

# PACIFIC MARITIME BOUNDARIES & EXTENDED CONTINENTAL SHELF PROJECT

Malakai Vakautawale  
Oceans and Maritime Programme  
Geoscience Energy Maritime Division

*Seabed 2030 6<sup>th</sup> Pacific Ocean Mapping Meeting  
Nadi 4<sup>th</sup> – 6<sup>th</sup> November 2024*

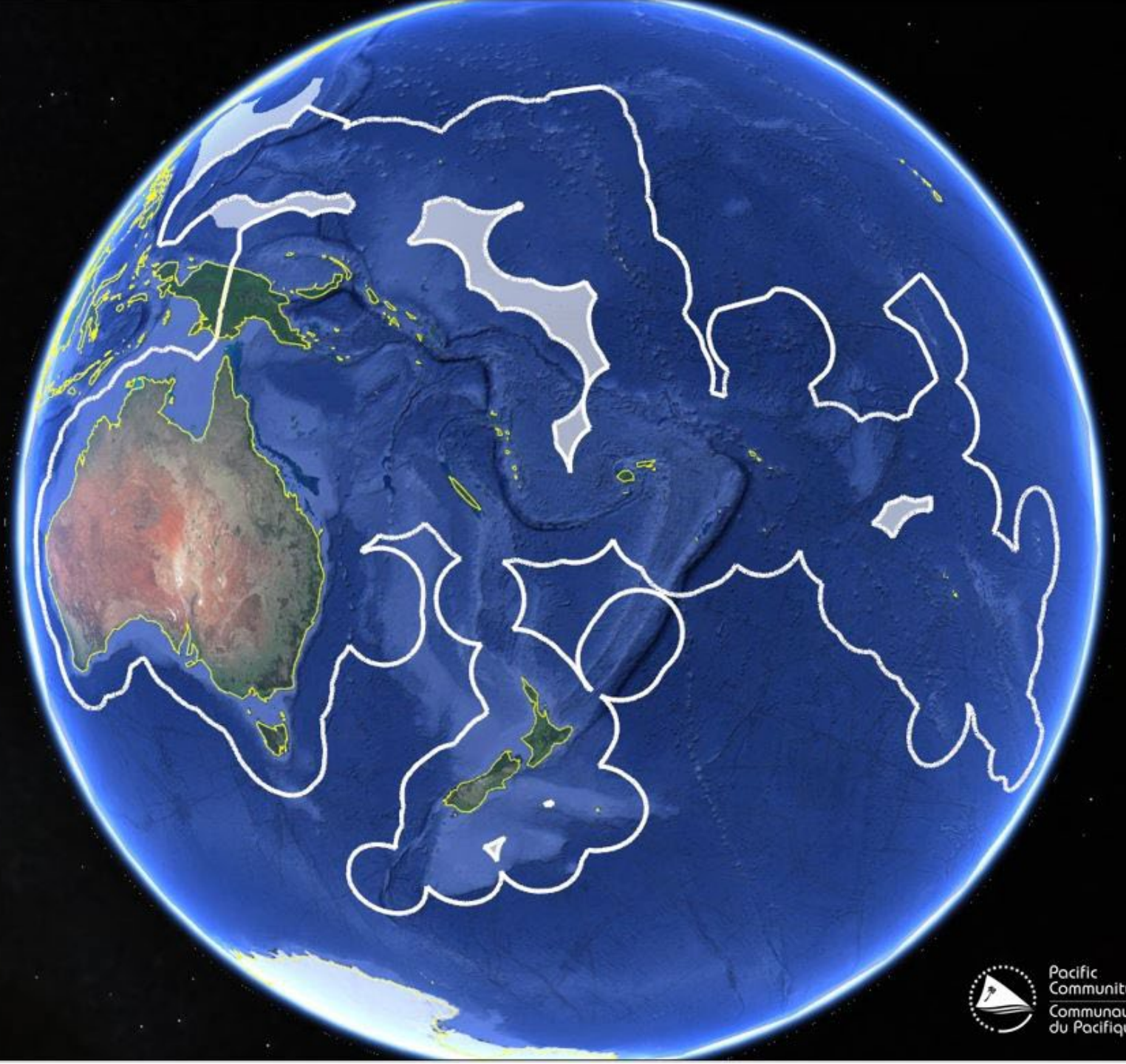
# The Blue Pacific Continent

**27** Pacific Countries  
and Territories

**42** million people

**42** million square  
kilometres

**30%** of the world's  
Exclusive Economic  
Zones (EEZ)



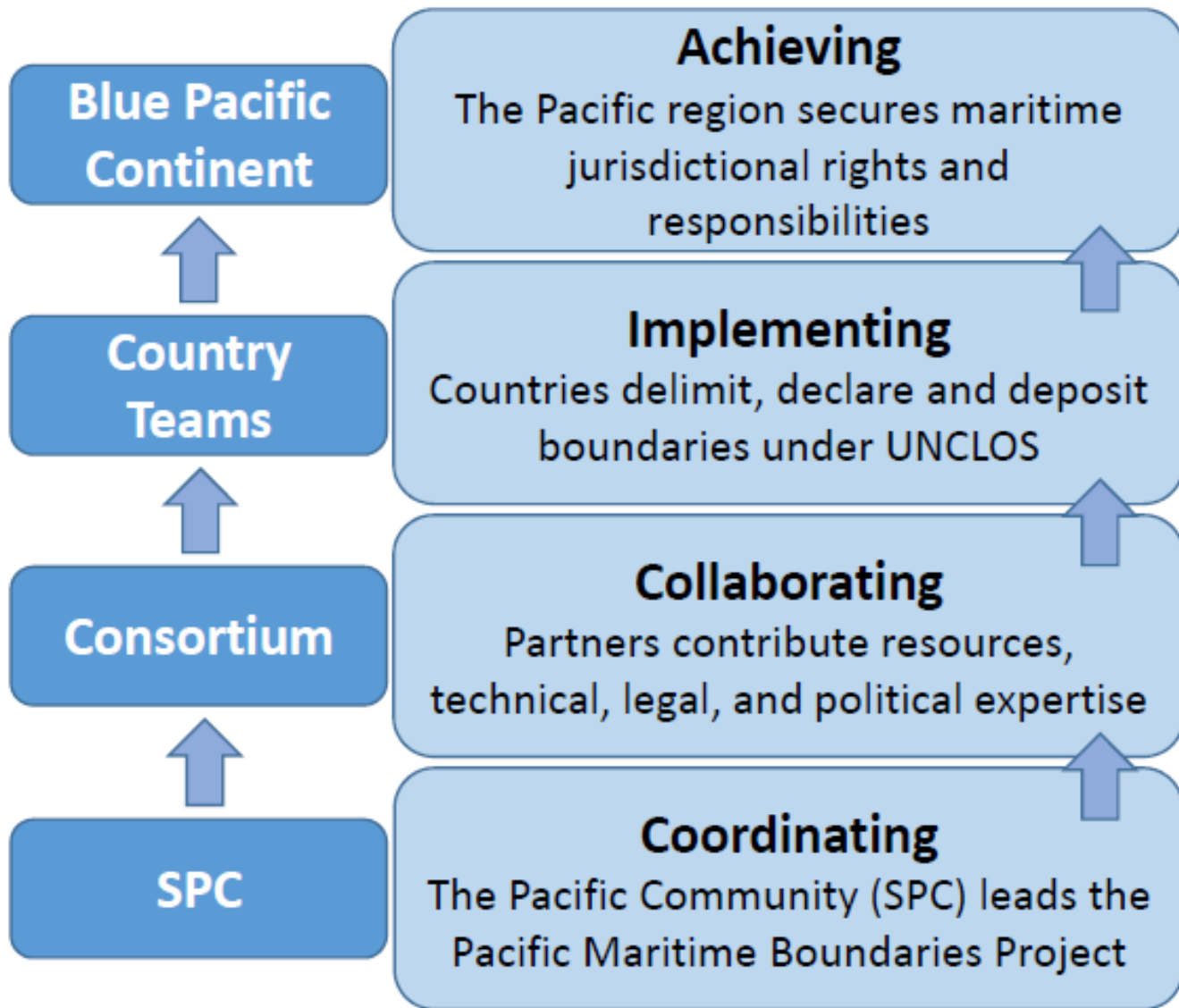
# Apia Commonwealth Ocean Declaration



8. We **emphasise** the universal and unified character of the 1982 *UN Convention on the Law of the Sea* (UNCLOS) and **reaffirm** that UNCLOS sets out the legal framework within which all activities in the ocean and seas must be carried out. We **affirm** the freedoms, rights and duties of all states, including the rights and duties of coastal states in their maritime zones, as set out in UNCLOS. We **reaffirm** our commitment to sustainable ocean governance under UNCLOS, .....

.....

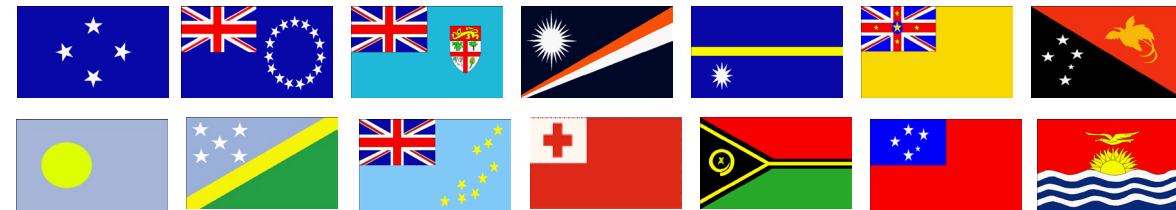
# Theory of Change for Pacific Maritime Boundaries & ECS



