Dr. Kathleen Marsaglia

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Co-Chair of IODP Science Evaluation Panel (2022-2024)

How can the U.S. maintain leadership in the drilling community and Earth sciences without the JOIDES Resolution platform and the ability to collect new data and samples?
Having a JOIDES Resolution-like platform is the critical element for a leadership position in Scientific Ocean Drilling based on proposal pressure that requires deep subseafloor coring capabilities in deeper water.

What is the current status or perception of the U.S. relationship with international components of IODP3 (EU and Japan)?
Excellent interactions among individual drilling proposal proponents, Science Evaluation Panel members, and shipboard scientists.

Core from IODP Exp 351, Arculus et al. 2014

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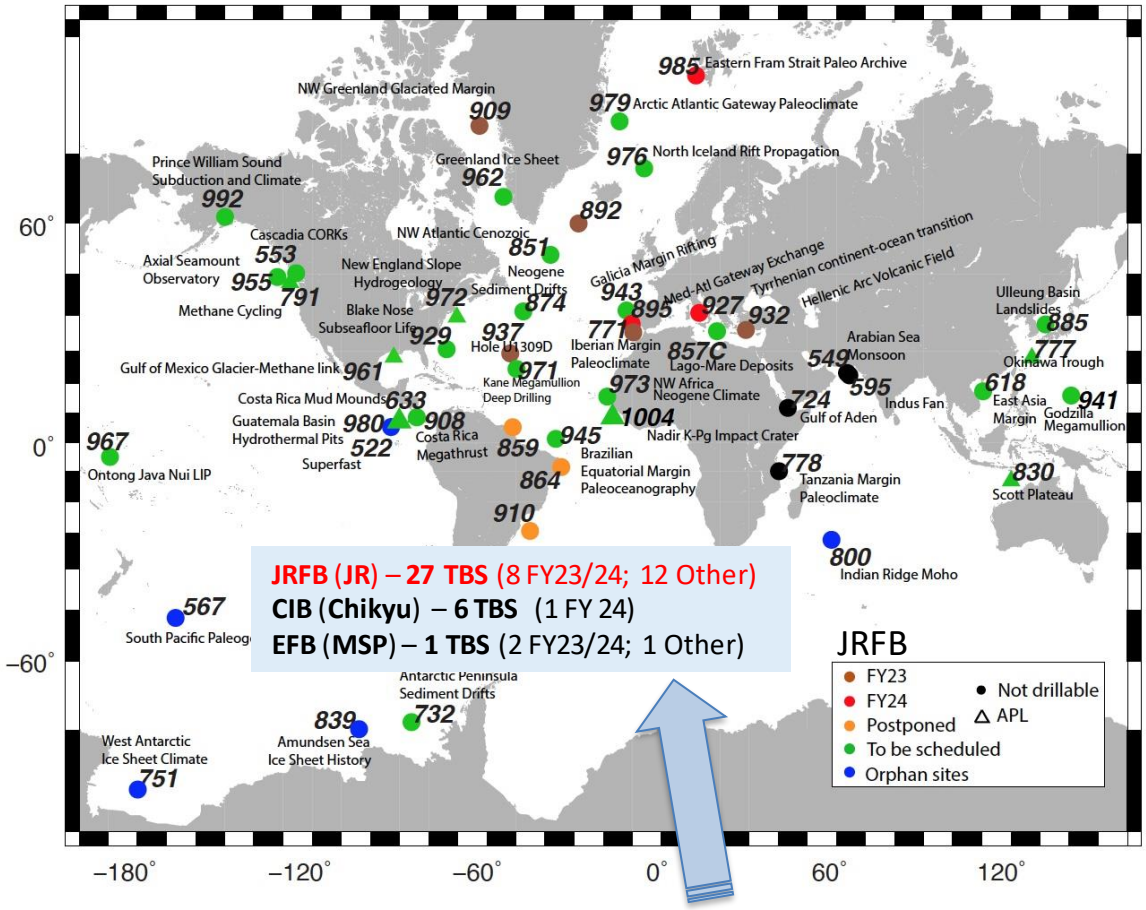
Science Evaluation Panel General Evaluation Criteria for IODP Proposals

- Are the scientific questions/hypotheses being addressed exciting and of sufficiently wide interest to justify the requested resources?
- To what degree does the integrated experimental design of site characterization, drilling, coring/sampling, logging, and downhole experiments constitute a compelling and feasible scientific proposal?
- Will the proposal significantly advance one or more goals of the Science Plan?
- Would the proposal engage new communities or other science programs into the drilling program?

