

Open and transparent access to samples and data is essential for research progress in scientific ocean drilling. In return, recipients of samples and data incur obligations on their use and on the reporting of derived science outcomes in the peer-reviewed scientific literature.

# Sample, Data and Obligations Policy

## Scientific Ocean Drilling Programmes



# INTERNATIONAL OCEAN DRILLING PROGRAMME

# Scientific Ocean Drilling Programs Sample, Data, and Obligations Policy

## Notes on application of the Scientific Ocean Drilling Programs Sample, Data, and Obligations Policy:

- This policy applies to the Deep Sea Drilling Project (DSDP), the Ocean Drilling Program (ODP), the Integrated Ocean Drilling Program (IODP), and the International Ocean Discovery Program (IODP) archived samples and to samples collected on International Ocean Drilling Programme (IODP<sup>3</sup>) expeditions.
- International Ocean Discovery Program (IODP) expeditions that began prior to October 1, 2024 are subject to the IODP Sample, Data, and Obligations Policy that was active at the start of that expedition. After that expedition's moratorium period ends, the samples are governed by this policy.
- This policy was approved by the *JOIDES Resolution* Facility Board, ECORD Facility Board, *Chikyu* IODP Board, and IODP<sup>3</sup> interim Mission Specific Platform Facility Board and becomes effective on October 1, 2024.
- Updates to this policy must be approved by the U.S. National Science Foundation and the IODP<sup>3</sup> Mission-Specific Platform Facility Board.

## Table of Contents

<b>Section 1: General Principles</b> .....	3
<b>Section 2: Policy Implementation Guidelines</b> .....	3
2-1 Sample and Data Requesters.....	3
2-2 Sample and Data Requests .....	4
2-3 Researcher Obligations .....	5
2-4 Educator and Outreach Officer Obligations .....	5
2-5 Submitting Manuscripts .....	6
<b>Section 3: Terms, Definitions, Roles &amp; Responsibilities</b> .....	8
3-1 Drilling Project .....	8
3-2 Expedition Science Party .....	8
3-3 Expedition Moratorium. ....	8
3-4 Sample Allocation Committee (SAC) .....	8
3-5 Land-2-Sea Expedition .....	8
3-6 Legacy Project .....	8
3-7 Legacy Project Moratorium .....	9
3-8 Legacy Sample Allocation Committee (LSAC).....	9
3-9 Scientific Ocean Drilling Core Curators .....	9
3-10 Curatorial Advisory Board (CAB) .....	9
3-11 Permanent Archive .....	10
<b>Section 4: Repository-Specific Information</b> .....	10
4-1 Geographic Core Distribution .....	10
4-2 Core Repository Contact Information .....	11

## Section 1: General Principles

The goal of this policy is to ensure open and transparent access to samples and data from the scientific ocean drilling programs for scientists, educators, museums, and outreach officers. The scientific ocean drilling programs are defined here as the Deep Sea Drilling Project (DSDP), the Ocean Drilling Program (ODP), the Integrated Ocean Drilling Program (IODP), the International Ocean Discovery Program (IODP), and the International Ocean Drilling Programme (IODP<sup>3</sup>).

In return for access, recipients of samples or data incur obligations on their use and reporting of the science outcomes from research based on these samples or data. The use of all core materials, samples, and data are under the auspices of the Scientific Ocean Drilling Core Curators and the Curatorial Advisory Board (CAB).

The goal of this policy is to ensure:

1. Availability of samples and data to Science Party members so they can fulfill the objectives of the drilling/legacy project and their responsibilities to the project/program.
2. Scientific community access to encourage scientific analyses over a wide range of research disciplines by providing samples and data.
3. Preservation of core and cutting materials as an archive for future description and observations, non-destructive analyses, and sampling.
4. Dissemination of the scientific findings from scientific ocean drilling activities and legacy core investigations to gain maximum scientific and public exposure.
5. Support for education and outreach related to the drilling programs by providing samples and data to educators, museums, and outreach officers.

