

Seabed 2030 5th SaWPaC Regional Mapping Community Meeting

12-14 July 2023, Lima, Peru

Pacific Community(SPC)



Pacific
Community

Communauté
du Pacifique

Hydrographic related activities

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SPC's 27 Member Countries and Territories

[SPC Member Map](#)

<https://youtu.be/berQErg1h3A>



**The Pacific
Community (SPC)**

27
Member Countries and
Territories

600 + staff

8 Divisions

USD 100 + million
annual budget

SPC's Divisions



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

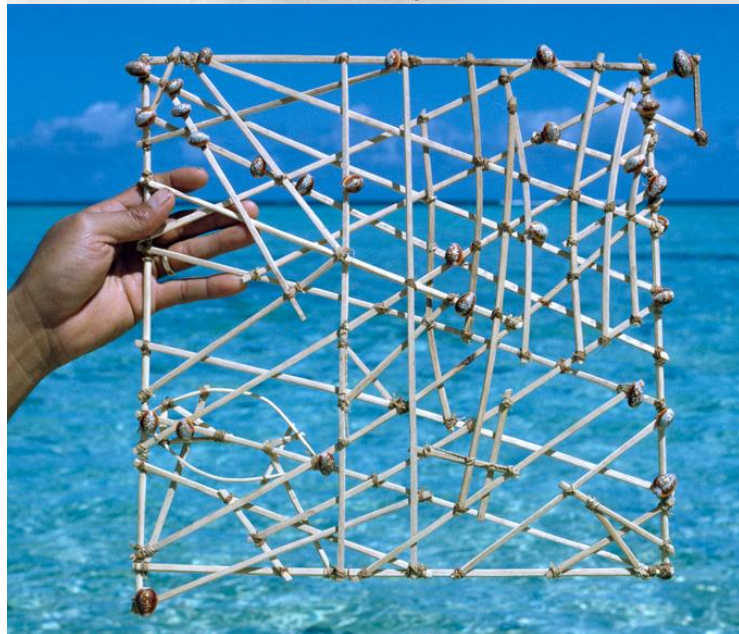
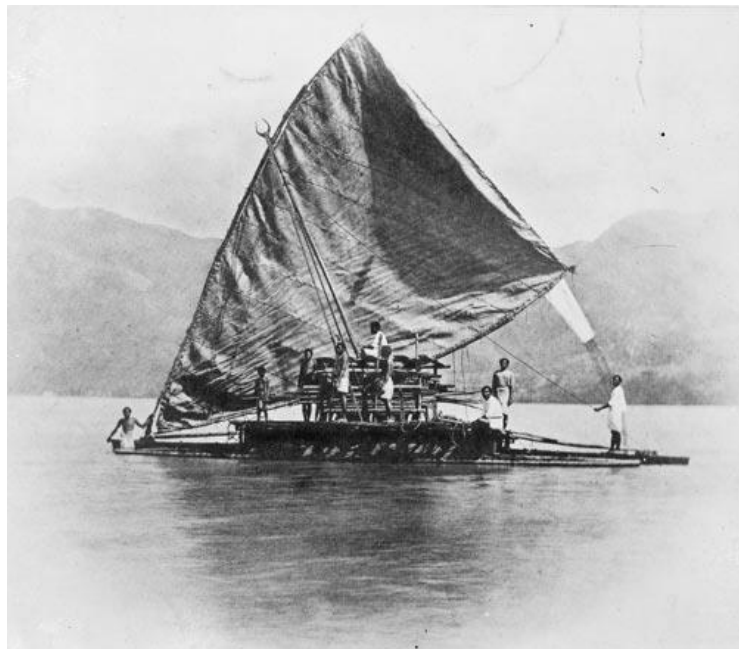