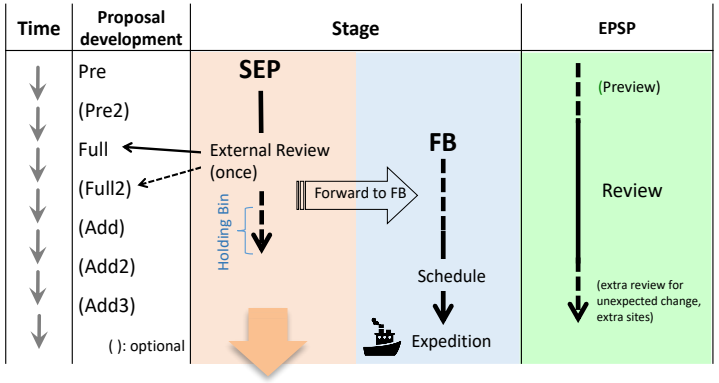
50 SEP members (science/site)
US(21), ECORD(14), Japan(7)
China (4), ANZIC(2), India(2)

Proposals at JR Facility Board



Typical proposal development and panel review

Usually several rounds of review at SEP prior to transfer to FB



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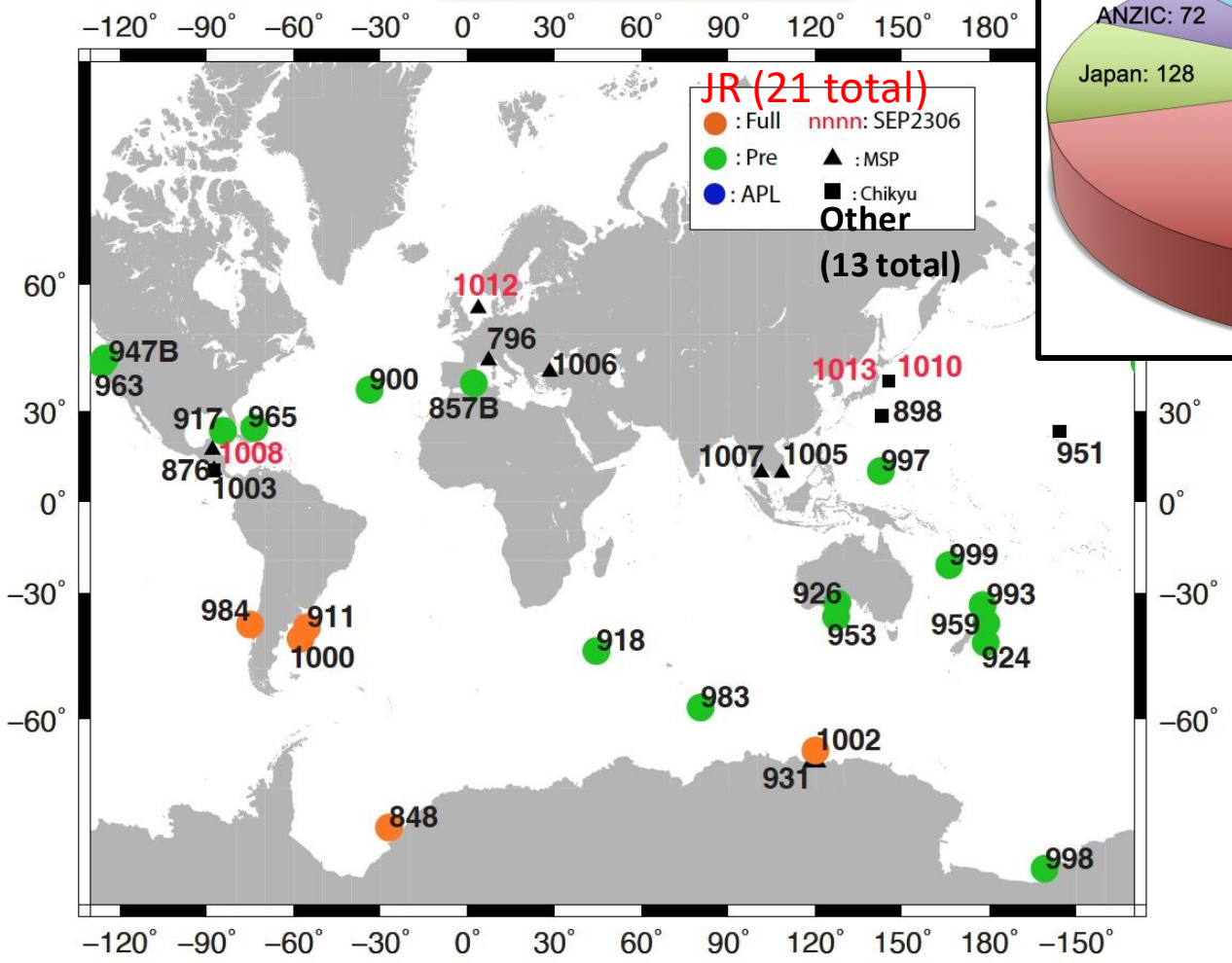
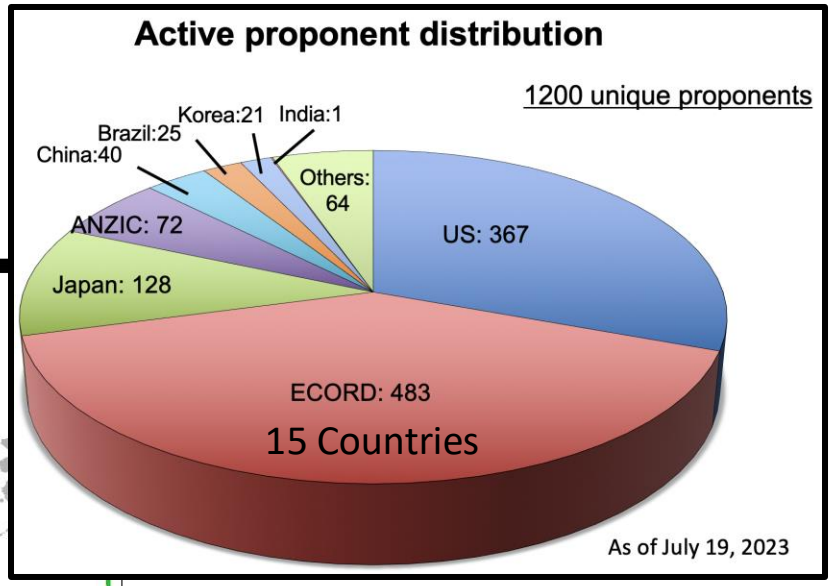
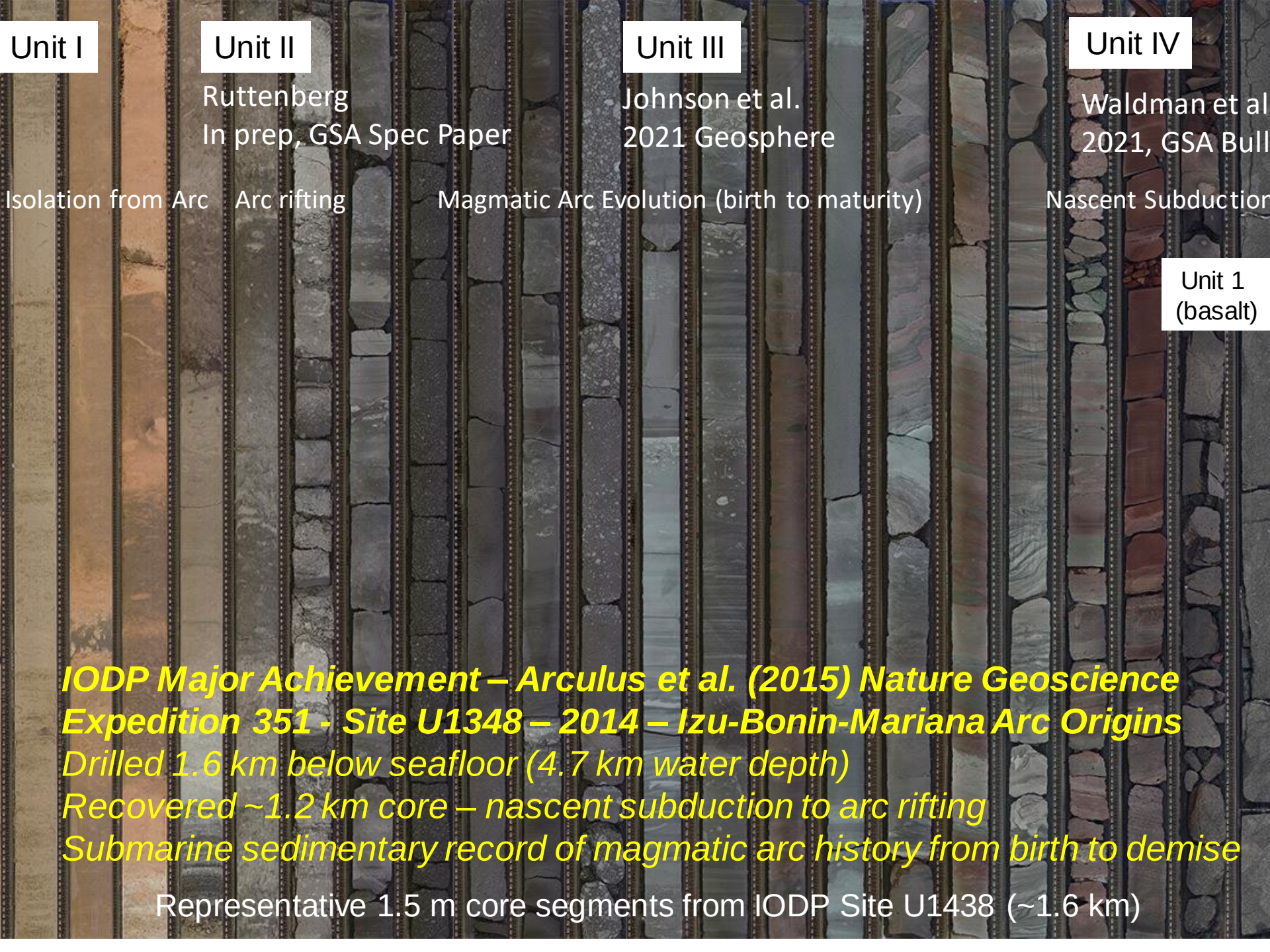
Proposals at SEP





1. **Proposals for JOIDES Resolution dominate:**
   - JR Facility Board - 27 ready to schedule
   - SEP - 21 in process Pre- and full
2. **Proposals and proponents are globally distributed**
3. **Proposals, SEP, and shipboard experiences form international community**

IODP
INTERNATIONAL OCEAN DISCOVERY PROGRAM


Unit I
Unit II
Ruttenberg
In prep, GSA Spec Paper
Unit III
Johnson et al.
2021 Geosphere
Unit IV
Waldman et al
2021, GSA Bull
Isolation from Arc
Arc rifting
Magmatic Arc Evolution (birth to maturity)
Nascent Subduction
Unit 1
(basalt)
IODP Major Achievement – Arculus et al. (2015) Nature Geoscience
Expedition 351 - Site U1348 – 2014 – Izu-Bonin-Mariana Arc Origins
Drilled 1.6 km below seafloor (4.7 km water depth)
Recovered ~1.2 km core – nascent subduction to arc rifting
Submarine sedimentary record of magmatic arc history from birth to demise
Representative 1.5 m core segments from IODP Site U1438 (~1.6 km)