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du Pacifique

# Geoscience, Energy and Maritime Division (GEM)

## Pacific Community(SPC)

SWPHC 21

Nadi, Fiji 2024

SPC Hydrographic related activities in 2023

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# SPC's 27 Member Countries and Territories



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## [SPC Member Map](#)



# SPC WORK AREAS



Climate Change and  
Environmental Sustainability



Educational Quality and  
Assessment



Fisheries, Aquaculture & Marine  
Ecosystems



Geoscience, Energy and  
Maritime



Human Rights and Social  
Development



Land Resources



Public Health



Statistics for Development



Integrated Programmes



# Pacific Safety of Navigation



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**Project goal:** support economic development, shipping and trade in the Pacific Island countries and territories through safer maritime routes managed in accordance with international instruments and best practices

**Funded by the International Foundation for Aids to Navigation (IFAN)**

- **Implementation**

**Preparation Phase: 2016**

**Phase I: 2016-2018, Phase II: 2018-2021**

**PHASE III: 2021 - 2024**

- **Target countries Phase III**

**Cook Islands, Kiribati, Fiji, FSM, RMI, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu**

**Result 1 - GOVERNANCE:** PICTs governance systems to deliver effective AtoN services are strengthened both nationally and regionally.

**Result 2 – CAPACITY BUILDING:** PICTs capacity to provide effective AtoN services in line with international instruments is strengthened.

**Result 3 - INFRASTRUCTURE:** PICTs AtoN infrastructures are adequate for the volume of traffic and the degree of risk identified.

