

Science in IODP³ is driven by community-generated drilling proposals targeting the vision outlined in the 2050 Science Framework and utilising multiple drilling platforms. The IODP³ proposal submission and evaluation process is designed to transform exciting science into successful drilling expeditions.

Submission Guidelines for Scientific Ocean Drilling Proposals



**INTERNATIONAL
OCEAN DRILLING
PROGRAMME**

Submission Guidelines for Scientific Ocean Drilling Proposals

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1. Introduction

Science in the International Ocean Drilling Programme (IODP³) is driven by community-generated proposals targeting the seven *Strategic Objectives*, five *Flagship Initiatives*, and four *Enabling Elements* of the “**2050 Science Framework**”.

- **Strategic Objectives** comprise broad Earth science research areas that form the foundation of scientific ocean drilling through to 2050. Each objective focuses on understanding the interconnections within the Earth system, and is wide-ranging and aspirational to allow new science to emerge through bottom-up proposal development and peer review. Collectively, the *Strategic Objectives* cover the interconnected processes and feedbacks of the full Earth system that can be uniquely investigated with scientific ocean drilling.
- **Flagship Initiatives** are long-term research efforts that require multi-expedition scientific ocean drilling over long time intervals. They aim to test scientific paradigms and hypotheses that inform issues of particular relevance or interest to society. The *Flagship Initiatives* typically combine research goals from multiple *Strategic Objectives*.
- **Enabling Elements** serve to significantly advance the goals of scientific ocean drilling through numerous and varied broader impacts and outreach initiatives, partnerships and collaborations with organizations that have complementary scientific goals, and continued technology development and innovative applications of advanced data analytics

In addition to purely offshore-based proposals, offshore- and onshore-based drilling operations may be combined to investigate the interconnected global Earth system via integrative “Land-to-Sea” drilling proposals, representing a key “Enabling Element” of the *2050 Science Framework*. Land-to-Sea projects are implemented jointly with the International Continental Scientific Drilling Program (ICDP).

IODP³ is committed to maximising the broader societal impact of the science it supports, and to communicating and sharing the data and results to generates, as described in the “Broader Impacts and Outreach” Enabling Element of the *2050 Science Framework*. In our proposal system, this is initiated through the Science Communications Plain Language Summary, and via subsequent expedition-linked outreach activities. Additionally, proposal proponents are encouraged to engage with local communities and populations early in the submission process to begin communicating the significance of their proposed scientific drilling research.

Development of compelling proposals and the successful achievement of their scientific objectives demands an iterative and open approach involving communication between the science proponents, the IODP³ advisory panels (the Science Evaluation Panel and the MSP Facility Board), and the IODP³ Operators (who implement successful proposals). The level of investment for a scientific ocean drilling/coring expedition goes beyond an individual researcher or a single research group. The IODP³ proposal structure and review processes are therefore designed to ensure extensive feedback between proposal proponents, members of advisory panels, and the IODP³ Operators. These processes are designed to transform great ideas at the scientific forefront into successful expeditions and overall outcomes.

1.1. Overview of the Proposal Process

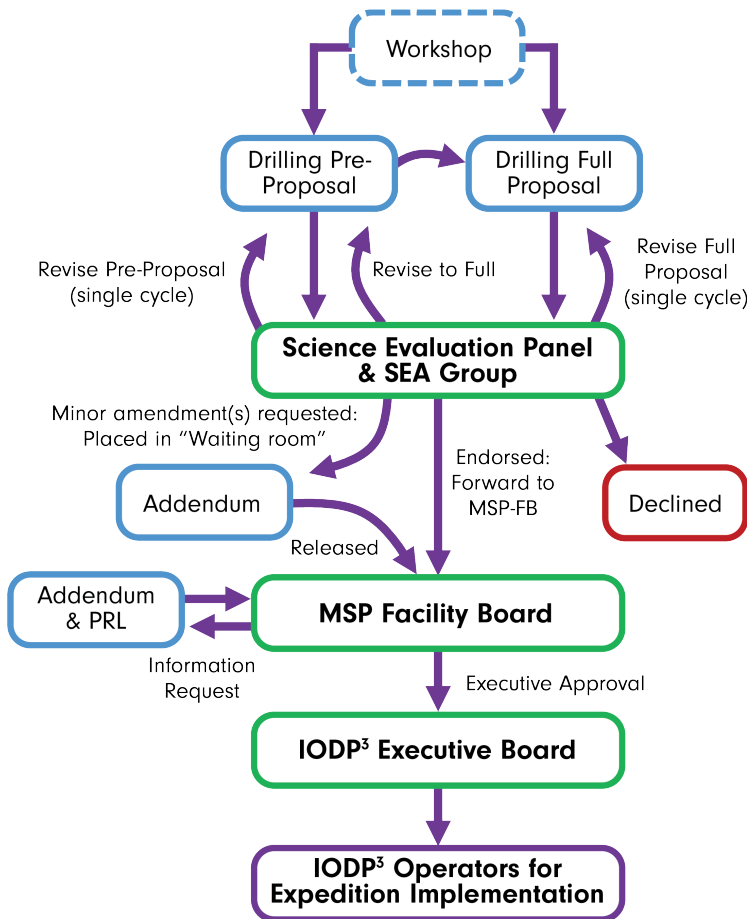
The scientific community submits proposals to the Proposal Database (PDB) of the IODP³ Science Office through its online **IODP³ Gateway** system (accessible from the IODP³ website).

Scientific ocean drilling proposals can target any offshore environment, using the flexibility of the Mission Specific Platform approach of selecting appropriate drilling/coring technologies and platforms to achieve proposed drilling objectives. This includes use of the riserless/riser drilling

capabilities of the DV Chikyū, and contracting of suitable research or commercial vessels/platforms for the specific conditions of a proposal.

Proposals may be submitted any time, but evaluation takes place after the following deadlines:

- Scientific Ocean Drilling Preliminary and Full drilling proposals: 31 January and 1 July
- Land-to-Sea (L2S) Preliminary proposals: 15 January (submitted to ICDP, not IODP³)
- Land-to-Sea (L2S) Full proposals: 1 July (submitted to IODP³)



The IODP³ drilling proposal evaluation process from development to implementation

In most cases, proposal proponents are encouraged to submit a Preliminary Proposal first (see [Section 3.1](#)), that can go through one cycle of review, revision and resubmission in response to feedback from the Science Evaluation Panel (SEP). Upon positive review of a Preliminary Proposal by the SEP, the proponent team will be invited to submit a Full Proposal (see [Section 3.2](#)). At that stage, the Full Proposal must also supply supporting site characterisation data to the Site Survey Database (SSDB) of the IODP³ Science Office via the online IODP³ Gateway system. SEP can request no more than one revision to the Full Proposal, if necessary.

Full drilling proposals that are rated as “Transformative”, “Excellent”, “Very Good” or “Good” based on SEP evaluations will be forwarded to the Mission Specific Platform Facility Board (MSP-FB) to be considered for implementation (see [Section 5.1](#)).

Scientific ocean drilling proposals at the SEP and MSP-FB (see [Section 3.7](#)) are also examined by the Safety and

Environment Advisory Group (SEA Group) for safety and environmental issues that may be associated with the general and specific geologic circumstances of the proposed primary and alternate drill sites (see [Section 3.6](#)). To expedite this process, members of the SEA Group will conduct reviews of proposals at the earliest possible stage of the proposal evaluation process, i.e., as soon as site survey data associated with the proposal have been submitted.

The MSP-FB considers drilling proposals for implementation and expedition scheduling based on regional planning, funding availability, ship-time availability, safety, and other logistical constraints. The MSP-FB and the IODP³ Operators make decisions on proposal implementation, for final approval by the IODP³ Executive Board (ExB).

The process for Land-to-Sea (L2S) drilling proposals is different, as it involves joint evaluation through both the IODP³ and ICDP systems. These processes are described in [Section 4](#).

1.2. Proposal and Data Confidentiality

All IODP³ proposals are confidential documents throughout the nurturing, evaluation, and scheduling processes. Individuals who receive and review IODP³ proposals must agree not to disclose or disseminate proposal contents and not to discuss the proposal outside the context of their roles within IODP³. Unless a proponent requests otherwise, information in the proposal Cover Sheet will be publicly accessible on the IODP³ website upon acceptance of the proposal for consideration.

For drilling proposals, all documents (including Site Forms, uploaded site characterisation data files, and any other required data or optional supplemental documents) become available for expedition planning and implementation purposes when the MSP-FB schedules a proposal as an IODP³ expedition. Restricted site characterisation data that fall under a Limited Non-Disclosure Agreement (see **Standard IODP³ Confidential Policy**, Section 6) are the only exception.

Proponents of drilling proposals are responsible for ensuring the removal of all restricted text and figure information prior to the submission of a proposal document into the PDB and for identifying restricted data files in the SSDB. Before proceeding, proponents should read the **Standard IODP³ Confidentiality Policy**, available on the IODP³ website.

Restricted site characterisation data (e.g., confidential industry data or data covered by a Limited Non-Disclosure Agreement) should be uploaded into the SSDB, if possible, with at least a predefined subset of minimum data made available in support of the review process and expedition science, implementation, and safety purposes. For restricted data, the minimum data requirements are described in Section 5 of the **Standard IODP³ Confidentiality Policy**.

Before proceeding, please read the **Standard IODP³ Confidentiality Policy** and the **Use of Limited Non-Disclosure Agreements in IODP³ Policy**, available at <http://www.iodp3.org>.

2. Summary of Drilling Proposal Document and Formatting Requirements

The IODP³ Science Office (IODP³-SO) collects all proposal materials via the online **IODP³ Gateway** system for all proposal types – Preliminary Drilling Proposals, Full Drilling Proposals, Addendums, and Proponent Response Letters (PRLs). Site characterisation data related to proposals must also be uploaded to the SSDB via the IODP³ Gateway.

The **Guidelines for Site Characterisation Data** outline data requirements for drilling proposals in detail, and the deadline for site characterisation data is typically one month after the drilling proposal deadline. Both the PDB and SSDB are accessible through the IODP³ Gateway (<http://www.iodp3.org>). If you encounter submission problems, contact the IODP³-SO Proposal and Meetings Manager by email to proposals@iodp3.org.

