

JOIDES Resolution Facility Board



15 June, 2016
Anthony Koppers
JR Facility Board, Chair

Outline

- 1 Updates from the JOIDES Resolution (JR) Facility Board (JRFB)**
 - 1A Simplified Guidelines for Preparing Proposals**
 - 1B XRF Scanning as Onshore Post-expedition Measurement**
 - 1C JR100 Shallow Coring during Non-IODP Tie-ups**
 - 1D Amphibious Drilling Proposals (ADP)**
- 2 New JR Expeditions Scheduled FY'17-19**
 - 2A Five Expeditions in FY'17-19 (one extra per year)**
 - 2B Two Antarctic Expeditions (need ice breaker support)**
- 3 Long-term JR Track and Update on Proposal Pressure in the South Atlantic**

1A. Simplified Proposal Guidelines

■ ■ Single document

IODP Proposal Submission Guidelines

IODP Science Evaluation Panel (SEP): Proposal Submission Guidelines

Approved by JOIDES Resolution Facility Board: 18 May 2016
Latest Revision: 28 April, 2016

Chapter 1 Introduction

Science in 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/program-documents). The program provides multiple drilling platforms (www.iodp.org/ships/platforms) 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.

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 Site Evaluation Panel



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

JRFB 1605 Consensus Statement 3

The JRFB agrees to institute a Standing JRFB Subcommittee on Policies and Guidelines, with the following members: Anthony Koppers (JRFB Chair), Holly Given (ex-officio representing SSO) and two other members of the JRFB (Christina Ravelo and Mike Coffin).

The mandate of this subcommittee is: (1) to consult with SEP, EPSP, SSO, JRSO and the IODP Facility Boards to improve IODP policies, guidelines, reference documents and terms of references, (2) to present those in a common IODP format, (3) to report every year at the JRFB meeting any substantial changes for discussion and seek approval of the board where necessary, and (4) to survey the wider IODP community about the effectiveness of these policies and guidelines.

JRFB 1605 Consensus Statement 4

The JRFB approves the Revised and Reformatted IODP Proposal Submission Guidelines (28 April 2016).

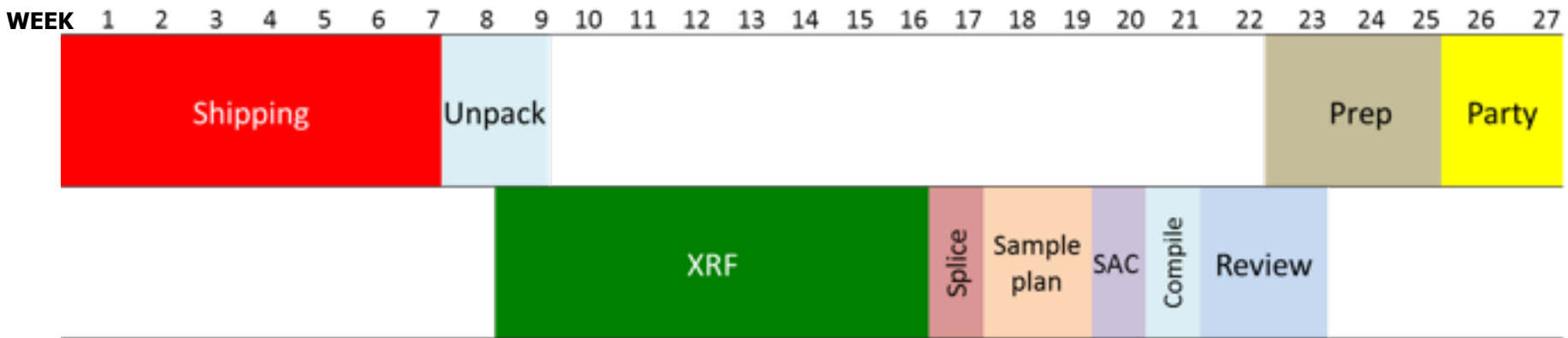
JRFB 1605 Consensus Statement 5

The JRFB approves the Revised and Reformatted IODP Site Characterization Guidelines (28 April 2016).

1B. XRF Scanning of Core Sections

■ ■ Scientific demand for elemental analysis provided by XRF scanning is increasing

- It allows refinement of splices and sample plans
- Data will be part of moratorium (18 months)



JRFB 1605 Consensus Statement 17

The JRFB supports the implementation of XRF scanning as a new IODP Standard Onshore Measurement as proposed by the JRSO in their revised FY'16 APP.