Statistics for Development



Integrated Programmes

The changing face of shipping and charting

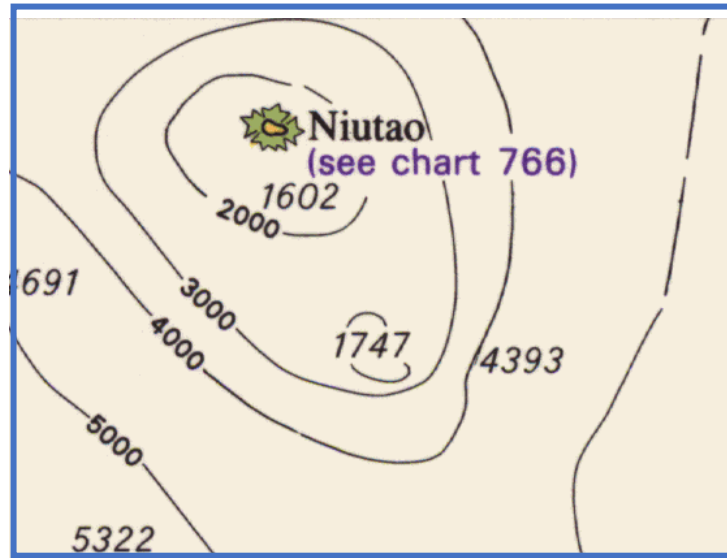


Modern maritime transport

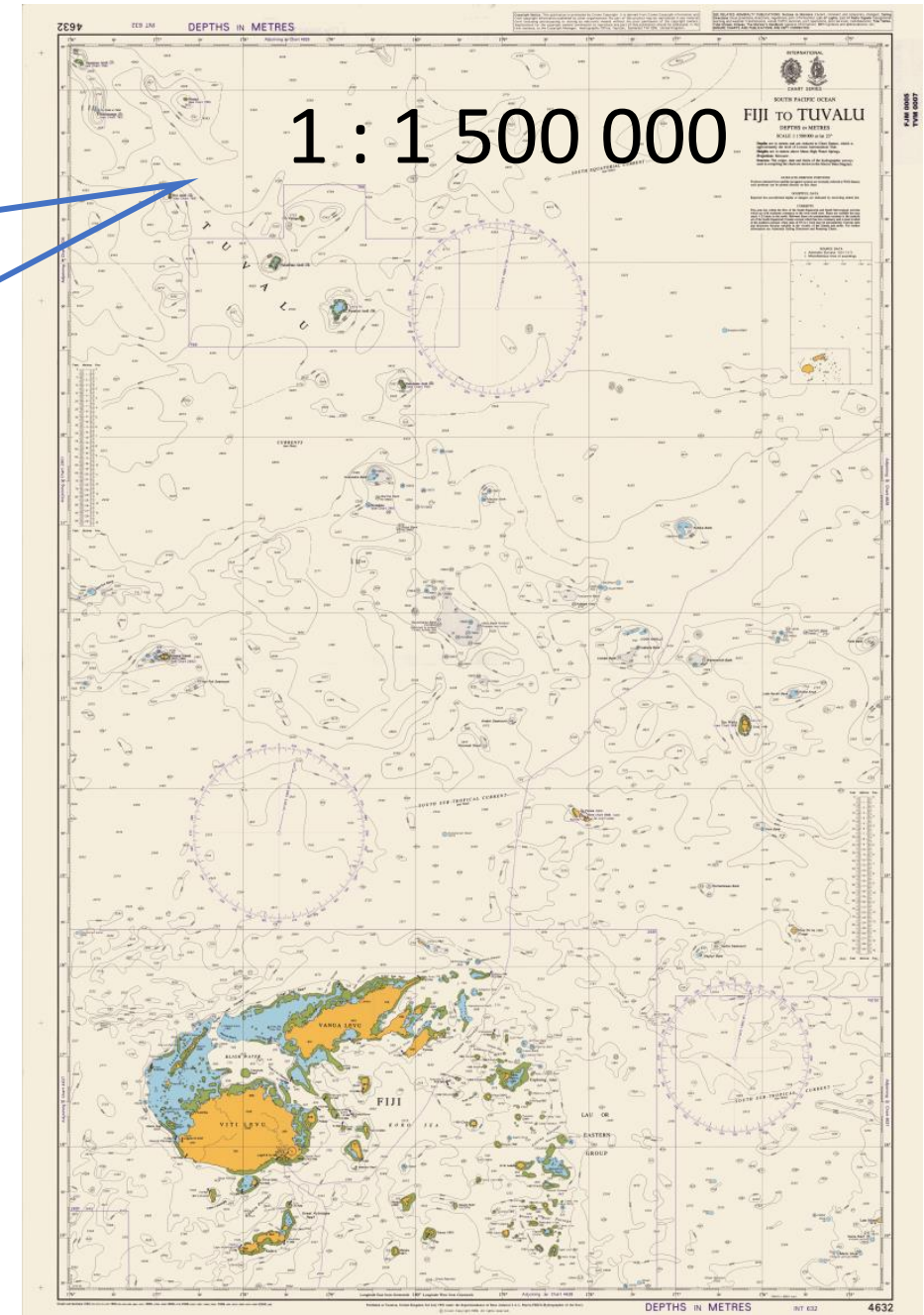


**Digital navigation
is now mandatory**

Poor state of nautical charts

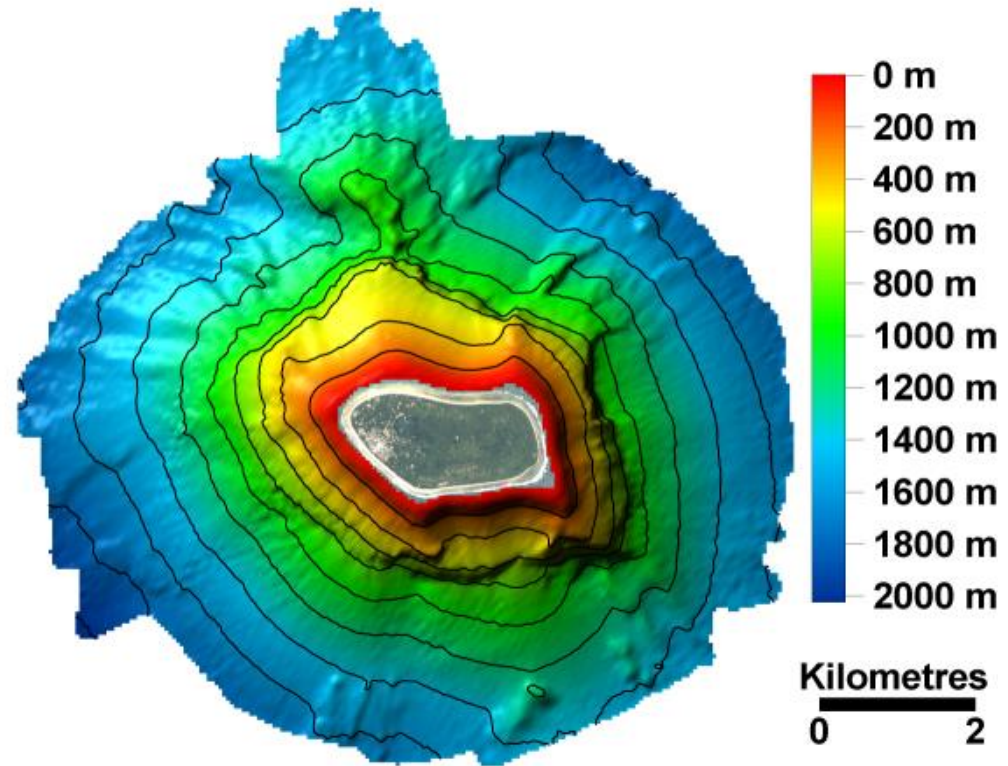
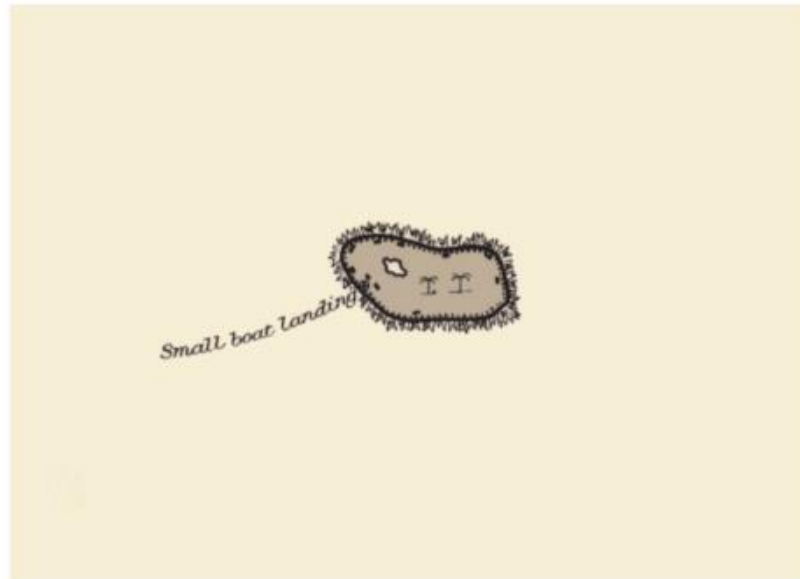


Niutao (Chart 766)



Niutao, Tuvalu

- From a 19th century sketch to high resolution data



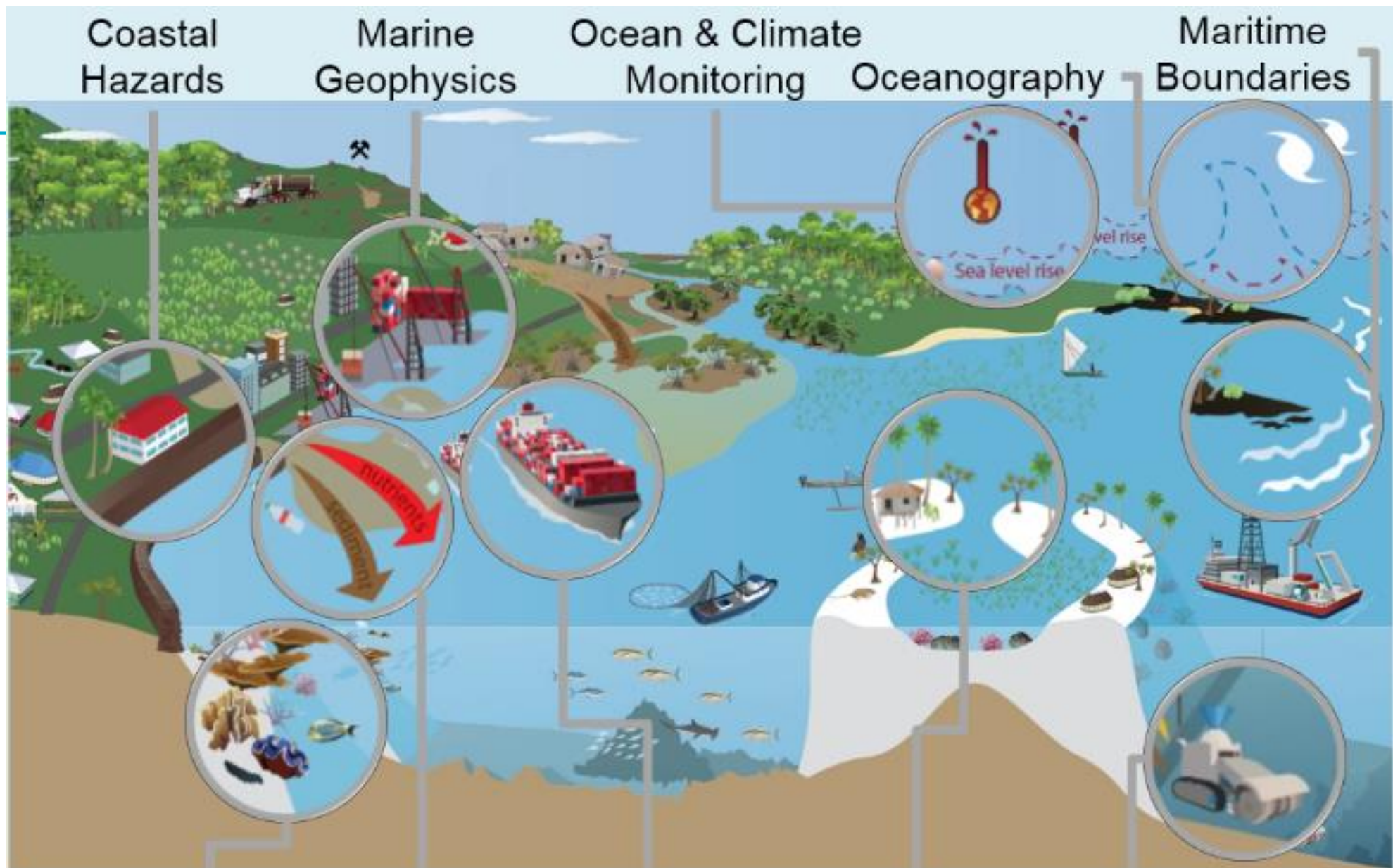
Safety of Life at Sea (SOLAS) Convention

Under the Safety of Life at Sea (SOLAS) Convention, Chapter V, Regulations 4 & 9 *each State must ensure that :*

- Maritime Safety Information (MSI) is promulgated
- Hydrographic surveys are carried out
- Appropriate nautical charts and other nautical publications are available and up to date

The provision of Hydrographic Services is an international obligations under Treaty Law





How do we map the seabed?