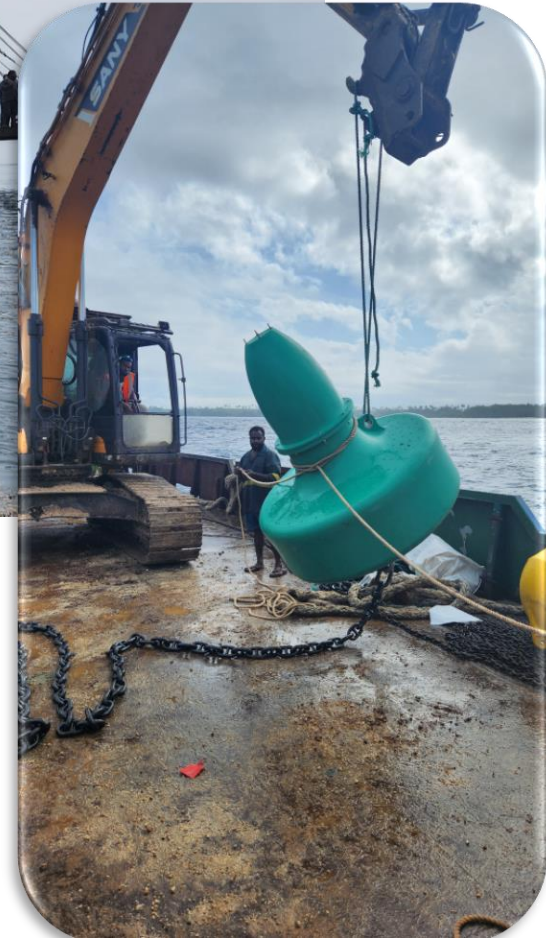




# Pacific Safety of Navigation Work Areas - Infrastructure



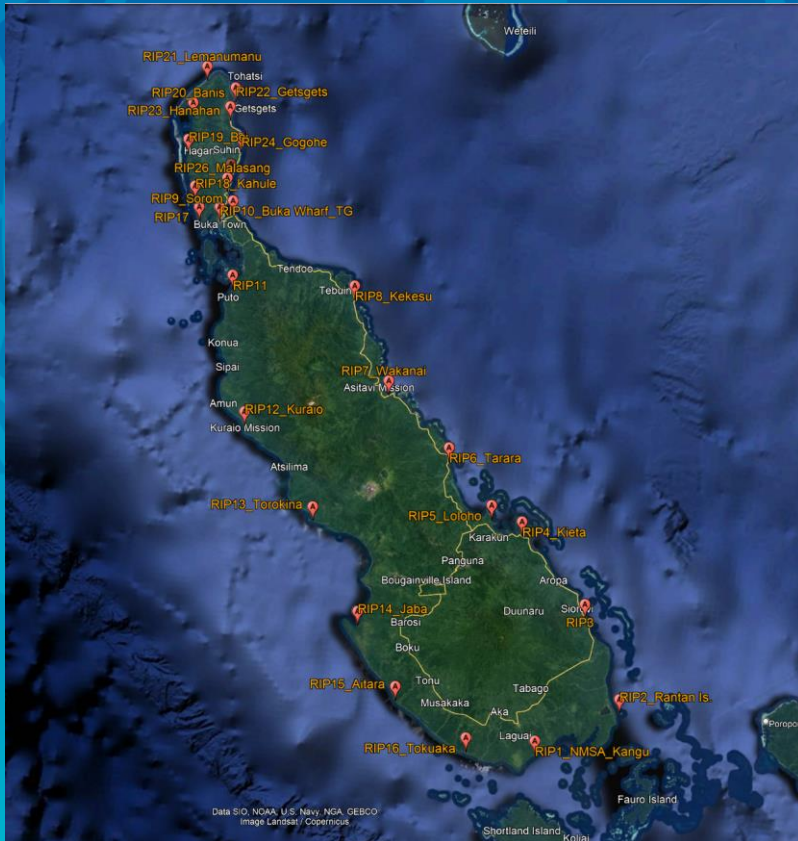
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# Bougainville Coastal Waters Project

Geodetic Surveys – Oceans & Maritime Programme

# Summary – Technical Work

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- Geodetic Surveys – Coastal Array (Static & Kinematic GNSS)
  - Geodetic Control Stations
  - Coastline Features
  - Physical Features
  - Tide Pole to Tide Gauge Calibration
- Photos of all Base Stations
- Locality Diagrams of all Base Stations
- Photos and Drone Footage of all survey and mapping activities



# Summary of Activities

- Typical base Station – Static GNSS
- Coastline Features – Kinematic GNSS



- Physical Features (ground surface and reef flat and reef edge) – Kinematic GNSS





# Summary – Technical Work

- Base Station - JENA



- Pole to Gauge – Tide Watch & GNSS

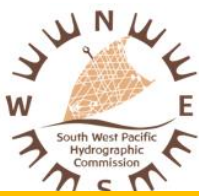




# Benefits

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- Capacity Building – surveying and mapping
  - Knowledge GNSS Surveying and Mapping
  - Technical capacity
- Team Bonding
- Community Engagement



