



**PIGOOS**



Pacific  
Community  
Communauté  
du Pacifique

# PIGOOS Update

Bipen Prakash

PIGOOS Coordinator

Pacific Community (SPC)

[bipendrap@spc.int](mailto:bipendrap@spc.int)



Global Ocean Observing System



**PIGOOS**

Pacific Island Global Ocean Observing System

A traditional Pacific outrigger canoe with a large white sail is sailing on the ocean. The sail is fully deployed and catches the wind. Three people are visible on the boat, one in the foreground wearing a black tank top and red shorts, and two others further back. The water is a deep blue, and the sky is a lighter blue with some clouds. The overall scene is bright and sunny.

# The Pacific Community (SPC)

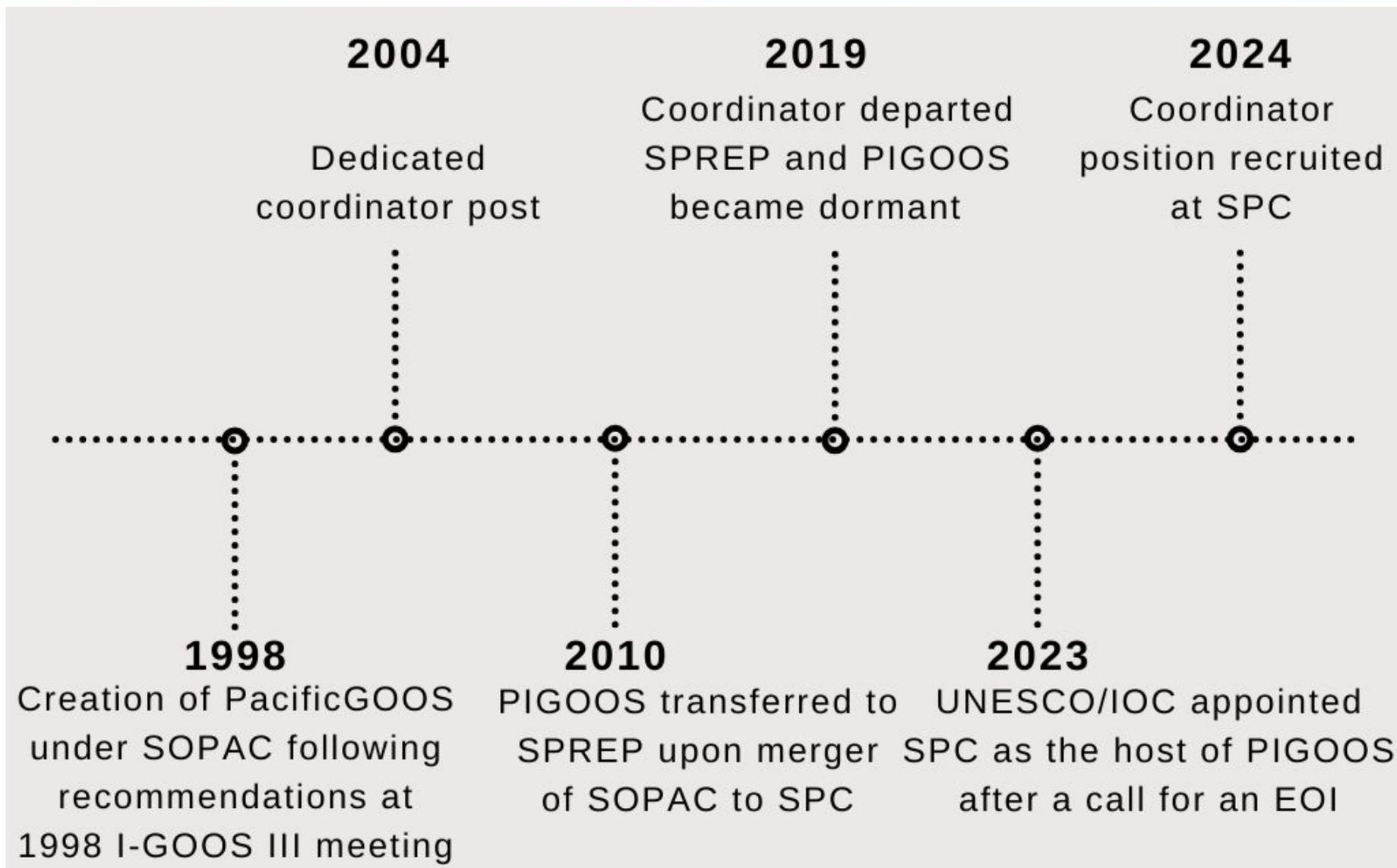
- Principal scientific and technical organisation in the Pacific
- An intergovernmental development organisation with 27 country and territory members (PICTs)
- Capabilities in over 27 sectors and disciplines
- >900 staff