2.1. Summary of Proposal Document Requirements

The table on page 4 provides a summary of proposal document requirements for each proposal type.

2.2. Summary of Proposal Formatting Requirements

Many elements of proposal packages are generated interactively with the IODP³ Gateway system. However, some required elements must be prepared offline and uploaded to the system as PDF files. These must adhere to the following formatting requirements:

- page size: A4
- line spacing: 1.5 (single spacing for CVs)
- figures: cannot be larger than a single A4 page
- font type and size: Arial, 11- or 12-point
- margins: 1.5 cm all around
- in-text references: must be (Author, year) and not numerical superscripts.

Maximum file sizes are:

- Main Text PDFs including Figures: Maximum 15 MB.
- Single Site Figure PDFs: Maximum 10 Megabytes (MB)

Document type	Preliminary Drilling Proposal (Section 3.1)	Full Drilling Proposal (Section 3.2)	Addendum to a Drilling Proposal (Section 3.4)	Proponent Response Letter (PRL) (Section 3.7.3)
Deadlines	31 January & 1 July	31 January & 1 July	N/A	One month before the MSP-FB meeting
Proposal Cover Sheet:	Required	Required	Required	None
• Abstract	≤ 400 words	≤ 400 words	≤ 400 words	None
• Scientific Objectives	≤ 250 words	≤ 250 words	≤ 250 words	None
• Science Communication Plain Language Summary	≤ 400 words	≤ 400 words	≤ 400 words	None
• List of Proposed Sites	Required	Required	Required for newly-proposed and/or relocated sites	N/A
Review Response	< 300 words per point raised by in SEP reviews	< 300 words per point raised by in SEP reviews	N/A	N/A
Site Forms: 1 – General; 2 - Site Survey; 3 – Environmental; 4 - Lithologies	Only General Site Form Required	All Site Forms Required	All Site Forms Required	None
Site Figures	Required	Required	Required	None
Main Text (including figure and table captions)	≤ 4,500 words	≤ 10,000 words	≤ 4,500 words	≤ 2,500 words
Figures and Tables (included in Main Text PDF)	≤ 8	≤ 12	≤ 8	≤ 5
Success Criteria and Risk Analysis Form	None	Required	None	None
List of Proponents	Required, max 20	Required, max 20	Required, max 20	None
Curricula Vitae (CVs)	None	Required for Principal, Data and Science Communication Lead proponents	Required if change in list of Lead proponents	None
References used in Main Text	Required	Required	Required (newly-cited only)	
Science Communication Form	None	Required	None	None

The remainder of this document provides important information about content requirements and should be read carefully.

3. Scientific Ocean Drilling Proposals

3.1. Preliminary Proposals

Proponents who have a new idea for scientific ocean drilling/coring are advised to submit a Preliminary Proposal. The Preliminary Proposal should outline science that addresses one or more of the Strategic Objectives and/or Flagship Initiatives in the *2050 Science Framework* and the need for scientific ocean drilling/coring. *The 2050 Science Framework* provides a context for generating proposals, but we also envision that new and exciting ideas requiring drilling/coring will develop that are not in the current framework and flexibility is encouraged.

For Preliminary Proposals, it is strongly recommended that proponents contact the IODP³ Operators before proposal submission to discuss drilling platform capabilities, the feasibility of their proposed drilling/coring plan and strategies, success criteria, associated risk, cost categories, and the required overall timetable for transiting, drilling/coring, logging, and other downhole measurements.

Proposals that involve biosphere-related objectives may be affected by the “*Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity*” (<https://www.cbd.int/abs/>). For targets within an Exclusive Economic Zone or an Extended Continental Shelf, proponents should become familiar with the protocol’s requirements for potential users of genetic resources to obtain the prior informed consent of the country in which the targeted genetic resource is located.

3.1.1. Preliminary Proposal Format and Scope

A Preliminary Proposal should describe a compelling hypothesis, question, or idea of interest to the global scientific community that can be addressed by a drilling/coring strategy. Proposals range from hypothesis-driven to question-driven, from discipline-specific to inter-disciplinary, and from simple to complex. Proposals should address questions that are of interest to the global scientific community.

The **Main Text** of a Preliminary Proposal can contain no more than 4,500 words, including captions for figures and tables, and 8 or fewer figures and/or tables (see **Section 2**), and is submitted as a PDF file uploaded to the PDB via the IODP³ Gateway system. References are provided as a separate PDF document and are not included in the Main Text.

The Preliminary Proposal Main Text should:

- State the scientific objectives and explain how those objectives relate to or advance beyond the “*2050 Science Framework*”.
- Justify the need for drilling/coring to accomplish the scientific objectives.
- Present a conceptual strategy for addressing the scientific objectives through drilling/coring, logging, or other downhole measurements.
- Describe the proposed primary and alternate drilling/coring sites, penetration depths, and expected lithologies (in conjunction with a **Site Form 1 – General Site Information** for each proposed site; see **Section 3.1.2**).
- Reference any previous drilling/coring in the area or relevant existing proposals or expeditions.
- Discuss the availability of, or plans to acquire, site characterisation data.
- Discuss the recovery rates needed to achieve key goals.
- Describe any development of advanced and non-standard tools, special sampling techniques, downhole measurements, and/or borehole observatories.
- Identify general risks or potential logistical problems (e.g., weather, core recovery issues, sites in an EEZ, seafloor, subseafloor or oceanographic hazards to drilling/coring, unexpected

stratigraphy or age, uncertainty in target depths, engineering challenges). A full risk analysis is not needed at this stage.

- Note any relationships to other bio- or geoscience programmes or initiatives.

3.1.2. Additional Required Information

Preliminary Proposals also include the following items that do not count against the word count limit (see [Section 2](#)) and that are created interactively or uploaded separately as PDFs in the PDB via the IODP³ Gateway:

- An **IODP³ Proposal Cover Sheet** (generated interactively within the IODP³ Gateway system) that contains the following elements:
 - the proposal **Title**
 - the names of all **Proponents** (maximum of 20)
 - up to 5 **Keywords** and the broad geographic **Area** of the proposal
 - the **Name, Affiliation** and **Country** of the **Principal Lead Proponent**
 - an **Abstract** of ≤ 400 words
 - a statement of the **Scientific Objectives** of ≤ 250 words
 - a **Science Communication Plain Language Summary** of ≤ 400 words. This should describe the proposed research and its broader impacts in a way that can be understood by a general audience (see [Section 5.6](#)).
 - a list of **Proposed Sites** for drilling/coring with **Brief Site-Specific Objectives**. Alternate sites (see [Section 5.3](#)) may also be included but are not required at this stage. All **Site Names** must conform to the established system (see [Section 5.2](#)) and site **Positions** must use WGS 84 coordinates in units of decimal degrees to at least the fourth decimal place (see [Section 5.4](#)).
- A **Review Response** (for revised Preliminary Proposals only) that succinctly summarises how your submission has addressed specific points raised in previous SEP reviews, i.e., what has been changed from previous versions of the proposal, using ≤ 300 words per point (see [Section 3.5](#)).
- **Site Form 1 – General Site Information** (generated interactively within the IODP³ Gateway system) for each proposed primary drilling/coring site.
- A **Site Figure** (see [Section 5.8](#)) for each proposed primary drilling/coring site.
- A **List of Proponents** (maximum 20; generated interactively within the IODP³ Gateway system), specifying the name, affiliation, email address, ORCID identifier (when available), and expertise of each proponent. The **Principal Lead Proponent** and **Data Lead Proponent** (i.e., the lead proponent for site characterisation data) must be clearly identified, along with a **Science Communications Lead** at this stage if possible.
- A separate PDF document of the **References** that are cited in the Main Text of the proposal (using the Harvard referencing style).

Upon acceptance of the proposal by the IODP³-SO, individuals listed as proponents will receive an automatic email notification to confirm that they have agreed to this role.

3.1.3. Review of Preliminary Proposals by the SEP

The IODP³-SO sends Preliminary Proposals to the SEP for review. The SEP consists of members of the international scientific community who volunteer to serve IODP³. The SEP is a rich advisory

resource for proponents in providing guidance and critical advice about the science and feasibility of their proposals.

- **Watchdog Assignments:**

The SEP Co-Chairs assign watchdogs to examine and present each Preliminary Proposal to the panel. This watchdog team typically includes two scientists to assess the scientific objectives presented in the proposal and two to review the uploaded site characterisation data; the fifth watchdog is a representative of the IODP³ Operators.

The SEP assesses each Preliminary Proposal in terms of its relevance to the *2050 Science Framework*, the suitability of the study area, drill sites, and platform for addressing the proposed scientific objectives, and whether the achievement of those objectives would likely result in fundamental scientific advances. The SEP seeks advice on technical aspects of the drilling proposal and proposed drilling/coring strategies through the fifth watchdog and IODP³ Operators' representatives at the evaluation meeting.

- **Proposal Evaluation and Decisions**

Proponents receive a written summary of the SEP's review, including their consensus decision, after the meeting. The SEP review includes one of the following three decisions:

- **Request for a Revised Preliminary Proposal:** The SEP finds the proposal has a potentially compelling scientific objective, but further work is required before moving to the Full Proposal stage. The SEP recommends revision of the Preliminary Proposal to incorporate comments and suggestions from the review and to further develop the idea. Only one revision of a Preliminary Proposal is permitted.
- **Request for Full Proposal:** The SEP recommends development of a Full Proposal to further describe the idea and potentially to coordinate efforts with other closely related proposals.
- **Preliminary Proposal is Declined:** The SEP declines the Preliminary Proposal if the science objectives are not well described or are not compelling, if the drilling/coring strategy doesn't adequately support the science questions, and/or if the drilling/coring programme is simply not feasible. Declination of a Preliminary Proposal can harbour a supportive message to re-scope the proposal and resubmit a **thoroughly** new Preliminary Proposal.

The SEP review includes the contact information for the proposal watchdogs and the SEP Co-Chairs. It is recommended that the Lead Proponent contacts one or more of the watchdogs or Co-Chairs to discuss the SEP's recommendation and to gain more insight into the next steps in the proposal process. In these cases, proponents should copy the IODP³-SO Proposal and Meetings Manager (proposals@iodp3.org) on the email correspondence.