# Capacity Building and National Workshops

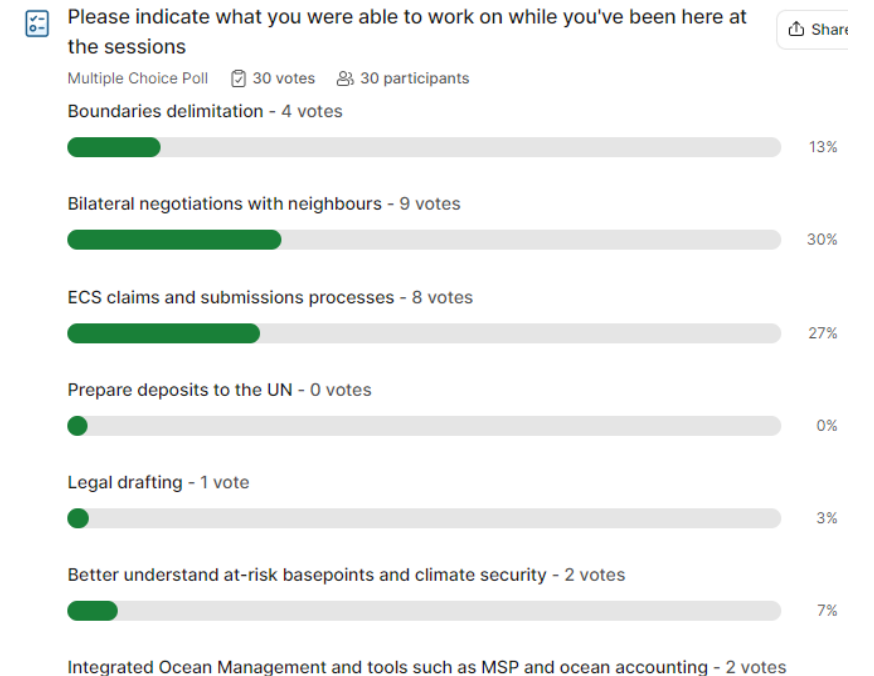


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## 22nd Maritime Boundaries Session working session (Dec 2023)



- **40 Country** participants from 14 PICS (30% women)
- **23 Trainers/ regional partners** (29% women)