Multibeam Echosounder

Singlebeam Echosouders

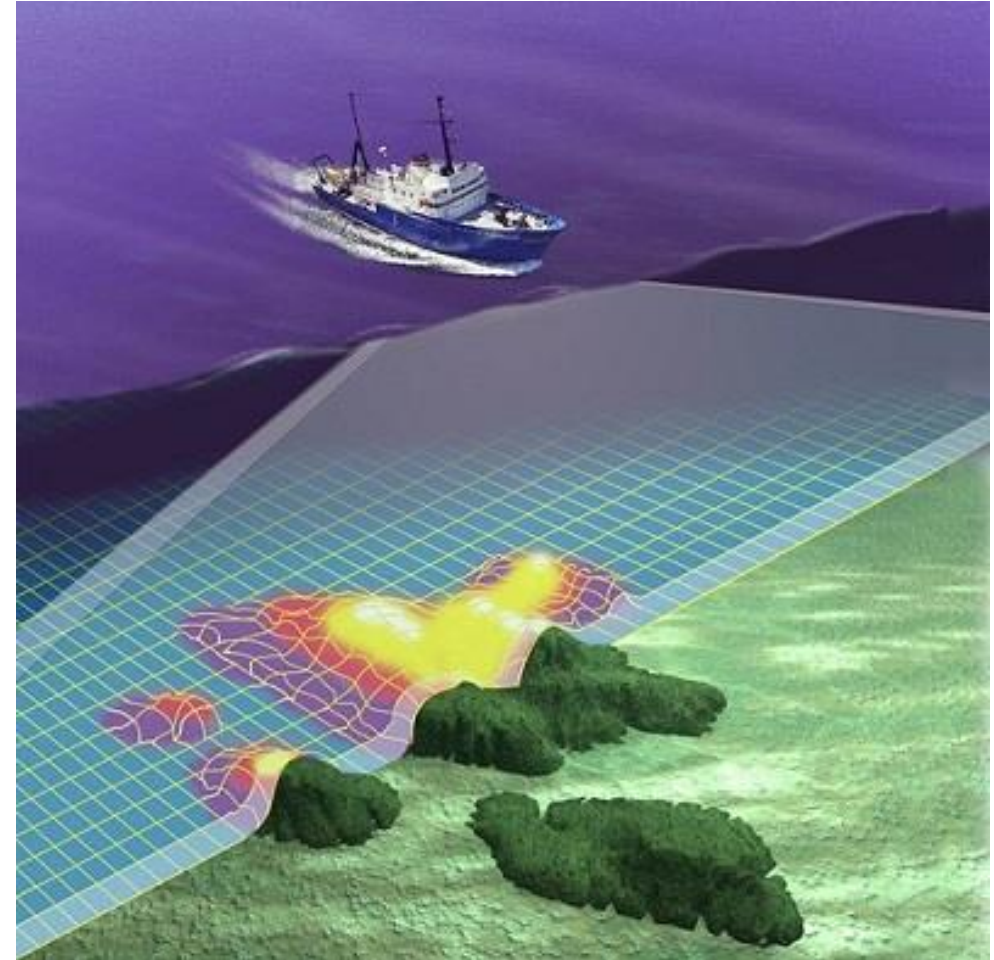
Sidescan sonars

LiDAR Survey

Vessel

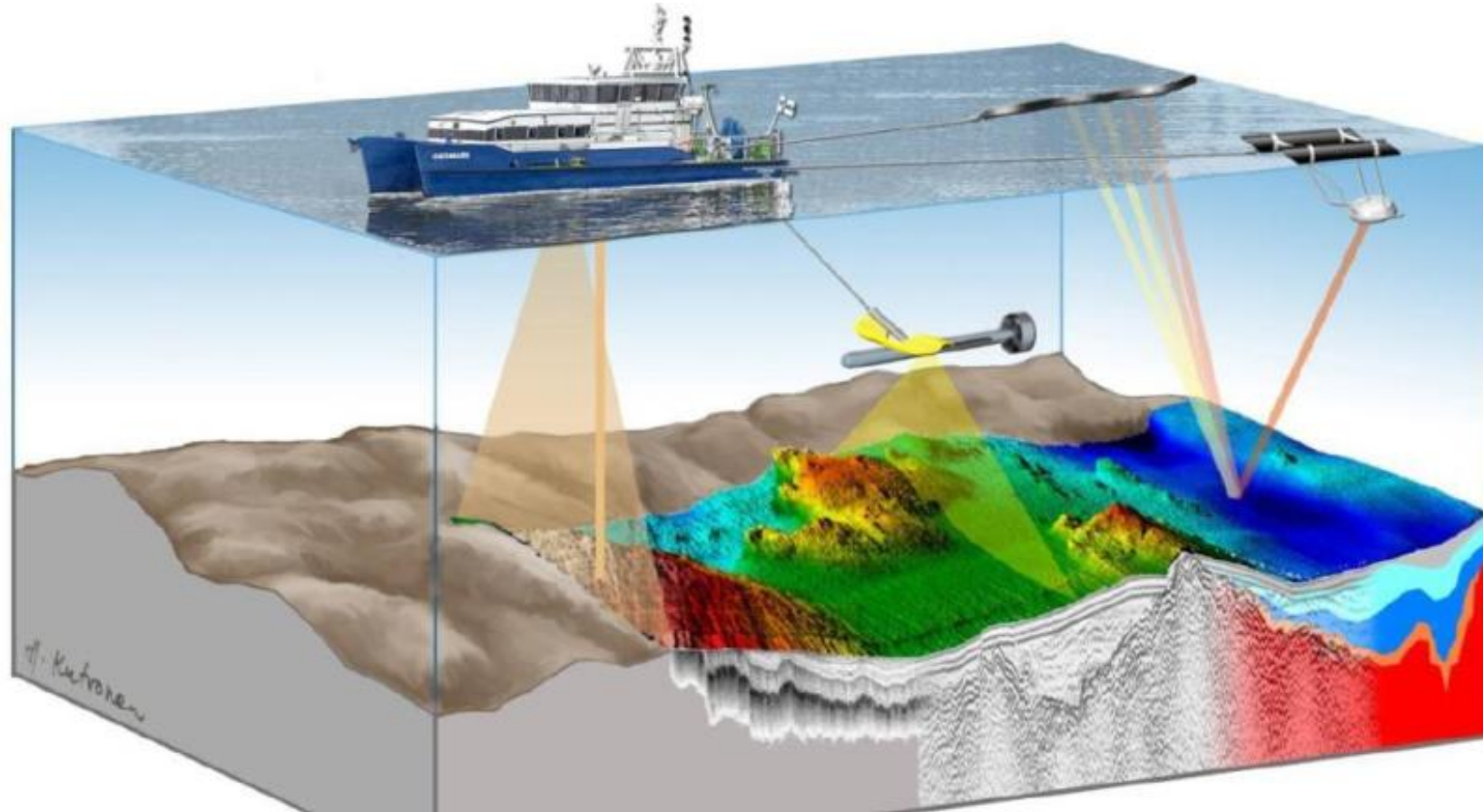
Expertise

Operational resources, etc.



SPC has all the required toys (~USD 1M)

- Singlebeam and Multibeam echosounders, precision GNSS, sidescan sonar, magnetometer, boomer seismic, UAV's software, staff, etc.



