

International Ocean Discovery Program Sample, Data, and Obligations Policy & Implementation Guidelines

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Policy

The goal of this policy is to ensure open and transparent access to International Ocean Discovery Program (IODP), Integrated Ocean Drilling Program (IODP), Ocean Drilling Program (ODP), and Deep Sea Drilling Project (DSDP) samples and data for scientists, educators, museums, and outreach institutions. Recipients of samples and data incur obligations on their use and reporting of the science outcomes from research based on these samples or data. The use of all cores and samples are under the auspices of the IODP Curators and the Curatorial Advisory Board (CAB).

Specifically, IODP ensures:

- Availability of samples and data to Science Party members so they can fulfill the objectives of the drilling project and their responsibilities to IODP;
- Dissemination of the scientific findings of all IODP drilling projects/expeditions to gain maximum scientific and public exposure;
- Scientific community access to encourage scientific analyses over a wide range of research disciplines by providing samples;
- Preservation of core and cuttings material as an archive for future description and observations, nondestructive analyses, and sampling; and
- Support for education and outreach related to the drilling program by providing materials to educators, museums, and outreach institutions.

Policy Implementation Guidelines

1. Sample and Data Requesters

There are 3 classes of sample requesters: **Science Party**, **Post-moratorium Researchers**, and **Educators & Outreach Institutions**. Each group incurs their own particular obligation once a data or sample request has been approved and delivered.

- **Science Party** consists of all invited shipboard and shore-based expedition scientists, plus other scientists who have been approved by the Sample Allocation Committee (SAC) to work on expedition material during the moratorium period. Expedition samples and data are held under a **moratorium period**. This ensures that the **Science Party** receives priority access to data and samples.
- **Post-moratorium researchers** are those who submit sample & data requests after the expedition's moratorium ends.
- **Educators & Outreach Institutions** are grade school through university educators, museum educators, and curators of museum exhibits and collections. This also includes professionals conducting outreach related to scientific ocean drilling.

2. Sample and Data Requests

Requests for data or samples must be made through official IODP channels. There are two categories of expeditions from which samples may be requested: **moratorium expeditions** and **post-moratorium expeditions**, including past IODP, ODP, or DSDP expeditions.

- **Moratorium Expeditions.** IODP imposes a moratorium, one year from completion of the expedition, during which sample and data access is restricted to members of the expedition science party. Completion of an expedition is designated as the date when the majority of sampling is completed, either on board the ship or at the end of any official expedition-related shore-based sampling party. The one-year term may be modified before the expedition in certain cases, such as when significant funding derives from external sources. Samples and data from these expeditions can be accessed via the following links: http://www.iodp-usio.org/Data_Samples/, <http://sio7.jamstec.go.jp/> and <http://iodp.wdc-mare.org/>.
- **Post-moratorium Expeditions.** Samples and data from IODP expeditions no longer under moratorium restrictions, including past IODP, ODP, and DSDP expeditions can be accessed via the following links:

http://www.iodp-usio.org/Data_Samples/, <http://sio7.jamstec.go.jp/> and <http://iodp.wdc-mare.org/>.

Shipping and supply costs in excess of reasonable costs, as detailed on the appropriate IODP core repository web site (see Appendix B), are the responsibility of the requester.

Moratorium Expedition requests: All submitted requests must be approved by the Sample Allocation Committee (SAC). The SAC will review the sample requests, and approval will be based on compatibility with the scientific goals and objectives of the expedition as developed in the Sampling Strategy section of the Expedition Prospectus. All scientists who receive approval for samples or data by the SAC become members of the Science Party. The sample requester may choose to appeal any decision by the SAC or the IODP Curator to the Curatorial Advisory Board (CAB). If a conflict arises over the allocation of samples during the moratorium period, expedition participants will have priority over those who did not participate in the expedition.

Researchers with approved sample and data requests incur publishing obligations (see **3. Obligations**) for working on expedition material during the moratorium period.

During the moratorium period, the only researchers permitted to receive expedition core and cuttings materials and data are members of the **Science Party**. The **Science Party** may access expedition data online at a password-protected web site (see the Implementing Organization (IO) data websites) during the moratorium period.

Post-moratorium Expedition Requests: Samples are given or loaned to persons whose requests have been approved by an appropriate IODP Curator.

3. Obligations

Science Party members are obligated to conduct research and to publish their results in a peer-reviewed scientific journal or book that publishes in English, or as a peer-reviewed data report either in the open literature or in a relevant issue of the *Proceedings of the International Ocean Discovery Program*. To fulfill the obligation, manuscripts must be submitted within 20 months post-moratorium. Failure to meet this obligation may result in the denial of future sample requests or future sailing opportunities.

Post-moratorium Researchers are asked to make data obtained from these samples publicly available within 36 months.