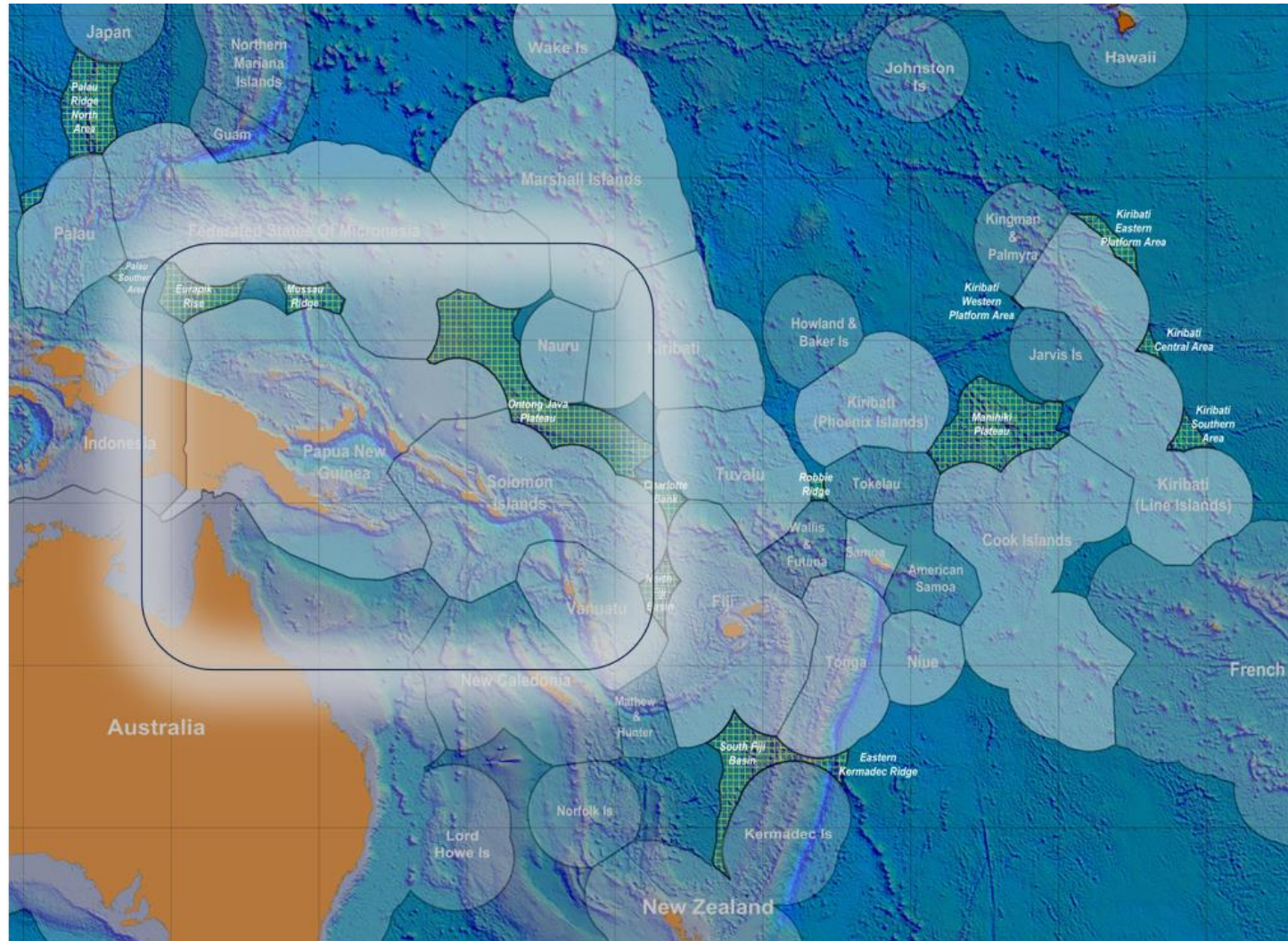
# Talanoa – the Pacific Way



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## Phase 3:

- Ontong Java Plateau – FM/SB/PG
- Eauripik Rise – PNG
- Massau Ridge – PNG
- Enclave between AU/SB/PG - SB