Maritime boundaries

Pacific Extended Continental Shelf Project



Developing capacity to progress ECS submissions

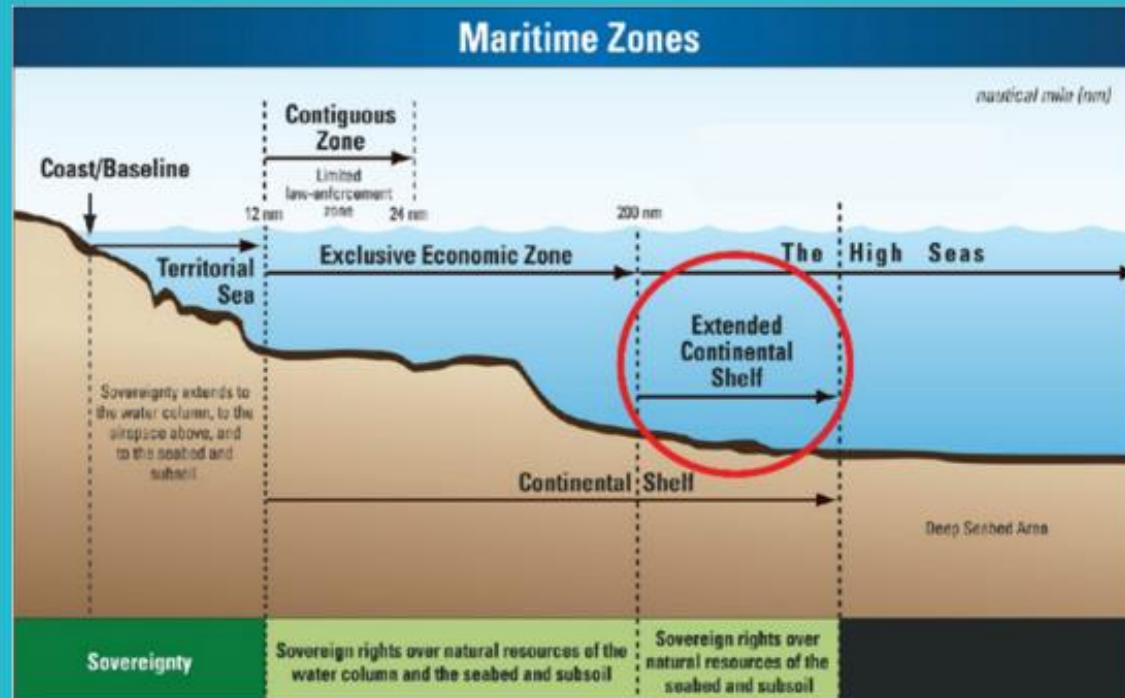
Capacity Building Opportunities

- National or regional training
- Software training
- Attachments or online courses

Data Acquisition

- Satellite imagery/ bathymetry

Submission Consultancy Support



Data and Information Management



Dashboard Launch (Jul 2022)