3.2. Full Proposals

A Full Proposal expands an initial idea, likely posed in a Preliminary Proposal, to a well-justified scientific plan that can be implemented in the real world with present technology and within a reasonable length of time. Proponents may submit a Full Proposal if advised to do so by SEP based on review of a Preliminary Proposal or a previous Full Proposal. Only one revision of a Full Proposal (called Full2) is permitted. Proponents may consider submitting a Full Proposal without a Preliminary Proposal; however, this is generally not advised as it limits review feedback.

3.2.1. Full Proposal Format and Scope

A Full Proposal should describe extensively all aspects of the scientific experiment, the drilling/coring plan, and the operational information necessary to determine feasibility, data availability, and site assessment needs. Full Proposals can be submitted for any expedition length. For example, the MSP-FB could implement a shorter scientific effort as a hybrid expedition or using

platforms with different operational capabilities. Note that for Full Proposals, contacting the IODP³ Operators before submission is required.

Proposals that involve biosphere-related objectives may be affected by the “*Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity*” (<https://www.cbd.int/abs/>). For targets within an Exclusive Economic Zone or an Extended Continental Shelf, proponents should become familiar with the protocol’s requirements for potential users of genetic resources to obtain the prior informed consent of the country in which the targeted genetic resource is located.

The **Main Text** of a Full Proposal can contain no more than 10,000 words, including captions for figures and tables, and 12 or fewer figures and/or tables (see [Section 2](#)), and is submitted as a PDF uploaded to the PDB via the IODP³ Gateway system. Prior SEP reviews, input from other IODP³ Advisory Panels, and/or workshops should be carefully considered and addressed in a Full Proposal.

Successful Full Proposals, whether complicated and extremely interdisciplinary, or simple and discipline-specific, share several key elements:

- They have strong and compelling science hypotheses/questions that are clearly articulated.
- They address scientific hypotheses or questions that require scientific ocean drilling/coring.
- They strongly link the scientific hypotheses or questions to the expected drilling/coring and logging results.
- They are responsive to the input from the SEP.
- They are innovative and have an acceptable balance between risk and potential for achievement.

A Full Proposal should:

- State the scientific objectives and explain how those objectives relate to or advance beyond the *2050 Science Framework*, including its Strategic Objectives and/or Flagship Initiatives.
- Justify the need for drilling/coring to accomplish the scientific objectives.
- Present a well-defined strategy for addressing the scientific objectives through drilling/coring, logging, or other downhole measurements. This should be framed in the form of hypotheses or questions resolvable by drilling/coring.
- Describe the available site characterisation data and/or any plans for acquiring additional data, and discuss how the drilling targets relate to those data. Proponents are reminded to upload a comprehensive set of all available site characterisation data into the SSDB via the IODP³ Gateway by the data deadline.
- Discuss the expected scientific outcome of drilling/coring and any subsequent work required to complete the overall project.
- Describe any development (including a development timeline) of advanced and non-standard tools, special sampling techniques, downhole measurements, borehole observatories or other tools, and include an out-year plan for observatory data recovery, maintenance, and ultimate termination.
- Describe any external funding for non-standard tools.
- Identify any risk or potential logistical problems (e.g., weather, core recovery issues, sites in an EEZ, seafloor, subseafloor or oceanographic hazards to drilling/coring, unexpected stratigraphy or age, uncertainty in target depths, engineering challenges).
- In order to increase operational flexibility, proponents are required to outline three different implementation plans:

- An **Essential Plan** listing the site(s) that is/are proposed for drilling/coring to guarantee the fulfilment of the crucial scientific objectives that must be achieved in order for the expedition to be successful.
- An **Intermediate Plan** in which specific priority sites are proposed for drilling/coring to guarantee the achievement of major scientific objectives and benefits achievable beyond the Essential Plan.
- An **Advanced Plan** including all proposed sites for drilling/coring to achieve all scientific objectives to their full extent and benefits achievable beyond the Intermediate Plan.

If proponents are unable to outline three different implementation plans, they must explain the reasons in detail. In any case, an Essential plan must be provided!

In case of resubmission of a proposal that was **previously at an International Ocean Discovery Program Facility Board and that did not contain the three plans** (previously referred to as Basic, Intermediate and Full Plans), then:

- if the proposal was a Full or Full2 at the Facility Board, the presented drilling plan is considered as the Advanced Plan. The Intermediate and Essential Plans must be added to the proposal before submission to IODP³, and this may be achieved via a prioritisation of objectives and sites, and should be discussed ahead of submission with the IODP³ Operators.
- if the proposal was an Ancillary Project Letter (APL) at the Facility Board, then the presented drilling plan is considered as the Essential Plan and no further plan is required.
- Describe, briefly, relationships to other bio- or geoscience programmes and/or other initiatives, including relevant previous drilling/coring, current proposals, or expeditions.
- Outline potential in-kind contributions (IKC) and project-based cash contributions from any institution, agency, or industrial partnership. IKCs may include essential scientific or operational services that the IODP³ would normally pay for, fully/partly funded drilling platforms, support vessels, hazard site survey (if required), permitting assistance, onshore facilities near drill sites (if required), ice management, and remote logistical assistance.

It is essential that Advanced Plans include multiple alternate drill sites should safety or site characterisation concerns preclude drilling/coring at one or more primary sites (see [Section 5.3](#) for definitions of alternate sites). Site characterisation data must be submitted to the SSDB via the IODP³ Gateway to support review of the proposals. The site characterisation data deadline is typically one month after the proposal submission deadlines; see the **Guidelines For Site Characterisation Data** for more information.

In addition, proposals should discuss required recovery rates in general as a function of depth and highlight target zones (including required recovery rates for these) in order to achieve the primary objectives of the proposal. Finally, the proposal should address the impact on the science if required recovery rates, target depths or specific sites are not achieved.

3.2.2. Additional Required Information

Full Proposals also include the following items that do not count against the word count limit (see [Section 2](#)) and that are created interactively or uploaded separately as PDFs in the IODP³ Gateway system:

- An **IODP³ Proposal Cover Sheet** (generated interactively within the IODP³ Gateway system) that contains the following elements:
 - the proposal **Title**
 - the names of all **Proponents** (maximum 20)

- up to 6 **Keywords** and the broad geographic **Area** of the proposal
- the **Name, Affiliation** and **Country** of the **Principal Lead Proponent**
- an **Abstract** of ≤ 400 words
- a statement of the **Scientific Objectives** of ≤ 250 words
- confirmation that you have **contacted the appropriate IODP³ Operator** about your proposal to discuss drilling platform capabilities, the feasibility of your proposed drilling plan and strategies, and the required overall timetable for transiting, drilling, coring, logging, and other downhole measurements
- a **Science Communication Plain Language Summary** of ≤ 400 words. The plain language summary should describe the proposed research and its broader impacts in a way that can be understood by a general audience (see [Section 5.6](#))
- a list of **Proposed Sites** for drilling/coring with **Brief Site-Specific Objectives**. Alternate sites (see [Section 5.3](#)) **must** also be included. All **Site Names** must conform to the established system (see [Section 5.2](#)) and site **Positions** must use WGS 84 coordinates in units of decimal degrees to at least the fourth decimal place (see [Section 5.4](#)).
- A **Review Response** (for new Full Proposals that are based on a Preliminary Proposal previously reviewed by SEP, or for revised Full Proposals) that succinctly summarises how your submission has addressed specific points raised in previous SEP reviews, i.e., what has been changed from previous versions of the proposal using ≤ 300 words per point (see [Section 3.5](#)).
- The following items for **each proposed primary and alternate drilling/coring site**:
 - **Site Form 1 – General Site Information**
 - **Site Form 2 – Site Survey Details**
 - **Site Form 3 – Environmental Protection**
 - **Site Form 4 – Lithologies**
 - a **Site Figure** (see [Section 5.8](#))

The forms are generated interactively within the IODP³ Gateway system and the Site Figures must be prepared and uploaded as A4 PDF files.

- A **Success Criteria and Risk Analysis Form** (completed interactively within the IODP³ Gateway system) that defines your minimum criteria for achieving scientific and operational success, primary risks to success and mitigating factors. Consultation with the IODP³ Operators is necessary for understanding risk and developing mitigation strategies (see [Section 5.7](#)).
- A **List of Proponents** (maximum 20; generated interactively within the IODP³ Gateway system), specifying the name, affiliation, email address, ORCID identifier (when available), and expertise of each proponent. The **Principal Lead Proponent, Data Lead Proponent** (i.e., the lead proponent for site characterisation data) and **Science Communications Lead Proponent** must be identified.
- A two-page **Curricula Vitae** or biographical sketch for **each** of the **Principal, Data, and Science Communication Lead Proponents**, combined into one PDF file.
- A separate PDF document of the **References** that are cited in the **Main Text** of the proposal (using the Harvard referencing style).

- A **Science Communication Form** (completed interactively within the IODP³ Gateway system) providing details of related previous scientific drilling expeditions/legs, existing articles or media relating to the research, and any existing contacts within local populations or communities (see [Section 5.6](#)). This information will help to inform a broader communication strategy should the proposal be implemented as an IODP³ drilling expedition.

Upon acceptance of the proposal by the IODP³-SO, individuals listed as proponents will receive an automatic email notification to confirm that they have agreed to this role.

3.2.3. Review of Full Proposals by the SEP

The IODP³-SO sends all new and revised Full Proposals, with the accompanying site characterisation data, to the SEP for review. The SEP consists of members of the international scientific community who volunteer to serve IODP³. The SEP is a rich advisory resource for proponents in providing guidance and critical advice about the science and feasibility of their proposals.

- Watchdog Assignments

The SEP Co-Chairs assign watchdogs to examine and present each proposal to the panel. This watchdog team typically includes two scientists to assess the scientific objectives presented in the proposal and two to review the uploaded site characterisation data; the fifth watchdog is a representative of the appropriate IODP³ Operators.