FRAMEWORK FOR A PACIFIC OCEANSCAPE  
Priority 1

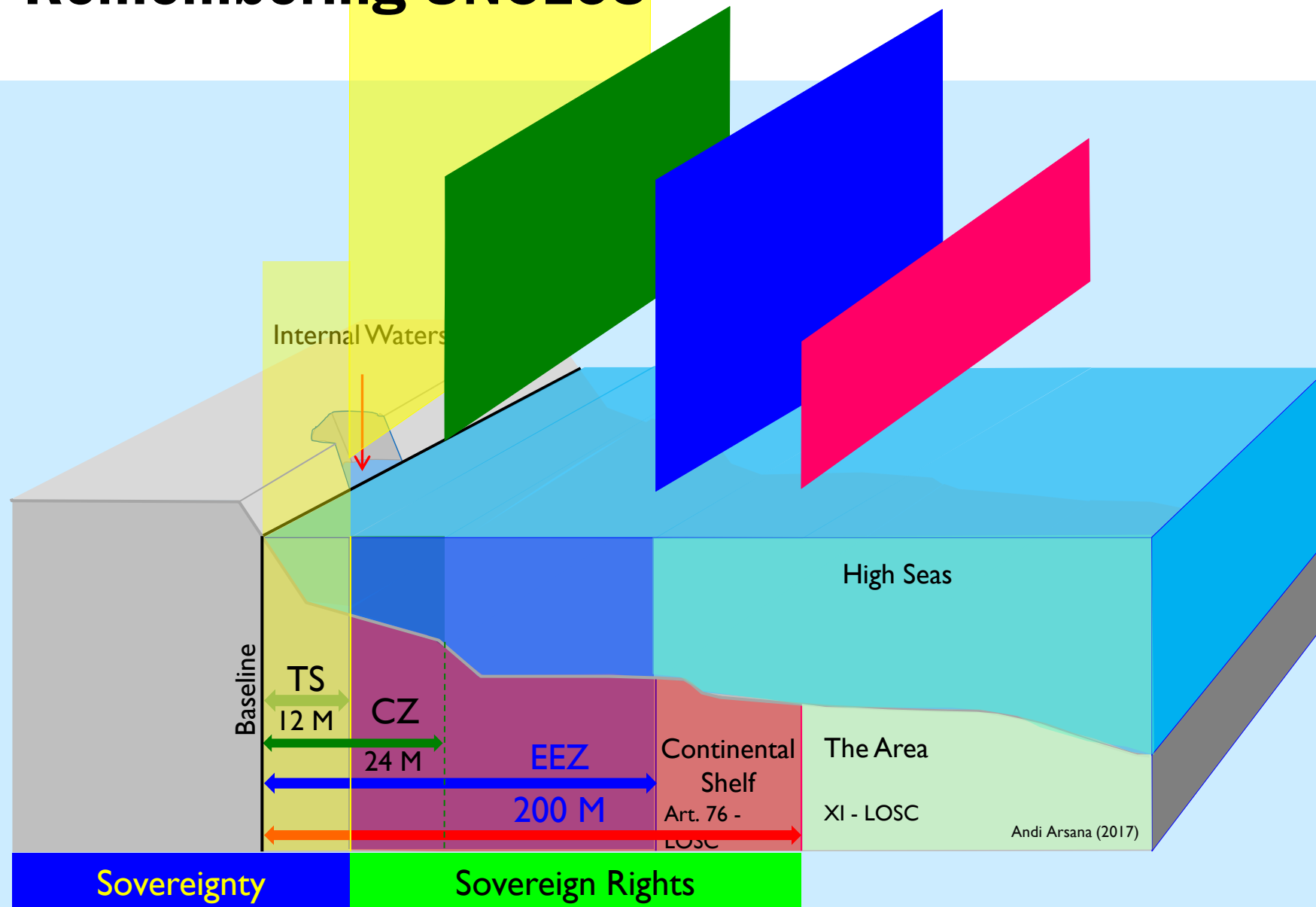


TARGET 14.C  
Implement international law: UN Convention on the Law of the Sea



Pacific Community  
Communauté du Pacifique

# Remembering UNCLOS



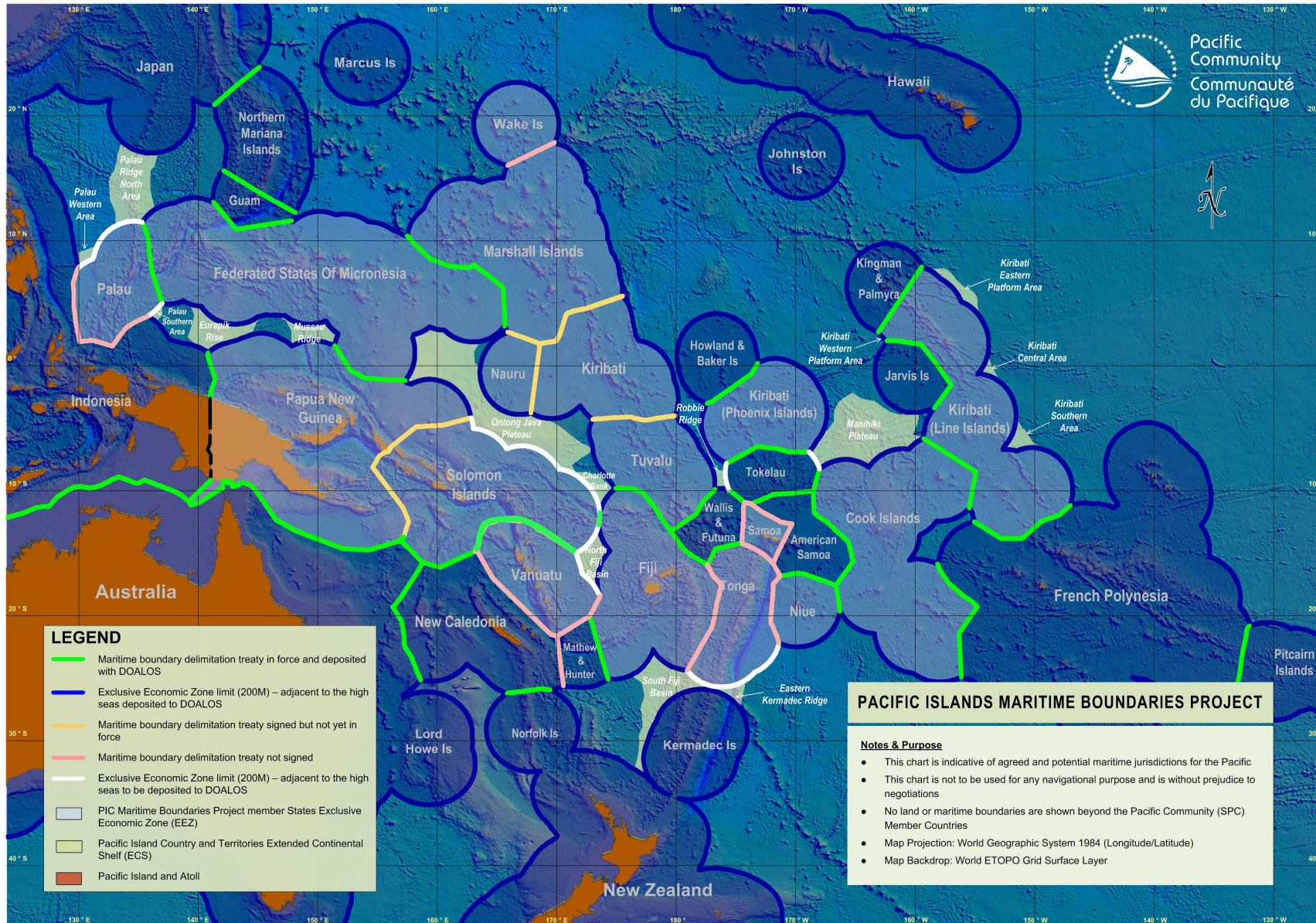
# WHERE WE WERE - 2001



9 out of 48 shared boundaries under treaty  
 (dashed blue lines)

3 out the 9 formally ratified  
 (blue lines)

# Pacific Maritime Boundaries; Current



- **36 out of 48 shared boundaries are under treaty**
- **7 treaties** remain to be brought into force (**yellow**)
- **12 shared boundaries** remain to be signed (**pink**)
- **5 countries high seas limits** have yet to be declared (**white**)

## Extended Continental Shelf:

- 3 out of 11 of ECS submissions have been reviewed. 2 have received recommendations.
- Another are preliminary info notes, requiring more data.

# What Role Does SPC Play?

## Technical Advice and Support



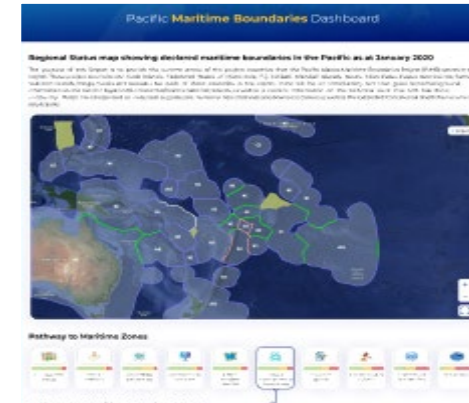
- Technical backstopping for in-country basepoint surveys
- Mapping and delimitation support
- Advising on UN submissions process
- Supporting negotiations
- Extended Continental Shelf submissions support

## Capacity Building



- Organising annual Working Sessions at UniSydney
- Hosting attachments
- National workshops
- Organising relevant training, webinars, and other development opportunities

## Data Stewardship & Accessibility



- Comprehensive dataset hosting on behalf of countries
