

Science in IODP is driven by community-generated proposals targeting the research themes outlined in the program's overall science plan and utilizing multiple drilling platforms. IODP proposal submission is a process designed to transform exciting science into successful expeditions.

Proposal Submission Guidelines

IODP Science Evaluation Panel



The JOIDES Resolution Facility Board approved these guidelines on May 18, 2016

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IODP Science Evaluation Panel (SEP): Proposal Submission Guidelines

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Chapter 1 Introduction

Science in the International Ocean Discovery Program (IODP) is driven by community-generated proposals targeting the four research themes outlined in the program's overall Science Plan, *Illuminating Earth's Past, Present, and Future* (www.iodp.org/iodp-science-plan). The program provides multiple drilling platforms (www.iodp.org/expeditions/science-operators) that are very expensive to operate. For example, a 2-month-long expedition with the riserless platform *JOIDES Resolution* costs between USD 8-14 million, while operations with the riser vessel *CHIKYU* can be in the hundreds of millions of dollars and *Mission Specific Platform (MSP)* expeditions range from USD <8 to >15 million. Because the level of investment goes beyond an individual researcher or a single research group, the IODP proposal structure, review, and planning processes are comprehensive and differ from those applied to other grant applications. Because of this difference the IODP process is iterative and open to communication between the science proponents, the advisory panels, and the drilling platform operators. It is a process designed to transform exciting science into successful expeditions. The detailed technical planning, implementation, and financial responsibilities involved are managed within the program, so, except in specific circumstances, there is no budget section in an IODP proposal.

The IODP receives drilling proposals, or long-coring proposals to support drilling proposals, from the scientific community and evaluates those proposals through advisory panels and through external peer review. This document specifies requirements for submitting proposals, outlines the review process, and describes the steps to get through the proposal process. In most cases, it is recommended to submit a preliminary proposal first (Step 1). Upon positive review by the Science Evaluation Panel (SEP) the proponent team will be invited to submit a full proposal (Step 2). After a second round of reviewing, SEP can request (but only once) a revision (Step 3) or send the proposal for external peer review (Step 4). Upon a successful peer review, SEP will rate the proposal and forward it to one of the drilling platform Facility Boards for scheduling (Step 5).

Proposals can be submitted to the Science Support Office (SSO) at Scripps Institution of Oceanography (www.iodp.org) to two deadlines: **1 April** or **1 October** (23:59 GMT).

Note that the deadlines for submitting site characterization data are nominally **one month after** the IODP proposal submission deadlines.

Proposals must be submitted through the online Proposal Database System (PDB) accessible at <http://proposals.iodp.org>. The PDB creates many proposal components interactively and provides additional guidance about format requirements. Users are advised to establish a PDB login and become familiar with the system early in the process. User-uploaded components must be in A4 or U.S.-letter page size with 12-point font, 1.5 line spacing, and 2.5 cm minimum margins (see **Section 1-1 below**). Figures should have sufficient resolution to show all relevant details. Once the SSO accepts the proposal and verifies its format compliance, access for data uploading in the Site Survey Data Bank (SSDB) at <http://ssdb.iodp.org> will be granted. Questions regarding proposal submission and proposal handling should be directed to the SSO (science@iodp.org).

1-1 Summary of Proposal Format Requirements

Proposal Type	Preliminary Proposal	Full Proposal *	Ancillary Project Letter (APL)	Addendum	Proponent Response Letter (PRL)
General	Abstract: 400 words or less (not necessary for PRL) Scientific Objectives: 250 words or less (not necessary for PRL) Figures: Cannot be larger than a single-page A4 or US Letter Font Size: 12 point Line Spacing: 1.5 Margin: 2.5 cm all around				
Maximum Image and File Sizes	Single Site Figure PDF: Maximum 10 Megabytes (MB) Main Text PDF including Figures: Maximum 15 MB				
Deadline	1 April, 23:59 GMT 1 October, 23:59 GMT			As requested	
Main Text	Up to 3,000 words	Up to 7,800 words	Up to 1,600 words	Up to 2,700 words	Up to 1,600 words
Figures and Tables **	Up to 8	Up to 12	Up to 5	Up to 8	Up to 5
List of Proponents	Required	Required	Required	Required if new proponents are added	None

Proposal Type	Preliminary Proposal	Full Proposal *	Ancillary Project Letter (APL)	Addendum	Proponent Response Letter (PRL)
List of Potential Reviewers	None	Required	None	None	None
Curriculum Vitae (CV)	None	Required	None	Required if new proponents are added	None
Proposal Cover Sheet	Required	Required	Required	Required	None
Site Forms and Figures ***	Form 1 is Required	Forms 1, 2, and Site Figures are Required Forms 4 and 5 are encouraged but optional	Forms 1, 2, and Site Figures are Required Forms 4 and 5 are encouraged but optional	Forms 1, 2, and Site Figures are Required for newly proposed sites Forms 4 and 5 are encouraged but optional	None
How to Submit	All proposal types must be submitted using the PDB accessible at http://proposals.iodp.org Site characterization data should be uploaded via the SSDB at http://ssdb.iodp.org Please contact the SSO (science@iodp.org) if you encounter submission problems.				

* Full Proposal also includes the sub-proposal types of Multi-phase Drilling Project (MDP), Complementary Project Proposal (CPP), and Amphibious Drilling Project (ADP).

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

*** Detailed site descriptions are not required for MDP proposals, but general site identification is encouraged.

Chapter 2 Submitting a Preliminary Proposal

You start by writing a **Preliminary Proposal** (Step 1) outlining science that addresses one or more of the four major themes of the IODP Science Plan (www.iodp.org/iodp-science-plan) and that requires scientific ocean drilling. The Science Plan is intended to provide a context for generating proposals, but is not intended to be prescriptive.