The SEP assesses each proposal in terms of its relevance to the *2050 Science Framework*, the suitability of the study area, and study sites for addressing the proposed scientific objectives, and whether the achievement of those objectives would likely result in fundamental scientific advances. The SEP seeks advice on technical aspects of the drilling proposal and proposed drilling/coring strategies through the fifth watchdog and other IODP³ Operators' representatives at the evaluation meeting.

- Proposal Evaluation and Decisions

The SEP evaluates **new** and **revised** Full Proposals, and a written review report is prepared and sent to the proponents. Depending on the stage of the proposal and the latest assessment in the review process, an evaluation may have one of the following outcomes:

- **Request for Revision of the Full Proposal:** The SEP may request a revision of the Full Proposal. Full Proposals can be revised **only once**. There is no strict time limit for resubmission because proponents may require time to seek essential outside advice on technical and funding aspects to improve the overall feasibility of their drilling proposal, collect additional site characterisation data, and/or reprocess existing data. Proposals that are inactive for 5 years are flagged and the Lead Proponents are contacted by the IODP³-SO to update the status of their proposal. Proponents may submit the revised proposal and/or new data; or proponents may request a specified time extension via submission of a Proponent Response Letter (see [Section 3.7.3](#)). Inactivity or no response to the IODP³-SO inquiry results in the deactivation of the proposal.
- **Full Proposal is Forwarded to the MSP-FB for Potential Scheduling:** SEP reviews all available and updated site characterisation data in the SSDB for completeness and adequacy. The SEP then decides whether the proposal should be forwarded for possible implementation to the MSP-FB (see [Section 3.7](#)). A proposal can only be forwarded to the MSP-FB if the site characterisation is complete. The SEP also rates the proposal (see [Section 5.1](#) for rating definitions) and writes a final review assessing the priority of the proposal with respect to the *2050 Science Framework*.

If the site characterisation data package is not sufficient and more data needs to be collected the proposal may be forwarded to the Proposal Waiting Room. There, the proposal will await the completion of the site characterisation, upon which SEP will forward it to the MSP-FB.

- **Full Proposal is Declined:** The SEP may decline Full Proposals at any stage if the science objectives and hypotheses, drilling/coring plan, or the accompanying site characterisation data are not sufficiently compelling or developed. This means that the proposal is no longer active in the system, and proponents can only re-enter the system via the submission of a new Preliminary or Full Proposal.

Reasons that a proposal might not advance include:

- The proposal's science is incremental (i.e., makes only a small step forward) or is one-sided (i.e., doesn't account for alternative hypotheses).
- The proponents are unresponsive to the SEP comments.
- The proposed science is simply undrillable.
- The proposal does not critically select drilling/coring sites and target depths to answer well-defined questions.
- The proposal does not clearly state how the proposed measurements will be used to answer the scientific questions/hypotheses.
- The proposal has scientific objectives that conform poorly with the overall goals of the *2050 Science Framework* or/and that do not bring added value to IODP³.
- The data that are needed to characterise the drill site (location, target depth, stratigraphic and structural framework) and place it in a proper context are not sufficient to underpin the science or to conduct operations safely.

3.4. Addendum to a Drilling Proposal

If drill sites are changed or added or additional/missing site characterisation data are submitted, submission of an Addendum is required to describe the changes or new sites, and to provide a rationale for how these fit the objectives of the proposed scientific drilling/coring project. However, if significant changes are made to the objectives or strategy of the original proposal, the proponents must submit a new proposal instead of an Addendum.

The Addendum **Main Text** can contain no more than 4,500 words, including captions for figures and tables, and 8 or fewer figures including tables (see [Section 2](#)). If newly available site characterisation data are referred to, it should discuss how the drilling/coring targets relate to those data. An Addendum must also include the following items that do not count against the word count limit, and that are created interactively or uploaded separately as PDFs via the IODP³ Gateway system:

- An **IODP³ Proposal Cover Sheet** (generated interactively within the IODP³ Gateway system) that contains the following elements:
 - the proposal **Title**
 - the names of all **Proponents** (maximum 20)
 - up to 6 **Keywords** and the broad geographic **Area** of the proposal
 - the **Name, Affiliation** and **Country** of the **Principal Lead Proponent**
 - an **Abstract** of ≤ 400 words
 - a statement of the **Scientific Objectives** of ≤ 250 words

- confirmation that you have **contacted the appropriate IODP³ Operator** about your proposal to discuss drilling platform capabilities, the feasibility of your proposed drilling plan and strategies, and the required overall timetable for transiting, drilling, coring, logging, and other downhole measurements
- a **Science Communication Plain Language Summary** of ≤ 400 words. This should describe the proposed research and its broader impacts in a way that can be understood by a general audience (see [Section 5.6](#))
- a list of **newly-proposed and/or relocated sites** for drilling/coring, including alternate sites with **Brief Site-Specific Objectives**. All **Site Names** must conform to the established system (see [Section 5.2](#)) and site **Positions** must use WGS 84 coordinates in units of decimal degrees to at least the fourth decimal place (see [Section 5.4](#)).
- The following items for **each newly-proposed or relocated primary and alternate drilling/coring site**:
 - **Site Form 1 – General Site Information**
 - **Site Form 2 – Site Survey Details**
 - **Site Form 3 – Environmental Protection**
 - **Site Form 4 – Lithologies**
 - a **Site Figure** (see [Section 5.8](#))

The forms are generated interactively within the IODP³ Gateway system and the Site Figures must be prepared and uploaded as A4 PDF files.

- A **List of Proponents** (maximum 20; generated interactively within the IODP³ Gateway system), specifying the name, affiliation, email address, ORCID identifier (when available), and expertise of each proponent. The **Principal Lead Proponent**, **Data Lead Proponent** (i.e., the lead proponent for site characterisation data) and **Science Communications Lead Proponent** must be identified.
- A two-page **Curricula Vitae** or biographical sketch for **each** of the **Lead Proponents**, combined into one PDF file (**Note:** this is only required if there have been any changes to the Lead Proponents).
- A separate PDF document of any **References** that were **newly-cited** in the Main Text of the Addendum (using the Harvard referencing style).

The IODP³ system requires that an Addendum be submitted to change a site location. Any new location, even a small move from a previous location, requires that a new site be created. The Addendum must include revised Site Forms for the new sites and the relevant SSDB site data and metadata must be updated. **In case of small changes**, the main text of the Addendum can be brief, simply stating the reason for the site changes; the abstract, scientific objectives, and science communication plain language summary in the cover sheet **can remain unchanged**.

3.5. Communication Between SEP and Proponents

When submitting a revised proposal at any stage (including a Full Proposal developed from a Pre-Proposal, or a new submission of a previously declined proposal), proponents must include a **Review Response** in the IODP³ Proposal Cover Sheet. This section will not count against the word count for the Main Text of the proposal and does not need to be repeated in the Main Text of the proposal. In the Review Response, proponents must succinctly summarise how their submission has addressed the specific points raised in previous SEP reviews (i.e., what has been changed from

previous versions of the proposal, using ≤ 300 words per point). A revised or new submission can be rejected without SEP review if, for example, the proponent has submitted essentially the same proposal without making changes asked for by SEP in previous reviews. This decision will be made by the SEP Co-Chairs and the primary basis of this decision will be the material that the proponents provide in their Review Response.

Please note that a Review Response is an important part of a revised proposal and differs from a Proponent Response Letter, which is described in [Section 3.7.3](#).

3.6. Safety Review by the Safety and Environment Advisory Group (SEA Group)

As part of the SEP review of drilling proposals and the subsequent development of a proposal into an expedition, members of the SEA Group will conduct a safety review of the proposed drill sites. To expedite the process, SEA Group members will evaluate the site data in parallel to the SEP review. If possible and necessary, members of the SEA Group may be invited to workshops preceding the submission of a proposal to discuss potential problems with site selection.

The evaluation by the SEA Group members will be added to the SEP Review Letter.

After a proposal has been forwarded to the MSP-FB, the SEA Group makes the final recommendations for each proposed site (by meeting virtually). These are: **Recommend as Proposed**; **Recommend with Modification** (e.g., in position and/or target depth); or **Not Recommend** with suggestions for improvement. The **SEA Group Safety Review Guidelines** contain additional information and details about this review process.

The IODP³ Operators have final approval of all drill sites, and the MSP-FB Co-Chairs decide whether any SEA Group modification to the drilling/coring plan creates a need for re-examination by the SEP. Any changes to a proposed drill site or addition of new primary or alternate drill sites requires submission of an Addendum to enter new site information (see [Section 3.4](#)); the latter also requires uploading of new site characterisation data in the SSDB. When an Addendum captures SEA Group-directed site modifications, the main text can be brief (e.g., “site modification requested by the SEA Group”) and the proposal cover sheet/abstract can remain unchanged.

3.7. Consideration by the MSP Facility Board

Once the SEP has forwarded a Full Proposal to the MSP-FB, further actions are within the jurisdiction of the MSP-FB. Any dialog to develop the proposal into an IODP³ expedition takes place between the MSP-FB, the IODP³ Operators, the proponent team, and the Co-Chief scientists, which are assigned after scheduling. On some occasions the MSP-FB can request additional analysis by the SEP, for example if changes to planned drilling/coring operations are made (see [Section 3.7.2](#)). All correspondence between the MSP-FB and proponents must be copied to the IODP³-SO (to proposals@iodp3.org) for the proposal’s formal record.

Until a proposal is scheduled as an expedition, the Principal Lead Proponent can be contacted by interested scientists to discuss additional scope such as, e.g., the application of special tools. The MSP-FB and the IODP³ Operators need to be included in this discussion, which shall be copied to the IODP³-SO for the proposal’s formal record.

3.7.1. Expedition Scheduling

In general, the MSP-FB considers scheduling once per year. A proposal may be included in an upcoming schedule of expeditions based on factors such as platform location and capability, regional planning, estimated operational cost, and anticipated science outcome and returns. Action also may be deferred to a future scheduling opportunity.

The MSP-FB Co-Chairs communicate any decisions to the proponents, which must be done via email through the IODP³-SO. At any stage, the MSP-FB may ask the proponents for more information.

