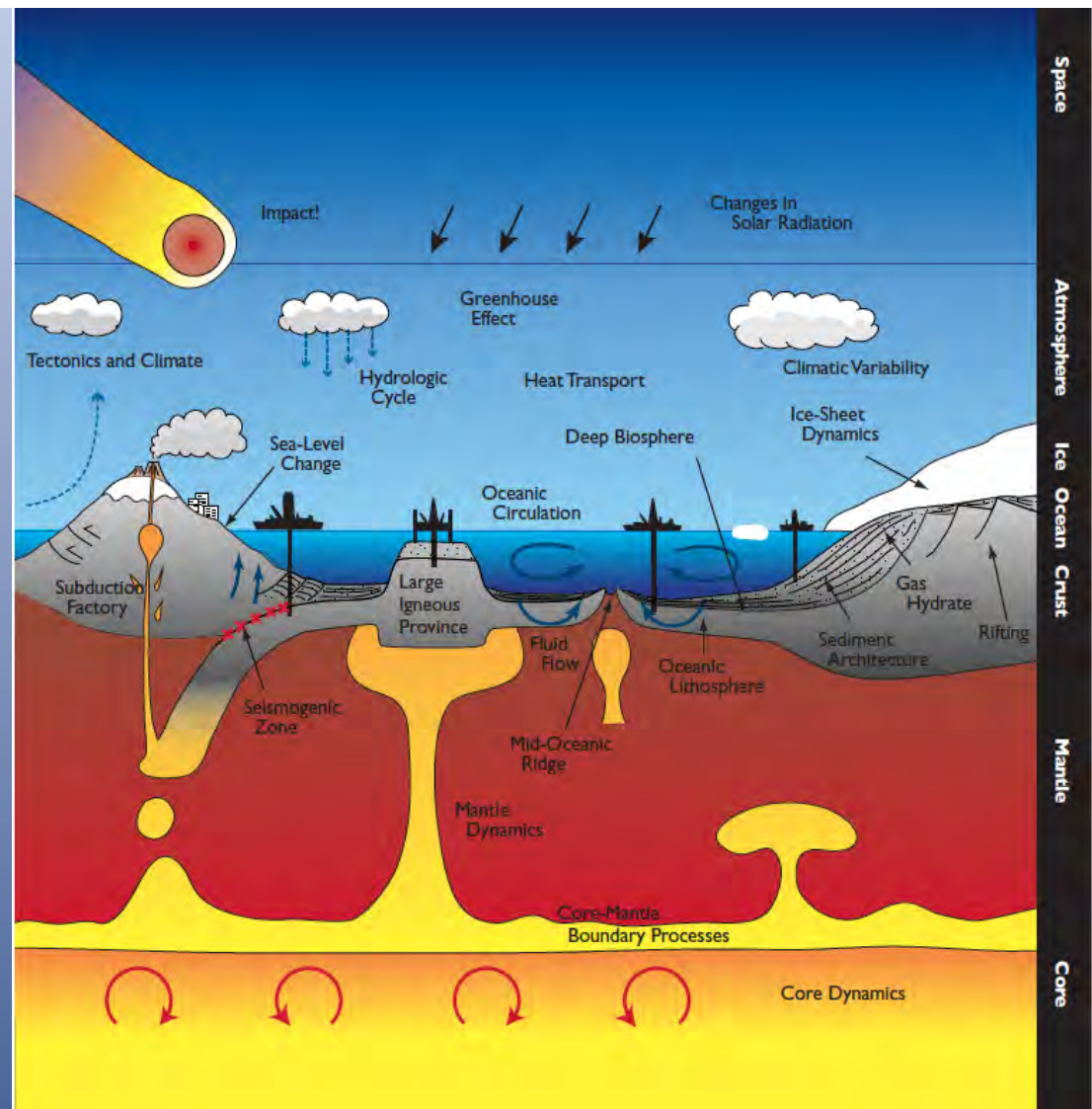


IODP



Kiyoshi Suyehiro www.iodp.org



INTEGRATED OCEAN DRILLING PROGRAM
MANAGEMENT INTERNATIONAL

October 17, 2012

Scientific ocean drilling

- 1961 Project Mohole *CUSS I*
- 1968 Deep Sea Drilling Project *Glomar Challenger*
- 1975 International Phase of Ocean Drilling
- 1985 Ocean Drilling Program *JOIDES Resolution*
- 2004 Integrated Ocean Drilling Program *JR/MSP*
- 2007 *Chikyu* sets sail
- 2009 *JR* renovated
- 2013 *International Ocean Discovery Program*