Proponents who have a new idea for scientific ocean drilling are advised to first submit a Preliminary Proposal before engaging in the preparation of the lengthier Full proposal.

A Preliminary Proposal is **required** if the riser platform *CHIKYU* is being requested.

Proponents of proposals are strongly encouraged to contact the appropriate Science Operator before submission to discuss drilling platform capabilities, the feasibility of their proposed drilling plan and strategies, and the required overall time table for transiting, drilling, coring, logging, and other downhole measurements.

Preliminary 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” part of the Convention on Biological Diversity (<https://www.cbd.int/abs/>). For targets within the Exclusive Economic Zones (EEZs) and Extended EEZs, proponents should become familiar with the protocol’s requirements for potential users of genetic resources to obtain the prior informed consent (PIC) of the country in which the genetic resource is located before accessing the resource.

2-2 Preliminary Proposal Format and Scope

The Main Text of a Preliminary Proposal can be up to 3,000 words long (excluding references and figure captions), with up to 8 figures and/or tables (**Section 1-1**). It should describe a compelling hypothesis or idea supported by a conceptual drilling strategy. Proposals range from hypothesis-driven to question-driven, from very discipline-specific to very interdisciplinary, and from simple to complex. They should address questions that are of interest to the global scientific community and will typically be linked to relevant parts of the Science Plan. A preliminary proposal should:

- State the scientific objectives and explain how those objectives relate to, or advance beyond, the IODP Science Plan 2013-2023, including the theme(s) and challenge(s) addressed;
- Justify the need for drilling to accomplish the scientific objectives;
- Present a conceptual strategy for addressing the scientific objectives through drilling, logging, or other downhole measurements;

- Describe the proposed drilling sites, penetration depths, and expected lithologies;
- Discuss the availability, or plans to acquire, site survey 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 any logistical problems, e.g. extreme weather, sea-ice, piracy, or others;
- Describe briefly any relationships to other international geoscience programs or initiatives.

2-3 Additional Required Forms

Preliminary Proposals also include the following items that do **not** count against the word count limit (**Section 1-1**), and that are **created interactively** by the online PDB system:

- An official proposal cover sheet, complete with an abstract of 400 words or less, and a statement of the scientific objectives of 250 words or less;
- A list of proposed drilling sites, including alternate sites, with brief site-specific objectives and Site Form 1 for each proposed primary and alternate drilling site. Site names **must** conform to the established system and site coordinates must use units of decimal degrees, to at least the fourth decimal place (**Appendix 7-1**);
- A list of proponents (maximum 20), specifying the name, affiliation, email 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 survey data) also need to be identified.

Upon acceptance of the proposal by the SSO, individuals listed in the proponent table will receive an automatic email notification to confirm that they have agreed to this role.

2-4 Review of Preliminary Proposals by SEP

The SSO sends the Preliminary Proposals to the SEP. The SEP consists of members of the international scientific community who volunteer to serve IODP by reviewing proposals. It is a rich advisory resource for proponents in providing guidance and critical advice about the science and feasibility of their proposals.

2-4-A Watchdog Assignments

The SEP Chairs assign watchdogs to examine and present your 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 characterization data; the fifth watchdog is a representative of the appropriate Science Operator.

The SEP assesses each proposal in terms of its relevance to the IODP Science Plan 2013-2023, the suitability of the study area, study 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 strategies through the fifth watchdog.

2-4-B Proposal Evaluation and Decisions

For proposals planning to use *JOIDES Resolution* or an *MSP*, proponents receive a written summary of SEP's review, including their consensus decision, after the meeting. The feedback you receive could be summarized by one of the following statements:

- Great idea, in line with the science vision of the program, likely achievable by scientific ocean drilling;
- Interesting concept with potentially high impact, but difficult to see how the problem is addressed by scientific ocean drilling;
- Idea not as interesting or transformative as others received, and thus not likely to move forward as a drilling proposal in its current state.

The SEP summary includes one of the following two decisions:

i. Request for Full Proposal

SEP recommends that you develop a **Full Proposal** and/or pursue workshop funding to further develop your idea, and potentially coordinate your efforts with other closely-related proposals.

ii. Preliminary Proposal is Deactivated

SEP may **deactivate** the Preliminary Proposal if the science objectives are not well described or are not compelling enough, if the conceptual drilling strategy doesn't adequately support the science questions, and/or if the proposed drilling program is simply not feasible.

Deactivation of a Preliminary Proposal often harbors the supportive message to re-scope the proposal and to resubmit a **thoroughly revised** new Preliminary Proposal.

The recommendation will include the contact information for the proposal watchdogs and the SEP Chairs. It is recommended that you contact one or more of the watchdogs or Chairs to discuss SEP's recommendation and to gain more insight into the next steps in the IODP proposal process for your proposal. In these cases please copy the SSO (science@iodp.org) on your email correspondence.

For proposals planning to use the *CHIKYU*, the SEP review is forwarded to the *CHIKYU* IODP Board (CIB) for their consideration and for their preliminary assessment of the technical and financial feasibility of the project. Proponents will then receive a summary of both the SEP and CIB reviews directly from the CIB. This summary will include either an invitation to submit a workshop proposal (as a predecessor to the submission of a Full Proposal) or notification that the Preliminary Proposal is being deactivated.

Chapter 3 Submitting a Full Proposal

Proponents who have previously submitted a Preliminary Proposal may submit a **Full Proposal** (Step 2) if advised to do so by the SEP or the *CHIKYU* IODP Board. SEP also may have requested a revision (Step 3) of a previously submitted Full Proposal, although such a revision request is only possible once.