- Improving accessibility of published info on Pacific Data Hub
- MB Dashboard in development

## Coordination & Project Development



- Host monthly Consortium partner meetings
- Home of Pacific Geospatial and Surveying Council Partnership Desk
- Communications and engagement strategy
- Develop project proposals

# National Capacity Workshops – Dec 2023



## 22<sup>nd</sup> Pacific Maritime Boundaries Session & RBBP Experts Meeting

Week 1



Week 2

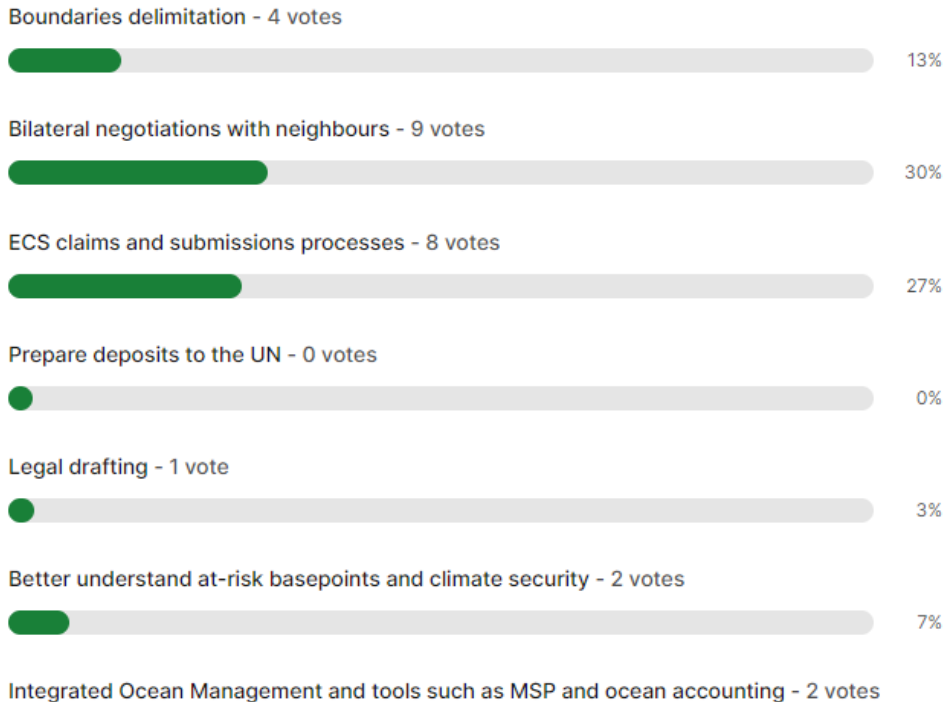


40 Participants from 14 Pacific Island Countries

23 Trainers and regional partners

Please indicate what you were able to work on while you've been here at the sessions

Multiple Choice Poll 30 votes 30 participants



# Papua New Guinea – Maritime Zone Act.

## PAPUA NEW GUINEA

Page last updated: 16/10/2024

### SUBMISSION IN COMPLIANCE WITH THE DEPOSIT OBLIGATIONS PURSUANT TO THE UNITED NATIONS CONVENTION ON THE LAW OF THE SEA (UNCLOS)

■ [M.Z.N.164.2024.LOS of 3 September 2024](#): Deposit of lists of geographical coordinates of points, concerning its baselines, including archipelagic baselines, and outer limits of the territorial sea, contiguous zone and exclusive economic zone, regarding the Principal Archipelago of Papua New Guinea, Nukumanu Islands, Pocklington Island and Tauu Islands, as contained in the Maritime Zones Act 2015 (No. 47 of 2015), accompanied by illustrative maps..