# Bathymetric Data Requests from Pacific Island Countries January 2024

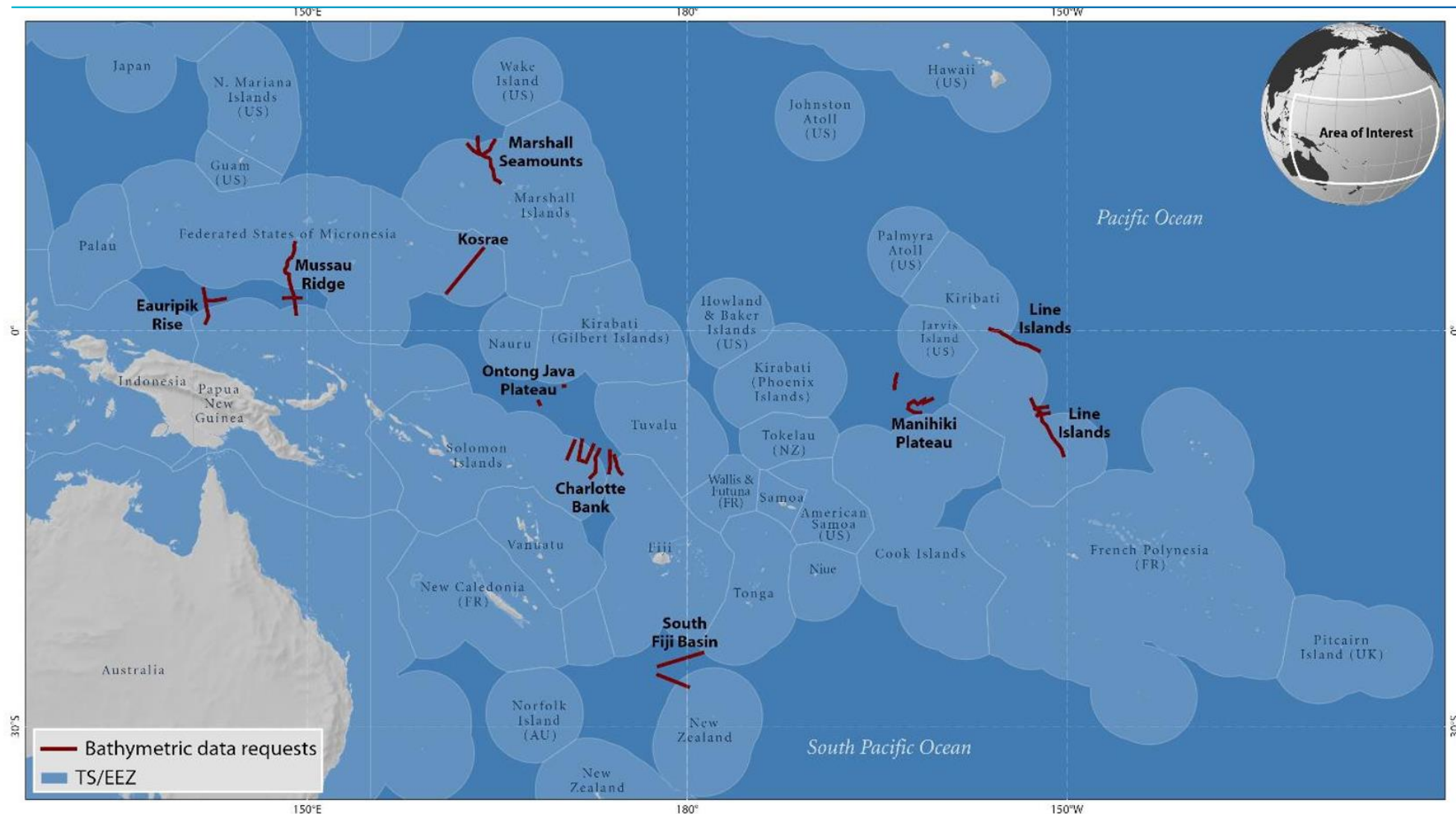
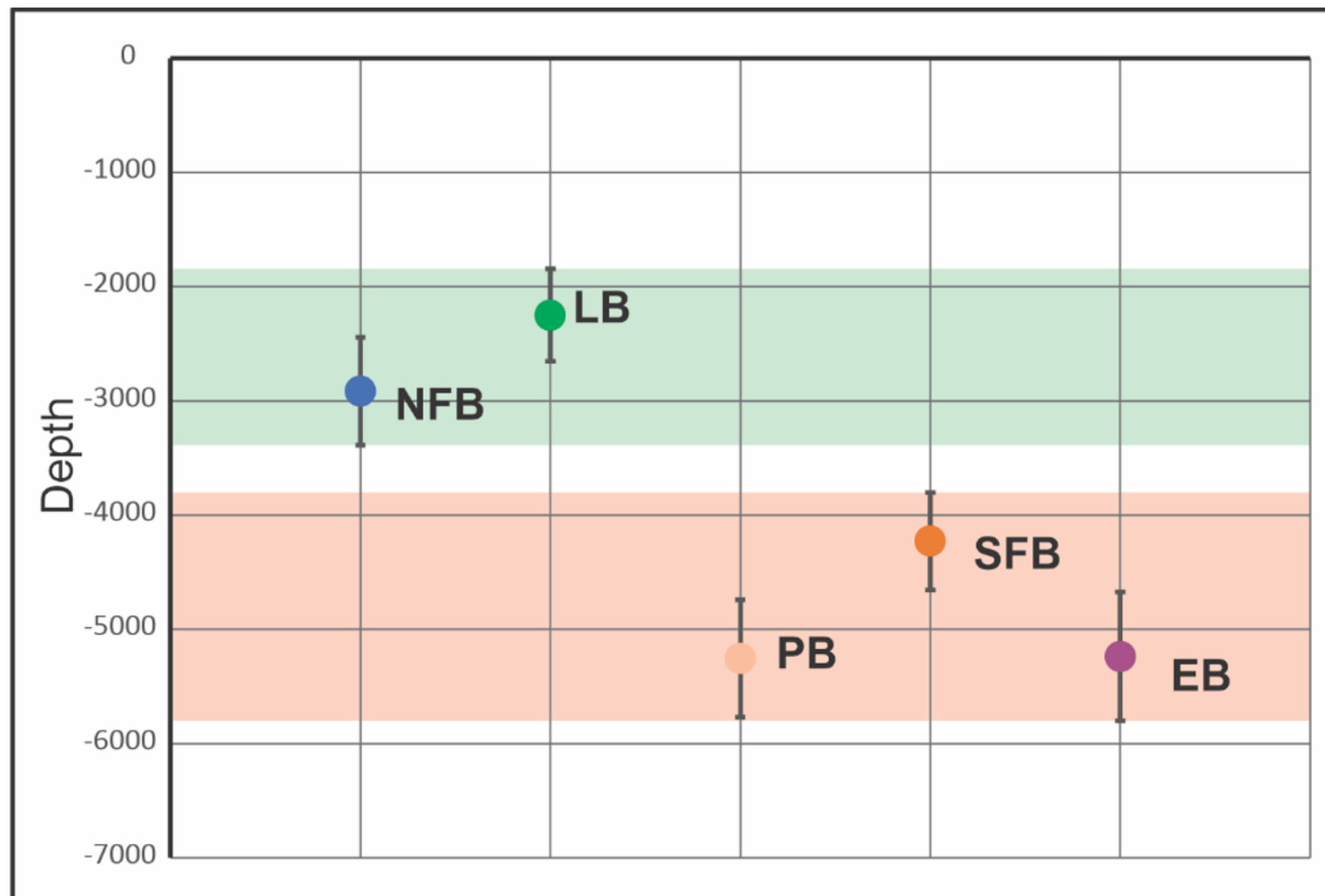