Proponents may consider skipping the Preliminary Proposal (only for *JOIDES Resolution* or *MSP* proposals) and moving immediately to submission of a Full Proposal. However, this is generally **not advised** as it limits feedback from SEP at an early stage of proposal review. Contact the SSO at science@iodp.org for additional advice about whether submission of a Preliminary or Full Proposal is appropriate.

3-1 Full Proposal Format and Scope

The main text of a Full Proposal can be up to 7,800 words long (excluding references and figure captions), with up to 12 figures and/or tables (**Section 1.1**). It 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. Think of it as a step from a great idea to one that can be implemented in the real world, with present technology and within a reasonable length of time.

Prior SEP reviews, input from other IODP Advisory Panels and/or workshop input should be **carefully considered** and **addressed** in a Full Proposal.

Excellent Full Proposals, whether complicated and extremely interdisciplinary, or simple and discipline-specific, share a number of elements in common:

- They have strong and compelling science hypotheses/questions that require scientific ocean drilling;
- They are responsive to the input from 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 IODP Science Plan 2013-2023, including the theme(s) and challenge(s) addressed;
- Justify the need for drilling to accomplish the scientific objectives;
- Present a well-defined strategy for addressing the scientific objectives through drilling logging or other downhole measurements;
- Provide detailed estimates of, and justification for, the time required for drilling, logging, or other downhole measurements;

It is essential to include sufficient **alternate drill sites** in the event that safety or site survey concerns preclude drilling at one or more primary sites. In addition, proposals should discuss **required recovery rates** (general) as a function of depth, and highlight particular 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 are not achieved.

- Describe the available site survey 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 survey data into the SSDB by the data deadline (<http://ssdb.iodp.org>);
- Discuss the expected scientific outcome of drilling and any subsequent work required to complete the overall project;
- Describe any development of advanced and non-standard tools, special sampling techniques, downhole measurements, borehole observatories or others, and include an out-year plan for observatory data recovery, maintenance, and ultimate termination;
- Describe any external funding for non-standard tools;
- Identify any logistical problems, e.g. extreme weather, sea-ice, piracy, or other;
- Describe briefly any relationships to other international geoscience programs and/or initiatives.

It is now possible to submit a proposal for operational time of a **few weeks only** rather than a two-month expedition. The relevant IODP Facility Board could implement a shorter scientific effort as a **hybrid expedition** or during a longer transit.

3-2 Additional Required Forms

Full Proposals include the following items that do **not** count against the word count limit (Section 1-1) and that are **created interactively** by the online PDB system:

- An official proposal cover sheet, complete with an abstract of 400 words or less, and a statement of the scientific objectives of 250 words or less;
- A list of proposed drilling sites, including alternate sites, with brief site-specific objectives, the appropriate set of Site Forms, and a Site Figure for each proposed drilling site. Site coordinates must be specified in units of decimal degrees, to at least the fourth decimal place. Site names must conform to the naming format, and the names must be updated whenever sites are relocated to a different shot point (**Appendix 7-1**)
- A list of proponents (maximum 20), specifying the name, affiliation, email 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 survey data) also need to be identified.

Upon acceptance of the proposal by the SSO, individuals listed in the proponent table will receive an automatic email notification to confirm that they have agreed to this role.

- A two-page curriculum vitae or biographical sketch for the lead proponents;
- A list of at least five potential reviewers external to the IODP Advisory Panels.

3-3 Review of Full Proposals by SEP

The SSO sends all new and revised Full Proposals to the SEP. The SEP consists of members of the international scientific community who volunteer to serve IODP by reviewing proposals. It is a rich advisory resource for proponents in providing guidance and critical advice about the science and feasibility of their proposals.

3-3-A Watchdog Assignments

The SEP Chairs assign five watchdogs to examine and present your proposal to the panel (see also **Section 2-4-A** on Preliminary Proposals). Watchdog teams principally remain the same over the lifetime of an IODP proposal going through the system, unless SEP members have rotated off or need to be replaced on the team for other reasons.

3-3-B Proposal Evaluation and Decisions

The SEP evaluates both **new** and **revised** Full Proposals. A written review is prepared and sent to the proponents with one of the following four decisions:

i. Full Proposal is Undergoing External Peer Review

The SEP concludes that the (revised) Full Proposal is mature and ready for **External Peer Review** (Step 4). These external reviews are managed through the SSO. Peer reviewers are asked to comment on the importance of the scientific primary and secondary objectives toward the advancement of the IODP Science Plan 2013-2023, suitability of the study area for addressing the scientific objectives, the likelihood of achieving the scientific objectives with the proposed drilling and logging strategy, and the scientific competence of the proponents, keeping in mind that many other scientists from outside the proponent team ultimately participate in planning and executing an IODP expedition.

External reviewers remain **anonymous** outside of the SSO at all times.

Proponents receive the external reviews of their proposal from the SSO and must submit a brief **Proponent Response Letter** (PRL) responding to the reviews before the next SEP meeting. A PRL is a PDF file submitted through the online PDB system that can be up to 1,600 words long (excluding references and figure captions), with up to 5 figures and/or tables (**Section 1-1**). The PRL should address only the specific comments or questions posed by the external reviewers. Occasionally, SEP may request an additional PRL during subsequent stages of the review process. For these uncommon requests, the SSO will set an appropriate deadline for receiving such PRLs, typically at least four to six weeks in advance of the next SEP meeting.

