International Ocean Discovery Program
Expedition XXX Scientific Prospectus

Short Expedition Title

[optional] Long expedition title

**Name**

**Co-Chief Scientist**

Department Name

Institution Name

Country

**Name**

**Co-Chief Scientist**

Department Name

Institution Name

Country

**Name**

**Expedition Project Manager/Staff Scientist**

International Ocean Discovery Program

Texas A&M University

USA

# Publisher’s notes

This publication was prepared by the *JOIDES Resolution* Science Operator (JRSO) at Texas A&M University (TAMU) as an account of work performed under the International Ocean Discovery Program (IODP). This material is based upon work supported by the JRSO, which is a major facility funded by the National Science Foundation Cooperative Agreement Number OCE1326927. Funding for IODP is provided by the following international partners:

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Portions of this work may have been published in whole or in part in other IODP documents or publications.

This IODP *Scientific Prospectus* is based on precruise *JOIDES Resolution* Facility advisory panel discussions and scientific input from the designated Co-Chief Scientists on behalf of the drilling proponents. During the course of the cruise, actual site operations may indicate to the Co-Chief Scientists, the Expedition Project Manager/Staff Scientist, and the Operations Superintendent that it would be scientifically or operationally advantageous to amend the plan detailed in this prospectus. It should be understood that any substantial changes to the science deliverables outlined in the plan presented here are contingent upon the approval of the IODP JRSO Director and/or *JOIDES Resolution* Facility Board.

## Disclaimer

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# Abstract

[~250 words explaining importance and overview of expedition and objectives, preferably formatted as a single paragraph. No callouts to tables or figures; no references cited. On its own, it should give an overview of the expedition.]

# Plain language summary

[~200 words conveying the same information as the Abstract but written so that it is understandable by a broader audience, preferably formatted as a single paragraph. Use straight-forward descriptions, contextualize information, explain scientific terms, and avoid jargon and acronyms. No callouts to tables or figures; no references cited. A de-jargonizer tool may help (e.g., [**http://scienceandpublic.com**](http://scienceandpublic.com)). See [**https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2021JB022735**](https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2021JB022735) for an example.]

# Schedule for Expedition XXX

International Ocean Discovery Program (IODP) Expedition XXX is based on IODP drilling Proposal XXX (available at **http://iodp.tamu.edu/scienceops/expeditions/XXXX**). Following evaluation by the IODP Scientific Advisory Structure, the expedition was scheduled for the research vessel (R/V) *JOIDES Resolution*, operating under contract with the *JOIDES Resolution* Science Operator (JRSO). At the time of publication of this *Scientific Prospectus*, the expedition is scheduled to start in XXXX, XXXX, on X Month 20XX and to end in XXXX, XXXX, on X Month. A total of XX days will be available for the transit, drilling, coring, and downhole measurements described in this report (for the current detailed schedule, see **http://iodp.tamu.edu/scienceops**). Further details about the facilities aboard *JOIDES Resolution* can be found at **http://iodp.tamu.edu/labs/index.html**.

# Introduction

[Fairly short introduction similar to abstract; can include references and callouts.]

# Background

[Cover previous related scientific work, what is known or hypothesized, justification/basis for expedition.]

## Geologic setting

[Sometimes combined with Background. Describe site areas and why they were selected.]

## Seismic studies/site survey data

The supporting site survey data for Expedition XXX are archived at the IODP Site Survey Data Bank (**https://ssdb.iodp.org/SSDBquery/SSDBquery.php**; select XXX for proposal number).

# Scientific objectives

[Describe questions asked and hypotheses to be tested. Enumerate objectives and how they will address questions and hypotheses. Include how the objectives fit into the 2050 science framework ([**https://www.iodp.org/2050-science-framework**](https://www.iodp.org/2050-science-framework)); this can be part of objective text or under a Connections to the 2050 Science Framework heading.]

# Operations plan/Coring strategy

[Present overview of drilling and coring strategy.]

## Proposed drill sites

[Describe primary and alternate sites, planned drilling operations for each, and how the sites fit together to provide the whole picture.]

# Wireline logging/Downhole measurements strategy

[Describe planned downhole logging and T/P measurements and how the data will be used in conjunction with shipboard measurements.]

[**http://iodp.tamu.edu/tools**](http://iodp.tamu.edu/tools); [**http://iodp.tamu.edu/tools/logging**](http://iodp.tamu.edu/tools/logging)

# Risks and contingency

[**This section is crucial for planning around unexpected situations and delays!** Be as detailed as possible, as this document will be used to guide operations if the unexpected occurs. Describe risks to planned operations and well-thought-out contingency plans.]

# Sampling and data sharing strategy

Shipboard and shore-based researchers should refer to the IODP Sample, Data, and Obligations Policy and Implementation Guidelines posted on the Web at **http://www.iodp.org/top-resources/program-documents/policies-and-guidelines**. This document outlines the policy for distributing IODP samples and data to research scientists, curators, and educators. The document also defines the obligations that sample and data recipients incur. The Sample Allocation Committee (SAC; composed of the Co-Chief Scientists, Staff Scientist, and IODP Curator on shore and curatorial representative on board the ship) will work with the entire scientific party to formulate a formal expedition-specific sampling plan for shipboard and postcruise sampling.

Shipboard scientists are expected to submit sample requests (at **http://iodp.tamu.edu/curation/samples.html**) ~6 months before the beginning of the expedition. Based on sample requests (shore based and shipboard) submitted by this deadline, the SAC will prepare a tentative sampling plan, which will be revised on the ship as dictated by core recovery and cruise objectives. The sampling plan will be subject to modification depending upon the actual material recovered and collaborations that may evolve between scientists during the expedition. Modification of the strategy during the expedition must be approved by the Co-Chief Scientists, Staff Scientist, and curatorial representative on board the ship.

The minimum permanent archive will be the standard archive half of each core. All sample frequencies and sizes must be justified on a scientific basis and will depend on core recovery, the full spectrum of other requests, and the cruise objectives. Some redundancy of measurement is unavoidable, but minimizing the duplication of measurements among the shipboard party and identified shore-based collaborators will be a factor in evaluating sample requests.

If some critical intervals are recovered, there may be considerable demand for samples from a limited amount of cored material. These intervals may require special handling, a higher sampling density, reduced sample size, or continuous core sampling by a single investigator. A sampling plan coordinated by the SAC may be required before critical intervals are sampled.

# Expedition scientists and scientific participants

The current list of participants for Expedition XXX can be found at **http://iodp.tamu.edu/scienceops/precruise/XXXX/participants.html**.

# References

# Tables

Table T1. Operations and time estimates for primary sites, Expedition XXX. [Tables for primary and alternate sites are provided by Operations Superintendent. Additional tables are not required.]

Table T2. Time estimates for alternate sites, Expedition XXX.

# Figures

[Include location map(s) showing primary site(s).]

# Site summaries

[Track maps and seismic figures will be presented on the same page as the site summary table (e.g., [**http://publications.iodp.org/scientific\_prospectus/398/398SP.PDF**](http://publications.iodp.org/scientific_prospectus/398/398SP.PDF)). Captions can be provided as appendix figure captions.]

## Site \_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| Priority: |  |
| Position: |  |
| Water depth (m): |  |
| Target drilling depth (mbsf): |  |
| Approved maximum penetration (mbsf): |  |
| Survey coverage (track map; seismic profile): |  |
| Objective(s): |  |
| Coring program: |  |
| Downhole measurements program: |  |
| Nature of rock anticipated: |  |