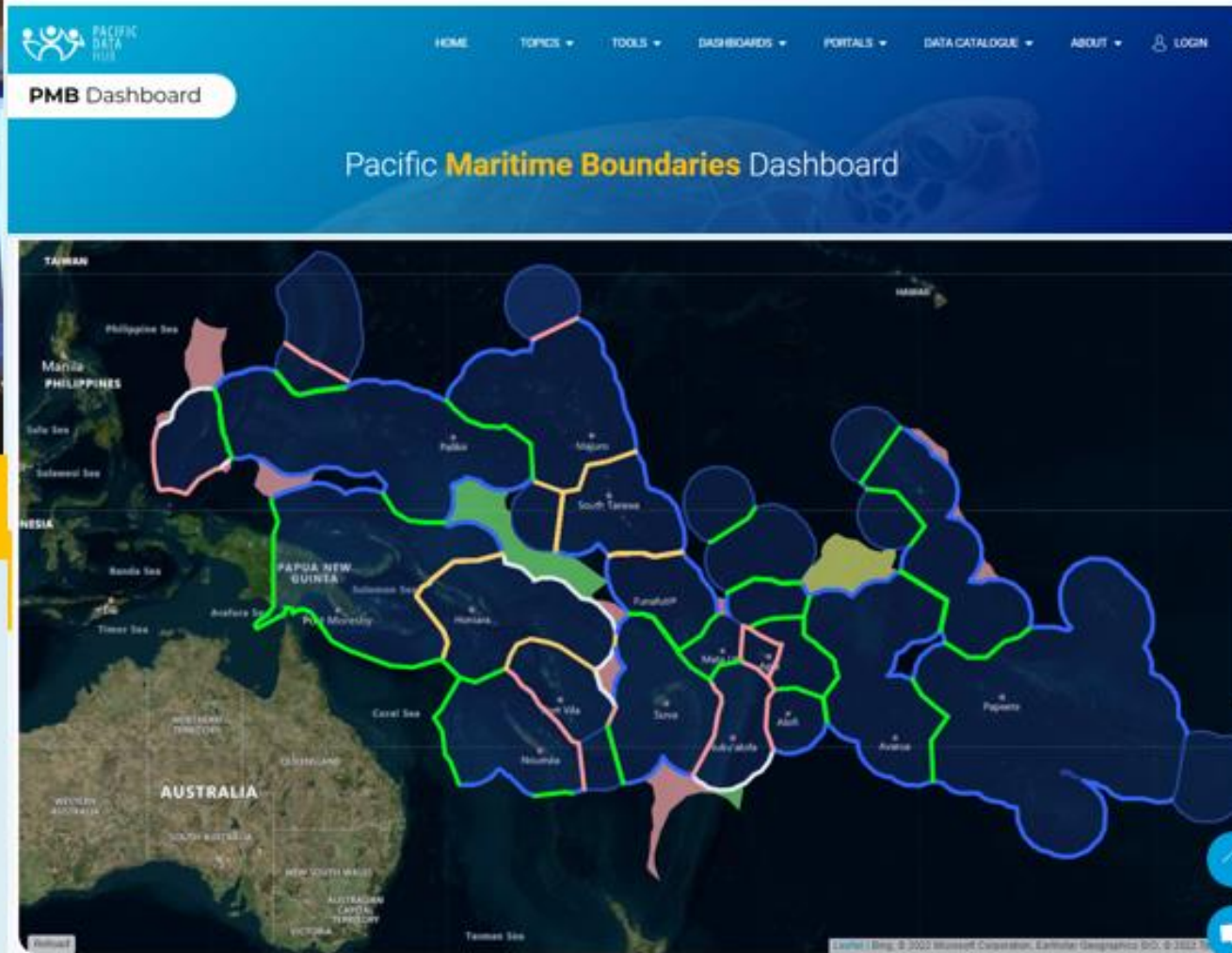
1. Pathway to maritime zones -



2. Pathway to Maritime Boundary Treaty -

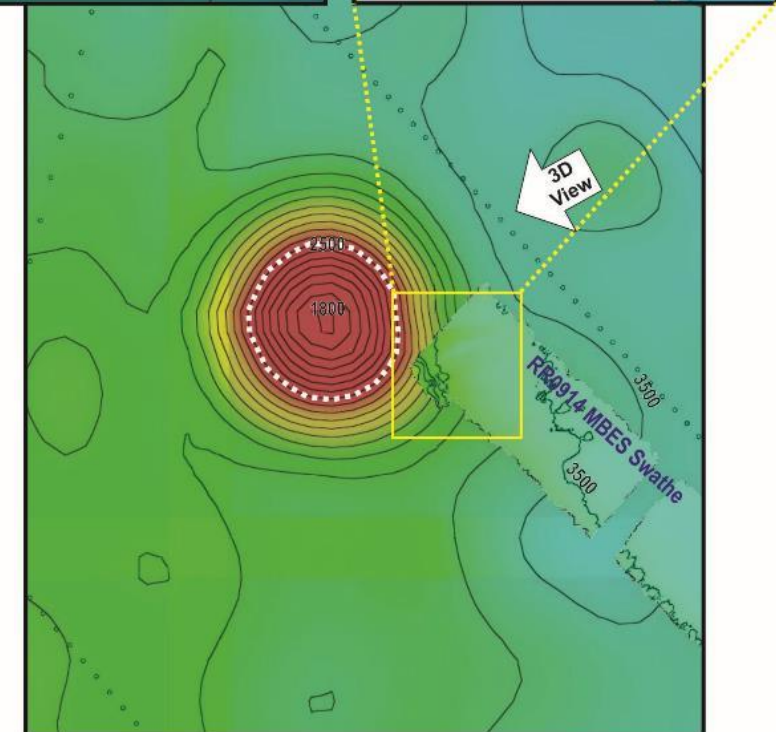
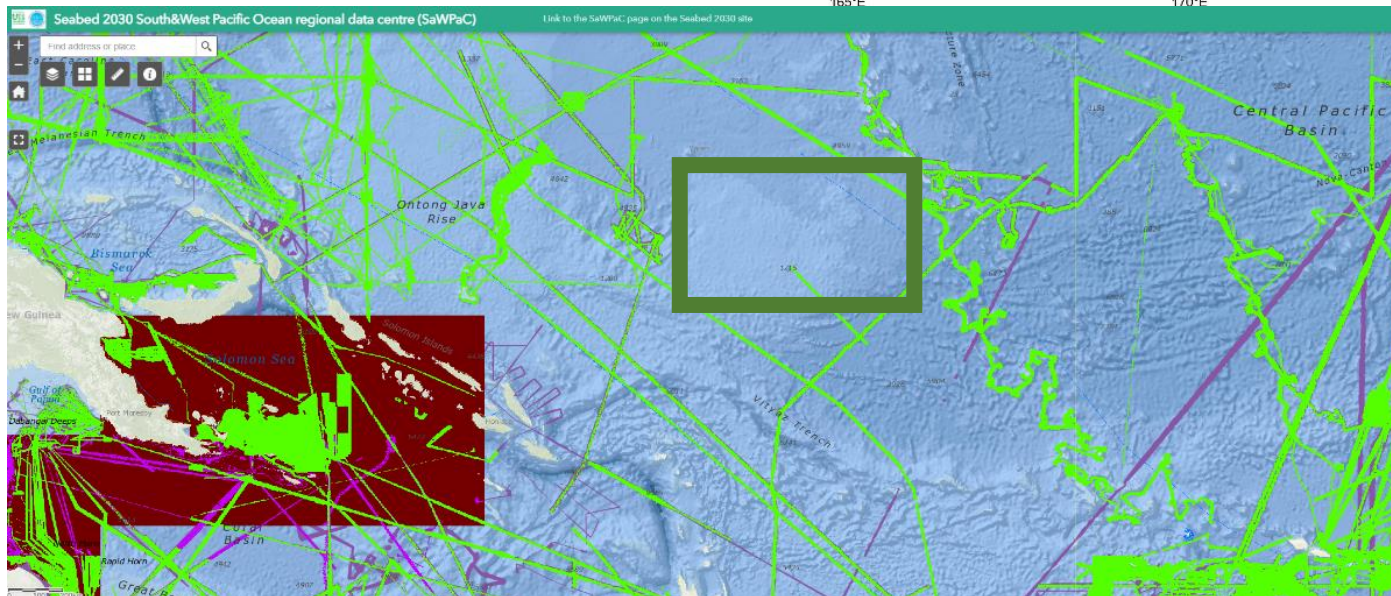
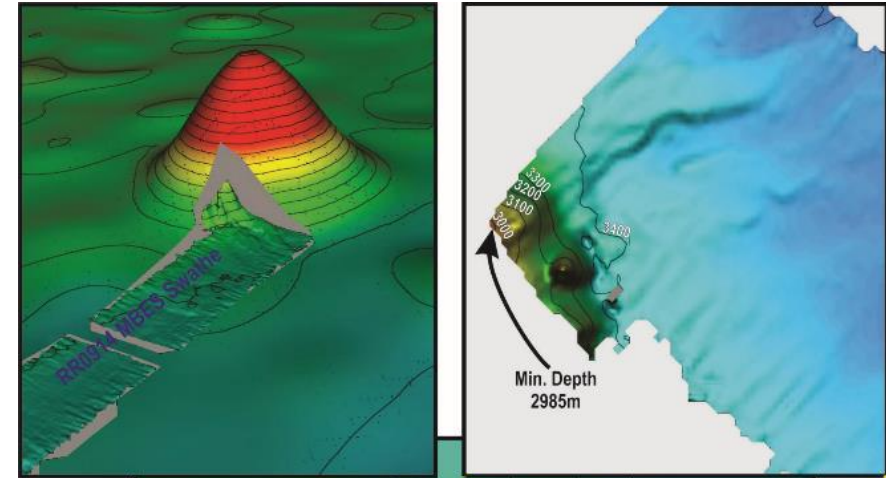