## Section 2: Policy Implementation Guidelines

### 2-1 Sample and Data Requesters

Sample and data requesters fall into four classes; each group incurs its own particular obligation once a sample and/or data request has been approved and delivered:

1. **Expedition Science Party Researchers:** These researchers are participants of an expedition science party. A science party consists of all invited shipboard and shore-based expedition scientists, plus other scientists who have been approved by the shipboard Sample Allocation Committee (SAC; including the expedition's Co-chief scientists, expedition program manager, and curator) to work on newly collected expedition material and/or data during the project's nominal moratorium period. Expedition samples and data are held under a one-year moratorium, to ensure that Science Party members receive priority access to samples and data.
2. **Legacy Project Researchers:** These researchers are participants of large, coordinated research efforts that utilize legacy assets and are program reviewed (e.g., LEAPs, SPARCs, ReCoRD). Legacy project researchers are the scientists who have been invited to participate in the project. A Legacy Sample Allocation Committee (LSAC; composed of 2 or 4 members, depending on the legacy project, representing scientific and curation interests. See full definition in Section 3-8) approves all requests for samples and/or new data that are a part of the legacy project. Legacy project data may be subject to a one-year moratorium after the end of its data acquisition period, depending on the legacy project's program.

3. **Post-moratorium Researchers:** These researchers, not part of the expedition science party or legacy project, may submit sample or data requests after an expedition or legacy project's moratorium ends. Requests for Expedition data and samples are approved by the related Scientific Ocean Drilling Core Curator.
4. **Educators and Outreach Officers:** Grade school through university educators, museum educators, and curators of museum exhibits and/or collections who sail as an outreach officer within a science party may request scientific ocean drilling samples and data during the moratorium. Any education and outreach professional who is conducting work related to a specific expedition/project or to scientific ocean drilling in general can request samples and data post-moratorium.

## 2-2 Sample and Data Requests

Requests for samples and data, including non-destructive analyses, must be made through official repository channels using the Sample, Data and Research Request Manager (SDRM) website (<https://web.iodp.tamu.edu/SDRM/#/>). Samples or data may be requested from moratorium or post-moratorium expeditions, the latter includes all past scientific ocean drilling programs' expeditions. Data from post-moratorium expeditions may also be requested as part of a Legacy Project.

### *Moratorium Requests:*

*Note: Moratorium policies only apply to IODP<sup>3</sup> expeditions. International Ocean Discovery Program (IODP) expeditions under moratorium are subject to the IODP Sample, Data, and Obligations Policy that was active at the start of that expedition.*

All submitted requests for samples from IODP<sup>3</sup> expeditions that are under moratorium must be approved by the expedition's 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 or proposal. All scientists who receive approval for samples or data by the SAC become members of the Science Party. If a conflict arises over the allocation of samples during the moratorium, the expedition's participants will have priority over those who did not participate in the expedition.

During the moratorium period, the only researchers permitted to receive expedition core and cuttings materials, and data are members of the Expedition Science Party. The Science Party may access expedition data online at a password-protected web site during the moratorium.

### *Post-Moratorium Requests:*

All submitted requests for expeditions out of moratorium and not part of a legacy project must be approved by the appropriate Scientific Ocean Drilling Core Curator.

### *Legacy Project Requests:*

All requests submitted for samples and/or data as part of legacy projects must be approved by the legacy project's Legacy Sample Allocation Committee (LSAC). The LSAC will review the requests, and approval will be based on compatibility with the project's overarching scientific goals and objectives, taking into consideration the availability of the legacy assets. Legacy project data may be subject to a one-year Legacy Project moratorium, depending on the legacy project program.

### *Land-2-Sea Expeditions:*

For post-moratorium sample and/or data requests from Land-2-Sea Expeditions, the related repository curator will ask the Co-chief Scientists for their input on how the request fits in with the project's goals for the first three years after the expedition moratorium ends. Final decision on post-moratorium sample request approval resides with the repository curator.

### *Non-destructive Analyses:*

Requests to perform non-destructive analyses on cores (descriptions, imaging, MSCL, X-ray core scanning, etc.) should be submitted to the Scientific Ocean Drilling Core Curator, at the related repository through the Sample, Data and Research Request Manager (SDRM) website (<https://web.iodp.tamu.edu/SDRM/#/>). Investigators who conduct non-destructive analyses incur the same obligations as those scientists who request samples.

A sample requester may choose to appeal any decision by an expedition SAC, LSAC, or Scientific Ocean Drilling Core Curator to the Curatorial Advisory Board (CAB).

All researchers with approved sample and data requests incur a set of obligations (see Section 2-3) for working on scientific ocean drilling material. Similarly, educators and outreach officers also incur a set of obligations (see Section 2-4).

Samples are given or loaned to persons whose scientific ocean drilling sample request has been approved by the related Scientific Ocean Drilling Core Curator. Shipping and supply costs in excess of reasonable costs, as determined by the related Scientific Ocean Drilling Core Curator, are the responsibility of the requester.