Return of Sample Material

Following completion of sample investigations, or in the event that research is discontinued, **Science Party** Members and **Post-moratorium Researchers** are

required to return all non-destroyed sample material at the investigator's expense to the IODP repository where the sample materials are stored (see Appendix B for sample distribution information).

Unfulfilled Research Plans

If investigators are unable to fulfill their obligations, a letter of explanation should be submitted to the IODP Curator(s); see Appendix B for contact information). The letter should provide specific reasons for not fulfilling obligations such as lack of conclusive analytical results (quality or quantity), personal reasons, or external factors.

Educators and Outreach Institutions

After the moratorium period has expired, core materials can be used for the following purposes:

- Viewing and describing for teaching and educational purposes,
- Sampling by educators (if core materials are abundant in the collection, and thus not in demand for research purposes), and
- Public display, such as in museums or at professional meetings.

Educators, museums, and outreach institutions that receive samples for educational or display purposes incur the following obligations to IODP:

- All recipients are required to submit a report at the conclusion of the loan period (or other time frame designated by the IODP Curator) that documents (a) how the core materials were used, (b) how many students/visitors were impacted, and (c) the activities that were organized related to the loan.
- All public displays of IODP material must properly credit IODP using the following wording: "This project used samples and/or data provided by the International Ocean Discovery Program (IODP)".

4. Submitting Manuscripts

Science Party

Manuscripts can be submitted for publication during the moratorium period. For ordinary manuscripts, the **Science Party** authors must comply with the following guidelines:

- Receive prior written approval by a majority of the expedition scientists. This approval will be coordinated by the IODP Expedition Project Manager (EPM) associated with the expedition. The EPM will circulate the manuscript among the expedition participants, tabulate the responses, and notify the author of the expedition participants' decision.
- Comply with all written collaborative agreements identified in the expedition sampling strategy (see Appendix B for contact and repository-specific information).

- Include “Expedition ### Scientists” (where ### is the expedition number) within the authorship.
- Include the words “International Ocean Discovery Program” or “IODP” in the abstract.
- Acknowledge IODP using the following wording: “This research used samples and/or data provided by the International Ocean Discovery Program (IODP). Funding for this research was provided by _____.”
- Provide the following key words, as appropriate, to the manuscript publisher: “International Ocean Discovery Program,” “name of drilling platform,” Expedition ##,” “expedition title,” and/or “Site ###” (where ### is the expedition or site identifier).
- Notify the Editorial Review Board (ERB) of manuscript submission and submit complete citation information to the platform operator upon acceptance.

The **Science Party** may decide to submit manuscripts immediately following an expedition to convey expedition results to a high-impact journal. In this case, all other IODP publications, news releases, and reports related to the expedition should be placed under temporary embargo. The Implementing Organization is required, before the end of the expedition, to notify the chair of the respective Facility Board of *JR*, *Chikyu* or the MSP to receive approval to postpone the publication of the expedition *Preliminary Report* (due for publication within 2 months post-expedition). The Implementing Organization will be responsible for coordinating and completing the process, including communicating with the contracted publication agency that prepares the *Preliminary Report* for publication. Approval of the publishing embargo must be received by the expedition EPM no later than two weeks post-expedition. A status report is due to the Facility Boards of *JR*, *Chikyu* or the MSP six months post-expedition.

Once the publishing embargo has been approved, the manuscript must be submitted to a journal with a copy to the publication contractor within two months post-expedition. If this deadline is missed, the embargo will be lifted, and all reports and news releases will go ahead. The *Preliminary Report* will also then be automatically published. All requirements for publishing during the moratorium period apply.

Post-moratorium Researchers

Post-moratorium researchers who use International Ocean Discovery Program (IODP), Integrated Ocean Drilling Program, Ocean Drilling Program (ODP), and Deep Sea Drilling Project (DSDP) data and samples received after the expedition moratorium period do not incur obligations to publish their results. However, if they do publish papers based on these data, they are requested to comply with the following guidelines:

- Submit a manuscript for publication, if possible, within 36 months after receiving samples.

- Include the words “International Ocean Discovery Program” or “IODP” in the abstract (or wording appropriate to the DSDP, ODP, or the Integrated Ocean Drilling Program).
- Acknowledge IODP in all publications that result from the data collected from samples received using the following wording: “This research used samples and/or data provided by the International Ocean Discovery Program (IODP). Funding for this research was provided by _____.”
- Provide the following key words, as appropriate, to the manuscript publisher: “International Ocean Discovery Program,” “Integrated Ocean Drilling Program,” “Ocean Drilling Program,” or “Deep Sea Drilling Project”, “name of drilling platform,” Expedition or Leg ###,” “expedition or leg title,” and/or “Site ###” (where ### is the cruise or site identifier).
- Notify the IODP Curator of manuscript acceptance and submit complete citation information.