IODP “international assets”



CHIKYU

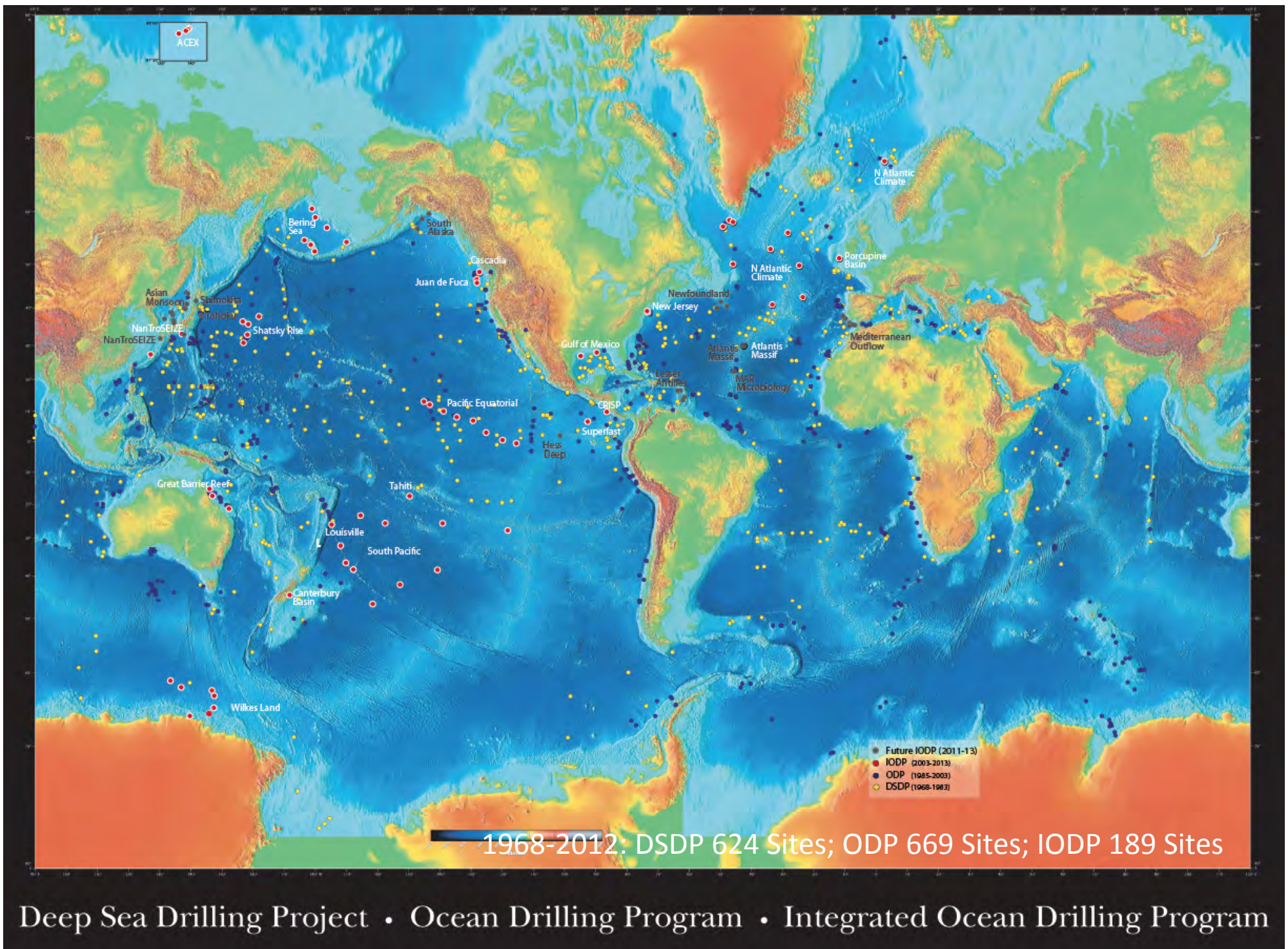
*JOIDES
Resolution*



*Mission-specific
Platform*



**INTEGRATED OCEAN DRILLING PROGRAM
MANAGEMENT INTERNATIONAL**



Legacy: samples and data

- Samples
- Data
- Knowledgebase

<http://sedis.iodp.org/>

BCR:
Bremen Core Repository
Bremen, Germany
141 km of core

GCR:
Gulf Coast Repository
College Station, TX, USA
126 km of core

KCC:
Kochi Core Center
Kochi, Japan
93 km of core

Photos courtesy of IODP/ECORD

Photos courtesy of IODP/USIO

Photos courtesy of IODP/JAMSTEC

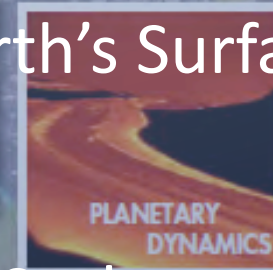


INTEGRATED OCEAN
MANAGEMENT INTE

The Science Plan Themes (2013-2023)