Replies to specific MSP-FB inquiries should be made via a **Proponent Response Letter** (PRL) (see [Section 3.7.3](#)) submitted through the IODP³ Gateway. Proponents can also submit an unsolicited PRL to communicate any changes or status updates that are important for scheduling decisions about a proposal to the MSP-FB.

The MSP-FB may also ask the proponents to submit an Addendum (see [Section 3.4](#)) to provide an update on relevant scientific research, provide more information, relocate proposed primary or alternate drilling/coring sites, or add new primary or alternate sites.

When drill sites are changed or added to an already scheduled expedition, but before the expedition sails, submission of an Addendum is required to describe the changed or new sites and to provide a rationale for how those fit the primary objectives in the proposed scientific drilling/coring project. Upon review by the MSP-FB Co-Chairs, the SEP may be asked to provide comments on the Addendum (see [Section 3.7.2](#)), and, in all cases, the SEA Group reviews the sites in question (see [Section 3.6](#)). The MSP-FB has the final decision in approving or rejecting any or all of the changed or added sites that are part of an Addendum.

Note that, although at least one Co-Chief Scientist is normally selected from the proponent team of an implemented proposal, proponents do not automatically become members of the Expedition Science Team, as staffing of expeditions is achieved by an open, competitive, international call process involving evaluation of applicants by the Programme Member Offices.

[3.7.2. SEP Comment Forms to the MSP-FB](#)

The MSP-FB may ask the SEP to give an opinion on specific aspects of a proposal to help the MSP-FB in its scheduling decisions or implementation of expeditions. In this case, the SEP comments to the MSP-FB become part of the proposal record maintained by the IODP³-SO via the **SEP Comment Form**. The IODP³-SO sends the SEP Comment Form only to the MSP-FB Co-Chairs and the IODP³ Operators. The MSP-FB Co-Chairs and/or the IODP³ Operators may follow up with the proponents and Co-Chief Scientists (if appointed by this stage) to explain what actions, if any, they require based on the SEP opinion. It is important to understand that such proposals retain their MSP-FB status; they are not being re-reviewed by the SEP.

[3.7.3. Proponent Response Letters \(PRL\)](#)

Proponents must submit a Proponent Response Letter (PRL) to address inquiries by the MSP-FB. A PRL is a PDF file submitted through the IODP³ Gateway system that contains no more than 2,500 words, including captions for figures and tables and 5 or fewer figures and/or tables (see [Section 2](#)). The PRL should address only the specific comments or questions posed by the MSP-FB.

4. Land-to-Sea Proposals (L2S)

[4.1. Overview of Land-to-Sea Proposals](#)

Land-to-Sea Proposals are those for which full achievement of the scientific objectives requires scientific drilling at both onshore and offshore sites or at shallow marine sites. They are jointly implemented by IODP³ and the International Continental Scientific Drilling Program (ICDP). Both programmes focus on various challenging themes of global geoscientific and socio-economic relevance, including: (1) geodynamic processes; (2) geohazards; (3) georesources; and (4) environmental change.

To date, IODP and ICDP have jointly funded proposals which demonstrate a scientific need for one of the following:

- Both land and sea drilling (e.g., IODP Expedition 313)

- Shallow marine locations where the collaboration between IODP and ICDP can achieve much more than either entity on its own (e.g., IODP Expedition 364).

IODP³ and ICDP have a common proposal submission process at each proposal stage and a joint review process by IODP³ and ICDP with a clear schedule and set of guidelines for proponents.

All proposed L2S projects will need to submit a **Preliminary Proposal**, a **Workshop Proposal**, and a **Full Proposal**. A workshop is required due to the complexity of such projects (see [Section 4.3](#) for full details).

Proponents (i.e., Principal Investigators and Co-Investigators) should prepare a single L2S Proposal at each stage combining the IODP³ and ICDP elements. Preliminary Proposals and Workshop Proposals should be submitted to ICDP at:

<https://www.icdp-online.org/proposals/>

and Full Proposals should be submitted to IODP³ via the IODP³ Gateway system at:

<https://www.iodp3.org/>

The IODP³ and ICDP programmes will share all L2S proposal documents between them and arrange for joint review and response. To summarize, L2S proposal submission requires a Preliminary Proposal, followed by a Workshop Proposal, and finally a Full Proposal.

Details of each step and the specified schedule are given below. This deviates somewhat from the submission procedure for other IODP³ proposals, therefore proponents should pay close attention to requirements, deadlines and where to submit to at each stage. To the largest extent possible, review procedures of both programmes are preserved. The joint implementation of a L2S Proposal will be resolved between the IODP³ MSP Facility Board (MSP-FB) and ICDP Executive Committee (EC) and Assembly of Governors (AoG), on a case-by-case basis.

An overview of the criteria used for evaluation of proposals is provided in “**IODP³ Proposal Evaluation Overview**” available at <https://www.iodp3.org> and “**ICDP Proposal Processing**” available at <https://www.icdp-online.org/proposals/proposal-processing/>.

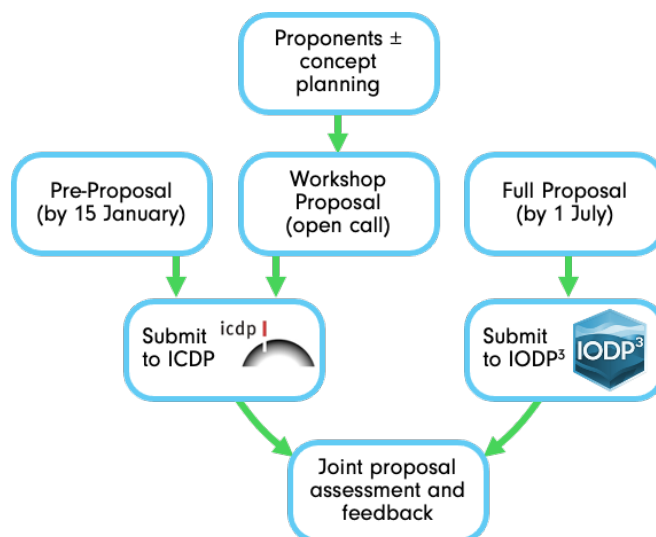
Note on Expedition Science Team Selection: Proponents should be aware that the science teams for the IODP³ and ICDP components of L2S projects are selected in different ways. In the case of the IODP³ component, any scientist from an IODP³ member country can apply for participation. Selection is a combined effort by the Programme Member Offices, the Co-Chief scientists of the expedition, and the platform operator, with the aim to enable appropriate participation of member countries and to provide the relevant scientific skills needed for the expedition. Therefore, proponents of the IODP³ component do not automatically become members of the Expedition Science Team. In the case of the ICDP component, up to 50% of the Expedition Science Team may be specified in the L2S Proposal. In addition, L2S Proposals may: (1) include Land-to-Sea drilling; or (2) comprise only shallow marine locations. If the former, the two science teams must work closely together to prepare for the paired expeditions/projects and after for analysis and integration of results. Some overlap in membership of the two science teams is to be expected.

More information about **ICDP proposals** and how to submit a Preliminary or Workshop L2S proposal via ICDP is available at: https://www.icdp-online.org/fileadmin/New_ICDP_website/Proposals/doc/Guidelines_for_L2S_Proposals_short.pdf

4.2. Schedule and Joint Review Process for Land-to-Sea Proposals

L2S Preliminary Proposals (15 January deadline) and **Workshop Proposals (no fixed deadline)** should be **submitted to ICDP** and will be shared with IODP³. **Full Proposals (1 July deadline)** are **submitted to IODP³** and will be shared with ICDP. All proposals will receive review by the IODP³ Science Evaluation Panel (SEP) and the ICDP Science Advisory Group (SAG). IODP³ SEP watchdogs

and ICDP appointees will generate a joint review of Preliminary and Full proposals, with subsequent panel review at the ICDP-SAG meeting in the Spring and IODP³ SEP meeting in the Autumn. A joint review letter of Preliminary and Full Proposals will be sent to the proponents following the Autumn IODP³ SEP meeting. A revised Pre-Proposal (“Pre2”) may be requested and is permitted prior to moving to the Workshop proposal stage. Workshop proposals are accepted at any time, reviewed by ICDP, and will receive a response as soon as possible following submission. Results from the workshop should be included in the L2S Full Proposal. In parallel with other IODP³ and ICDP Full Proposals, only one revision of the Full Proposal (to “Full2”) is permitted.



Land-to-Sea drilling proposal system

4.3. Summary of Land-to-Sea Proposal Requirements

Proposal Type	L2S Preliminary Proposal	L2S Workshop Proposal	L2S Full Proposal
General	Abstract: ≤ 400 words Scientific Objectives: ≤ 250 words Figures: Cannot be larger than a single-page A4 In-text References: Must be (Author, year) and not numerical superscripts Font size: 11- or 12-point Line Spacing: 1.5 Margin: 2.5 cm all around		
Maximum Image and File Sizes	N/A	N/A	Single Site Figure PDF: Maximum 10 Megabytes (MB) Main Text PDF including Figures: Maximum 15 MB
Deadlines	15 January	Any time	1 July
How and Where to Submit	Submit a single PDF file to ICDP at: proposal.submission@icdp-online.org	Submit a single PDF file to ICDP at: proposal.submission@icdp-online.org	Submit to IODP ³ at: https://www.iodp3.org
Main Text	≤ 4,000 words	≤ 5,800 words	≤ 12,000 words
Figures and Tables	No limit, so long as they convey essential information	No limit, so long as they convey essential information	≤ 14**
List of Proponents	Required	Required	Required
Curricula Vitae (CV)	None	Required	Required
Proposal Cover Sheet	Required	Required	Required
Site Forms 1 – General; 2 - Site Survey; 3 – Environmental; 4 - Lithologies	None	None	All IODP³ Site Forms Required:
Site Data	No site survey data should be uploaded	No site survey data should be uploaded	Site survey data must be uploaded to the IODP ³ SSDB

** Figures and Tables are part of the user-uploaded Main Text PDF. They are not uploaded as separate files.

4.4. Land-to-Sea Preliminary Proposals

The deadline for submission of L2S Preliminary Proposals through the ICDP system is 15 January each year. Proponents should email a single PDF file to: proposal.submission@icdp-online.org.