1C. JR100 Shallow Coring Program

■ ■ Use the JR in a non-IODP mode to collect high-resolution Advanced Piston Corer (APC) cores from 0-100 mbsf

- There is a strong scientific need for high-resolution cores collected up to 100 mbsf (e.g. NRC Sea Change report)
- Retirement of the R/V Knorr (which hosted the WHOI Long Coring System)
- The availability of an NSF facility (the JR) that may help reduce NSF-OCE infrastructure support costs

JRFB 1605 Consensus Statement 16

The JRFB supports NSF's plans for the shallow JR100 coring program to be implemented during non-IODP Periods, when the JRFB scheduling for the JOIDES Resolution permits.

1D. Amphibious Drilling Proposals

- ■ Since May 2015 proponents can propose a combined proposal to drill on land and offshore

JRFB 1505 Consensus Statement 3

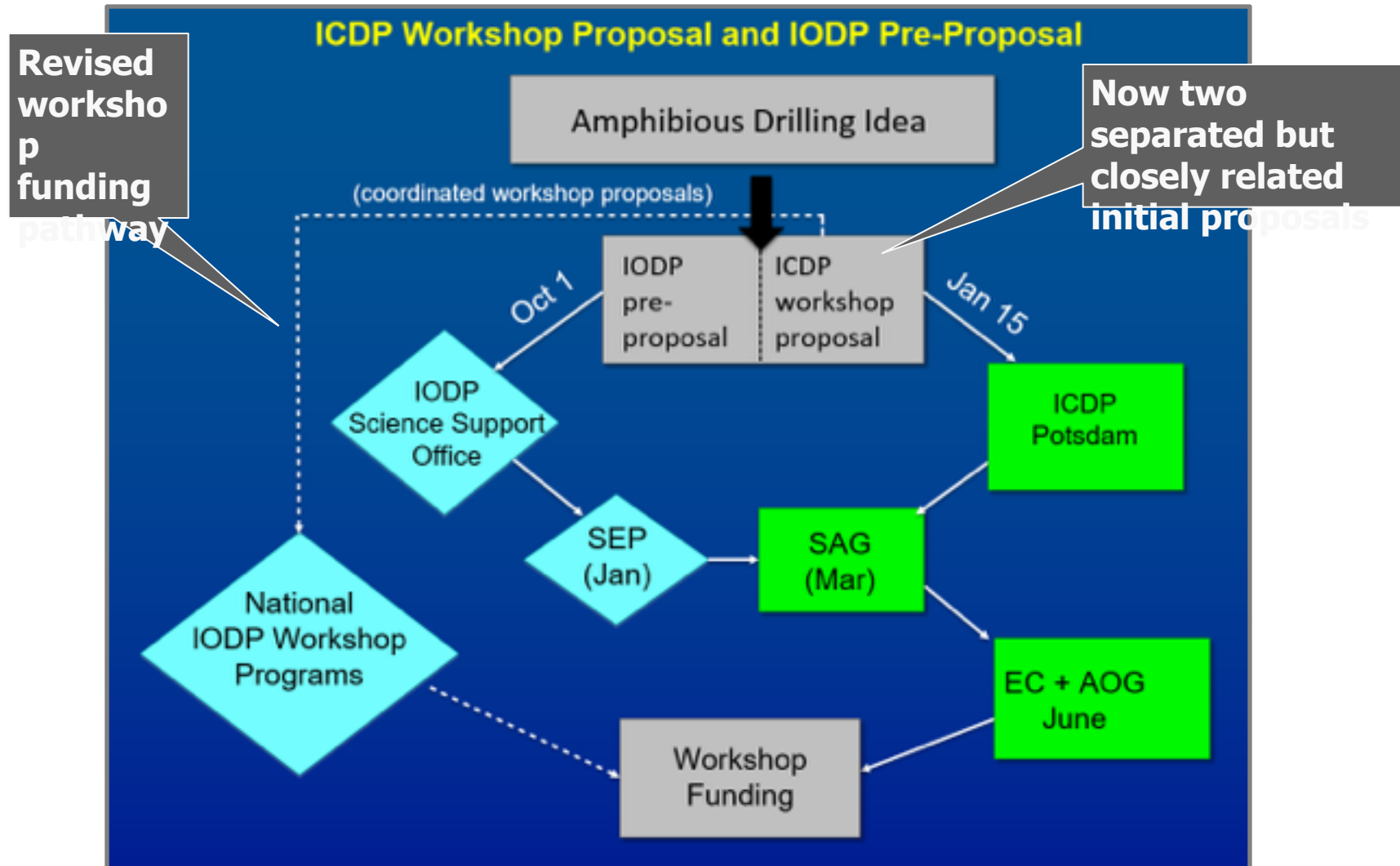
The JRFB approves the Guidelines for Joint IODP-ICDP “Amphibious” Proposals and agrees to move forward with implementation in conjunction with the ICDP and the IODP Science Support Office.