In addition to a PRL, proponents of Full Proposals that have already been externally reviewed may submit an **Addendum** to provide an update on relevant scientific research including new data from a new site survey, to fulfill a specific request for more information, to move or add proposed drill sites, or perhaps to present an offer of support from another scientific program/agency.

If the supplementary material implies a significant change to the objectives or strategy of the original proposal, the proponents must submit a new proposal instead of an Addendum.

The Addendum text can be up to 2,700 words long excluding references, with up to 8 figures including tables (**Section 1-1**).

An Addendum must also include the following items that do **not** count against the word count limit, and that are **created interactively** by the online PDB system:

- An official proposal cover sheet, complete with an abstract of 400 words or less, and a statement of the scientific objectives of 250 words or less;

- A list of the newly proposed or relocated drilling sites, with brief site-specific objectives, the appropriate set of Site Forms, and a Site Figure for each new site. Site coordinates must be specified in units of decimal degrees, to at least the fourth decimal place. Site names must conform to the naming format, and the names must be updated whenever sites are relocated to a different shot point (**Appendix 7-1**).

The PDB submission system requires that an **Addendum** be submitted to **change** a site location/name (even a small refinement). The Addendum must include revised Site Forms (only those relevant) and the relevant SSDB metadata/site data must be updated. In the case of such small changes, the main text of the Addendum can be very brief, simply stating the reason for the site changes; the abstract and scientific objectives on the cover sheet most likely can remain unchanged.

ii. Full Proposal is Forwarded to a Facility Board for Implementation

Following the external reviews, the SEP reviews the proposal again, together with the PRL and any Addendum. In addition, the SEP will review all available (and updated) site survey data (in the SSDB) to characterize the completeness and adequacy of the data. The SEP then decides whether the proposal should be **Forwarded for Possible Implementation** by the appropriate **Facility Board** (Step 5). If recommended, SEP writes a final review assessing the priority of the proposal with respect to the IODP Science Plan 2013-2023. Finally, SEP rates the proposal according to the criteria described as follows:

- **Excellent Proposal:** The proposal is exciting, addresses new scientific problems, or will take novel approaches to existing problems that remain unresolved or controversial and are considered of wide importance. The proposal may challenge existing paradigms, has strong potential for true discoveries and breakthroughs, and most likely will open up new avenues of research in the field(s) pursued or even beyond. An excellent proposal also has an excellent, succinct, and carefully planned scientific drilling and research plan, and in all probability, will have important societal impact. The proposal should be implemented, if at all possible.
- **Good Proposal:** This second category of proposals also has potential for producing exciting science and will apply compelling research strategies. The proposal may address more mature scientific problems with less potential for major new discoveries or paradigm changes. However, good proposals are still highly likely to produce important datasets that can support long-term building of data archives, help resolve long-standing controversies in established fields of research, and thereby advance such fields of research in a significant way, possibly including new avenues of research within the fields pursued. A good proposal also has a good and succinct drilling plan that is both feasible and

carefully planned, and in all probability, the scientific and technical achievements will be important for society. Should be seriously considered for implementation, if fitting into long-term efforts or planning.

- **Fair Proposal:** This third category of proposals falls behind in terms of excitement and potential for discovery. The research in the proposal may still be able to provide important, complementary data sets that can help fill specific niches, but it is unlikely to move the field of research significantly forward, or to lead to new avenues of research. Nevertheless, a fair proposal may contain elements that, if fitting into other proposals or other planned drilling activities (e.g. regional proximity), could provide a solid scientific return for a limited program investment. The science and drill plans may show some deficiencies, while the potential societal impacts from scientific and technical achievements are not high (or poorly documented). The proposal could be considered for (partial) implementation at some point.

The Facility Board overseeing the platform in question will decide whether and when a proposal will be implemented for scientific ocean drilling (**Chapter 6**). During consideration by the Facility Board, the Full Proposal may be subject to additional requirements and must satisfy all additional conditions made by the Facility Board before it can be implemented. For example, a safety review by the Environmental Protection and Safety Panel (EPSP) is required for projects using the *JOIDES Resolution* and *MSP* expeditions (**Section 6-1-C**).

iii. Request for Revision of the Full Proposal

The SEP may request a **Revision of the Full Proposal** and re-review it internally at another future SEP meeting and prior to sending it to external review. 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 the drilling proposal;
- Collect additional site survey data;
- Reprocess existing data.

Proponents are advised that all necessary (new) data and metadata for site characterization must be uploaded into the SSDB (<http://ssdb.iodp.org>) by the data deadline (Section 1).

Proposals that are inactive for 5 years will be flagged and the lead proponents contacted by the SSO to update the status of their proposal. Proponents may submit the revised proposal and/or new data; or request a specified time extension

via submission of a PRL. Inactivity or no response to the SSO inquiry will result in the deactivation of the proposal.

Once the SEP receives the revised Full Proposal, it can either recommend external peer review (see *i.* above) or deactivation, if the proposal hasn't reached a sufficient state of development (see *iv.* below).

iv. Full Proposal is Deactivated

The SEP may **Deactivate** Full Proposals and Revised Full Proposals, if the science objectives and hypotheses, drilling plan, and the site survey data are not sufficiently compelling or developed. This means that the proposal will no longer be kept on active status in the system and, at this stage, proponents can only reenter the system via the submission of a new Preliminary or Full Proposal.

