View results

Respondent

4 Anonymous

13:17
Time to complete

Basic information

1. **Name of GRA** *

- ( ) GRA: Black Sea GOOS
- ( ) GRA: CIOOS
- ( ) GRA: EuroGOOS
- ( ) GRA: GOOS Africa
- ( ) GRA: GRASP
- ( ) GRA: IOCARIBE-GOOS
- ( ) GRA: IMOS
- ( ) GRA: IOGOOS
- ( ) GRA: MonGOOS
- ( ) GRA: NEAR-GOOS
- ( ) GRA: OCEATLAN
- (•) GRA: PI-GOOS
- ( ) GRA: SEAGOOS
- ( ) GRA: U.S. IOOS

2. **Your name** *

Bipen Prakash

3. **Your email** *

bipendrap@spc.int

4. **Your role in the GRA** *

PIGOOS Coordinator

GRA Overview

5. **Vision and mission of the GRA** *

PI-GOOS is a network of regional organisations established in 1998 to raise awareness of and support ocean observing systems in the Pacific Islands, identify and address gaps in the Pacific Ocean observing network, and ensure Pacific observations contribute to and benefit from the GOOS.

6. **Affiliated organisations and agencies of the GRA** *

- [x] Governments/Member States
- [ ] Academia
- [x] Research Institutions
- [x] Regional organisations
- [ ] Non-governmental Organisations (NGOs)
- [ ] Private sectors
- [x] IMOS

7. **Please list the national observing systems that the GRA is connecting to.**

Pacific Sea Level and Geodetic Monitoring Network (GLOSS); DART buoys; ocean acidification monitoring through the Pacific Islands Ocean Acidification Centre; SPC's FVON; Network of Spotter Buoys; SPC's Marine Water Quality Monitoring Project; Earth Sciences New Zealand's Argo Programme; Digital Earth Pacific; and satellite/model data services integrated through the Pacific Ocean Portal.

8. **How does the GRA connect to GOOS National Focal Points (NFPs) in the respective countries?** *

If so, please specify GOOS NFPs in which countries you are currently connecting to). Link to current GOOS NFPs is: https://goosocean.org/who-we-are/goos-national-focal-points/group/

Currently, there are no designated GOOS NFPs in the PIGOOS membership. Engagement with national priorities occurs through other established mechanisms like the Pacific Meteorological Council and its Pacific Island Marine and Ocean Services Panel (PIMOS), and through direct consultations with NMHSs and other national partners.

9. **Governance of the GRA.** *

Please outline governing bodies of the GRA, including Chair, Secretariat, Steering Committee, etc.

PIGOOS is hosted by SPC and reports to the Pacific Meteorological Council through the Pacific Islands Marine and Ocean Services (PIMOS) Panel.

10. **Strategic documents of the GRA.** *

Please list titles, dates, and relevant information of the most recently updated version of the governing documents, including the **links** if available. Strategic documents may include: MoU, Goals and Objectives, Planning documents (e.g. Strategic Plan, Work Plan, Implementation Plan), Data Policy, etc.

SPC's broader Strategic Plan 2022-2031 (https://www.spc.int/strategic-plan) provides the overarching institutional framework.
Pacific Islands Meteorological Strategy (PIMS) 2017-2026 (https://www.pacificclimatechange.net/document/pacific-islands-meteorological-strategy-2017-2026-sustaining-weather-climate-water-and): Provides the overarching framework for ocean services in the region, directly guiding PIGOOS's alignment with national meteorological and ocean service priorities.
SPC Geoscience, Energy and Maritime (GEM) Division Business Plan (https://gem.spc.int/about/business-plan): Guides the work of the host division within SPC, ensuring PIGOOS activities are integrated into the broader geoscience and maritime development agenda for the region.

11. **Communication tools of the GRA.** *

Please list links of GRA website, contact person, newsletter, brochure, introductory video, etc., if any.

PIGOOS webpage: https://www.spc.int/pigoos

12. **Primary financial sources of the GRA.** *

Please consider the investment in the ocean observing system itself as well as for GRA coordination.

Pacific Community Centre for Ocean Science (New Zealand Government): primary coordination support
Climate and Oceans Support Programme in the Pacific (Australia and New Zealand Governments): Pacific Sea Level and Geodetic Monitoring Network and Pacific Ocean Portal
Spotter Buoys: various projects, including Climate Risk & Early Warning Systems (CREWS) initiative, the Vanuatu Climate Information Services for Resilient Development Planning (VanKIRAP) project, Backyard Buoys, Enhancing Climate Information and Knowledge Services for Resilience in 5 Island Countries of the Pacific Ocean (CIS-PAC5).
SPC's Marine Water Quality Monitoring project: CIS-Pac5
Pacific Islands Ocean Acidification Centre: The Ocean Foundation
IMOS
IOC-UNESCO

Achievements since last GRA Forum (April 2024)

13. **Meetings and workshops the GRA organised or sponsored.** *

Pacific Islands Oceans Conference – Oct 2025

14. **Contribution/Integration to the Global Ocean Observing Networks.** *

If the GRA is currently contributing/integrating to other networks other than GOOS networks, please specify them in the field of 'Other'.

