Ships Operators
Ops Plan:
MSP, non-riser legs
Site Survey
Tech. Devel.
Science Activities
Progress Reports/ Follow-on Proposals
SSEPs & PC Review

SSEPs and Legacy activities

- The SSEPs note that it is desirable to develop legacy activities that can also broaden IODP constituency and participation, which will be necessary to staff a program that includes MSP, riser and riserless drilling

- recognize and appreciate the educational and outreach aspects of a web-based Greatest Hits . However, the SSEPs respectfully note that 100-200 contributions are unlikely to all be Greatest . The SSEPs recommend professional preparation of a high quality printed brochure containing selected contributions for funding agencies. The iSSEPs are happy to provide recommendations as to which contributions are most noteworthy and appropriate for inclusion in a Greatest Hits volume, should JOI request such input.

- note that the Achievements and Opportunities volume overseen by SCICOM, could be a great vehicle for outreach and education of the general public if also published in a place such as Scientific American. Some panel members note that this kind of outreach would be very favorably regarded by their ODP/IODP organizations

- recommend that IODP build a web-accessible library of high quality downloadable figures for geoscience educators to use. Initially, such figures could come from the Achievements and Opportunities volume, JOI distinguished lectures, Leg highlights. Prominently tagged with the phrase figure provided courtesy of IODP such a library could be good advertisement as well as a valuable educational service.

- SSEPs members propose to undertake, as individuals, a range of legacy activities intended to maximize the impact of ODP on our scientific communities. These include review articles, special volumes, and synthesis workshops and volumes. Volunteered contributions are listed below; panel members are highlighted.

Review articles:
Chemistry of fluids in subduction zones, **Mike Mottl** and Miriam Kastner
Decollement structure and hydrology in accretionary prisms, **Harold Tobin** and Alex Maltman

Thematic volumes (journal publication recommended)
Asian Monsoons on Milankovitch and sub-Milankovitch Time Scales. Editors **Steve Clemens**, Wang and Prell, Marine Geology special volume, sponsored by JOI-USSSP and SCOR/Images

Synthesis workshops and publications:
Organic-rich sediments as paleoclimate indicators, **Juergen Thurow**, H. Jenkyns and T. Wagner

Workshop at the Geological Society of London, December, 2002, leading to thematic volume in the Journal Geol. Soc. London

Ocean-Continent Interactions in the East Asian Marginal Seas, AGU Chapman meeting, 11-14 November, 2002 in San Diego California, convened by **Peter Clift,** Dennis Hayes, and Pinxian Wang. AGU monograph to follow meeting. The marginal seas of the Asian continent form the transition between the world's largest continent and largest ocean and are major repositories of information on the interaction between the two within the tectonic, geologic and climatic spheres. This meeting aims to foster interactions between normally separate communities, such as tectonic and oceanographic workers. The meeting will be split into three thematic sections (1) regional tectonics and the forces that drive the opening of the basins, (2) the nature of the sedimentary fill and its interpretation, (3) climate-tectonic interactions with special reference to India-Asia orogenesis. For more information: http://www.whoi.edu/pclift/EAB.html

- The SSEPs recommend that iSAS/JOIDES websites establish a Legacy section that briefly describes, and where possible provides links to, legacy documents, workshops, and publications such as those included above

- recommend that iSAS/JOIDES websites include links to the wide range of science programs and initiatives that have ties to ocean drilling, along with a brief description of the connections between IODP and the science programs. Programs with which links would be desirable include:
Inter-Ridge: interdisciplinary studies of mid-ocean ridges, InterRidge is a multinational initiative to nurture international cooperation on ridge-related issues http://www.intridge.org.
MOMAR, long term MOnitoring of the Mid-Atlantic Ridge (next workshop summer 2002) http://triton.ori.u-tokyo.ac.jp/%7Eintridge/momar/report.htm
Earthscope
Neptune
DEOS
Images
MESH
CSEDI
Office of Naval Research
International Continental Drilling Program
MARGINS, with focus on active processes in margins and focus experiments on rifting, sediments from source to sink, the subduction factory and the seismogenic zone
Inter-MARGINS

11. SCICOM Report

JOIDES SCIENCE AND OPERATIONS COMMITTEES
19 - 20 March, 2002
Yokohama Institute for Earth Sciences
Japan Marine Science and Technology Center
Yokohama, Japan

MOTIONS and CONSENSUS ACTIONS

SCICOM Consensus 02-01-01: SCICOM approves the meeting agenda.

SCICOM Motion 02-01-02: SCICOM approves the minutes of its August 2001 meeting in Portland.

Mayer moved, Salisbury seconded, 13 in favor, none opposed, 1 abstention (Austin), 1 absent (Herzig).