Reasons that a proposal might not advance in IODP include:

- 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);
- Proponents are unresponsive to SEP and/or external reviewer comments;
- Proposal displays little effort on the part of the proponents to understand what makes science drillable (i.e., pursues science that is simply undrillable);
- Proposal does not critically select drilling sites and target depths to answer well-defined questions;
- Proposal does not clearly state how the proposed measurements will be used to answer the scientific questions/hypotheses;
- Proposal has scientific objectives that conform poorly with the overall goals of the program's Science Plan, and that do not bring added value to the science plan;
- The data that are needed to characterize 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.

v. Full Proposal is Placed in the Holding Bin

Proposals may be placed in the **Holding Bin** if the SEP finds that the science of the proposal is mature enough to forward to a Facility Board, but the proposal still needs to complete site survey data requirements or address specific operational issues. The proposal is released from the Holding Bin and forwarded to a Facility Board when the SEP agrees that the proposal meets all the requirements.

Chapter 4 Other Proposal Types

4-1 Complementary Project Proposal (CPP)

A **Complementary Project Proposal (CPP)** is a proposal with a commitment from a third-party source for a substantial amount of financial support. CPP proponents should contact the Chair of the appropriate Facility Board to enquire about the amount of outside funding required. For example, in the case of the *JOIDES Resolution*, an unrestricted donation of at least USD 6M to the National Science Foundation is required to implement a CPP. Because of the specialized nature of these CPP programs, it is highly advisable to discuss potential plans for developing a CPP with the SSO or appropriate Science Operator before a proposal is written.

Expeditions arising from such proposals principally will follow all IODP rules, the entire SEP proposal trajectory (from preliminary proposal, to full proposal, to external review), as well as the IODP Sample, Data and Obligations Policy that defines data moratorium and access, and the publication responsibilities of seagoing scientists. The level of scientific staffing for the entity contributing the CPP funds is negotiated on a case-by-case basis.

CPPs should be prepared as regular IODP proposals (**Section 1.1**) but, in addition, must include a description of the formal financial arrangement from a third party, or must include a description of the to-be-arranged financial commitment.

The SEP assesses and rates CPPs based on the same criteria as regular proposals. However, CPPs can receive fast-track consideration by the SEP if so required by the situation (e.g., funding source, operational plans, etc.). If fast-track consideration is required, the SEP may conduct an internal science review or conduct e-reviews, and then forward the proposal directly to the relevant Facility Board.

If fast track is not required, SEP follows the normal procedures as outlined above for both Preliminary and Full Proposals, including only one revision per full proposal, external peer review and the possibility that the CPP proposal gets deactivated.

The Facility Board overseeing the scheduling of the requested platform will decide if a CPP is implemented, and the Facility Board may negotiate with the proponents on details of the external funding.

4-2 Multi-phase Drilling Project (MDP)

A **Multi-phase Drilling Project (MDP)** can take different forms, but the unifying concept is that the project cannot be done in a single drilling expedition. Examples of an MDP include, but are not limited to, a project that requires a long site occupation in one

location, a series of scientifically related projects located in close proximity, or a project that addresses (a) large, overarching scientific question(s) requiring data from geographically distant sites.

An MDP takes a unique path through the review system. The initial **Umbrella Proposal** should define the overall scientific objectives of the entire project and justify the need for a multi-platform or multi-phased drilling strategy to achieve those objectives; this may not require site-specific information beyond some generic site description. The Umbrella Proposal should follow the Full Proposal format for word count and the number of figures/tables, but Site Forms and site survey data are not required (**Section 1.1**).

The SEP reviews the Umbrella Proposal and may endorse it, may recommend revision, or may deactivate it if the science objectives and drilling plans (multiple platforms) are not sufficiently described.

After endorsement of the Umbrella Proposal, the SEP will ask the proponents to develop a set of closely inter-related proposals that describe individual steps or phases in detail, and that identify actual drill sites in each individual component proposal. SEP evaluates each proposal (either Preliminary Proposal or Full Proposal) within the broader context provided by the umbrella proposal.

All individual component proposals of a MDP must fulfill the normal requirements for Preliminary Proposals and Full Proposals (or Ancillary Project Letters; see **Chapter 5**) and follow the normal SEP review process.

The SEP decides whether a component proposal of the MDP has reached a sufficient stage of development for external peer review and whether it should be recommended to the appropriate Facility Board for possible scheduling. The SSO will ask the reviewers to assess the individual proposal as a component of the MDP within the context of the Umbrella Proposal.

4-3 Amphibious Drilling Proposal (ADP)

Starting in October 2015, IODP began accepting **Amphibious Drilling Proposals** or ADPs that will be jointly reviewed and implemented by IODP and the International Continental Drilling Program (ICDP). An ADP requires scientific drilling at both onshore and offshore sites to fully achieve its scientific objectives.

IODP and ICDP have developed guidelines for joint review of ADPs (see Guidelines for Review of Amphibious Drilling Proposals www.iodp.org/adp_review_guidelines). More information about ICDP proposals is located at www.icdp-online.org/proposals/prepare-and-submit-a-proposal/.

To summarize ADP guidelines, ADPs typically start with a Preliminary Proposal in IODP and a workshop proposal in ICDP. Following a positive reception by SEP, the ADPs then generally follow the review cycle of Full Proposals in IODP. Full ADP Proposals must be submitted to the IODP proposal deadlines using the online PDB system. Because at the stage an ADP is considered as separate IODP and ICDP proposals, the proponents are responsible for ensuring that the submitted ADP meets the requirements of both programs.

ADPs must meet the limits for word and figure counts of an IODP Full Proposal (Section 1.1). ICDP-specific proposal information (identified in Items 1-7 on Page 3 of the ICDP guidelines, including relevant budgetary information) should be included in an **Appendix** in the main IODP Proposal PDF document; this Appendix will not count against the IODP word count limit. Site Forms and Site Figures are required for all proposed sites (both onshore and offshore) including primary and alternate drill sites. However, site characterization data will be accepted in the IODP SSDB and reviewed by SEP for the IODP offshore sites only; site characterization for onshore sites are the purview of ICDP. Proponents planning ADP submissions are strongly encouraged to contact the SSO for more information on format requirements.