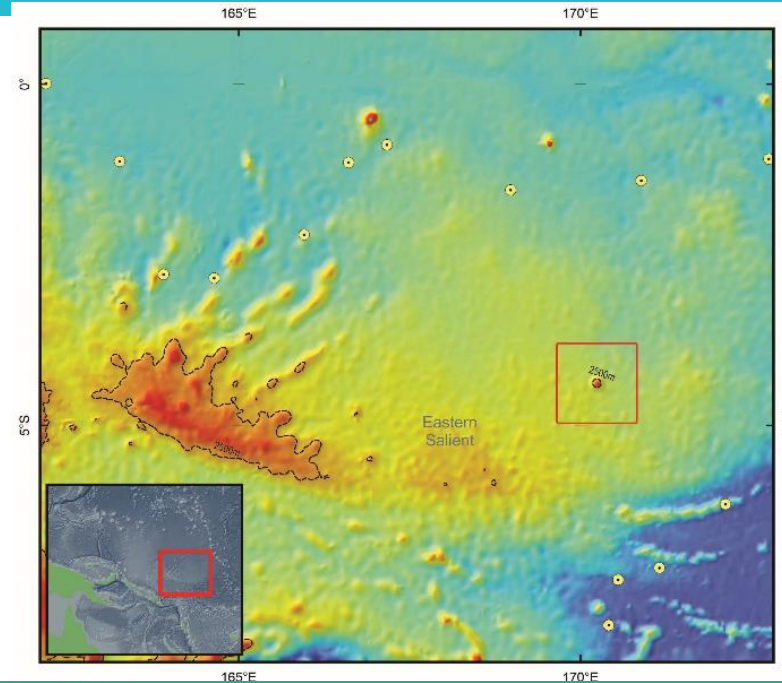


3. Extended Continental Shelf Pathway -

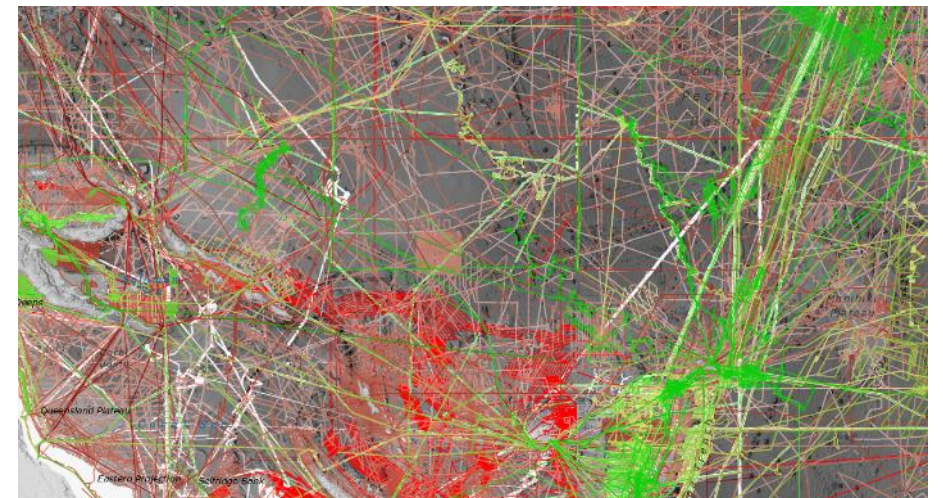
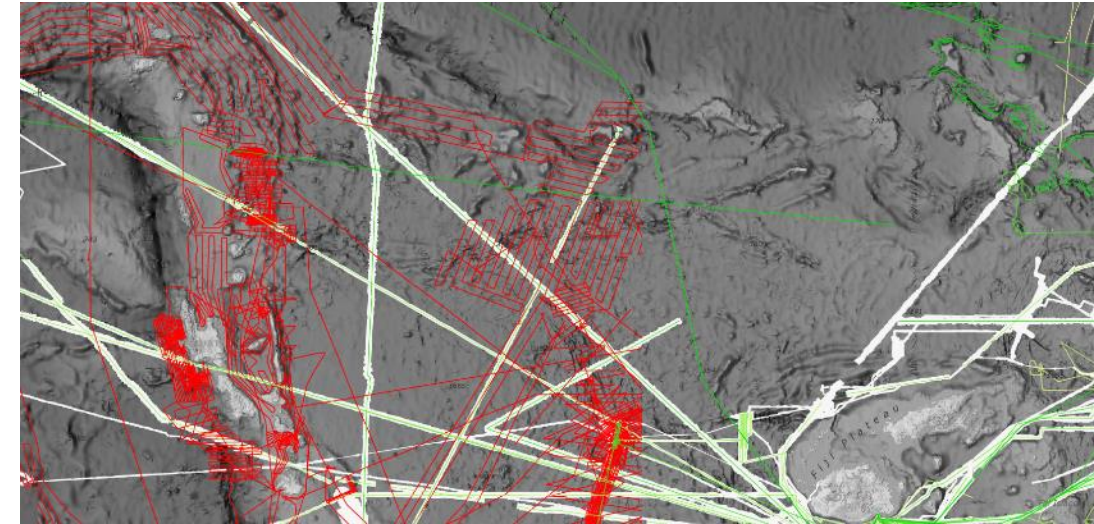
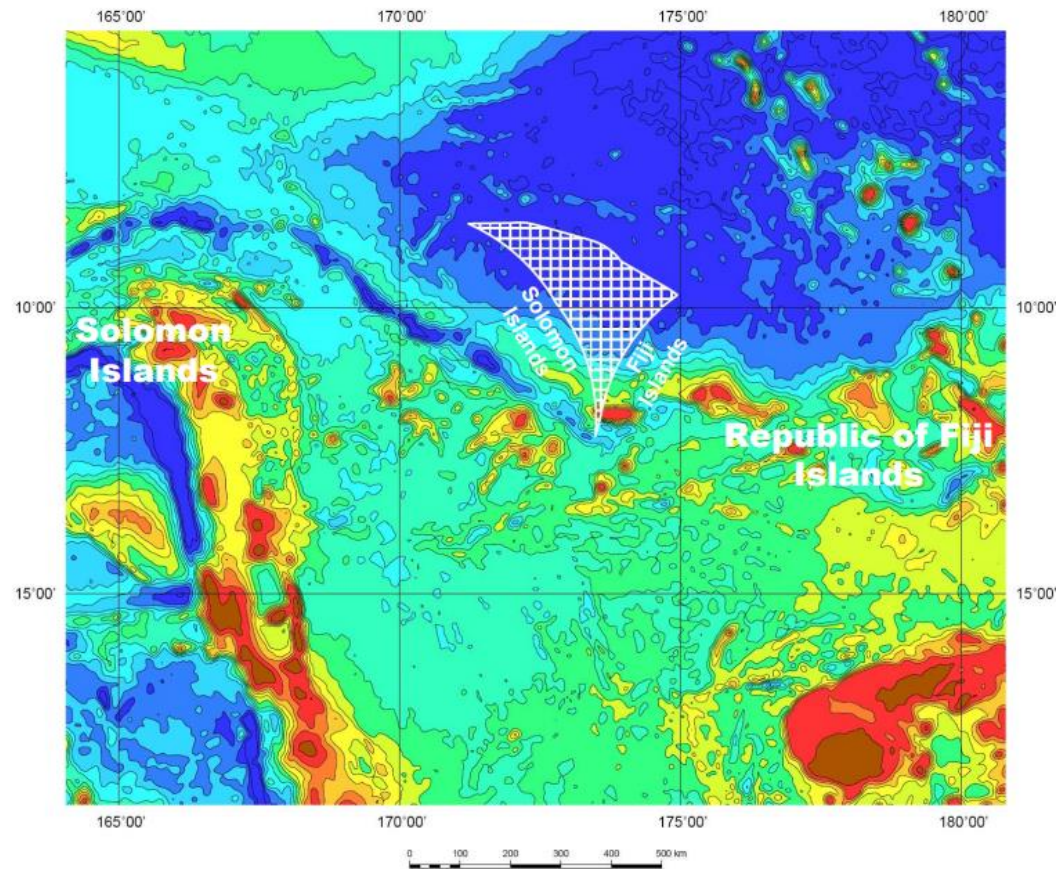