- ◆ [List of geographical coordinates of points](#)
- ◆ [Illustrative map](#)

Relevant article of [UNCLOS](#): 16(2), 47(9), 75(2)  
[Law of the Sea Bulletin](#) No. 116

The lists of geographical coordinates of points contained in this deposit supersede the list of geographical coordinates of points contained in a previous deposit made by Papua New Guinea (see [M.Z.N.41.2002.LOS of 8 October 2002](#))

■ [Previous deposits that were superseded](#)

### Communications received by the Secretary-General in connection with the deposit of charts and/or lists of geographical coordinates of points

■ N/A

### CONTINENTAL SHELF BEYOND 200 NAUTICAL MILES FROM THE BASELINES FROM WHICH THE BREADTH OF THE TERRITORIAL SEA IS MEASURED

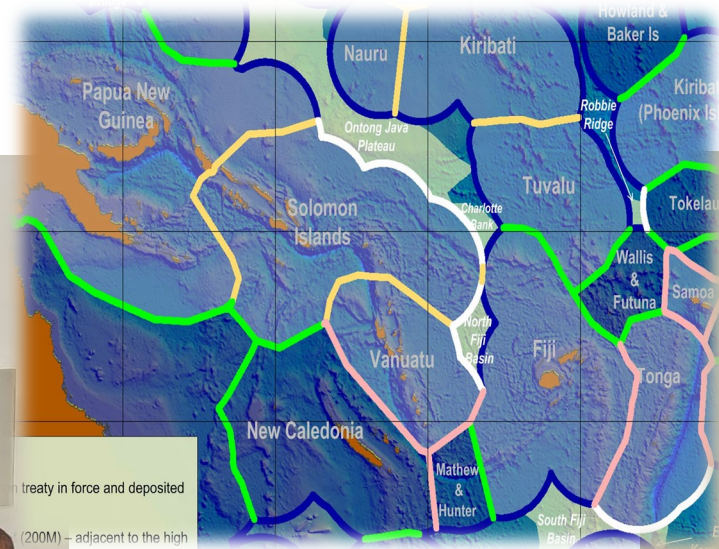
■ [Joint submission by the Federated States of Micronesia, Papua New Guinea and Solomon Islands to the Commission on the Limits of the Continental Shelf made on 5 May 2009](#) - concerning the Ontong Java Plateau

■ [Preliminary information indicative of the outer limits of the continental shelf beyond 200 nautical miles](#) in accordance with [SPLOS/183](#)