The main text of an L2S Preliminary Proposal is $\leq 4,000$ words long, (A4 size, 11- or 12-point font, 2.5 cm margins, line spacing 1.5). The text limit does not include the reference list, figure and table captions, cover sheet or details of proponents (see below for details). There is no limit to figures and/or tables so long as they convey essential information.

The **Main Text** of a L2S Preliminary Proposal should:

- State the scientific objectives and explain how those objectives specifically address or advance the 2050 Science Framework and the ICDP Science Plan
- Justify the need for drilling to accomplish the scientific objectives
- Present a conceptual strategy for addressing the scientific objectives through drilling, coring, logging, or other down-hole measurements
- Describe the proposed drilling sites, penetration depths, and expected lithologies
- Discuss the availability of, or plans to acquire, site characterisation data
- Discuss the % core recovery rates needed to achieve key goals
- Describe any requirements for or development of advanced and non-standard tools, special sampling techniques, down-hole measurements, and/or borehole observatories.
- Identify any logistical problems, e.g., political issues, permitting problems, extreme weather, sea-ice, piracy, or others.
- Describe briefly any relationships to other international geoscience programmes or initiatives.

L2S Preliminary Proposals should also include the following items (that do **not** count towards word or page limits). Writing guidelines and templates can be found at <https://www.icdp-online.org/proposals/proposal-preparation/>.

- An official ICDP Proposal Cover Sheet (available **here**), complete with an abstract of ≤ 400 , and a statement of the scientific objectives of ≤ 250 words.
- A list of proponents (maximum 20), specifying the name, affiliation, email address, and expertise of each proponent. Up to 10 lead proponents may be specified. The Principal Lead Proponent and Data Lead (i.e., the lead proponent for site characterisation data) also need to be identified.
- A list of proposed drilling sites, including alternate sites if known, with brief site-specific objectives.
- **NOTE:** No site survey data should be uploaded to the IODP³ Site Survey Database (SSDB) at this stage, but this will be required for a Full Proposal.
- Standard 2-page Curricula Vitae of all PIs listed in the ICDP Proposal Cover Sheet, prepared using this template.

IODP³ will create a proposal number and site names and locations within the IODP³ Proposal Database and Site Survey Database systems upon receipt of the Preliminary Proposal (forwarded by ICDP; *proponents do not need to send their proposal to IODP³*).

4.5. Land-to-Sea Workshop Proposals

Submission through ICDP at any time, open submission deadline. Proponents should email a single PDF file to: proposal.submission@icdp-online.org

L2S Workshop Proposals should state the scientific objectives of the workshop and explain how those objectives relate to, or advance, the *2050 Science Framework* and the *ICDP Science Plan*. A revised L2S Workshop proposal may be required after review.

An L2S Workshop Proposal should include the items below and meet the formatting requirements. Writing guidelines and templates can be found at <https://www.icdp-online.org/proposals/proposal-preparation/>.

- An official ICDP Proposal Cover Sheet (available [here](#)), complete with an abstract of ≤ 400 words, and a statement of the scientific objectives of ≤ 250 words.
- A main proposal document consisting of a maximum of 5,800 words, excluding references (A4 size, 11- or 12-point font, 2.5 cm margins, line spacing 1.5)
- A standard 2-page Curriculum Vitae of all proponents listed in the cover sheet (please use the ICDP CV template available [here](#))
- If this is a revised workshop proposal, a clear response to previous review comments should be included in a cover letter.

The main proposal document should address the following items:

- Discuss the scientific objectives and explain how those objectives specifically address/advance the IODP³ and ICDP science plans.
- Explain why the research goals are of global and far-reaching importance and why drilling is needed to achieve these goals (the programmes do not consider topics of only local or regional relevance).
- Discuss the specific drilling site(s) or how these will be selected, and how they facilitate reaching the research goals.
- Discuss the societal relevance of the project, and plans for education and outreach. **Please note**, an education and outreach plan is required for a L2S Full Proposal.
- Discuss the expected scientific outcome of drilling and subsequent work required to complete the overall project.
- Present a preliminary list of workshop participants to demonstrate international participation and a broad range of expertise, including those with knowledge of the IODP³ and ICDP programmes essential to the development of the proposal (this preliminary list should not exceed 50% of the total number of workshop participants). The proposal should specify how efforts will be made to open the workshop and project to the wider international community of researchers from various disciplines.
- Give a brief description of the structure and agenda of the planned workshop.
- Outline specific scientific and technical issues that will be discussed and developed by the workshop participants. Summarize the planned strategy for addressing the scientific objectives through drilling, core/cuttings/fluid sampling, logging and down-hole measurements, laboratory testing and/or analysis of recovered samples, and integration with existing or planned surface-based studies, and highlight any particular aspects that will be discussed at the workshop. Note that technical and drilling details only need to be briefly outlined, as it is the task of a workshop to gather a critical mass of international researchers together to develop these aspects in a Full Proposal.
- Describe the proposed drill sites (and alternate sites) on the basis of the available data, which may include geologic maps, seismic sections and other geophysical data, sediment cores or other stratigraphic interpretations, cross-sections showing expected lithologies, and relevant information from prior drilling operations. If existing site survey data are insufficient, the workshop agenda should clearly address what is needed for further site characterisation prior to drilling (please refer to the IODP³ **Guidelines for Site Characterisation Data** available at <https://www.iodp3.org> and the **Pre-site survey and site selection** chapter of the ICDP Primer

(v6, 2024) available **here**), and discuss how the necessary additional site survey data will be obtained.

- Include a workshop budget.
- Describe briefly any relationships of the drilling project or supplemental science investigations to other international geoscience programmes.
- In case of similar projects already conducted within ICDP or IODP³ (or its predecessor ocean drilling programs), accurately describe the relationship to these other projects and to what degree and how this project is unique.
- Note that one IODP³ and one ICDP review panel member will attend the workshop.
- Note that no site survey data should be uploaded to the IODP³ Site Survey Database (SSDB), but this will be required for a Full Proposal.

If a Workshop proposal is accepted, the proponents must have an open call (a web-based and/or printed advertisement) to the international scientific community for participation in the workshop of at least 50% of the total number of participants. Proponents are encouraged to seek co-funding of the ICDP workshop through IODP³ Programme Member Offices (PMOs).

4.6. Land-to-Sea Full Proposals

L2S Full Proposals must be submitted through the IODP³ Gateway system (<http://www.iodp3.org>). It is strongly encouraged that they are submitted at the 1 July proposal submission deadline, with a deadline for upload of site survey data to the SSDB (via the IODP³ Gateway) approximately one month later. We do not recommend submission at the 31 January deadline, as the proposal will not be reviewed until the following review cycle (associated with the 1 July submission deadline).

Proposals that involve biosphere-related objectives may be affected by the “*Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity*” (<https://www.cbd.int/abs/>). For targets within an Exclusive Economic Zone or an Extended Continental Shelf, proponents should become familiar with the protocol’s requirements for potential users of genetic resources to obtain the prior informed consent of the country in which the targeted genetic resource is located.

The main text of a L2S Full Proposal should be a maximum of 12,000 words long, including captions for figures and tables but excluding references, with ≤ 14 figures and/or tables. The document should be formatted for A4 size, using 11- or 12-point font, 2.5 cm margins, and line spacing 1.5. The word limit does not include the proposal cover sheet, any appendices, or the list of proponents; these should not be included in the Main Text (see below for details). The proposal should describe extensively all aspects of the full scientific experiment, drilling plans, and the operational information necessary to determine feasibility, data availability, and site assessment needs. Prior reviews, input from other Advisory Panels, and/or workshop input should be carefully considered and addressed in the Full Proposal. Note that the IODP³ Gateway system also requires completion of a **Review Response** section (not included in the proposal word/page limit) for the PDB records to summarize changes made in response to previous reviews. Details of the budget, technical and drilling plans, data management plans for the land sites (see information below) should be included as Appendices.

The **Main Text** of a L2S Full Proposal should:

- State the scientific objectives and explain how those objectives specifically address/advance the *2050 Science Framework* and the *ICDP Science Plan*.
- Indicate how the results from the Workshop have been integrated into the proposal.
- Justify the need for drilling to accomplish the scientific objectives.
- Present a well-defined strategy for addressing the scientific objectives through drilling, coring, logging and/or other down-hole measurements.

- Provide detailed estimates of, and justification for, the time required for drilling, coring, logging, and/or other down-hole measurements.
- Describe the available site characterisation data and any plans for acquiring additional needed data, and discuss how the drilling targets relate to these data.
- For offshore site characterisation requirements, please refer to the IODP³ **Guidelines for Site Characterisation Data** available at <https://www.iodp3.org>. For land site characterisation recommendations, please refer to the **Pre-site survey and site selection** chapter of the ICDP Primer (v6, 2024) available **here**.
- **NOTE:** Proponents must upload the required, comprehensive set of site characterisation data into the IODP³ SSDB for both land and offshore sites by approximately one month after the proposal submission deadline. While we normally require data submission as described in the IODP³ **Guidelines for Site Characterisation Data** (available at <https://www.iodp3.org>), exceptions may be made under specific circumstances, e.g., use of proprietary data. This would require communication with the Chair of the ICDP Executive Committee.
- For the **offshore** component of the L2S project, in order to increase operational flexibility in IODP³, proponents are **required** to outline three different implementation plans for the offshore operations in their L2S Full Proposal:
 - An **Essential Plan** listing the site(s) that is/are proposed for drilling/coring to guarantee the fulfilment of the crucial scientific objectives that must be achieved in order for the expedition to be successful.
 - An **Intermediate Plan** in which specific priority sites are proposed for drilling/coring to guarantee the achievement of major scientific objectives and benefits achievable beyond the Essential Plan.
 - An **Advanced Plan** including all proposed sites for drilling/coring to achieve all scientific objectives to their full extent and benefits achievable beyond the Intermediate Plan.

If proponents are unable to outline three different implementation plans, they must explain the reasons in detail. In any case, an Essential Plan must be provided!