➤ At Science Support Office.
(SEP)

➤ ADP Proposal Guidelines **Updated**

➤ ADP Implementation Guidelines discussed at JRFB but requires **more work** and **discussion** with other FB's

1D. Amphibious Drilling Proposals



JRFB 1605 Consensus Statement 6

The JRFB approves the Revised ADP Guidelines (3 May 2016).

JRFB 1605 Action Item 2

The JRFB Subcommittee on Policies and Guidelines will update and merge the Guidelines for Joint IODP-ICDP “Amphibious” ADP Proposals into the IODP Proposal Submission Guidelines. The JRFB Chair will forward the updated guidelines to the ICDP Program Office.

JRFB 1605 Action Item 3

The JRFB Subcommittee on Policies and Guidelines will work on an updated ADP Implementation Policy in support of the Joint IODP-ICDP “Amphibious” ADP Projects. The updated policy will be circulated amongst all IODP Facility Boards before June 2016 for approval and then shared with ICDP by the JRFB Chair.

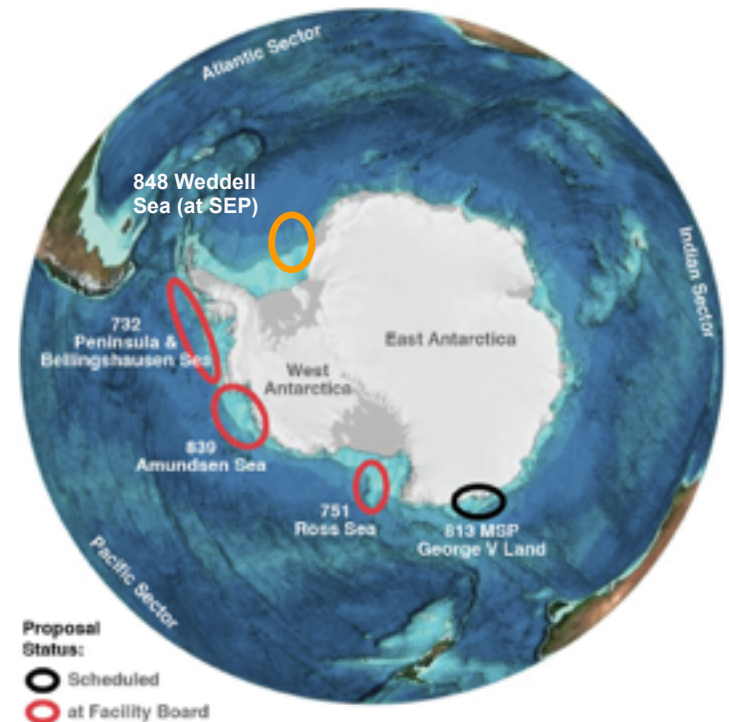
2. Updated JR Schedule FY'17-19 *

| Fiscal Year 1 Oct - 30 Sept | Proposal Expedition | Title |
|--------------------------------|------------------------------|--|
| FY'17 | P832 | Tasman Frontier Subduction |
| FY'18 | Expedition 369 | Australia Cretaceous Climate and Tectonics |
| FY'18 | P841-APL + P781A (1 of 2) | Combined Expedition Creeping Gas Hydrate Slides and LWD portion of Hikurangi Observatory |
| FY'18 | P751 ** | West Antarctic Ice Sheet Climate (Ross Sea) |
| FY'18 | P781A (2 of 2) | Hikurangi Observatory (CORK installations) |
| FY'18 | P818 | Brothers Arc Flux |
| FY'18 | Non-IODP | Mandatory 5-year Inspection JOIDES Resolution |
| FY'19 | P567 | South Pacific Paleogene |
| FY'19 | Non-IODP | Short 2-4 weeks (to move from Tahiti and mobilize in Punta Arenas) |
| FY'19 | P839 ** | Amundsen Sea Ice Sheet History |