Bathymetry, seismic data needs

- Ontong Java Plateau
- 2500 m isobath data acquisition

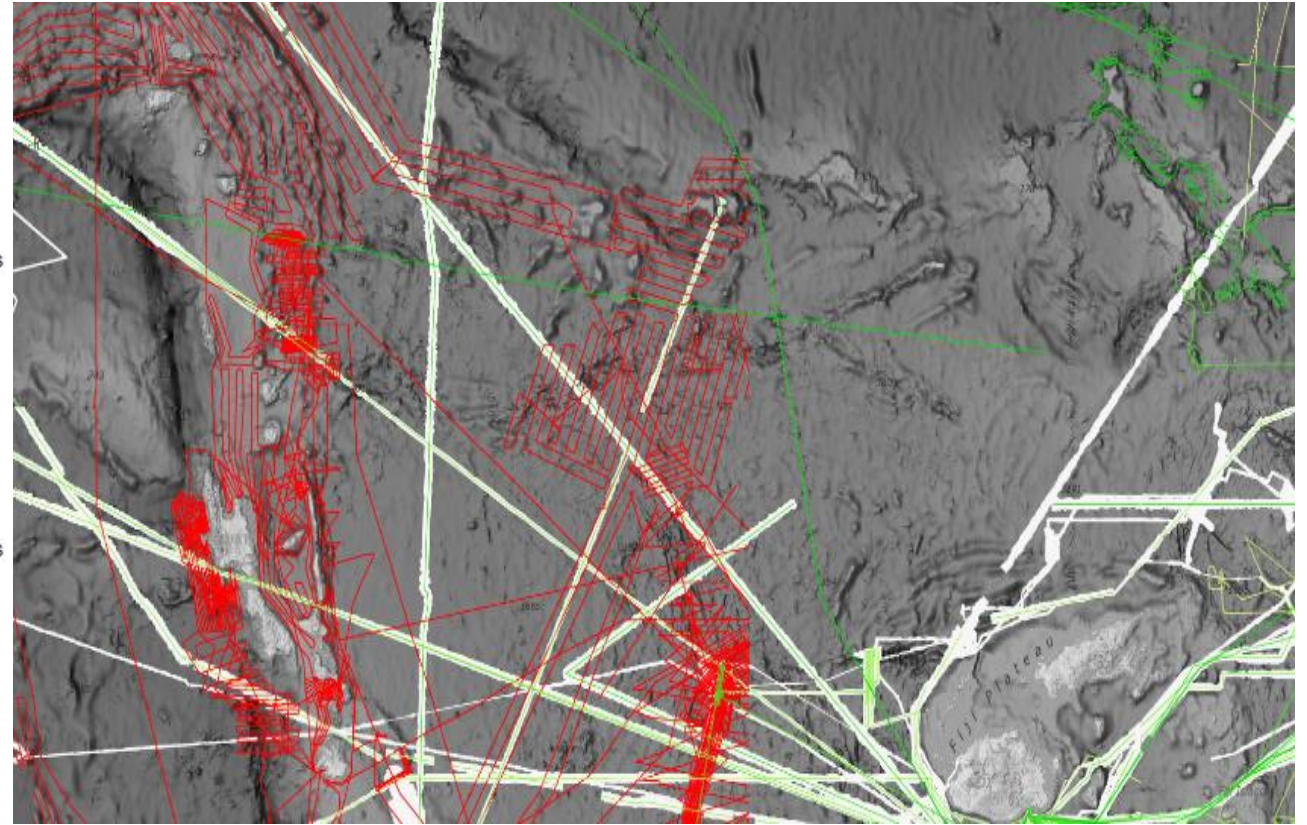
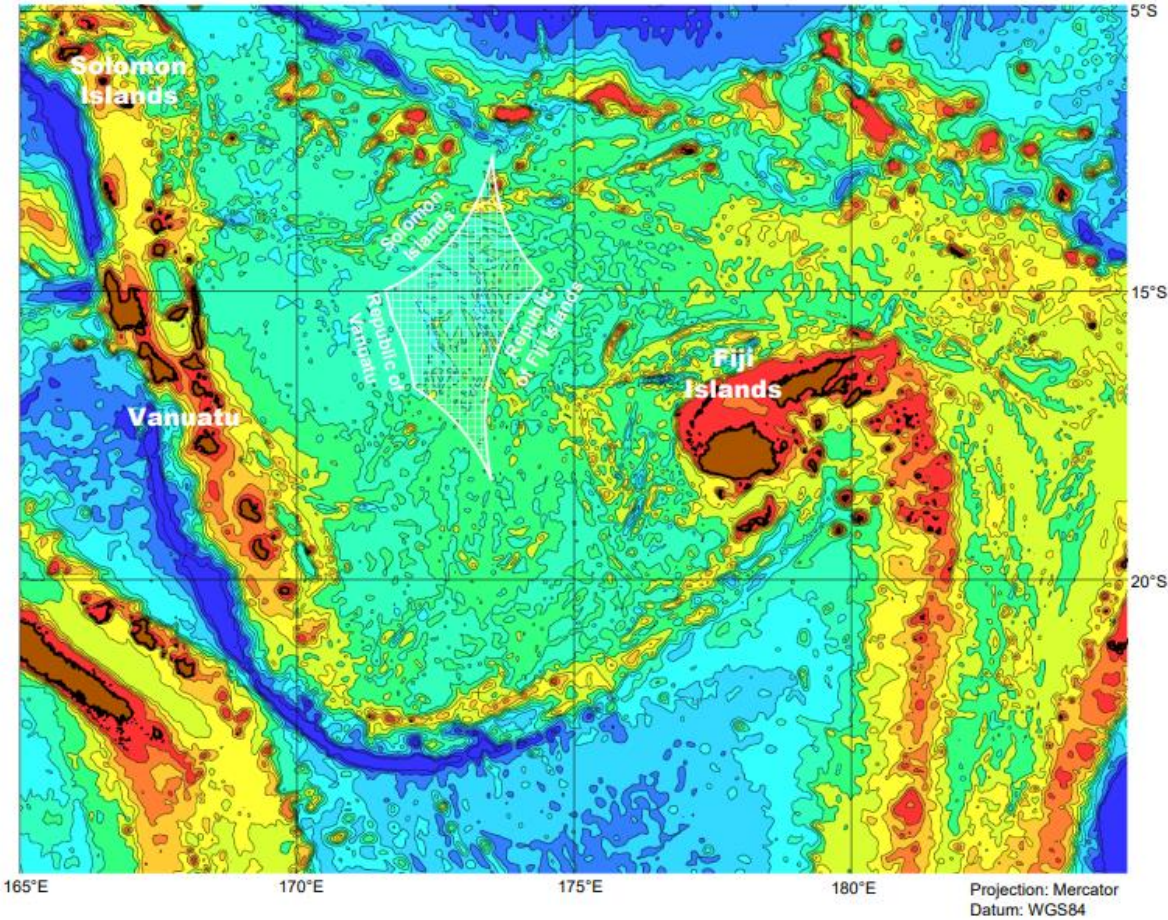