# Nauru – UNCLOS 101 Training



# Talanoa – the Pacific Way

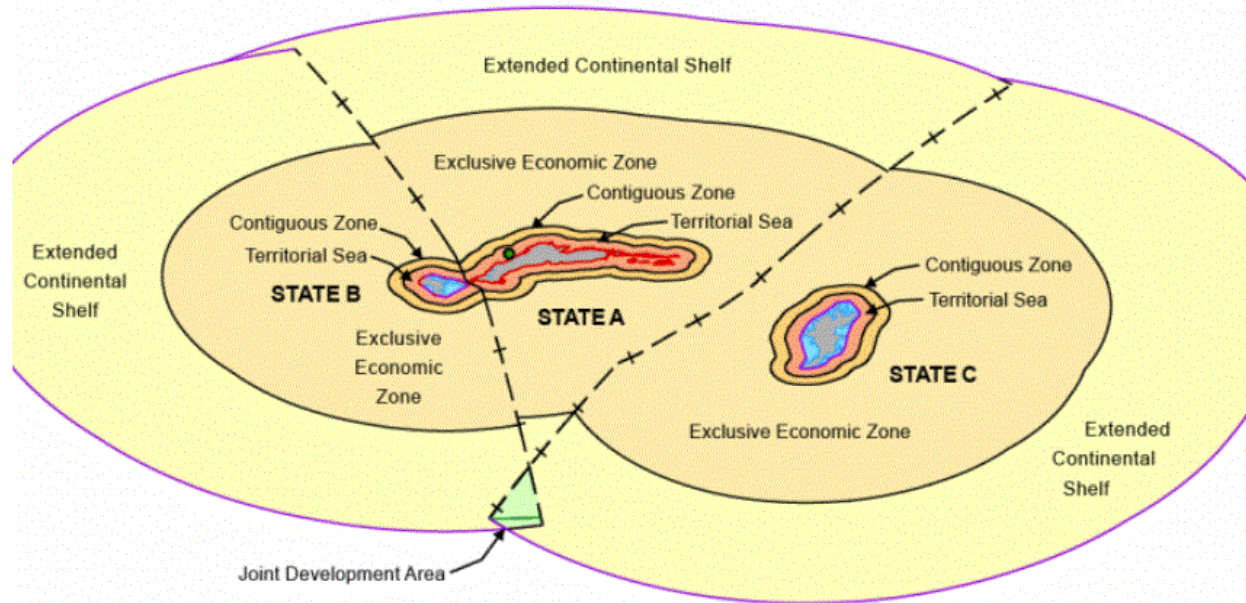


...treaty in force and deposited  
... (200M) – adjacent to the high



# IHO S-121 Digital Data Deposit with UN DOALOS

S-121 EXAMPLE DATASET



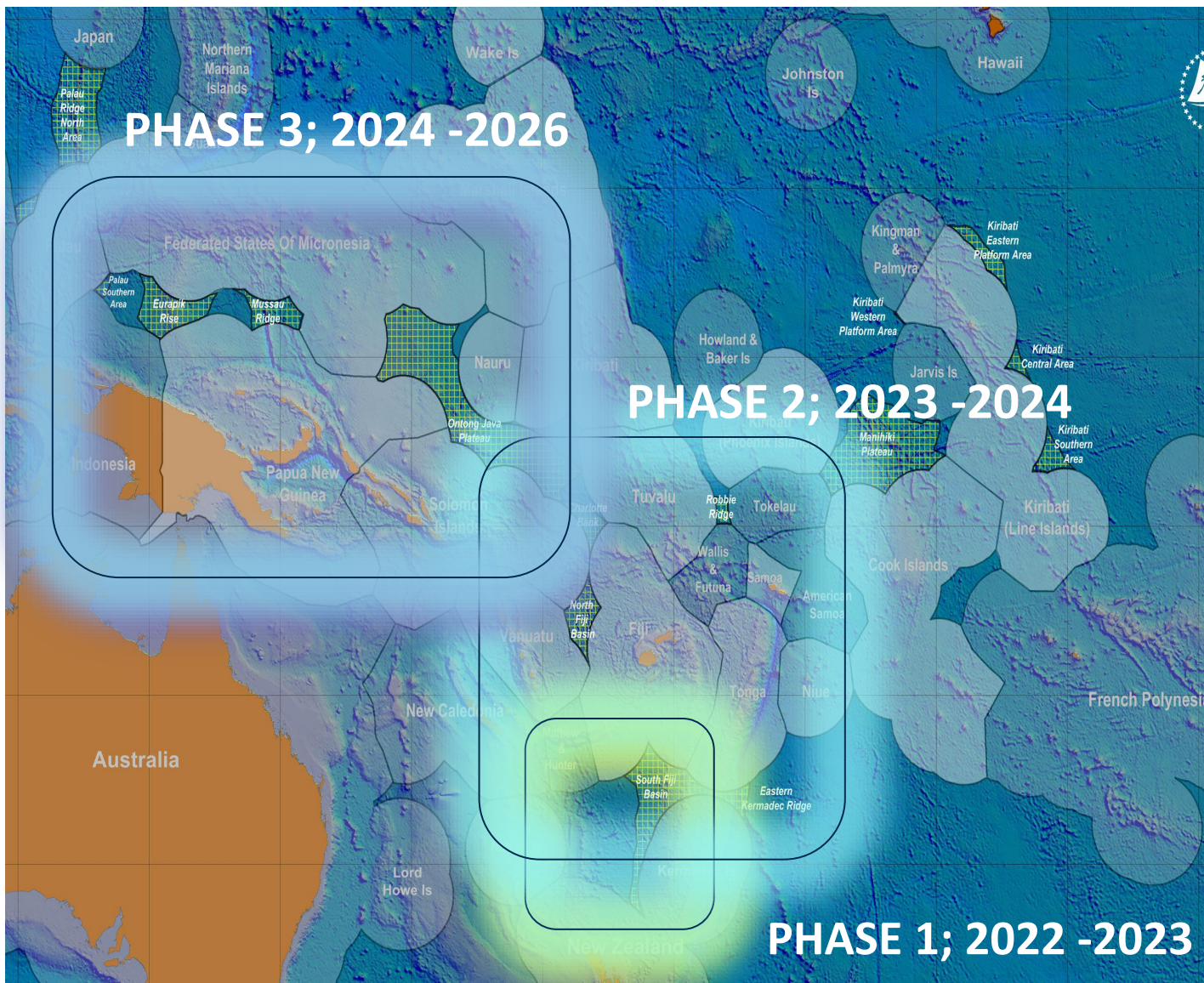
**Prime Use Case** – state discharge of “depository obligations” under UNCLOS or a new open access method for providing and exchanging digital representations of MLBs

Comprehensive features for representing legal source documentation for UNCLOS features

MLB is a foundation layer for **Marine Spatial Data Infrastructure (MSDI)** and Marine Spatial Planning (MSP).

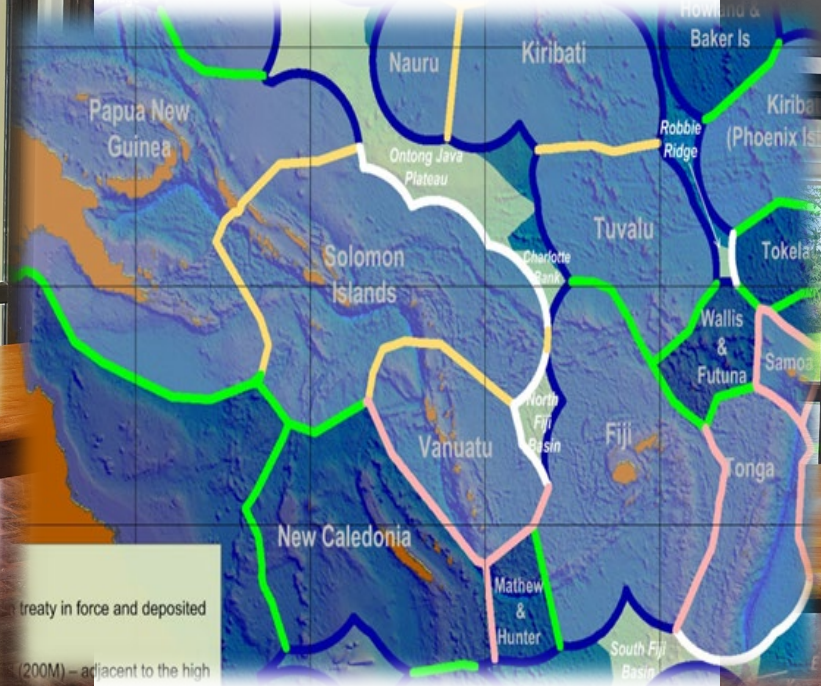
# UNCLOS : Article 76 Extended Continental Shelf

# Pacific Extended Continental Shelf Project



ECS Area	Countries	Status
South Fiji Basin	FJ	Cabinet Approval To submit to UNDOALOS
ECS Area	Countries	Status
North Fiji Basin	FJ/VU/SB	Awaiting Cabinet approval
Melanesian Borderland Plateau	FJ & SB	Cabinet approval complete. To submit to UN DOALOS
ECS Area	Countries	Status
Ontong Java Plateau	FM/PG/SB	Under review
Eauripik Rise	PG	In Progress
Mussau Ridge	PG	In Progress
SB Enclave	SB	In Progress
Manihiki Plateau	CK	In final stages of CLCS

# ECS Technical Agreement



NORTH FIJI BASIN

MELANESIAN BORDERLAND PLATEAU

# Leveraging the GEBCO Product for submissions to CLCS



- Developing States have no/limited capacity for data acquisition.
- Depend on vessels of opportunity.
- The CLCS require submissions to it to be underpinned by measured data.

# Uses of measured bathymetric data under Art. 76 of UNCLOS



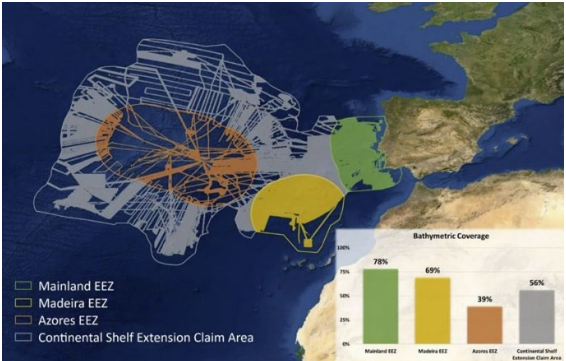
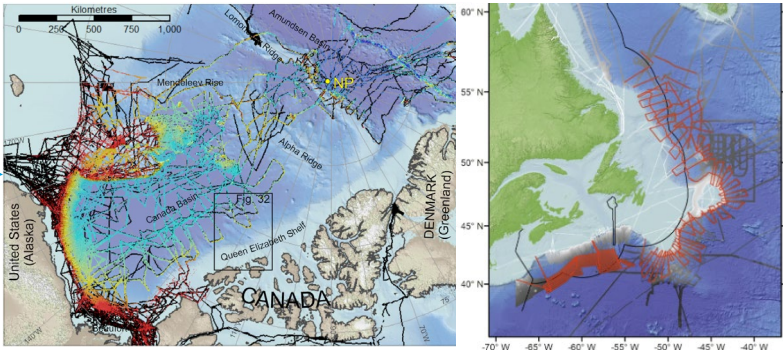
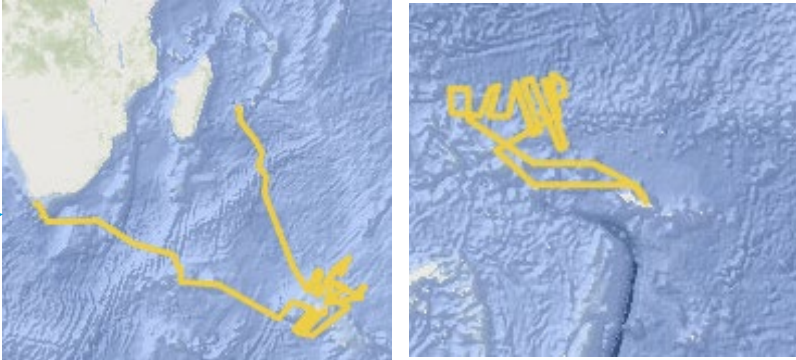
- i. Geomorphology related to the demonstration of submerged prolongation.
- ii. Determination of the foot of the continental slope.
- iii. Determination of the 2500 m isobath in the construction and application of the Depth Constraint (2500 m + 100 M).