Appendix A. Terms, Definitions, Roles and Responsibilities

1. Drilling Project

A single expedition or multiple expeditions defined as one project during the expedition scheduling phase.

2. Moratorium Period

The moratorium period is one year long and begins either (1) after the conclusion of an expedition cruise if the majority of the sampling occurred during the cruise, or (2) after the conclusion of the expedition onshore sampling party (onshore science party in case of the mission-specific platform).

During the moratorium period, the only researchers permitted to receive expedition core and cuttings materials and data are members of the Science Party. After the moratorium period ends, samples are given or loaned to persons whose requests have been approved by an IODP Curator. Project data are also publicly available (www.iodp.org/access-data/) after the moratorium period.

3. Nondestructive Analyses

Requests to perform nondestructive analyses on cores (e.g., descriptions, imaging, X-ray scanning, etc.) should be submitted to the IODP Curator at the appropriate repository after the completion of the IODP Sample Request Form (www.iodp.org/access-data/). Investigators who conduct nondestructive analyses incur the same obligations as scientists who request samples.

4. Post-moratorium Researchers

Researchers who request samples after the moratorium period has ended.

5. *Proceedings of the International Ocean Discovery Program*

An IODP serial publication published by the U.S. operator that contains a detailed summary of expedition technical operations and scientific results and related peer-reviewed data reports and synthesis papers that cover post-expedition research.

A “data report” is a short report of useful data that mainly consists of data sets and does not contain interpretation of results.

An expedition “synthesis paper” summarizes in a review-type fashion the findings related to the key goals and themes of the drilling project and links to the broader and global theme(s) addressed. While this is primarily based on the scientific papers and data reports resulting from the expedition, it is not a synopsis of all papers and data reports in all fields of observations. The style should be close to that of a thematic review paper for the open literature, though obviously tied closely to the actual expedition(s). An expedition could have more than one synthesis paper, if the diversity of science and findings would be best served by that. Likewise, synthesis papers from drilling projects with multiple expeditions, joint scientific party

membership, and a common moratorium period would not normally be broken down according to specific expeditions, but would be presented as a single manuscript.

Each *Proceedings* volume will be completed at 36 months post moratorium.

6. Science Party

The Science Party includes all invited shipboard and shore-based expedition participants plus scientists who have been approved by the SAC for working on expedition material during the moratorium period and publishing their results.

7. IODP Curators

There are three International Ocean Discovery Program (IODP) Curators who are responsible for (1) curation and sampling of core and cuttings during an IODP drilling project and (2) oversight and use of IODP, Integrated Ocean Drilling Program, Ocean Drilling Program (ODP), and Deep Sea Drilling Project (DSDP) core collections that are stored in the IODP repositories.

7.a. Platform Curator

Each Curator serves as the Platform Curator to oversee all curation tasks from the pre-planning stage through the arrival of the core and cuttings after an expedition at the repository where the core and cuttings material will be stored. The Platform Curator has responsibility to oversee use of the core and cuttings materials through the end of the moratorium period.

7.b. Repository Curator

Each Curator serves as the Repository Curator with responsibility for the preservation of the core and cuttings once it arrives at the repository where the core material will be stored. The Repository Curator has responsibility to oversee the use of core and cuttings material after the moratorium period ends.

All Curators maintain records of all distributed samples, both from the platform and from the repositories. Sample records include the names of the recipients, the nature of the proposed research, the volume of samples taken, and the status of the request. This information is available to investigators upon request through the Repository Curator.

8. Curatorial Advisory Board

The Curatorial Advisory Board (CAB) is a standing body that consists of five members of the scientific community (selected by the JOIDES Resolution Facility Board/ECORD Facility Board/Chikyu IODP Board – with nominations from the IODP Curators) who serve overlapping four-year terms. Every effort will be made to ensure that CAB membership represents a variety of scientific disciplines.

The CAB has two main roles:

- Act as an appeals board vested with the authority to make final decisions regarding sample distribution if and when conflicts or differences of opinion arise among any combination of the sample requester, IODP Curator at the repository of interest, and the SAC.
- Upon request from the IODP curator, if needed review and approve requests to sample the permanent archive and requests for loans of core material for outreach and education.

A person appealing to the CAB may contact any member of the Board directly (see <http://www.iodp.org/curatorial-advisory-board>).

9. Editorial Review Board

The Editorial Review Board (ERB) is established for every drilling project and comprised of the Co-Chief Scientist(s) for the drilling project and the IODP Expedition Project Manager assigned to the expedition. These individuals may select external scientists/specialists to serve with them. The need for external ERB members will be determined based on the Co-Chief Scientists' and Expedition Project Manager's workloads and expertise. An ERB remains active for 36 months post-moratorium.

The ERB has four main roles:

- Coordinate the writing of the drilling project results;
- Monitor all post-drilling project research and associated publication of results;
- Make decisions on issues relating to the publication of research related to the drilling project to fulfill IODP obligations; and
- Monitor obligation fulfillment by the Science Party.