2. Updated JR Schedule FY'17-19

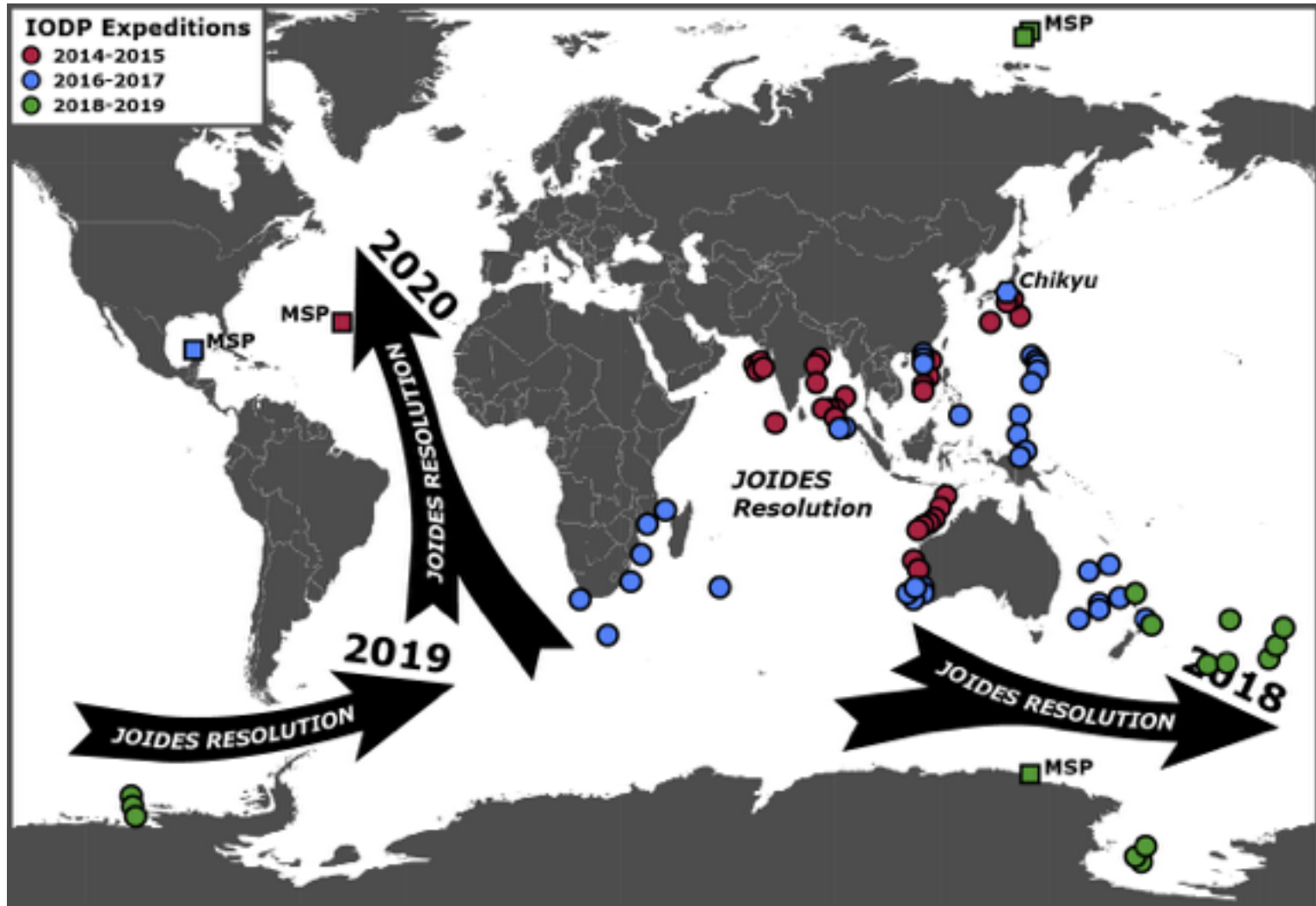
■ ■ Antarctica's Cenozoic ice and climate history ...