In case of resubmission of a proposal that was **previously at an International Ocean Discovery Program Facility Board and that did not contain the three plans** (previously referred to as Basic, Intermediate and Full Plans), then:

- if the proposal was a Full or Full2 at the Facility Board, the previous drilling plan is considered as the Advanced Plan. The Intermediate and Essential Plans must be added to the proposal before submission to IODP³, and this may be achieved via a prioritisation of objectives and sites, and should be discussed ahead of submission with the IODP³ Operators.
- Include sufficient alternate drill sites as safety or site characterisation concerns may preclude drilling at one or more primary sites either before or during operations. This is an essential element of a Full Proposal.
- Discuss required % core recovery rate(s) as a function of depth and highlight particular target zones in order to achieve the primary objectives of the proposal.
- Address the impact on the science if required recovery is not achieved.
- Discuss the expected scientific outcomes of drilling and subsequent work required to complete the overall project.
- Describe any requirements for and/or development of advanced and non-standard tools, special sampling techniques, down-hole measurements, borehole observatories or others, and include a funding plan for observatory data recovery, maintenance, and ultimate termination.

- Describe any external funding for non-standard tools.
- Identify any logistical problems, e.g., permitting issues, extreme weather, ice conditions, piracy, etc.
- Describe briefly any relationships to other international geoscience programmes and/or initiatives.
- Provide a detailed response to the joint IODP³-ICDP review(s) of previous versions of the proposal.
- For **offshore sites**, please note that if the proposal is selected for drilling, sites will also need to be approved by the IODP³ Safety and Environment Advisory (SEA) Group (see [Section 3.6](#)).
- For **onshore sites**, include:
 - A detailed budget including at least two full quotes from drilling contractors. These should include costs for site preparation, drilling, down-hole measurements, on-site sample handling and analyses, down-hole monitoring, logistics/travel, etc., and should separately classify costs as contracts, consumables, and services (such as mobilisation/demobilisation), as well as time-dependent services in different phases.
 - A detailed technical plan and a permitting plan with details of the authority that grants permission for drilling. Note: ICDP categorizes a project according to its technical complexity and requires different degrees of technical planning for executive operations.
 - A detailed drilling, testing and logging schedule or timetable.
 - A simple Risk Matrix that identifies possible major risks that might impact the project and defines a strategy to avoid or mitigate against physical, budgetary, health and safety, or environmental failures.
 - A project management plan, defining roles and responsibilities for key personnel and identifying all proponents in essential scientific and operational aspects of the project.
 - An Education and Outreach Plan defining implementation and individual responsibilities.
 - Up to 50% of the Expedition Science Team for land site drilling may be specified - this list of names should be included within the Main Text of the proposal.

Full L2S Proposals should include the following items that do **not** count against the word limit and that are created interactively or uploaded as PDFs via the IODP³ Gateway system:

- An **IODP³ Proposal Cover Sheet** (generated interactively within the IODP³ Gateway system) that contains the following elements:
 - the proposal **Title**
 - the names of all **Proponents** (maximum 20)
 - up to 6 **Keywords** and the broad geographic **Area** of the proposal
 - the **Name, Affiliation** and **Country** of the **Principal Lead Proponent**
 - an **Abstract** of ≤ 400 words
 - a statement of the **Scientific Objectives** of ≤ 250 words
 - confirmation that you have **contacted the appropriate IODP³ Operator** about your proposal to discuss drilling platform capabilities, the feasibility of your proposed drilling plan and strategies, and the required overall timetable for transiting, drilling, coring, logging, and other downhole measurements
 - a **Science Communication Plain Language Summary** of ≤ 400 words. This should describe the proposed research and its broader impacts in a way that can be understood by a general audience (see [Section 5.6](#))

- a list of **Proposed Sites** for drilling/coring with **Brief Site-Specific Objectives**. Alternate sites (see [Section 5.3](#)) **must** also be included. All **Site Names** must conform to the established system (see [Section 5.2](#)) and site **Positions** must use WGS 84 coordinates in units of decimal degrees to at least the fourth decimal place (see [Section 5.4](#)).
- A **Review Response** (for new Full Proposals in response to feedback on the Preliminary Proposal, or for revised Full Proposals) that succinctly summarises how your submission has addressed specific points raised in previous SEP reviews, i.e., what has been changed from previous versions of the proposal using ≤ 300 words per point (see [Section 3.5](#)).
- The following items for **each proposed primary and alternate drilling/coring site**:
 - **Site Form 1 – General Site Information**
 - **Site Form 2 – Site Survey Details**
 - **Site Form 3 – Environmental Protection**
 - **Site Form 4 – Lithologies**
 - a **Site Figure** (see [Section 5.8](#))

The forms are generated interactively within the IODP³ Gateway system and the Site Figures must be prepared and uploaded as A4 PDF files.

- A **Success Criteria and Risk Analysis Form** (completed interactively within the IODP³ Gateway system) that defines your minimum criteria for achieving scientific and operational success, primary risks to success and mitigating factors. Consultation with the IODP³ Operators is necessary for understanding risk and developing mitigation strategies (see [Section 5.7](#)).
- A **List of Proponents** (maximum 20; generated interactively within the IODP³ Gateway system), specifying the name, affiliation, email address, ORCID identifier (when available), and expertise of each proponent. The **Principal Lead Proponent**, **Data Lead Proponent** (i.e., the lead proponent for site characterisation data) and **Science Communications Lead Proponent** must be identified.
- A two-page **Curricula Vitae** or biographical sketch for **each** of the Principal, Data, and Science Communication Lead Proponents, combined into one PDF file.
- A separate PDF document of the **References** that are cited in the **Main Text** of the proposal (using the Harvard referencing style).
- A **Science Communication Form** (completed interactively within the IODP³ Gateway system) providing details of related previous scientific drilling expeditions/legs, existing articles or media relating to the research, and any existing contacts within local populations or communities (see [Section 5.6](#)). This information will help to inform a broader communication strategy should the proposal be implemented as an IODP³ drilling expedition.
- A **Summary of Support Requested from ICDP** for onshore site drilling (maximum of two-pages).

4.7. Implementation of an Approved Land-to-Sea Proposal

If the Full L2S Proposal is reviewed favourably by the ICDP-SAG and the IODP³ SEP, it may be forwarded to the Executive Committee (EC) and Assembly of Governors (AOG) in ICDP and the IODP³ MSP-FB for possible implementation. At this point, issues of coordination between the onshore and offshore drilling components are discussed between the MSP-FB and ICDP Operational Support Group (OSG).

5. Appendices

5.1. Proposal Ratings

The SEP rates scientific drilling proposals according to the criteria described as follows:

- **Transformative Proposal:** The proposal addresses science that is likely to transform our understanding of globally-significant processes, help to define new approaches to scientific ocean drilling science, and/or is likely to lead to a step-change in resolving scientific problems or controversies, especially those of high societal relevance. The proposal has the highest potential for new discoveries and breakthroughs and/or for opening or defining exciting new avenues of research. It should be implemented if feasible to do so.
- **Excellent Proposal:** The proposal addresses science considered of very wide importance. It tackles new and exciting scientific problems, or it will take novel approaches to existing problems that remain unresolved/controversial. The proposal has strong potential for new discoveries and breakthroughs and most likely will open new avenues of research. It should be implemented if feasible to do so.
- **Very Good Proposal:** The proposal addresses science considered of probable wide importance. It will significantly advance understanding of existing scientific problems. Compared to ‘Excellent’ proposals, ‘Very Good’ proposals have reduced potential for major new discoveries but will produce datasets to address globally important scientific problems. It should be implemented if feasible to do so.
- **Good Proposal:** The proposal has potential for producing good scientific results. The scientific problems to be addressed are important, but potentially more regional in nature. Compared to ‘Excellent’ and ‘Very Good’ proposals, ‘Good’ proposals address more mature scientific problems with limited potential for major new discoveries, but they are still likely to produce important datasets and result in important refinements of existing scientific concepts. It should be seriously considered for implementation if it can be incorporated into long-term efforts and platform schedules.
- **Fair Proposal:** The proposal falls behind in terms of excitement and potential for discovery. The research may still be able to provide important, complementary data sets that can help fill specific niches, but is unlikely to move the field of research significantly forward, or to lead to new avenues of research. Nevertheless, the proposal may contain elements that, if fit into other proposals or other planned drilling activities (e.g., regional proximity), could provide a solid scientific return for a limited programme investment, and therefore might be considered for (partial) implementation at some point.

5.2. Proposed Drilling/Coring Site Names

IODP³ follows a uniform system for naming proposed drilling/coring sites whereby any seafloor site ever considered for possible drilling/coring receives a unique name. **Incorrect site names are the single largest reason that proposals fail compliance checks.** Site names must strictly conform to the general format AAAAA-nnX, where AAAAA represents a string of two to five alphabetic characters referring to the geographic area of the proposed drilling/coring site, nn represents the specific two-digit site number within that area (always preceded with a 0 for site numbers less than ten, e.g., WLSHE-01A), and X represents a capital alphabetic character indicating the version of a specific site. For all newly proposed sites, site names thus end with X=A. For the second version of a site (if necessary) the site names end with X=B, etc. Proponents are encouraged to check site names with the IODP³-SO in advance of completing Site Forms and proposal documents.

Sites cannot be moved after they are submitted as part of a proposal unless they are renamed. Sites that are shifted a small distance and have the same scientific objective should be named by

incrementing the X. New sites that are further away geographically or have a different scientific objective should have a new AAAAA or nn in the site name. Designated primary and alternate site names should not encode any indicators of relative priority, because site priorities often change as a proposal develops and matures. Alternate sites must have unique site names by changing nn or AAAAA (but not X). For example, PIG-03B refers to the second (hence “B”) proposed location of Site 3 in Pigafetta Basin. PIG-04A could represent a newly proposed alternate site for PIG-03B.

5.3. Definition of an Alternate Site

An important way to mitigate the risk of not reaching the scientific objectives of an expedition is through operational and scientific alternate sites. An operational alternate site offers an alternative location where scientific objectives similar to the primary site can be achieved. The site data should be interpreted so that it is clear the site can act as an alternate to the primary site. It should be sufficiently far from the primary site such that the same operational problems would be unlikely or less likely to occur. Ideally, an operational alternate site would offer a lower probability of operational problems than the primary site (e.g., shallower target depths or differing sea ice conditions), providing the opportunity to meet similar objectives if problems are encountered at the primary site. Additional alternate sites should also be proposed in the event that additional operational time becomes available.