The members of the ERB hold the following specific responsibilities:

	All ERB Members	Expedition Project Manager	Co-Chief Scientists
Coordinate the writing of the Expedition Reports section of the <i>Proceedings of the International Ocean Discovery Program</i> , attend the first post-cruise meeting, and review the Expedition Reports section galleys.	X		
Ensure that all manuscripts published in the "Expedition Research Results" section of the <i>Proceedings of the International Ocean Discovery Program</i> are complete and of reviewable quality before they are sent out for review. Manuscripts that do not meet IODP's standards will be returned to the author and will not go through the review process unless they are revised to meet IODP standards before the submission deadline.		X	

	All ERB Members	Expedition Project Manager	Co-Chief Scientists
Collect all proposed publication titles related to the expedition (papers published in the <i>Proceedings of the International Ocean Discovery Program</i> volume and journals or books).	X		
Make decisions on issues relating to the publication of research related to the drilling project to fulfill IODP obligations	X		
Approve the final table of contents for the <i>Proceedings of the International Ocean Discovery Program</i> volume.	X		
Check each journal or book manuscript submission, within three months of receipt, for proper citation of site summaries and site chapters and for proper use of data and conclusions from other members of the Science Party.	X		
Implement the peer-review process for data reports and synthesis papers submitted to the <i>Proceedings of the International Ocean Discovery Program</i> as soon as the Expedition Project Manager approves each one as being of "reviewable quality."	X		
Write or coordinate a drilling project synthesis paper to be published in the <i>Proceedings of the International Ocean Discovery Program</i> or a journal.			X
Submit synthesis paper by 26 months post-moratorium.			X
Coordinate the peer-review process for synthesis paper if submitted to the <i>Proceedings of the International Ocean Discovery Program</i> .		X	
Document the status of the Science Party members' actions to fulfill their obligations requirements.	X		
Regularly provide updates to the Expedition-Related Bibliography that is part of each <i>Proceedings</i> volume.	X		

10. Sample Allocation Committee

The Sample Allocation Committee (SAC), which is established for each drilling project, consists of the Co-Chief Scientist(s), IODP Expedition Project Manager, and Platform Curator. During the drilling project, the Platform Curator designates authority and responsibilities to the drilling project Curatorial Representative.

The SAC establishes a project-specific sampling strategy and makes decisions on project-specific sample requests received before the drilling project, during the drilling project, and during the moratorium period. In the event of an evenly divided vote, the Platform Curator at the repository associated with the expedition will make a decision. The sample requester may choose to appeal the SAC's or Platform Curator's decision to the CAB.

11. Facility Board

Each platform provider (NSF for *JOIDES Resolution*, MEXT/JAMSTEC for *Chikyu*, ECORD for Mission-Specific Platforms) uses a Facility Board to make or inform decisions on the effective use of its drilling facility in fulfilling the objectives of the IODP Science Plan.

Facility Boards make use of the *JOIDES Resolution* Facility's advisory panels - the Science Evaluation Panel (SEP) and the Environmental Protection and Safety Panel (EPSP) - to evaluate the science, sites, environmental protection, and safety of proposed expeditions.

Appendix B. Repository-Specific Information

There are three IODP core repositories (<http://www.iodp.org/repositories>): the Bremen Core Repository (BCR) at the University of Bremen, Germany, the Gulf Coast Repository (GCR) located at Texas A&M University in College Station, USA, and the Kochi Core Center (KCC) at Kochi University, Japan.

According to IODP convention and practice, the existing geographic core distribution model will be maintained.

The BCR stores all of the cores recovered since the beginning of scientific ocean drilling from the Atlantic and Arctic Oceans as well as the Mediterranean, Black and Baltic Seas. The BCR is also responsible for providing mobile laboratories for MSP expeditions and for organizing and hosting their Onshore Science Parties.

The GCR stores all of the cores recovered since the beginning of scientific ocean drilling from the Pacific Ocean (east of western boundary of the Pacific Plate), Caribbean Sea and Gulf of Mexico, and the Southern Ocean (South of 60° except Kerguelen Plateau).

The KCC stores all of the cores recovered since the beginning of scientific ocean drilling from the Pacific Ocean (west of western boundary of Pacific plate), the Indian Ocean (North of 60°S), all of Kerguelen Plateau, and the Bering Sea.

Repository Procedures can differ slightly between the BCR, GCR and KCC and these are accessible at/through the respective repository webpages:

Bremen Core Repository:

http://www.marum.de/en/IODP_Bremen_Core_Repository.html

Gulf Coast Repository:

<http://iodp.tamu.edu/curation/gcr/index.html>

Kochi Core Center:

<http://www.kochi-core.jp/en/iodp-curation/index.html>