➔ The CLCS require measured bathymetric data for ii. and iii., and often also for 1, particularly in cases of complex geomorphology.

# ECS Mapping Efforts

- Developed coastal States expend significant money and resources on mapping efforts to support submissions to the CLCS. For example:

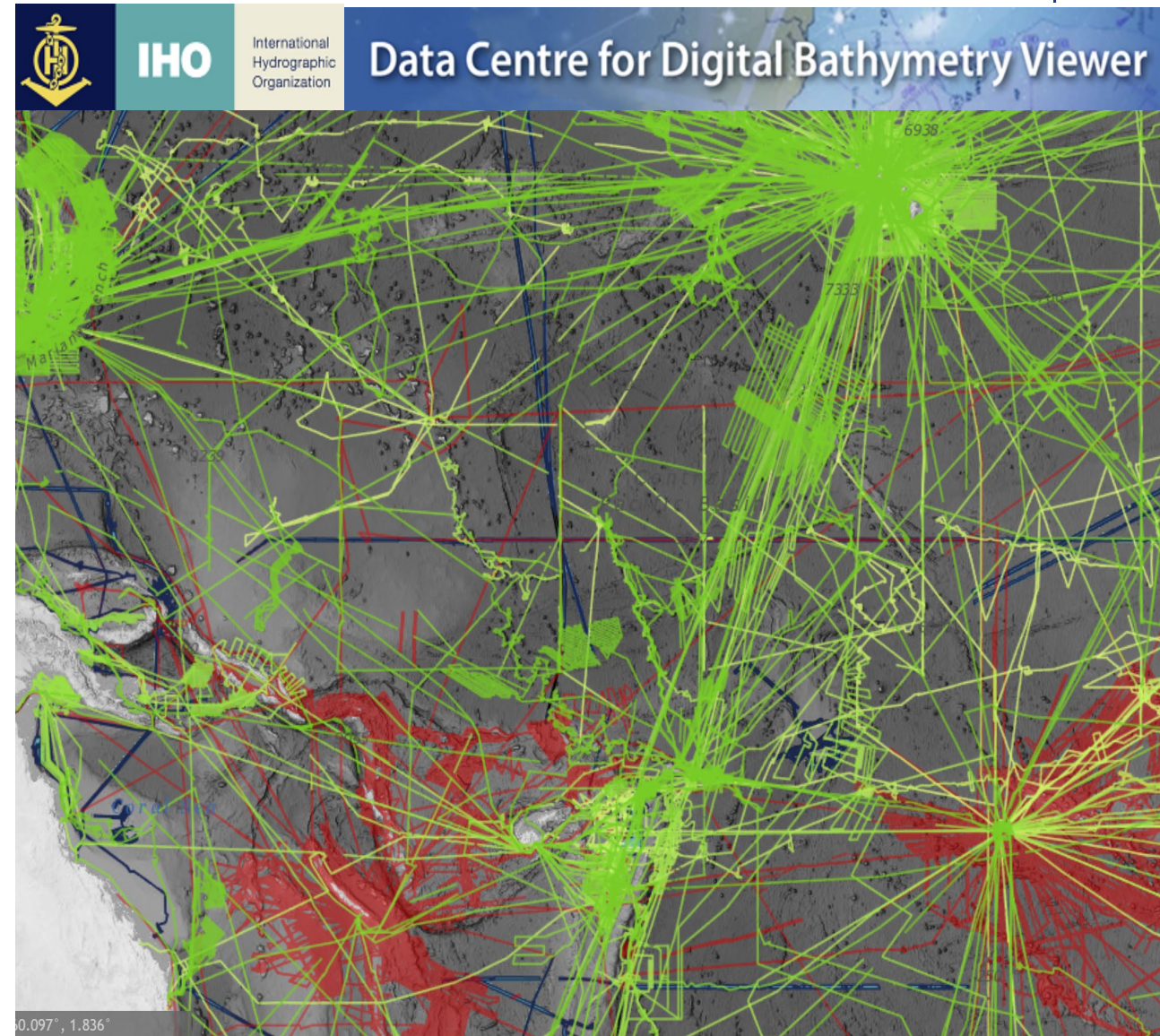
- France
- Canada
- Portugal



- Due to capacity and financial constraints, this is not an option for Pacific coastal States.

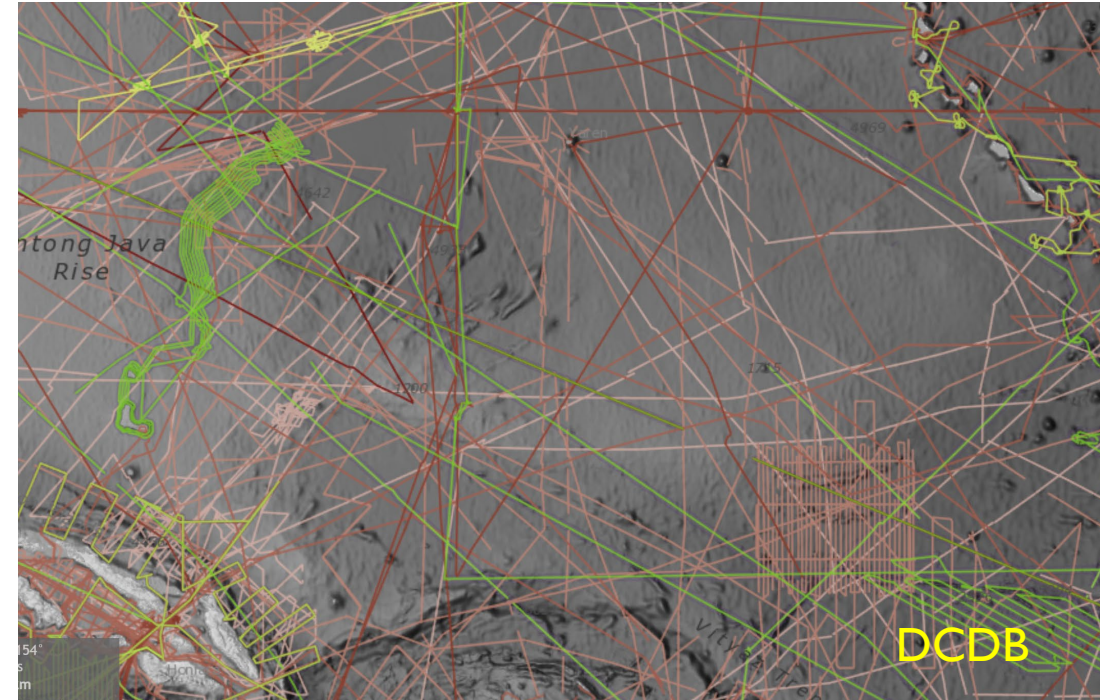
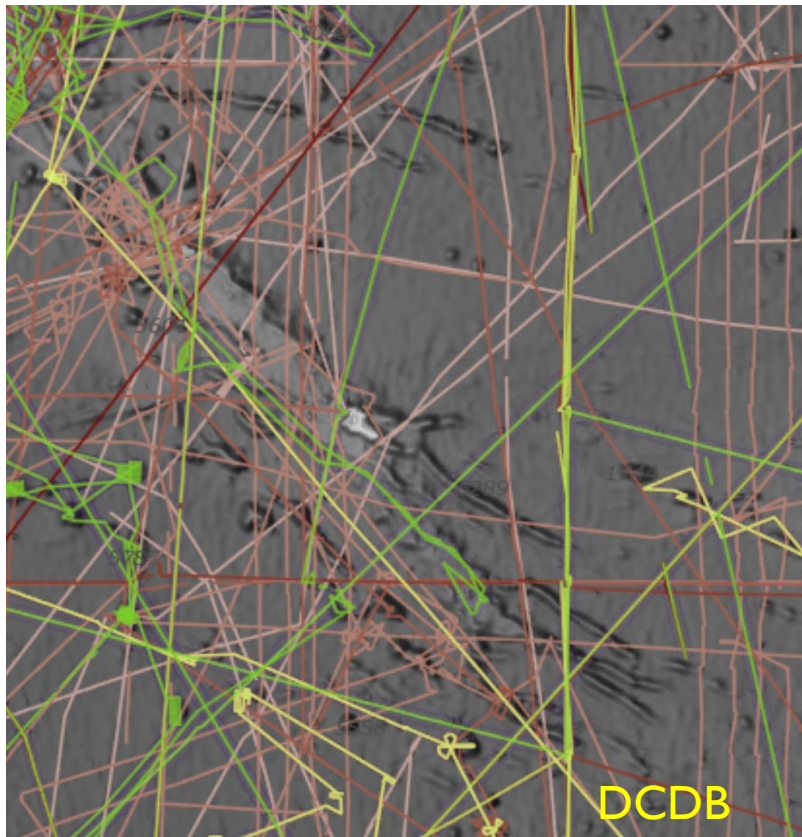
# Pacific Coastal States Data Constraints