Figure 1: Map of multibeam bathymetric data requests (thick red lines) for Pacific Island countries.



NFB – North Fiji Basin, LB – Lau Basin, PB – Pacific Basin, SFB- South Fiji Basin, EB- Ellice Basin





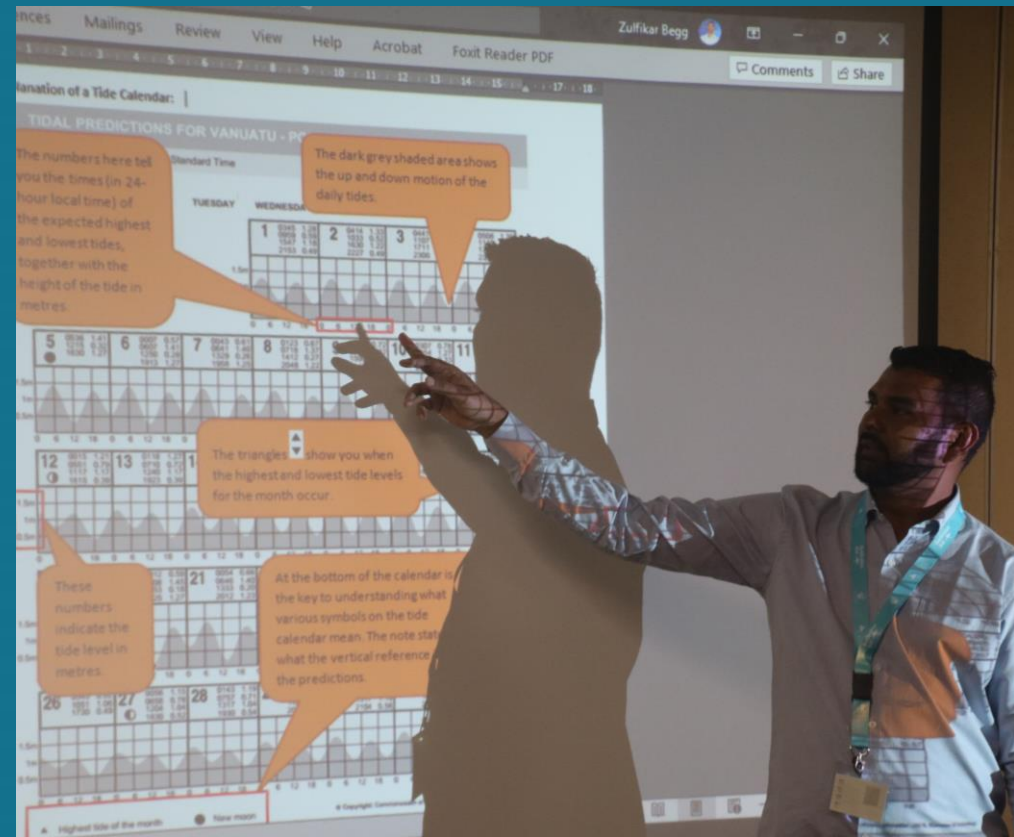
# Climate and Oceans Support Program in the Pacific (COSPPac) Phase Three