Chapter 5 Ancillary Project Letters (APLs)

An individual scientist or group of scientists may wish to request additional data/samples from an already scheduled expedition in order to achieve valuable science objectives with minimum additional platform time. The mechanism to request additional coring or logging is through an **Ancillary Project Letter (APL)**.

Projects proposed through an APL must require less than 10-15% of dedicated platform time in an expedition, including transit.

APLs can require an investment of drilling, logging, and technician time, as well as a berth on the platform; therefore, IODP will strive to integrate such projects with an appropriate drilling proposal as early as possible in the normal planning process. For **MSP** expeditions, the submission of APL(s) will rely on a call for applications because the implementation of APLs by **MSP** will primarily depend on the available budget; this call will include the scale of the APL in terms of possible added platform time and facilities.

5-1 APL Format and Scope

Investigators must submit an APL in accordance with the normal proposal and data upload deadlines, after which they are reviewed by SEP. The APL main text can be up to

1,600 words (excluding references and figure captions), with up to 5 figures and/or tables (**Section 1.1**)

A well-prepared APL should:

- Describe the project and its overall scientific goals;
- Identify the locations of interest for drilling and explain, in the context of the site survey data, how the proposed site will provide the data necessary to meet the primary objectives;
- Explain the proposed types of shipboard measurements and data collection;
- Define the requirements for ship time and shipboard personnel;
- Identify any feasibility issues: weather windows, piracy, etc.

5-2 Additional Required Forms

All APLs also include the following items that will not count against the word count limit and that are generated interactively through the online PDB system:

- An official proposal cover sheet, complete with an abstract of 400 words or less;
- The appropriate set of Site Forms for each proposed drilling or logging site (and any alternate sites). Site names must conform to the naming format, and the names must be updated whenever sites are relocated (**Appendix 7.1**)
- A list of proponents (maximum 20), specifying the name, affiliation, email 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 survey data) also need to be identified.

Upon acceptance of the proposal by the SSO, individuals listed in the proponent table will receive an automatic email notification to confirm that they have agreed to this role.

5-3 Review of APLs by SEP

The SEP Chairs assign five watchdogs to examine and present your proposal to the panel (see also **Section 2-4-A** on Preliminary Proposals). Watchdog teams principally remain the same over the lifetime of an IODP proposal going through the system, unless SEP members have rotated off or need to be replaced on the team for other reasons.

The SEP may advise investigators to further develop their ideas into a Preliminary Proposal (and eventually a Full Proposal) or collaborate with the proponents of an existing proposal. If the latter is the case, the SSO and/or the SEP Chair can initiate contact between the two or more investigator groups. The SEP may also forward a well-received APL directly to a Facility Board, particularly if it relates to a drilling proposal that has already undergone external review.

Chapter 6 Consideration by an IODP Facility Board

Once SEP has forwarded a proposal to the **Facility Board** (FB) for the *JOIDES Resolution*, *CHIKYU*, or *MSP*, its status changes to an “at FB” proposal. Further actions are within the jurisdiction of the Facility Board and any further dialog to develop the proposal into an IODP expedition takes place between the Facility Board, the Science Operator, the proponent team, and assigned co-chief scientists.

6-1-A Expedition Scheduling

In general, the IODP Facility Boards consider each “at FB” proposal once per year. The proposal may be included in an upcoming schedule of expeditions, based upon determining factors such as platform location and capability, estimated operational cost, anticipated science outcome and returns, and fit within the overall IODP Science Plan. Action also may be deferred to a future scheduling opportunity.

After discussion, Facility Boards communicate any decisions to the proponents (depending on the Facility Board, this may be done via email by the SSO). At any stage, the Facility Board may ask the proponents for more information. Replies to specific Facility Board inquiries should be made via a PRL (**Section 3-3-B-i**) that is to be submitted through the PDB.

Proponents can also submit an unsolicited PRL to communicate any changes or status updates about “at FB” proposals to the Facility Board that are important for their scheduling decisions.

All correspondence between Facility Boards and proponents must include the SSO so it can be captured in the proposal’s formal record. The Facility Board may also ask proponents to submit an Addendum to provide an update on relevant scientific research, provide more information, relocate proposed drilling sites, or add new (alternate) sites.

6-1-B SEP Comment Forms to IODP Facility Boards

The Facility Board may ask SEP to give an opinion on specific aspects of an “at FB” proposal that will help the Facility Board in its scheduling decisions or implementation of expeditions. In this case, the SEP comments to the Facility Board become part of the proposal record maintained by the SSO; and the SSO will send the SEP comments to the Facility Board Chair, and the Science Operator with a courtesy copy to the corresponding proponent or co-chief scientist. The Facility Board Chair and/or Science Operator will follow up with the proponent and co-chief scientists to explain what actions, if any, they require based on the SEP opinion. It is important to understand that such proposals retain their “at FB” status; in other words, they are not being re-reviewed by the SEP. To emphasize this, a different **SEP Comment Form** is used.

6-1-C Safety Review by EPSP

As part of the development of a proposal into an expedition, and typically after scheduling, the Science Operator asks the advisory EPSP to conduct a safety review of the proposed drill sites. As explained further in the EPSP Safety Review Guidelines (www.iodp.org/epsp-safety-review-report-guidelines) the **Data Lead** will represent the proponents and participate in the EPSP safety review meeting.

The EPSP makes one of three potential recommendations for each proposed site:

- Approve as proposed;
- Approve with modification (e.g. in position and/or target depth);
- Decline approval.