- **CLIMATE AND OCEAN CHANGE**
Reading the Past, Informing the Future
- **BIOSPHERE FRONTIERS**
“Deep Life” and Environmental Forcing of Ecosystems
- **EARTH CONNECTIONS**
Deep Processes and Their Impact on Earth’s Surface Environment
- **EARTH IN MOTION**
Processes and Hazards on Human Time Scales

Illuminating Earth’s
Past, Present, and Future



Connections between the four themes is critical to the program concept



INTEGRATED OCEAN DRILLING PROGRAM
MANAGEMENT INTERNATIONAL

THE INTERNATIONAL OCEAN DISCOVERY PROGRAM
EXPLORING THE EARTH UNDER THE SEA

Challenges

- 1: How does Earth's climate system respond to elevated levels of atmospheric CO₂?
- 5: What are the origin, composition, and global significance of subseafloor communities?
- 8: What are the composition, structure, and dynamics of Earth's upper mantle?
- 12: What mechanisms control the occurrence of destructive earthquakes, landslides, and tsunami?



IODP Forum Science Community

International Partners

Implementing Organizations

Platform Providers –
NSF/MEXT/ECORD

MEXT

International
Partners

CDEX/JAMSTEC
Chikyu Operations

Kochi Core Center

Data Management
Publications
Education and Outreach
Technical Development

Facility Governing Board

NSF

International
Partners

USIO
JR Operations

Gulf Coast Core Repository

Data Management
Publications
Education and Outreach
Technical Development

Facility Governing Board

ECORD

International
Partners

ESO
MSP Operations

Bremen Core Repository

Data Management
Publications
Education and Outreach
Technical Development

Facility Governing Board

Support Office

Proposal Handling
SAS meeting Support
Scientific Drilling Journal

Chikyu Project
Planning Office

Proposals

Proposals

Proposals

Science Advisory Structure

Science Community



INTEGRATED
MANAGEMENT INTERNATIONAL

CHIKYU+10 International Workshop

Tokyo; April 21-23, 2013

Discussion of future scientific missions using *Chikyu*.

Details will be widely publicized following a Steering Committee meeting in mid-November. Early inquiries can be sent to chikyu10@iodp.org.

Mike Coffin, CHIKYU+10 Steering Com Chair

Organized by JAMSTEC and IODP-MI



INTEGRATED OCEAN DRILLING PROGRAM
MANAGEMENT INTERNATIONAL

ECORD 2013-2023

- Societal relevance
- Arctic exploration
- Mission Specific Platform redefined
- No more commingled fund scheme
- Co-funding on a project-by-project basis
- Distributed European Drilling Infrastructure