Charlotte Bank – Ellice Rise



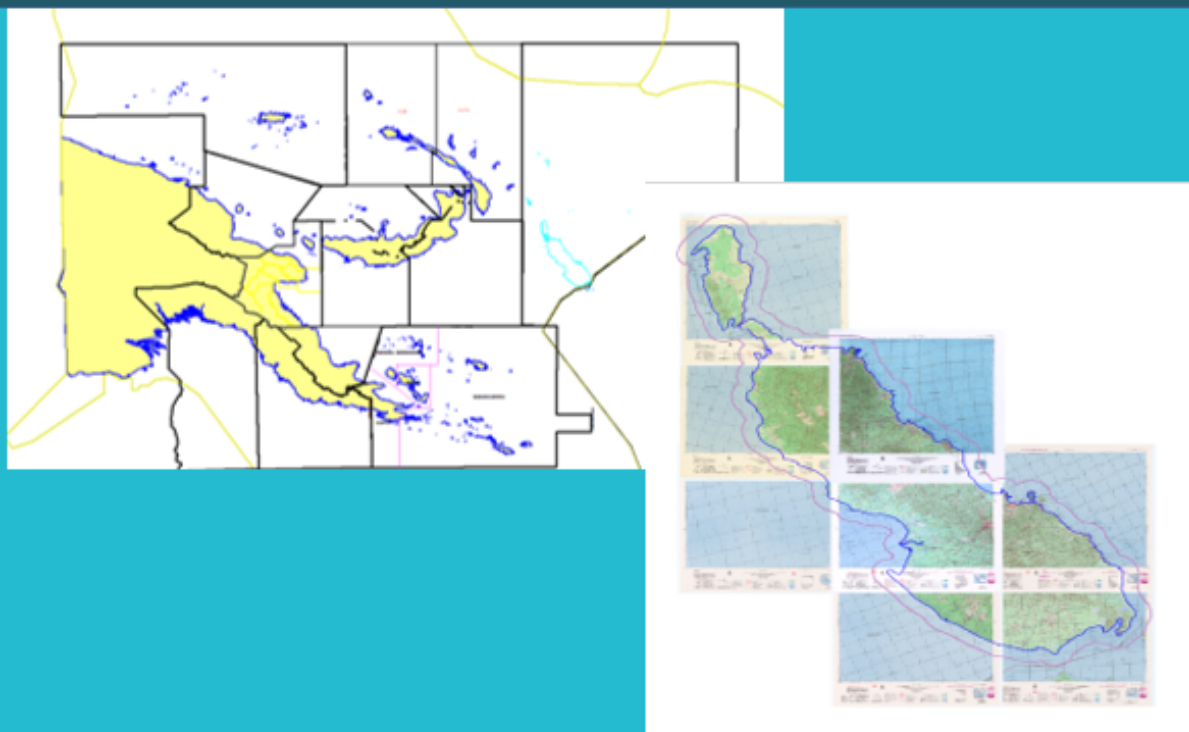
Bathymetry, seismic data needs...cont

North Fiji Basin



Bougainville Coastal Waters

Delimiting coastal waters and building capacity for good ocean governance



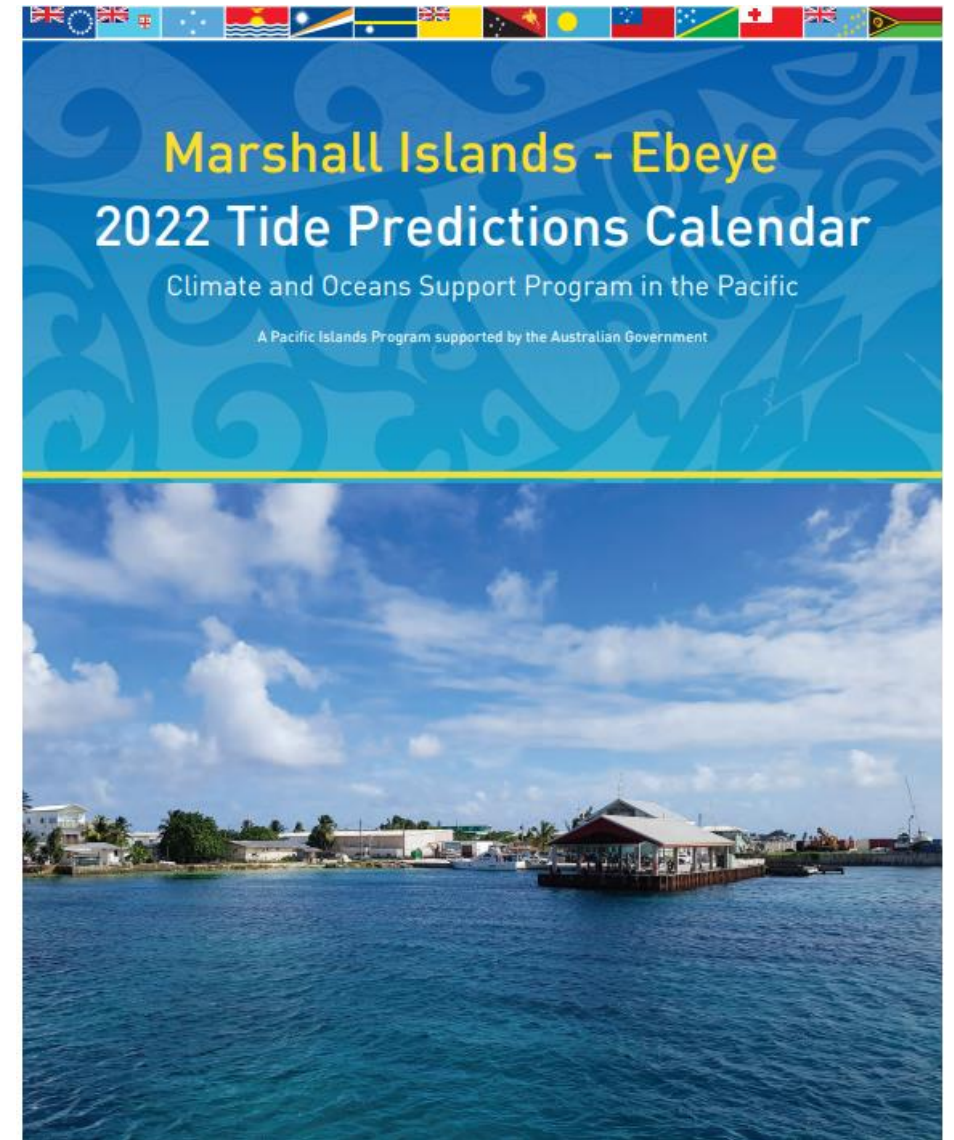
Led by Papua New Guinea

- National Fisheries Authority
- National Maritime Safety Authority

**Enforces national legislation
(Maritime Zones Act 2015)**

Applied Ocean Science

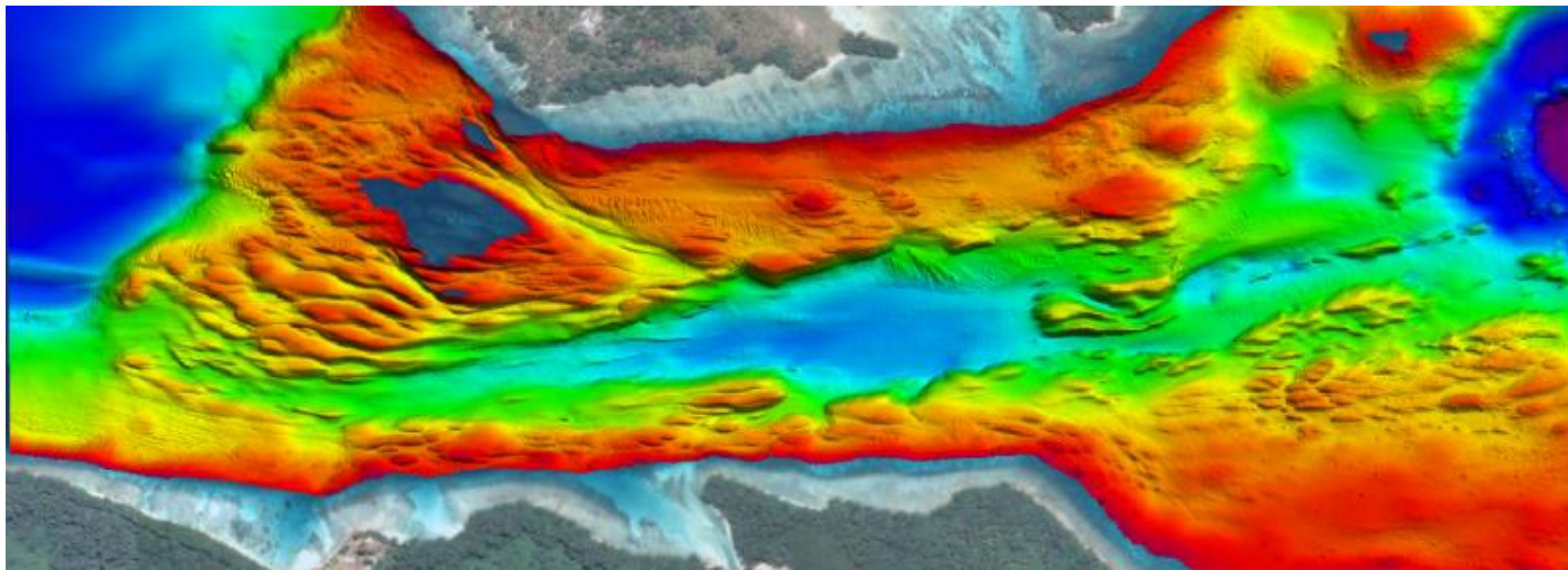
- SPC through the DFAT funded Climate and Oceans Support Program in the Pacific produced 2022 tide prediction calendar for 24 locations in the region, including a new calendar for Ebeye, RMI.
- Digital copies of the calendar can be accessed at the Pacific Ocean Portal- under the library tab. <http://oceanportal.spc.int/>



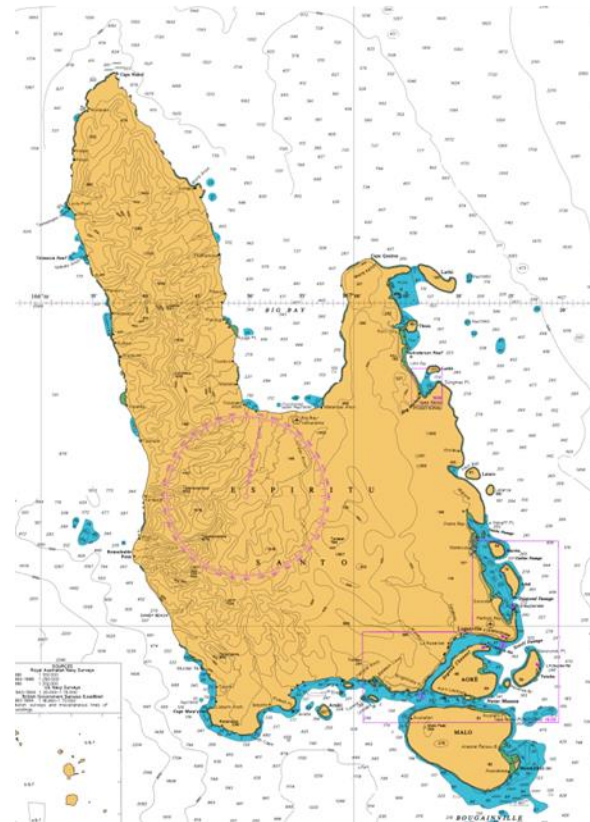
Hydrographic survey

Calibration and tide station installation



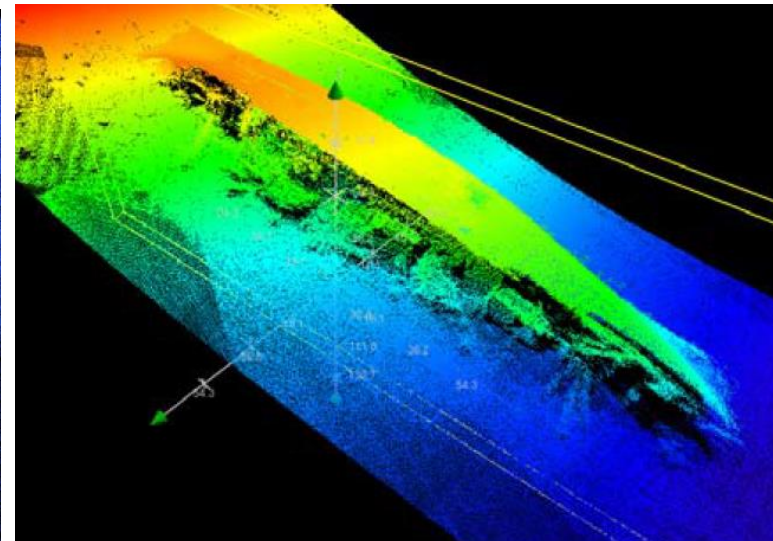
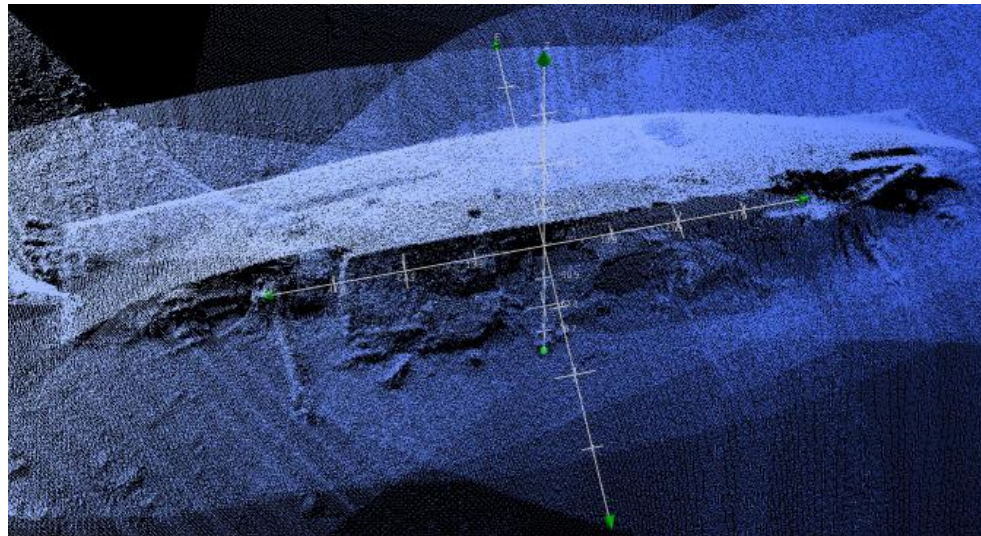


Earliest known chart of Nova Gerusalem (Espirito Santo Island, Vanuatu) vs modern chart



Uncharted ship wreck, Luganville

Multibeam data of SS President Coolidge



Opportunities ahead ...



Fisheries, Aquaculture &
Marine Ecosystems
(FAME) Division



The Pacific Community Centre for Ocean Science

SPC/PCCOS Research Vessel Project



The Fisheries, Aquaculture and Marine Ecosystems (FAME) Division of SPC are investigating the potential to design and construct a specific research platform for the Pacific region to support:

- The development of regional scientific advice
- To reinforce the region's capabilities to manage its natural resources
- Potential for vessel usage sharing by regional scientific organisations

What if we do nothing?

- Legal liability for the costs of accidents as a result of inadequate charts
- Insurance companies withdrawing insurance or raising premiums
- Withdrawal of international vessels from port visits Pacific destinations
- Primary Charting Authorities withdrawing navigational charts



What are the benefits?

- Safe, reliable and affordable transport services that connect people to markets and services
- For every \$1 spent on hydrography, there is an estimated **\$91 return** in ongoing economic activity: **The Blue Economy**
- Hydrography also supports:
protection of marine environment, national infrastructure development, coastal zone management, marine exploration, search and rescue, fisheries, maritime boundaries delimitation, defence and security, disaster management, etc.



Thank you