The Science Operator has final approval of all drill sites. While a SEP liaison is present at the EPSP meeting to provide perspective in the science and site discussions, the Facility Board Chair decides whether any EPSP modification to the drilling plan creates a need for re-examination by SEP; in the history of IODP, this need has been very rare. Any changes to a proposed drill site or addition of new primary or alternate drill sites requires submittal of an Addendum via the PDB to enter a new Site Form; the latter also requires uploading of new site survey data in the SSDB.

When an Addendum captures EPSP-directed site modifications, the main text can be very brief (e.g. “site modification requested by EPSP”) and the proposal cover sheet / abstract can remain unchanged.

Chapter 7 APPENDIX

7-1 Proposed Drilling Site Names

IODP follows a uniform system for naming proposed drilling sites whereby any seafloor site ever considered for possible drilling receives a unique name. Incorrect site names are the single largest reason that proposals fail compliance check. Site names must conform to the format AAAAA-nnX, where AAAAA represents a string of up to five alphanumeric characters (first character alphabetic only) referring to the geographic area of the proposed drilling site, nn represents the specific site number within that area, and X represents an alphabetic character that indicates the version of a specific site. For all newly proposed sites, the site name thus starts with X=A.

Whenever proponents relocate a proposed drilling site to a different shot point, they must also rename it by incrementing X, changing nn, or changing AAAAA, depending on the relative geographic proximity and similarity of the scientific objectives compared to the original site. 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).

Example: PIG-3B refers to the second (hence “B”) proposed location of Site 3 in Pigafetta Basin. PIG-4A could represent a newly proposed alternate site for PIG-3B.

7-2 The Site Survey Data Bank (SSDB)

The SSDB is the official digital repository for all site survey data related to a particular proposal or expedition. The SSDB is accessed at <http://ssdb.iodp.org>. File formats for uploading data (e.g. maps, multichannel seismic profiles, and SEGY data) are explained in the **IODP Site Characterization Data Guidelines** (www.iodp.org/iodp-site-characterization-data-guidelines).

For all types of Full Proposals and APLs, a Site Figure (previously known as Site Summary Form 6) summarizing the supporting data that exist in the SSDB is required for each proposed primary and alternate drilling site. This required figure does not substitute for submitting data to the SSDB. Proponents must create the Site Figure as a single-page PDF document (see **Pages 23-24** for representative examples) that contains the following elements, depending on data availability:

- A label identifying the document as the Site Figure and indicating the site name;
- A list of the file names of the relevant site-survey data that exist in the SSDB;
- 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 site, including:
 - Seafloor bathymetry, with labeled 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;

Geographic coordinates must be in decimal degrees to the **4th decimal place** if possible.

- Two profiles for each seismic line that crosses the proposed drilling site where appropriate:
 - The first profile should include an annotated vertical line showing the location (e.g., Site ABC-1A, CDP 4871) and penetration depth (or time

- using best depth-to-time conversion) of the proposed drilling site; this profile may also show an interpretation of the seismic data;
- The second profile should show the same image as the first profile, but without showing the drilling 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 km), and have sufficient resolution to show the relevant structure imaged by the data.

7-2-A Site Figure Example 1

Site Summary Form 6 IODP proposal 834-Full Site AP-03A

coordinates: -41.2631989/ 26.3272991

water depth: 3220 m

penetration: 500 m

Remarks:

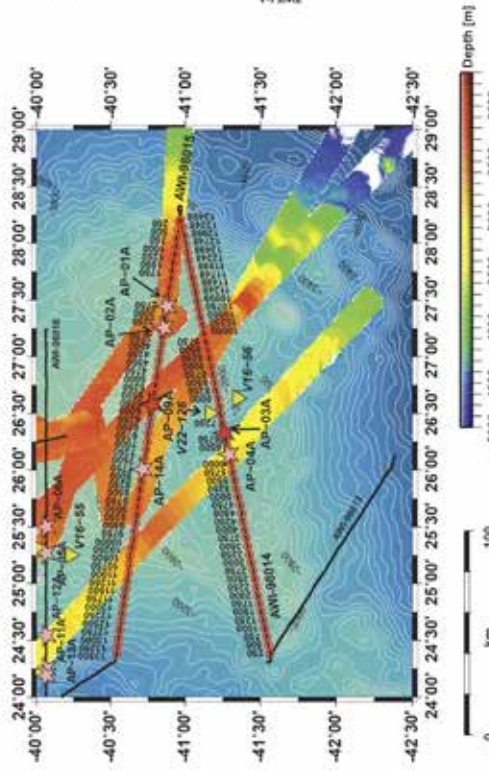
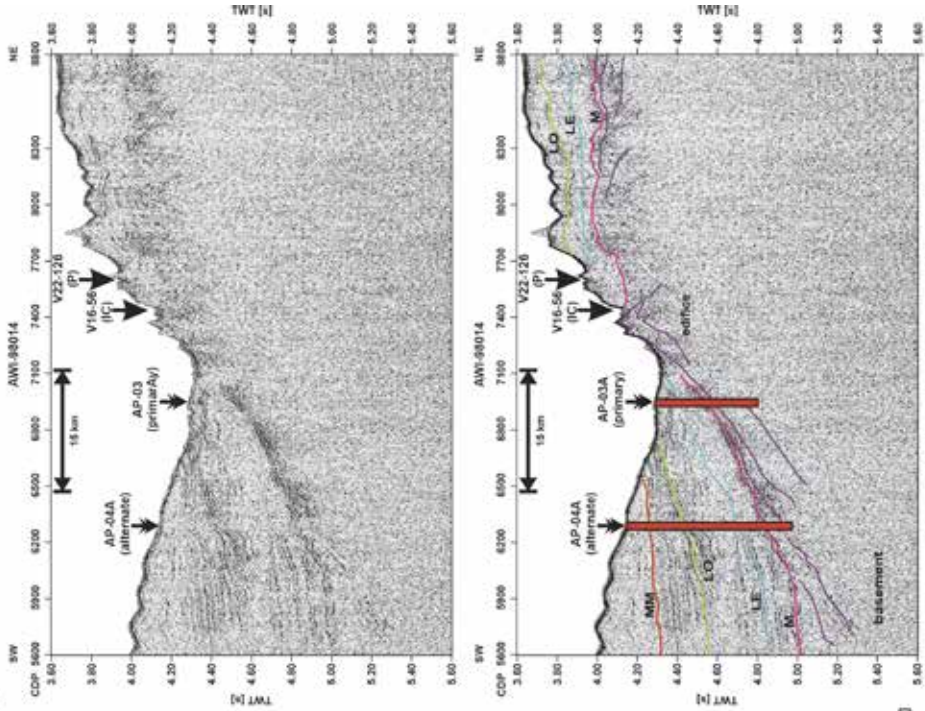
- γ Seismic images are time migrated stacks.
- γ Seismic data in CDP order.