## 2-3 Researcher Obligations

### *Publishing Obligation:*

**Expedition 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 in the open literature. To fulfill this 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 and Legacy Project Researchers** are obliged to make data and results obtained from samples and/or data received as part of a Scientific Ocean Drilling Sample, Data and Research Request, publicly available within 36 months of completion of the request in a peer-reviewed scientific journal or book that publishes in English, or as a peer-reviewed data report in the open literature.

### *Return of Sample Material:*

Following completion of sample investigations, or if the proposed research described in the sample or data request is discontinued, Expedition Science Party Members, Post-moratorium and Legacy Project Researchers are required to return all non-destroyed sample material, including loaned sample mounts, smear slides, thin sections, and other material at the investigator's expense to the repository where the expedition sample materials are stored.

## 2-4 Educator and Outreach Officer Obligations

After an expedition's moratorium period has expired, core materials and data can be used or loaned for the following education and outreach purposes:

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

All educators, museums, and outreach officers who receive samples and/or data for educational or display purposes incur the following obligations:

Recipients are required to submit a report at the conclusion of the loan period (or other time frame designated by the Scientific Ocean Drilling Core Curator) that documents (a) how the scientific ocean drilling materials were used, (b) how many students/visitors were impacted, and (c) the activities that were organized related to the loan.

Public displays of scientific ocean drilling material must properly credit the respective scientific ocean drilling program using the following wording: “This project used samples and/or data provided by the [respective scientific ocean drilling program (i.e., DSDP, ODP, Integrated Ocean Drilling Program (IODP), International Ocean Discovery Program (IODP), IODP<sup>3</sup>).”

#### *Return of Sample Material:*

Following completion of the educational activity or loan period, educators, museums and outreach officers are required to return all non-destroyed sample material, including loaned sample mounts, smear slides, thin sections, and other material at their expense to the repository where the expedition sample materials are stored.

## 2-5 Submitting Manuscripts

### *IODP<sup>3</sup> Expedition Science Party Authors:*

IODP<sup>3</sup> Expedition Science Party authors submitting manuscripts for publication in journals, books or any other physical or digital media (including during the moratorium period) must comply with the following guidelines:

1. Receive prior written (email) approval from a majority of the expedition scientists. This approval will be coordinated by the Expedition Project Manager (EPM) or related scientific ocean drilling program representative associated with the expedition. The EPM or representative will circulate the manuscript among the expedition participants, tabulate the responses, and notify the author(s) of the expedition participants’ decision.
2. Comply with all written collaborative agreements in the expedition’s sampling strategy.
3. Include “IODP<sup>3</sup> Expedition ### Scientists” (where ### is the expedition number) within the authorship.
4. Include the word(s) ”International Ocean Drilling Programme (IODP<sup>3</sup>)” and/or”IODP<sup>3</sup>” in the publication’s abstract.
5. Acknowledge IODP<sup>3</sup> in all publications that result from the samples and/or data collected or received using the following wording: “This research used samples and/or data provided by the International Ocean Drilling Programme (IODP<sup>3</sup>). Funding for this research was provided by #####.” (where ##### is the grant information required by the funding agency).
6. Provide the following key words, as appropriate, to the manuscript publisher:
  - a. “Name of the program”, e.g., International Ocean Drilling Programme (IODP<sup>3</sup>)
  - b. “Name of drilling platform”
  - c. “Expedition (short) title”
  - d. “Expedition ###” (where ### is the expedition number)
  - e. “Site ###” (where ### is the site identifier)

Expedition science parties may decide to submit manuscript(s) immediately following an expedition to convey their initial results to a high-impact journal (e.g., Nature, Science, PNAS). In this case, all other scientific ocean drilling publications, news releases, and reports related to the expedition should be placed under temporary embargo. The Science Operator is required to notify the Chair of the IODP<sup>3</sup> Mission-Specific Platform Facility Board (MSP-FB) before the end of the expedition to receive approval to postpone the publication of the Expedition Summary Report (which is due for publication within two months post-expedition).

The Science Operator will be responsible for coordinating and completing the process, including communicating with the contracted publication agency that prepares the Expedition Summary 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 on the progress toward the publication(s) governed by the temporary publication embargo is due to the MSP-FB six months post-expedition.