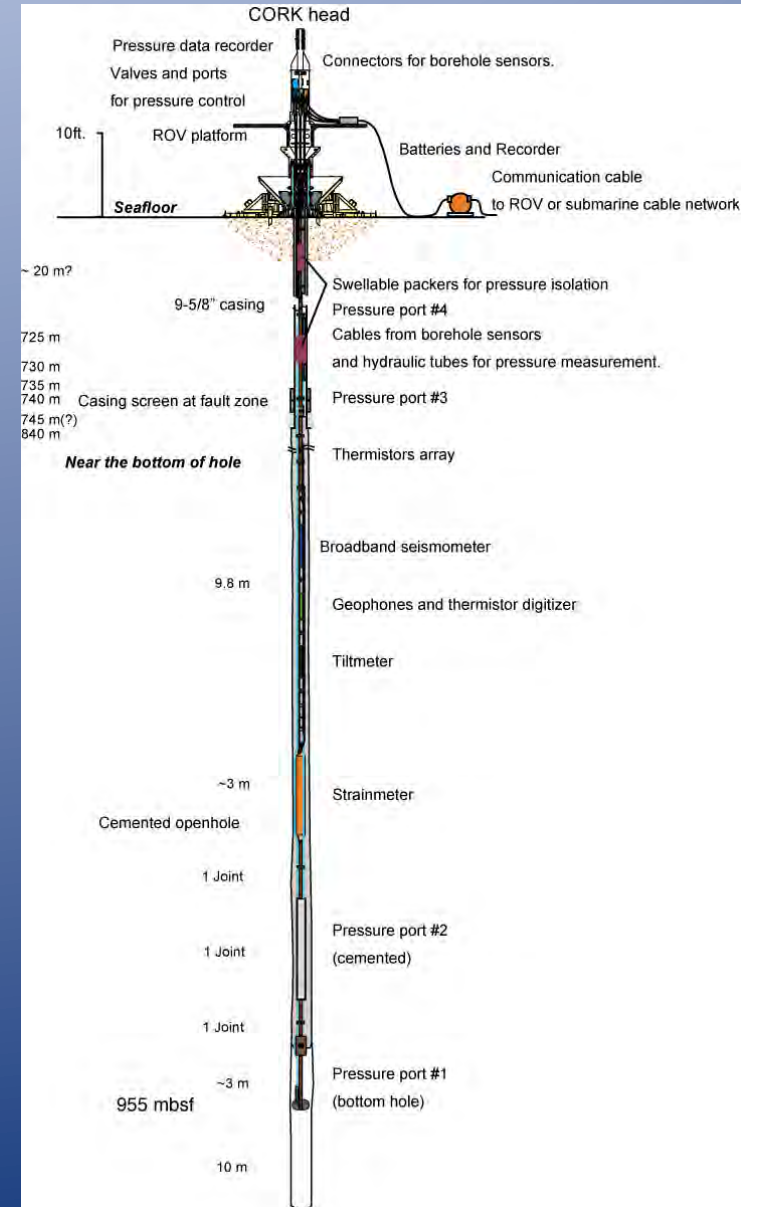
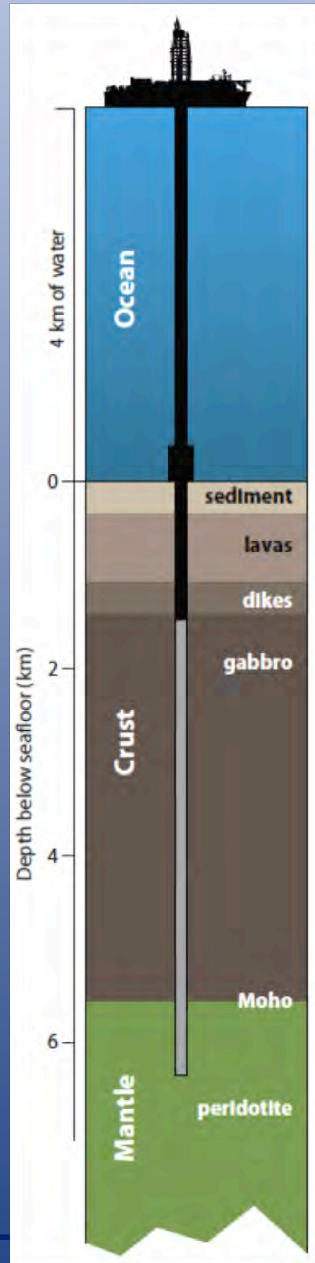
<http://www.ecord.org/pub/brochure.html>