Data files in SSDB:

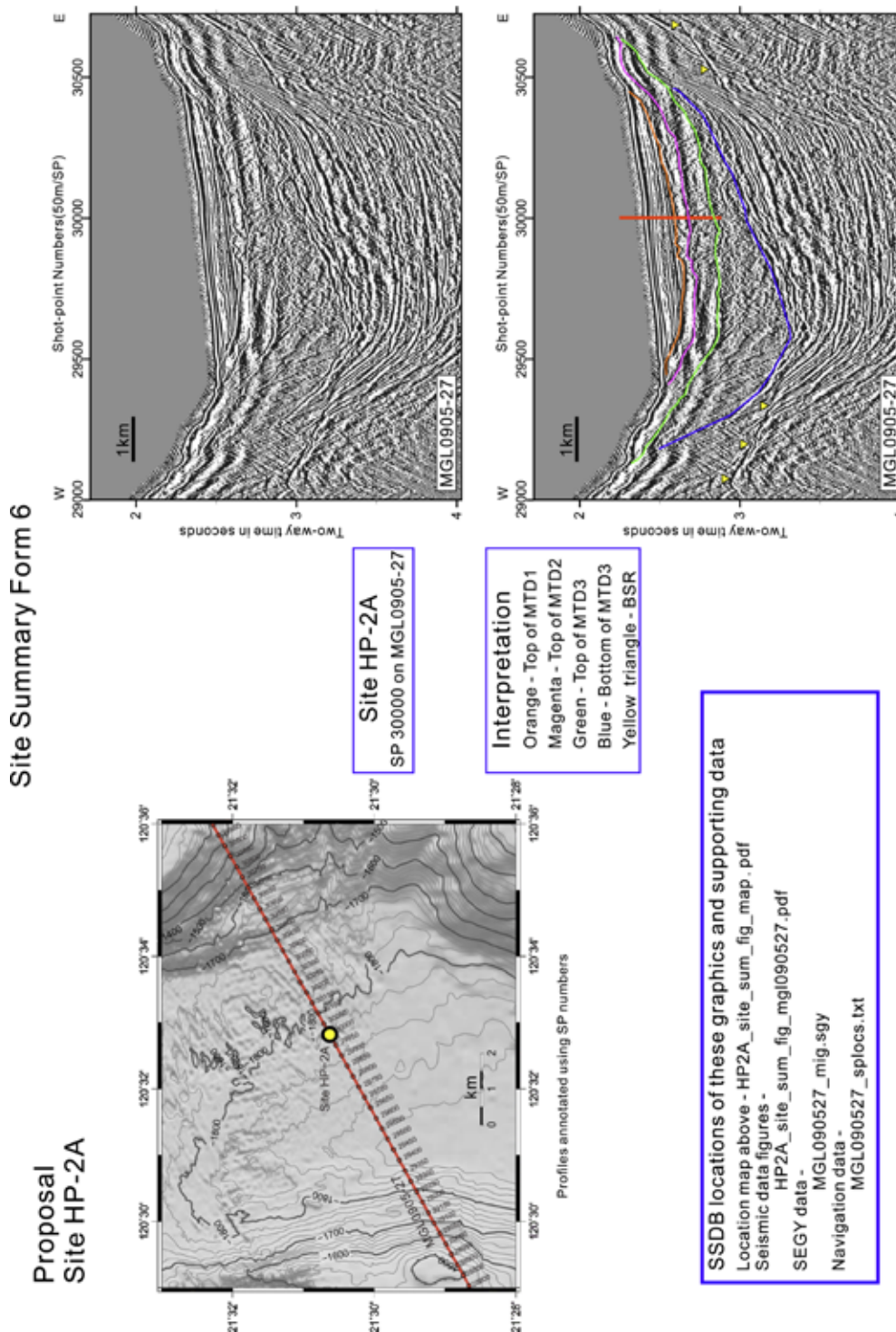
- γ 98014_Agulhas_Plateau_migfx.segy,
- γ 98014_Agulhas_Plateau_stack.segy,

additional data available:

multibeam, velocity information



7-2-B Site Figure Example 2



7-3 Useful Site Survey Data Links

IODP Site Characterization Data Guidelines

www.iodp.org/iodp-site-characterization-data-guidelines

SSDB Information for Proponents

<http://ssdb.iodp.org/documents/proponent-info.php>