- Three JRFB proposals form a coherent West Antarctic Margin transect illuminating spatial and temporal variations of past ice sheet dynamics
- Pursuing a scenario with 3 expeditions in 3 seasons
- Improved understanding of underlying processes, thresholds and magnitudes of previous West Antarctic Ice Sheet (WAIS) retreats and collapses, with implications for sea level rise



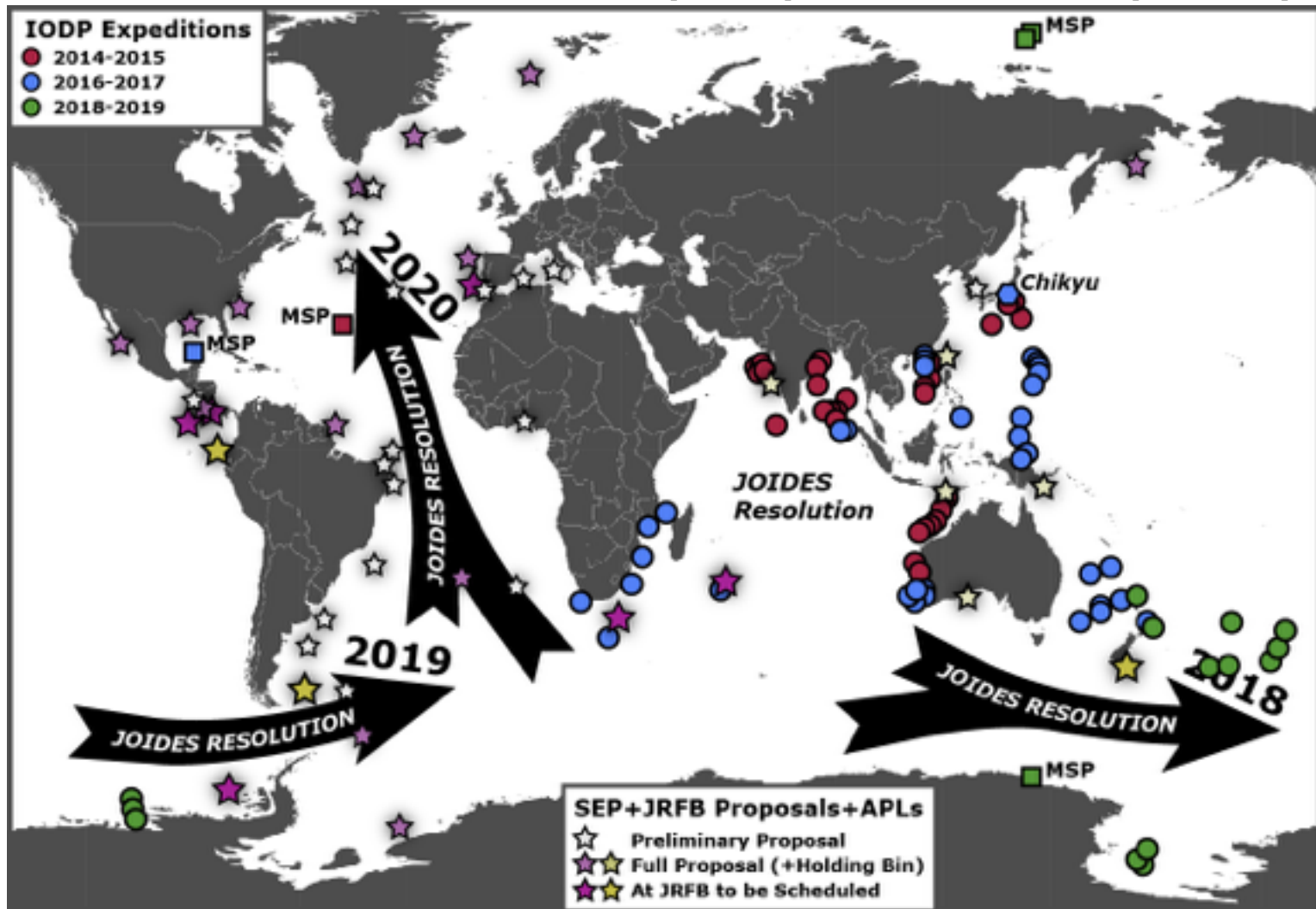