A scientific alternate site offers an alternative location for cases where an underlying assumption of the primary site proves incorrect, such as stratigraphic intervals being different than anticipated in lithology or age so that expedition goals are not served, errors in depth estimates to targets (based on seismic velocities) resulting in untenable drilling/coring times, or if engineering requirements to obtain a scientific objective cannot be met (e.g., inability to re-enter a previous scientific drilling hole in order to deepen it or an observatory installation encounters challenges at the primary site).

5.4. Geographic Coordinates

IODP³ uses the WGS 84 reference system for all geographic coordinates. Any geographic coordinates presented in documents or data submitted to IODP³ must use WGS 84 and be written in decimal degrees, to the 4th decimal place if possible.

5.5. The Site Survey Database (SSDB)

The Site Survey Database (SSDB) is the official digital repository for all site characterisation data related to a particular proposal or expedition. Proponents submit to the SSDB via the IODP³ Gateway (accessed from <https://www.iodp3.org>). Required data types and acceptable file formats are explained in full in the **Guidelines for Site Characterisation Data** (available at <https://www.iodp3.org>).

5.6. Science Communication Planning

Proponents of drilling proposals will provide valuable information in the **Science Communication Plain Language Summary** and the **Science Communication Form** (Full drilling proposals only). This information is used to support the development of expedition communication plans and other IODP³ outreach goals. The Science Communication Plain Language Summary asks proponents: “Using simple terms, describe in 400 words or less your proposed research and its broader impacts in a way that can be understood by a general audience.” This section is intended to provide a non-technical summary of a proposal’s research and societal impacts; it is not intended to include specific outreach activities. Proposals should consider the unique aspects of their proposed research or drilling plan in writing their summary. The Science Communication Plain Language Summary will be evaluated during the standard proposal review process, with proponents of drilling/coring proposals receiving feedback and advice on how to improve their summary (e.g., by speaking with communication specialists within IODP³).

The **Science Communication Form** (completed interactively within the IODP³ Gateway system), which is required for Full drilling proposals, asks if the proposal builds on past scientific ocean drilling/coring experience or knowledge. Proposals do not have to build on past scientific ocean drilling legs/expeditions to be successful, but this information is useful in structuring a broader communication strategy. The Science Communication Form prompts are:

- Does this proposal build on previous scientific ocean drilling legs/expeditions from which a wider communications narrative could be built? If so, please provide the leg/expedition number(s).
- Do articles or media about this research already exist in the popular press or general interest literature? If so, please provide references, with links if available.
- Do contacts exist already to local communities and populations? If so, names, mail addresses and details on the exchange need to be provided.

Proponent responses to these sections will be available to PMOs, funders, IODP³ Operators, and/or others as they develop education, outreach, and communication activities.

5.7. Success Criteria and Risk Analysis

The topics of success, risk, and cost are closely related to each other (e.g., likelihood of success depends on risk, steps to mitigate risk will affect cost). Proponents of drilling proposals should describe their success criteria with benchmark steps, scientific and operational risks, and mitigation strategies by answering the following prompts in the **Success Criteria and Risk Analysis Form** on the IODP³ Gateway system:

- Define your minimum criteria for achieving both scientific and operational success.
- What are the primary risks to not achieving your scientific and operational success?
- What factors in your proposal (e.g., operational and scientific alternate sites) mitigate these risks?

Outlining these elements will require proponents to communicate with the IODP³ Operators at an early stage of the proposal writing process. The IODP³ Operators may set a deadline prior to the proposal submission deadline for beginning these discussions to ensure enough time for analysis.

5.8. The Site Figure for Offshore Drill Sites

For all Full Proposals, a Site Figure must be prepared for each proposed primary and alternate drilling/coring site and uploaded into the PDB via the IODP³ Gateway. While the Site Figure does not substitute for submitting data files to the SSDB, it gives a quick overview of the quality of the SSDB files for each proposed drill site. Proponents must create the Site Figure as a single-page PDF document (see the representative example below) that contains the following elements, depending on data availability:

- A label identifying the document as the Site Figure and indicating the site name.
- For any displayed data that have not been submitted to the SSDB yet, the form should specify when the data will be uploaded into the SSDB.
- A clearly annotated map showing all relevant details around the proposed drilling/coring site, including:
 - seafloor bathymetry, with labelled contours or a depth scale
 - the exact site location

- track charts for the key seismic lines, annotated at regular intervals with the same horizontal unit (e.g., CDP (common depth point), shot-point number, etc.) as the accompanying seismic profiles
- a distance scale if not apparent from the horizontal and vertical annotation.
- Two versions for each seismic line that crosses the proposed drilling/coring site where appropriate. The first version should include an annotated vertical line showing the location (e.g., Site ABC-01A, CDP 4871) and penetration time (or depth using best depth-to-time conversion) of the proposed drilling/coring site; this version may also show an interpretation of the seismic data. The second version should show the same image as the first version, but without showing the drilling/coring site or any interpretation.
- Each seismic profile should indicate the name and orientation (e.g., NW–SE) of the survey line, have well-annotated horizontal and vertical axes, including a horizontal scale bar in kilometres, and have sufficient resolution to show the relevant structure imaged by the data.

Site Figure IODP proposal 834-Full Site AP-03A

coordinates: -41.2631989/ 26.3272991

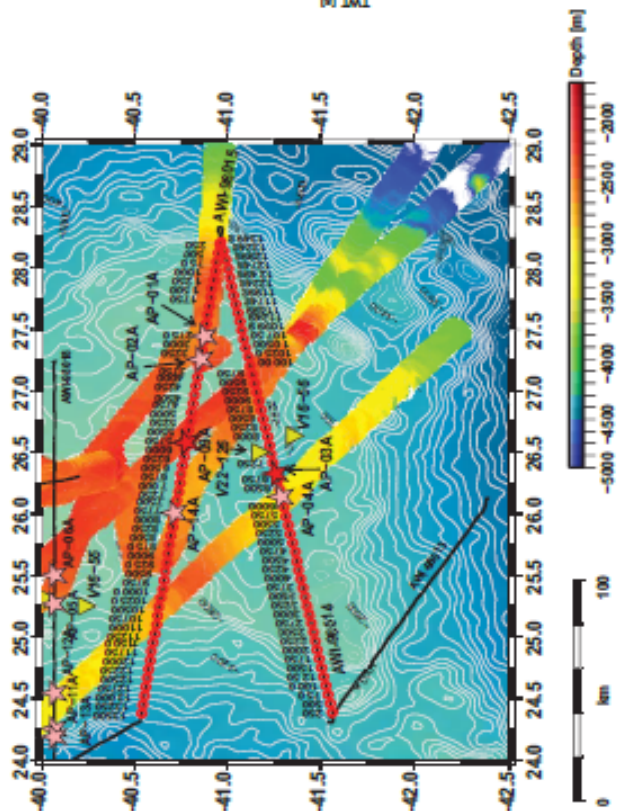
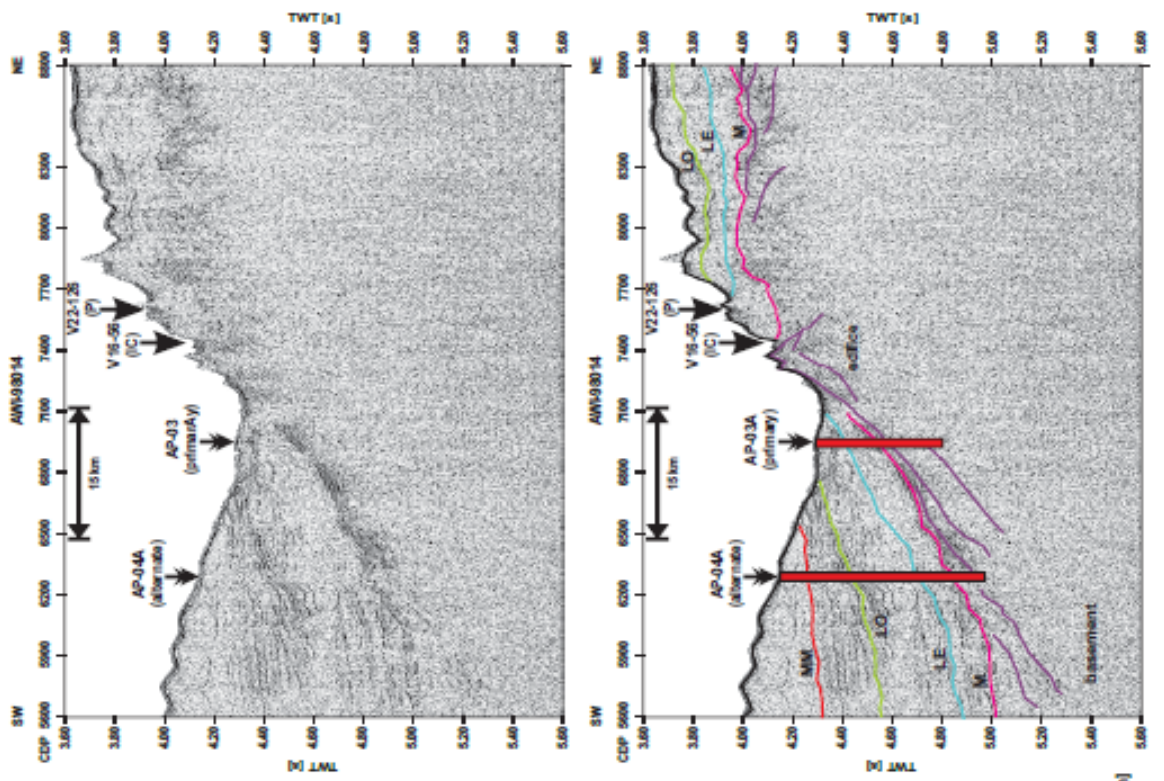
water depth: 3220 m

penetration: 500 m

Remarks:

⚠ Seismic images are time migrated stacks.

⚠ Seismic data in CDP order.



Example of a Site Figure