- Pacific Islands coastal States rely on public domain databases to obtain the data necessary for submissions to the CLCS.
  - IHO database.
  - U.S. NCEI database
- Some data are straight-forward to identify and obtain, while others are more challenging.



# Current Data Availability

- Frequently, older single beam echosounder data are the only data available for use in submissions to the CLCS.



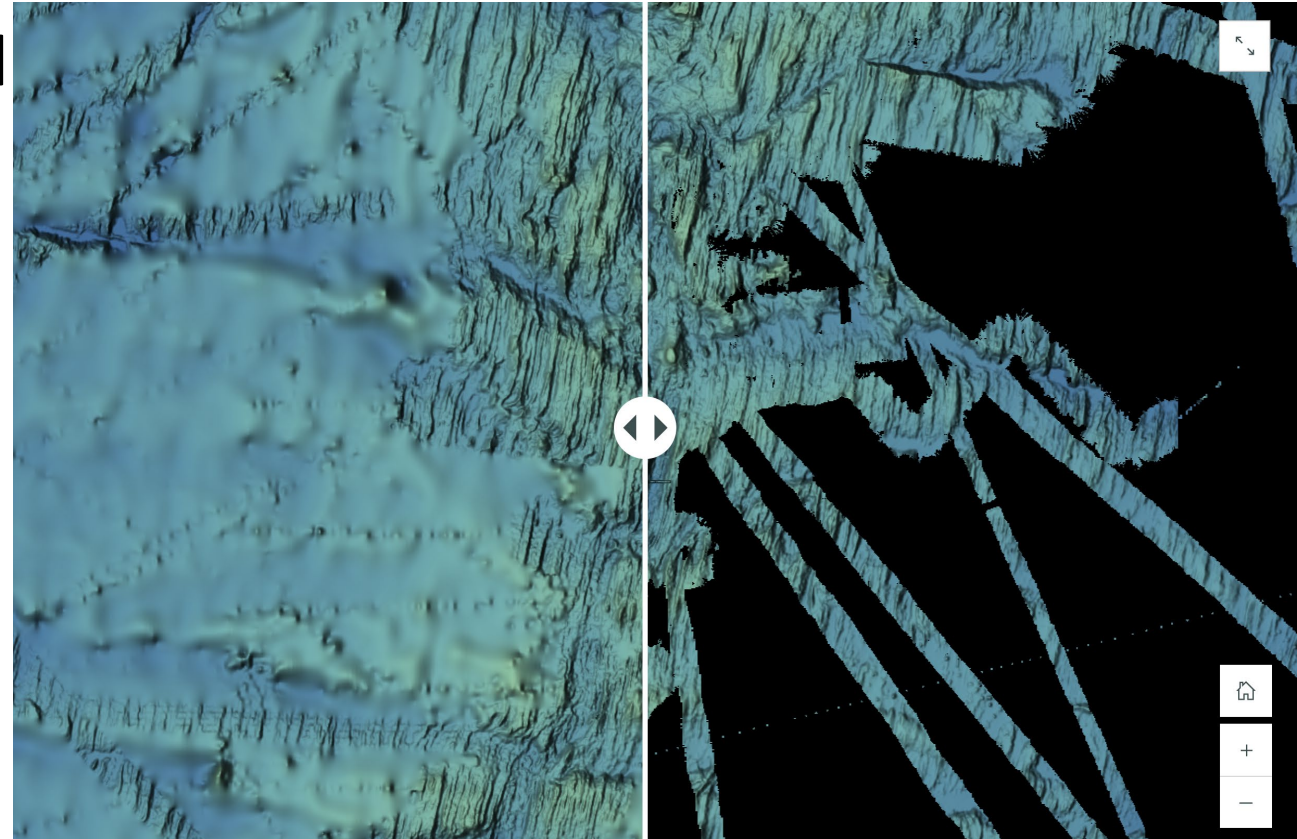
- Efforts are ongoing by SPC and partners to use vessels of opportunity for data acquisition.

# Challenges in using Public Domain Bathymetry

- Data is not optimally positioned for the application of Article 76.
- There are frequently barriers to obtaining data from the databases – e.g. embargo due to academic considerations; restrictions due to “sovereignty issues”.
- In many instances, multibeam data is in formats that require specialised software and technical capacity/personnel to process.
- Only data that is within the public domain (in databases) can be identified. Some surveys (particularly academic) are not submitted to these databases and therefore cannot be accessed.