# What is PI-GOOS?



- GOOS Regional Alliance
- Serves 22 SPC member PICTs – 20% of the world's EEZ
- It aims to identify and address gaps in the Pacific Ocean observing network.
- Priority: coastal observations and tropical tuna

# History



# Current PI-GOOS Goals



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- Provide and improve predictions of weather and climate, and their impact on Pacific Island Communities.
- Provide base data for longer-term predictions of weather and climate influenced by climate change.
- Raise awareness and use of the ocean observing system in the Pacific Ocean.
- Coordinate between other ocean and climate projects in the Pacific Ocean.
- Facilitate support of different ocean observing system components and the deployments of associated devices from Pacific Island Countries and Territories.

# Governance



- Internal advisory committee composed of ocean specialist within SPC - to assist the coordinator.
- Reports to the Pacific Meteorological Council, bridging IOC and WMO, linking WMO and IOC at the regional level.

# Ocean Monitoring - Challenges



## Institutional and Financial

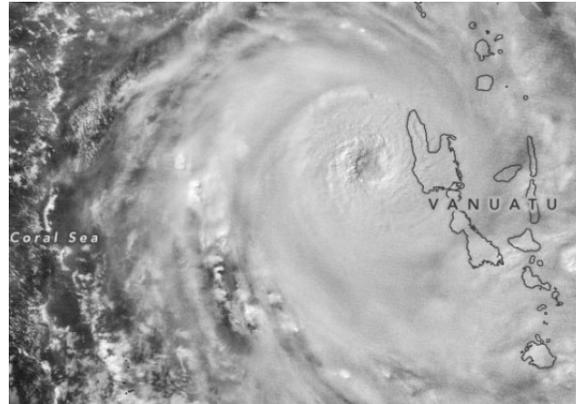


3month after deployment, NC

## Ocean Survey Capacity at NMHS



## Extreme Ocean Conditions



## Human Interaction

Accident



Vandalism



Misuse



# Priorities

- Increase funding, including programmatic fund
- Strengthen regional ocean data management and sharing systems
- Leverage maritime transport and tuna fleets for VOS and SOOP (FVON)
- Build national capacity to maintain ocean observing equipment
- Develop a regional ocean observation strategy for Pacific Islands