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

#### *Post-moratorium and Legacy Projects Researchers:*

Post-moratorium researchers who use samples and/or data from the International Ocean Drilling Programme (IODP<sup>3</sup>), International Ocean Discovery Program (IODP), Integrated Ocean Drilling Program (IODP), Ocean Drilling Program (ODP), and Deep Sea Drilling Project (DSDP) received after the end of the respective expedition moratorium period(s) and who publish papers based on these sample and/or data are requested to comply with the following guidelines:

1. Submit a manuscript for publication, if possible, within 36 months after receiving samples and/or data.
2. Include the scientific ocean drilling program name(s): “International Ocean Drilling Programme” and/or “IODP<sup>3</sup>” in the publication’s abstract (or similar wording appropriate to the DSDP, ODP, the Integrated Ocean Drilling Program or the International Ocean Discovery Program).
3. Acknowledge the scientific ocean drilling program (i.e., IODP<sup>3</sup>, International Ocean Discovery Program (IODP), Integrated Ocean Drilling Program (IODP), ODP, DSDP) in all publications that result from the samples and/or data collected or received using the following wording: “This research used samples and/or data provided by the International Ocean Drilling Programme (IODP<sup>3</sup>). Funding for this research was provided by #####.” (where ##### is the grant information required by the funding agency).
4. Acknowledge the scientific ocean drilling core repository(s) that provided samples used in the publication:
  - a. Bremen Core Repository (BCR)
  - b. Gulf Coast Repository (GCR)
  - c. Kochi Core Center (KCC)
5. Provide the following key words, as appropriate, to the manuscript publisher:
  - a. “International Ocean Drilling Programme (IODP<sup>3</sup>)”
  - b. “International Ocean Discovery Program (IODP)”
  - c. “Integrated Ocean Drilling Program (IODP)”
  - d. “Ocean Drilling Program (ODP)”
  - e. “Deep Sea Drilling Project (DSDP)”
  - f. “Name of drilling platform”
  - g. “Expedition(s) or Leg(s) (short) title”
  - h. “Expedition(s) or Leg(s) ###” (where ### is the expedition/leg number)
  - i. “Site(s) ###” (where ### is the site identifier)
  - j. Legacy projects should be acknowledged based on details of the program.



## Section 3: Terms, Definitions, Roles & Responsibilities

### 3-1 Drilling Project

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

### 3-2 Expedition Science Party

The Expedition 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.

### 3-3 Expedition Moratorium

The moratorium period is one-year long and begins either (a) at the conclusion of an expedition, if the majority of the sampling occurred during the seagoing expedition, or (b) at the conclusion of the expedition's onshore sampling party (also part of the "onshore science party" in case of a 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 a Scientific Ocean Drilling Core Curator. Project data are publicly available after the moratorium period.

### 3-4 Sample Allocation Committee (SAC)

The Sample Allocation Committee (SAC), which is established for each drilling project, consists of the Expedition's Co-Chief Scientist(s), Expedition Project Manager (EPM), and Curator. During the drilling project, the Curator designates authority and responsibilities to a 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 Scientific Ocean Drilling Curator associated with the expedition will make a decision. The sample requester at any time may choose to appeal the SAC's or Curator's decision to the CAB.

### 3-5 Land-2-Sea Expedition

A Drilling Project whose scientific objectives are met with both offshore (Scientific Ocean Drilling; International Ocean Discovery Program (IODP), IODP<sup>3</sup>) and onshore (International Continental Scientific Drilling Program; ICDP) drilling operations.

### 3-6 Legacy Project

Legacy Projects are interdisciplinary, coordinated research efforts that utilize existing scientific ocean drilling legacy assets (i.e., LEAPs, SPARCs, ReCoRD). The scale of these projects extends beyond that of a typical post moratorium sample request. They are endorsed by a scientific ocean drilling facility board or any other organization in the scientific ocean drilling framework. Due consultation to the core repository is required before implementation of a Legacy Project. Legacy Projects may have different responsibilities depending on the Legacy Project program.

### 3-7 Legacy Project Moratorium

Depending on the legacy project type, some data generated during the project may be subject to a one-year moratorium period, where it will only be accessible to legacy project science party members. The moratorium details will be outlined by the legacy project program (i.e., LEAPs, SPARCs, ReCoRD).

### 3-8 Legacy Sample Allocation Committee (LSAC)

A Legacy Sample Allocation Committee (LSAC) will be established for all Legacy Projects. For Legacy Projects with one lead proponent/PI/chief scientist (e.g., current ReCoRD), the LSAC will be composed of the Curator from the respective core repository and the one lead proponent/PI/chief scientist. For Legacy Projects with two lead proponents/Pis/co-chief scientists (e.g., LEAPs, SPARCs), the LSAC will be composed of the Curator from the respective core repository, the two lead proponents/Pis/co-chief scientists and one other member from the associated core repository or operator. For legacy projects where the LSAC is comprised of two members and is expected to require collection of more than 3,000 samples, the LSAC will be expanded to include two additional members. One of these members will be a participant of the legacy project or an external scientist who is familiar with the region/time interval/science objectives of the project and one member will be from the associated core repository or operator. The number of lead proponents/Pis/chief scientists will be defined by the Legacy Project program.