Zulfikar Begg, [zulfikarb@spc.int](mailto:zulfikarb@spc.int) – Coordinator Applied Ocean Science

# Supporting Pacific Island stakeholders to use climate, ocean, and sea level information to strengthen climate and disaster resilience



Early Action Rainfall (EAR) Watch training group, Vanuatu, November 2022



Ocean and Tides training, Fiji, March 2023



- Climate and Ocean Support Program in the Pacific (COSPPac) seeks to sustain the partnership between the Pacific, Australia and New Zealand supporting core climate and ocean services for the Pacific.
- Phase 2: 2018-2023, \$28.6 million (DFAT funded includes investment from New Zealand Aid (MFAT) \$5M)
- Phase 3: 2023-2027, \$45 million primarily DFAT funded (budgeting on additional investment from New Zealand Aid (MFAT))
- COSPPac has been extended for a third phase of four years, ensuring the continued development of valued products and services for optimum impact for Pacific Island governments and communities.



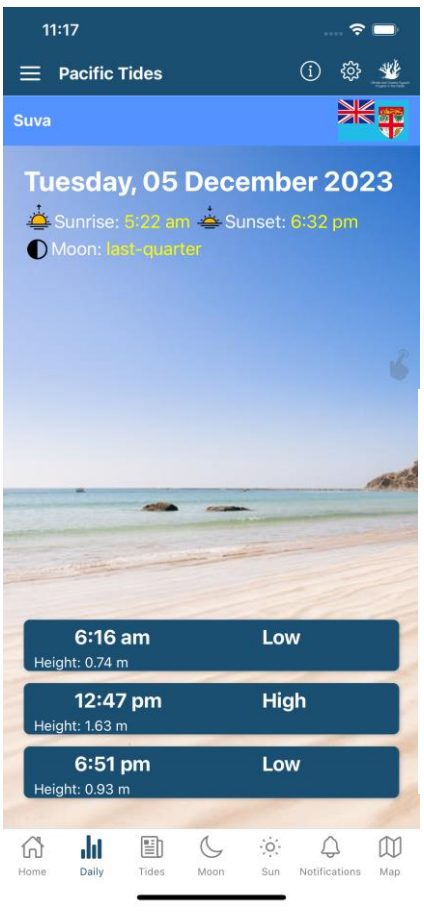
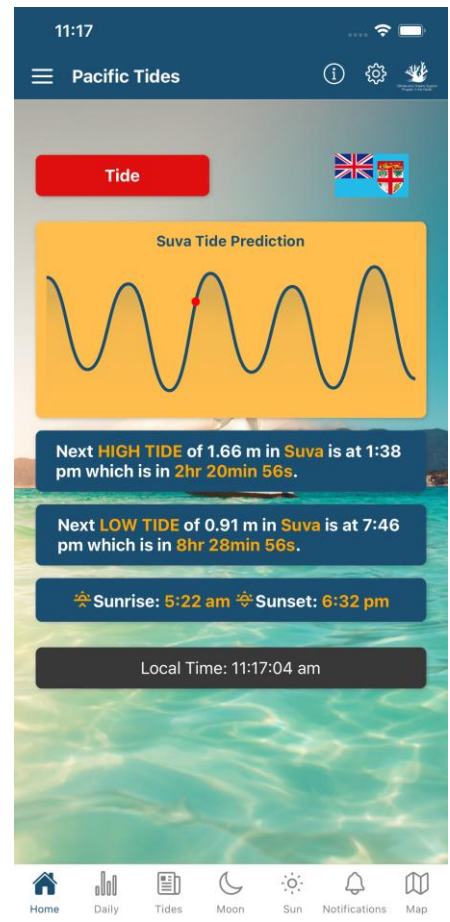
# Phase 3 opportunities 2. Products and Services