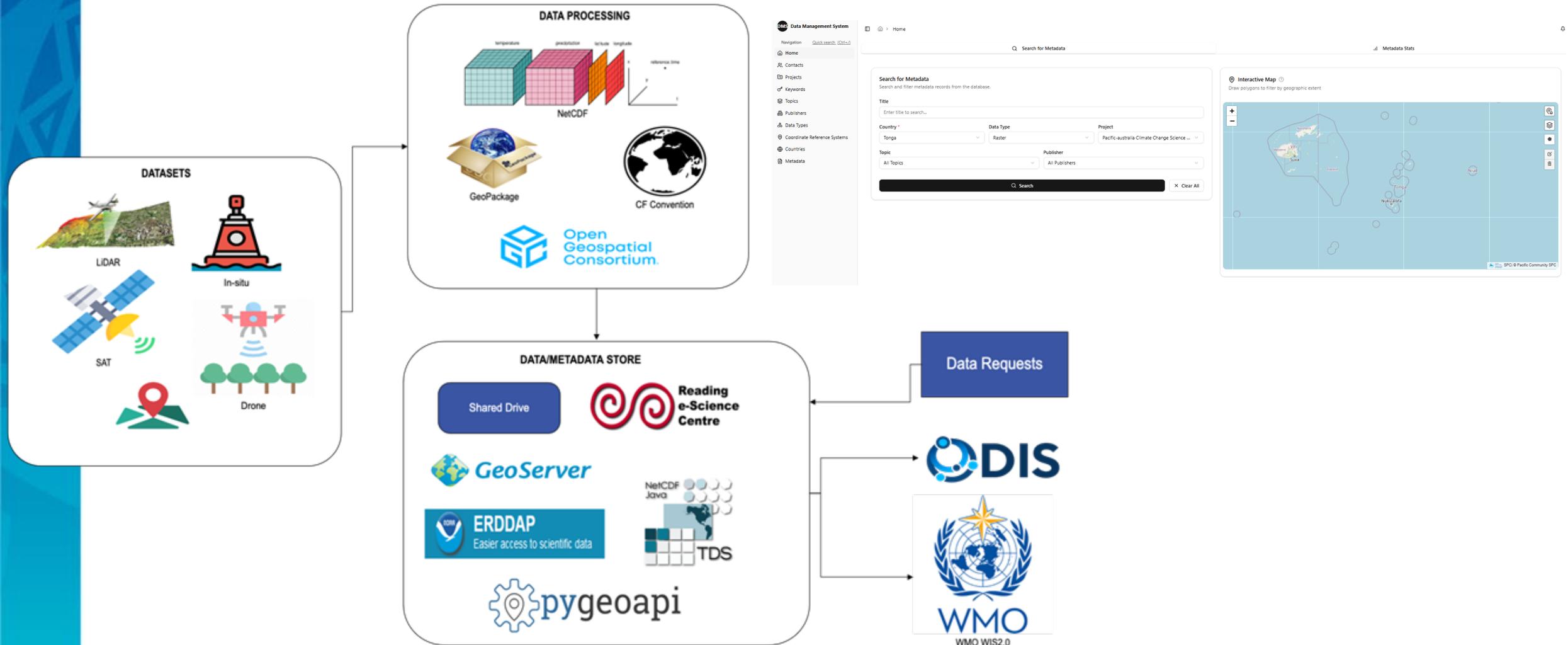


# Pacific Ocean Portal



<https://oceanportal.spc.int/explorer>

# SPC's Oceanographic DMS



# Pacific Research Vessel

- In the process of procurement, informed by an external feasibility study in 2020
  - LOA: 48m (11.6 m width and 3,5 m draft)
  - Range: 6,000 NM
  - Draft: 3.5m
  - Crew: 26 (including a 12-passenger max capacity)
- Main objective: Collect data on tropical tunas and their environment
- **Tuna tagging missions** (90 to 100 days/year)
- **Ecosystem monitoring** (60 days/year)
- **Specific SPC member country needs** (number of days TBD)
- **Oceanographic capabilities**
  - Multibeam echosounder EM712
  - Multi frequency EK80 scientific echosounder
  - CTD 12 bottles
  - DTIS/Cameras
  - Autonomous sensors
  - Mooring deployment
  - Diving surveys (auxiliary boat, direct water access)
- Deck space, powerful hydraulic crane, winches and A-Frame 8 tons class
- Full Basic Design provided by a naval architect under SPC contract
- Vessel management company recruited to support the boat design study and the vessel build
- Would be available (country needs depending) for engagement at a day rate

## RV PASIFIKA



- **SPC currently seeking additional funds for the project**
- **If green light to sign a contract with a shipyard in June 2026, the expected vessel delivery date would be end of 2028**

# Support and Collaboration



- Further strengthen SPC's oceanographic data management system through proven expertise from AODN
- Help maintain sustained time-series of EOVs - deployment and maintenance of moorings and wave buoys
- Assistance in establishing and scaling VOS and SOOP contributions
- Technical and strategic support to pilot, demonstrate, and evaluate emerging ocean observing technologies
- Guidance and structured opportunities for sharing best practices, technical standards, and lessons learned

# IMOS Funding for PIGOOS



- NCRIS step change investment
- Funding commitment of AUD 1.5 million
  - Wave rider buoy
  - Ocean acidification monitoring
  - Oceanographic Data Management System



**PI-GOOS**

**CONGRATULATIONS TO THE  
INTEGRATED MARINE OBSERVING SYSTEM**

**20 YEARS OF  
SUSTAINED MARINE OBSERVING**