The LSAC establishes a project-specific sampling strategy and makes decisions on project specific sample and/or data requests for the Legacy Project, taking into account the project's overarching scientific objectives and the availability of the legacy assets requested. In the event of an evenly divided vote, the Scientific Ocean Drilling Curator associated with the Legacy Project will make a decision. A sample requestor at any time may choose to appeal the LSAC's decision to the CAB.

### 3-9 Scientific Ocean Drilling Core Curators

Three Curators, one for each scientific ocean drilling core repository, are responsible for (1) curation and sampling of core and cuttings during a scientific ocean drilling expedition and (2) oversight and use of the scientific ocean drilling programs' core collections that are stored in one of the three designated repositories.

The curators maintain records of all distributed samples, both from the platform and from the repositories. These 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 upon request from each scientific ocean drilling core repository.

One scientific ocean drilling core Curator (or assigned curatorial representative for a specific expedition) serves as the Offshore 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 Offshore Curator has responsibility to oversee use of the core and cuttings materials through the end of the moratorium period.

### 3-10 Curatorial Advisory Board (CAB)

The Curatorial Advisory Board (CAB) is a standing body that consists of five members of the scientific community. The CAB members and chair are selected by the *JOIDES Resolution* Advisory Board (JRAB) and the IODP<sup>3</sup> MSP Facility Board based on nominations from the Scientific Ocean Drilling Core Curators.

CAB Members serve overlapping four-year terms. Every effort will be made during the selection process to ensure that the CAB membership represents a variety of scientific disciplines. CAB membership records will be maintained by the IODP Science Support Office, or the entity designated as the SSO's successor.

The CAB has two main roles:

1. 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, the Curator at the repository of interest, the SAC and LSAC.

2. Upon request from a Scientific Ocean Drilling Core Curator, if needed, review and approve requests to sample the permanent archive and requests for loans of core material for outreach and education.

Any person or party appealing to the CAB may contact any member of the CAB directly.

### 3-11 Permanent Archive

A permanent archive is set for each scientific ocean drilling site that recovers core material. The permanent archive is a record of the stratigraphic intervals recovered at a drill site. In cases where one hole is drilled and for all igneous, metamorphic and metalliferous rock cores, the archive halves are designated as permanent. If multiple holes are drilled and replicate copies of the same stratigraphic interval are recovered, at least one copy must be designated as permanent. Additional sections may be designated as permanent by the expedition SAC. All core sections not designated as permanent archive are considered non- permanent archive sections. Permanent archive sections can only be sampled with approval from the CAB. After the moratorium, non-permanent archive sections may be sampled with permission by the related Scientific Ocean Drilling Core Curator.

## Section 4: Repository-Specific Information

The three core repositories are:

1. **Bremen Core Repository** (BCR) at MARUM, University of Bremen, Germany
2. **Gulf Coast Repository** (GCR) at Texas A&M University, College Station, USA
3. **Kochi Core Center** (KCC) at Kochi University, Japan.

### 4-1 Geographic Core Distribution

According to current scientific ocean drilling convention, the following geographic core distribution model will be maintained for the storage and curation of scientific ocean drilling programs' cores and samples:

1. The BCR stores all cores recovered since the beginning of scientific ocean drilling from the Atlantic and Arctic Oceans as well as the Mediterranean, Black, and Baltic Seas. In addition, the BCR is responsible for providing mobile laboratories for MSP expeditions and for organizing and hosting their Onshore Science Parties.
2. The GCR stores all cores recovered since the beginning of scientific ocean drilling from the Pacific Ocean (defined as east of the western boundary of the Pacific Plate), Caribbean Sea, the Gulf of Mexico, and all Southern Oceans (defined as south of 60° except for the Kerguelen Plateau).
3. The KCC stores all cores recovered since the beginning of scientific ocean drilling from the Pacific Ocean (defined as west of western boundary of the Pacific Plate), Indian Ocean (North of 60°S), the Kerguelen Plateau, and the Bering Sea.

### 4-2 Core Repository Contact Information

Repository procedures can differ slightly between the BCR, GCR, and KCC and these are accessible through the respective repository websites. Please check each repository website for up-to-date contact information:

- Bremen Core Repository: <https://www.marum.de/en/Research/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>