## Pacific Ocean Portal

The Pacific Ocean Portal dashboard features eight main categories, each with a plus sign icon for expansion:

- Tourism:** Represented by a person surfing.
- Ocean Monitoring:** Represented by a thermometer.
- Coral Reefs:** Represented by a coral reef.
- Sea Level:** Represented by a bar chart and waves.
- Fisheries:** Represented by a fish.
- Shipping:** Represented by a cargo ship.
- Library:** Represented by a document and pencil.
- Pacific Tides App:** Represented by a smartphone icon.

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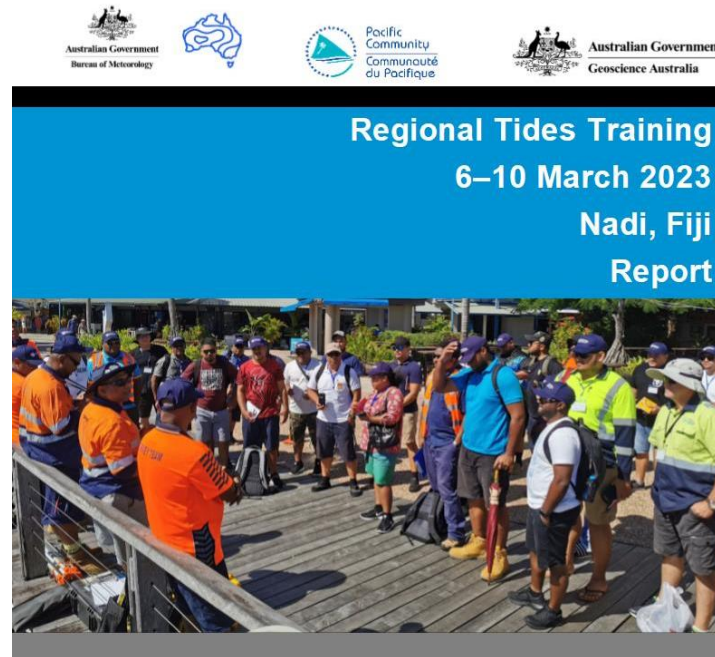


Download the app





# Phase 3 opportunities 3-5. Communications, Capacity Development and Governance



- Support towards PGSC partnership desk
- Support towards Geospatial and Surveying Capacity building activities
- Regional Tides Training-2025
- Attachment and internship opportunities
- GEDSI integration across all activities
- Publication of national level geodetic reports-(PSLGM routine levelling)
- Ocean Science/PGSC support towards Ad-hoc request from SPC member countries







# Update on Ocean prediction and Monitoring activities relevant to Hydrography



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# Opportunities ahead..

## FAME division of SPC(Regional fisheries RV project)

- New custom-built vessel – 45m in length and 10m in breadth
- Drop keel design for EM 712 MBES (3500m)
- 6m tender for shallow water surveys (R2Sonic 2024)
- Crane for AtoN and FAD activities
- SCUBA diving capacity
- ROV capability





## Recommendations to the 21<sup>th</sup> SWPHC



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**Note** SPC activities under the Oceans and Maritime Programme and its role and continued involvement in the Maritime Sector

**Note** The development of a Pacific One-Maritime Framework (POMF) with appropriate plans and solutions aligned to the 2050 Strategy for the Blue Continent

**Acknowledge** the importance of a safe, green, accessible, and efficient maritime sector under the 2050 Strategy for the Blue Pacific Continent

**Agree** for a consistent and coordinated approach of safety of navigation in the Pacific between countries and interested partners and to engage with IMO through Pacific position papers and formal requests for support





# Vinaka



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