SCICOM Consensus 02-01-03: SCICOM has considered SCIMP recommendation 01-2-03 concerning data archiving, database mirroring, and the formation of a data legacy working group. SCICOM agrees with SCIMP that maintaining the integrity of ODP data in perpetuity, and assuring future access to this resource, is essential to the ODP legacy. SCICOM would also like to be sure that a functional database system is transferred to IODP as seamlessly as possible.

SCICOM therefore recommends that SCIMP plan for formation of a data legacy working group, including an evaluation of what expertise is needed and available (both within and outside SCIMP) and what the working group mandate should be. Issues to be addressed by this working group may include identification of (a) critical archiving gaps with present data sets, (b) challenges associated with storage of metadata, and (c) problems that could be avoided during development of IODP data bases, policies, and storage procedures. We ask SCIMP to consult with the interim director of JOI, who has considered many of the relevant issues, and (informally) with appropriate iSAS panels as necessary, and to report back to SCICOM by August 2002 with a plan for formation of this working group as part of the broader issues of ODP legacy and ODP-IODP database transition.

SCICOM Consensus 02-01-04: SCICOM reaffirms the importance of all ODP samples as an integral part of the ODP legacy. Therefore, SCICOM requests that the Science Operator take all necessary steps to maintain the integrity of the entire ODP sample collection as the ODP phase-out approaches. This includes the thin section collection as noted in SCIMP recommendation 01-2-11. In addition, SCICOM endorses

SCIMP recommendation 01-2-9 encouraging host countries of Micropaleontological Reference Centers to underwrite costs of maintaining these centers.

SCICOM Consensus 02-01-05: SCICOM accepts the following SCIMP recommendations and applauds the efforts already made by the ODP Operators to address them:

SCIMP recommendation 01-2-01 concerning hard-drive support for digital core data
SCIMP recommendation 01-2-06 concerning the IESX Joint Pilot Study
SCIMP recommendation 01-2-07 concerning the legacy technical summary documents
SCIMP recommendation 01-2-08 concerning core resistivity measurements
SCIMP recommendation 01-2-12 susceptibility point measurement for AMST

In addition, SCICOM endorses SCIMP recommendation 01-2-04 concerning potential development of a high-resolution downhole magnetic susceptibility logging tool for ODP and IODP.

SCICOM Consensus 02-01-06: SCICOM accepts the Leg 210 contingency plans.

SCICOM Consensus 02-01-07: SCICOM records its approval and excitement at the progress being made by the joint JOI/JEODI effort toward implementing SCICOM s top-ranked proposal (Lomonosov Ridge, Arctic) as an IODP program.

SCICOM Consensus 02-01-08: SCICOM accepts Jamie Austin s invitation to host the March 2003 SCICOM/iPC meeting in Austin, Texas.

SCICOM Consensus 02-01-09: SCICOM expresses its great appreciation to Julie Morris for her extraordinary service as chair of ISSEP. ODP was fortunate to have the service of Julie s considerable talents at a particularly important time for the program. She worked not only to shepherd the last set of ODP proposals through the advisory process, but also helped lead the effort to plan for the IODP and to preserve the legacy of 17 years of ocean drilling. Julie, in partnership with Neil Lundberg, set an outstanding example of how to work cooperatively, collaboratively, and effectively across disciplines. She was always ready with thoughtful, clear, and insightful information about the proposals in her charge and about the concerns and desires of the SSEPs. It was a great pleasure for all of us to work with her and we look forward to her participation in the next phase of scientific ocean drilling.

They say Julie Morris lacks height,
But SCICOM doubts not her might.
At herding a SSEP,
She proved quite adept,
We ll all greatly miss her insight.

SCICOM Consensus 02-01-10: SCICOM thanks our hosts — Ishii-san and the ODP-Japan Office, Yamada-san and the OD21 Office — for the wonderful arrangements for the SCICOM/iPC meeting.

11.2 Proposal activity

APL-21 action:

On March 15, 2002, the JOIDES Office received APL-21, for Santa Barbara Basin coring for Investigating seismically-induced pore pressure generation that spawn tsunamogenic landslides. If approved, this could only be scheduled during summer of 2002, so an email review procedure was agreed upon at the SCICOM meeting. During the month following the SCICOM meeting, APL-21 was reviewed by the SSEPs. After assessing the SSEPs review and engaging in email discussion, SCICOM then approved the APL for possible scheduling on either Leg 203 or 204 by voting on the following question:

"Should APL-21 be provisionally scheduled on either Leg 203 or Leg 204, contingent on the following conditions:
1. At least 24 hours becomes available on the leg, either (a) because the JOIDES Resolution left port a full day early at the beginning of the leg, or (b) because at least a day was saved by completing the science program early and/or on the final leg transit.
2. Timely submission of full site survey data package to the ODP Data Bank, followed by satisfactory review by the PPSP at its June 11-12 meeting."

14 votes in favor, none opposed, 1 not entered