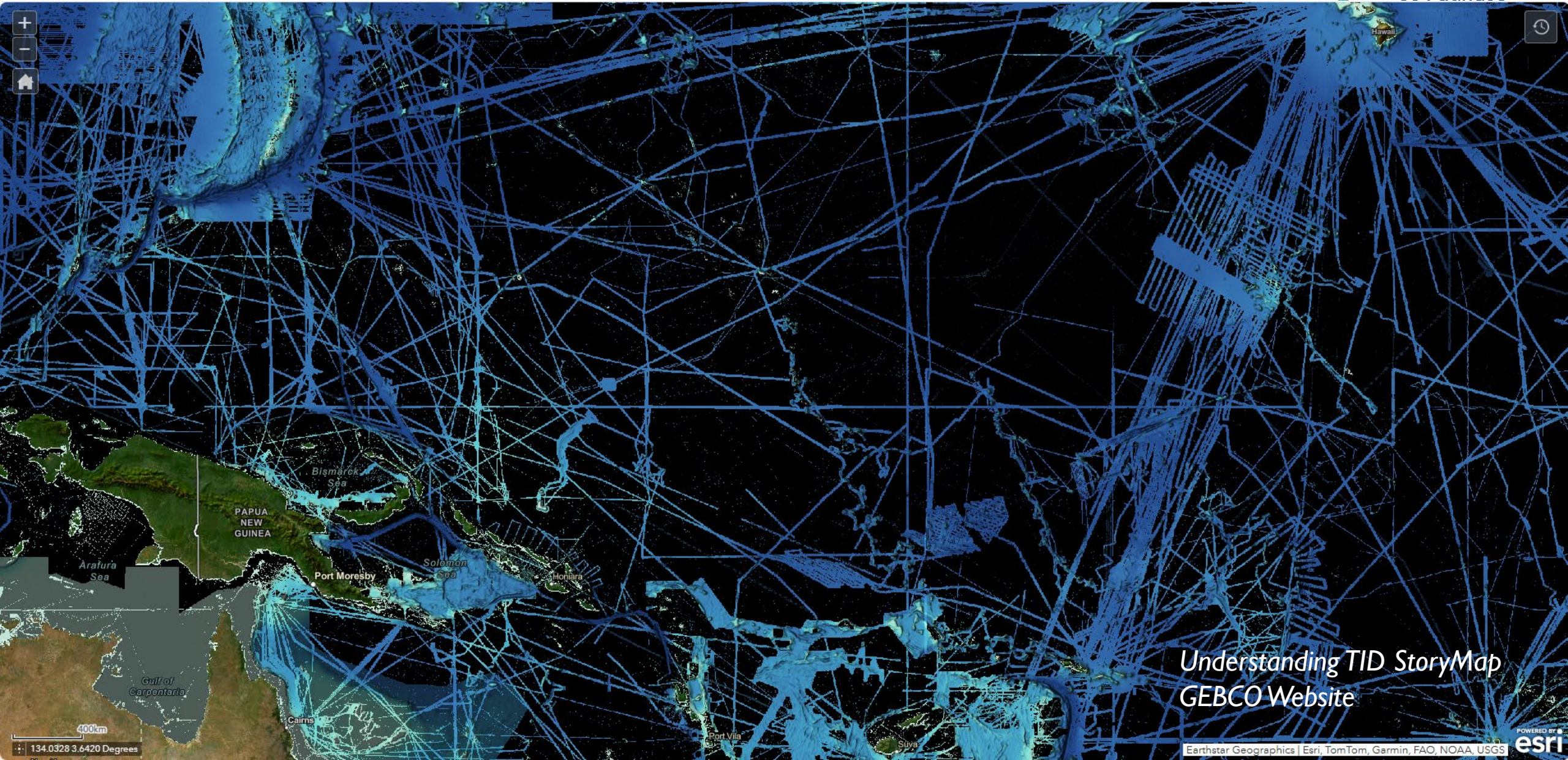
# GEBCO Grid

- Useful for background data (used in maps and figures) and regional morphological context.
- Only single grid containing merged measured and interpolated/predicted data is available to users.
- Interpolated/predicted data is not appropriate for submissions.



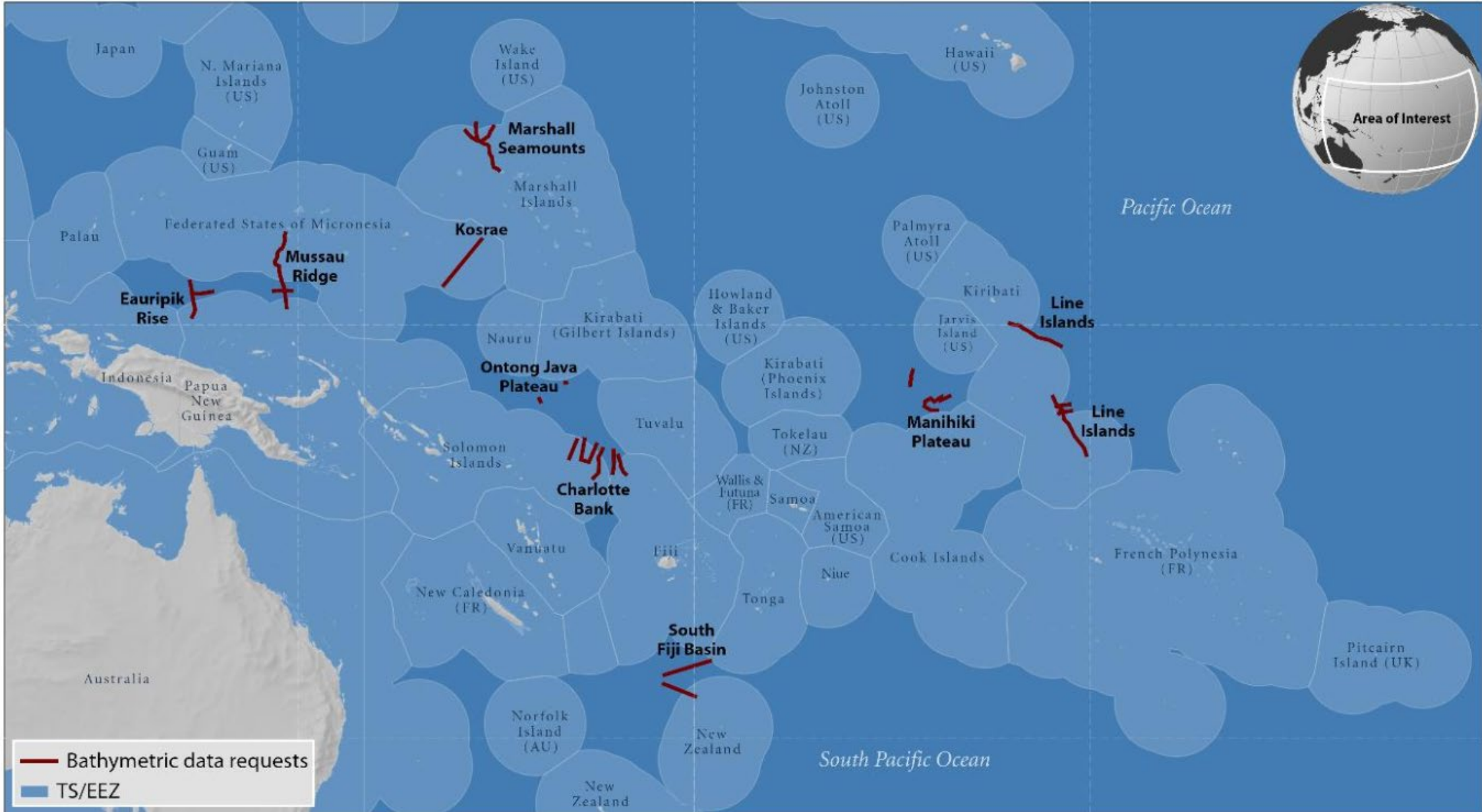
*Understanding TID StoryMap - GEBCO Website*

# GEBCO Measured Data



Understanding TID StoryMap  
GEBCO Website

# Extended Continental Shelf Data gap



# What can the GEBCO Community do?



- Provide capacity – data processing, software etc.
- Partnership with the Pacific Community – provision of bathymetry data for ECS project.
- Provide a grid based on measured data only.
- Ideally, a TID grid with metadata would be available.



**THANK YOU!**