3. Long-Term JR Cruise Track

BASED ON JRFB 1605



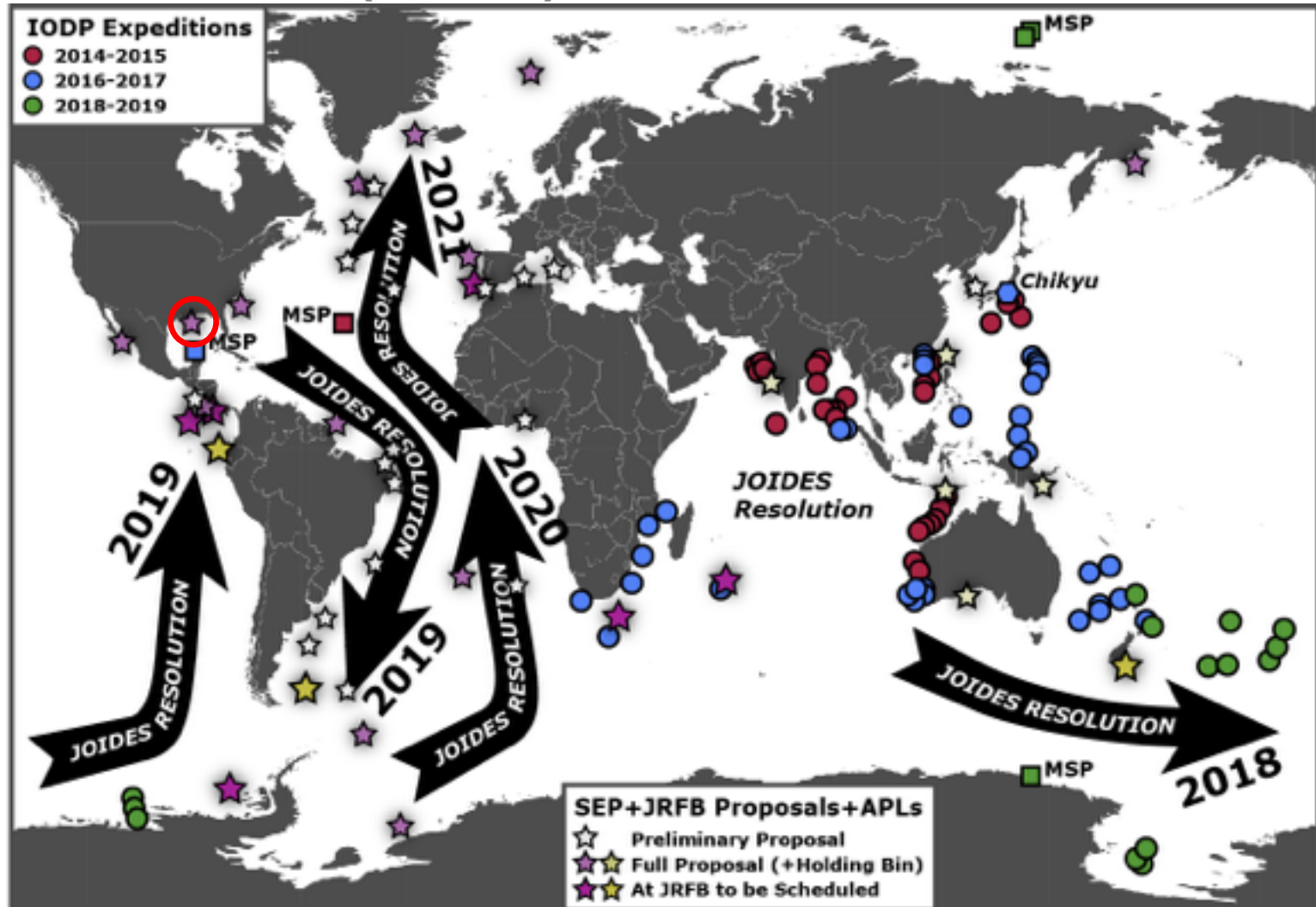
3. Long-Term JR Cruise Track

CURRENT PROPOSALS AT SEP AND JRFB (STARS) AND EXPEDITIONS (CIRCLES)



3. Long-Term JR Cruise Track

ASSUMING 877-CPP2 (FLEMINGS) WILL BE FORWARDED BY SEP 1606



3. Long-Term JR Cruise Track

UPDATED MAP (CALENDAR YEARS) FOLLOWING JRFB MEETING OF MAY 2016