**INTEGRATED OCEAN DRILLING PROGRAM
MANAGEMENT INTERNATIONAL**

Feb 2012

Frontiers





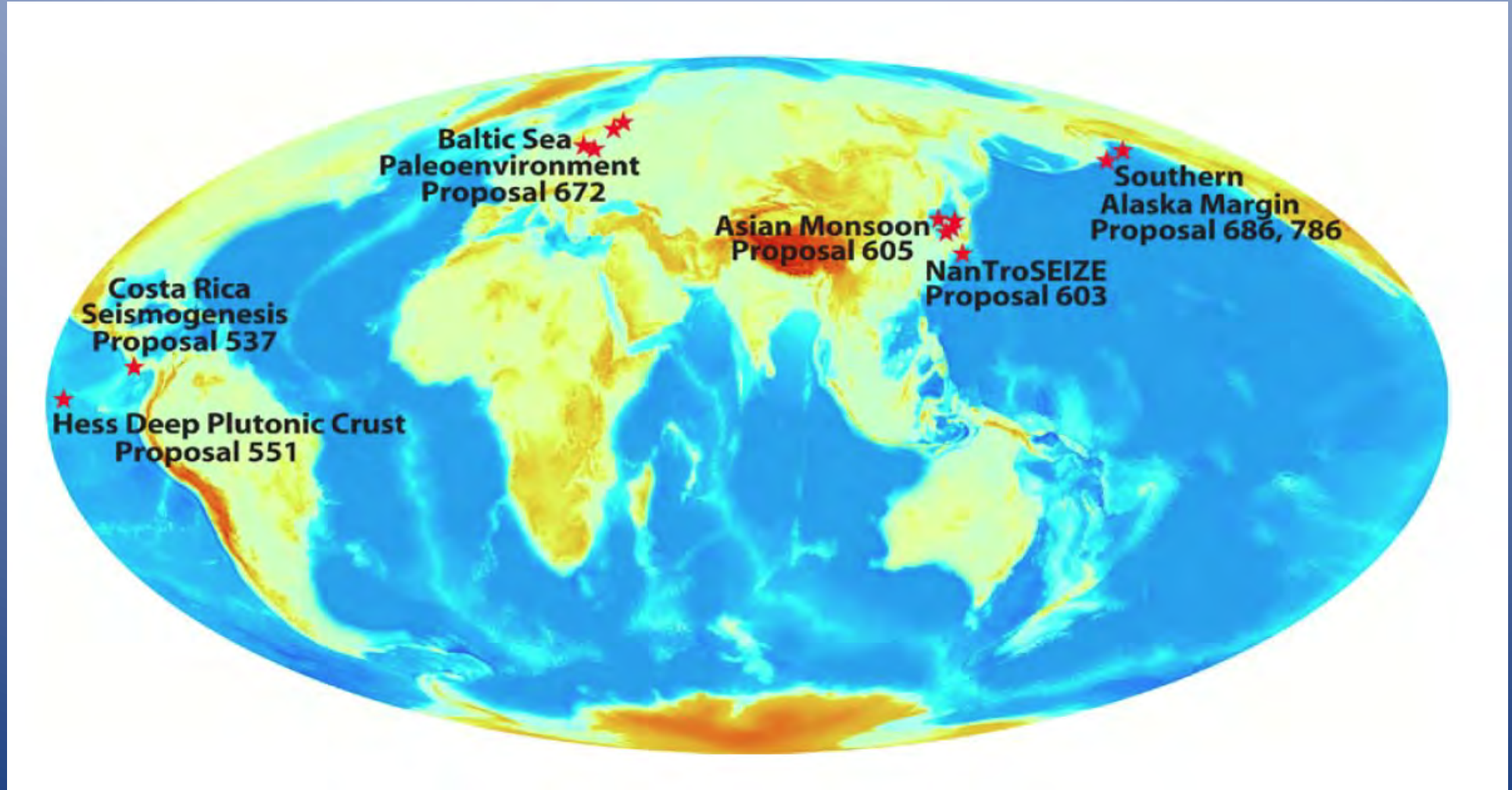
**INTEGRATED OCEAN DRILLING PROGRAM
MANAGEMENT INTERNATIONAL**

Guiding Science Plans

- Conference on Scientific Ocean Drilling (COSOD), 1981
- COSOD II, 1987
- Long Range Plan **Ocean Drilling Program**, 1989-2002
- Long Range Plan **Understanding Our Dynamic Earth through Ocean Drilling**, 1996-2003
- Initial Science Plan **Earth, Oceans and Life**, 2003-2013
- New Science Plan **Illuminating Earth's Past, Present, and Future**, 2013-2023



IODP FY2013



INTEGRATED OCEAN DRILLING PROGRAM
MANAGEMENT INTERNATIONAL

Initial time estimate (from NSP)

THEME	MONTHS			
	<i>Chikyu</i>	<i>JOIDES Resolution</i>	MSP	Total
Climate	5	50	10	65
Biosphere	5	20		25
Earth Connections	25	25	5	55
Earth in Motion	15	25	5	45
Total	50	120	20	190



Platform Provider Management

- Independent funding for each Platform and associated facilities
- Yearly subscription or project-by-project participation
- Platforms overseen by Facility Governing Boards
 - *Includes Scientists, Funding agencies, Operator*
 - *Yearly Scheduling*
 - *Long-term planning*
- Core Archives
 - *ECORD - Bremen Repository*
 - *US - Gulf Coast Repository and JR cores at Kochi*
 - *Japan - Chikyu cores*
- Platform Providers --- Publications, Eng Dev, E&O