- [ ] Ship Observations Team (SOT)/Voluntary Observing Ships (VOS)
- [ ] Ship Observations Team (SOT)/XBT-Ship of Opportunity Programme (SOOP)
- [ ] Ship Observations Team (SOT)/Automated Shipboard Aerological Programme (ASAP)
- [x] Global Ocean Ship-Based Hydrographic Investigations Programme (GO-SHIP)
- [x] Global Sea Level Observing System (GLOSS)
- [ ] OceanSITES
- [ ] Data Buoy Cooperation Panel (DBCP)/Moored Buoys (MB)
- [x] Data Buoy Cooperation Panel (DBCP)/Tsunami Buoys
- [ ] Data Buoy Cooperation Panel (DBCP)/Drifting Buoys (GDA)
- [x] Argo
- [ ] The Global High Frequency Radar Network
- [ ] Ocean Gliders
- [ ] Animal-Borne Ocean Sensors (AniBOS)
- [x] Emerging: Fishing Vessel Observing Network (FVON)
- [ ] Emerging: Surface Ocean CO2 Observing Network (SOCONET)
- [ ] Emerging: Science Monitoring And Reliable Telecommunications (SMART) Subsea Cables
- [ ] Emerging: SUN Fleet
- [ ] None
- [ ] Other

15. **Any other ocean observation projects and activities uniquely conducted by the GRA?**

Digital Earth Pacific
Pacific Islands Ocean Acidification Centre

16. **Contribution of data at local/national/regional/global level.** *

Please indicate other data centers and repositories in 'Other', if applicable.

- [ ] Ocean Data and Information System (ODIS)
- [ ] IODE National Ocean Data Center (NODC)
- [ ] IODE Associate Data Unit (ADU)
- [ ] IODE Associate Information Unit (AIU)
- [ ] WMO Information System (WIS)
- [x] SPC's Data Management System and the Pacific Ocean Portal

17. Describe the primary roles of the GRA in facilitating the **delivery of Information, Products and Services to end users** and how these are different/complementary to national activities. *

PI-GOOS plays a regional coordination and enabling role that strengthens the ability of Pacific Island countries to deliver high-quality ocean information, products, and services to their communities. Unlike national agencies, PI-GOOS does not provide services directly to end users. Instead, it works through NMHSs and other national partners, ensuring countries have the tools, capacity, and interoperable systems needed to translate ocean observations into actionable services.

18. **In what areas (checklist is below) does the GRA enable co-designed/co-produced ocean observing solutions?** *

More detailed information & services, e.g. links, can be indicated in 'Other'

- [x] Biodiversity conservation
- [x] Sustainable fisheries
- [x] Coastal resilience
- [x] Climate resilience mitigation and adaptation
- [x] Sustainable ocean planning
- [ ] Marine carbon capture and storage
- [x] Safety of life at sea
- [x] Coastal hazard warnings
- [x] Disaster risk reductions
- [x] Human health
- [x] Ocean science
- [ ] Other

19. **Please list new Best Practice documents completed in 2025 (and submitted to the OBPS).** *

None

20. **Capacity Building and Knowledge Sharing**

Please state the capacity building activities organised in 2024-2025, and # of beneficiaries; expertise/experience shared with other GRAs in terms of capacity building.

National Ocean Science to Services Workshop in Solomon Islands – Oct 2024 - ~45 people; National Ocean Science to Services Workshop in Cook Islands – Nov 2024 - ~50 people; National Ocean Science to Services Workshop in Palau – Jun 2025- ~35 people; National Ocean Science to Services Workshop in American Samoa – Nov 2025 - ~60 people

Essential Ocean Variables (EOVs) Measurement

GOOS Essential Ocean Variables (EOVs) are defined as the ***minimum set of ocean variables*** that are needed to assess ocean state and variability for important global ocean phenomena, and to provide essential data for applications that support societal benefit. Please see more detailed information and specification sheet for each EOV via https://goosocean.org/what-we-do/framework/essential-ocean-variables/

21. Please indicate the **physics EOVs** that have been/are being measured by your GRA. *

	Yes	No	No info
Sea state	◉	○	○
Ocean surface stress	○	◉	○
Sea ice	○	◉	○
Sea surface height	◉	○	○
Sea surface temperature	◉	○	○
Subsurface temperature	◉	○	○
Surface currents	◉	○	○
Subsurface currents	◉	○	○
Sea surface salinity	◉	○	○
Subsurface salinity	◉	○	○
Ocean surface heat flux	○	◉	○
Ocean bottom pressure	○	◉	○
Turbulent diapycnal fluxes (*pilot)	○	◉	○

22. Please indicate the **biochemistry EOVs** that have been/are being measured by your GRA. *

	Yes	No	No info
Oxygen	◉	○	○
Nutrients	○	◉	○
Inorganic carbon	◉	○	○
Transient tracers	○	◉	○
Particulate matter	◉	○	○
Nitrous oxide	○	◉	○
Stable carbon isotopes	○	◉	○
Dissolved organic carbon	○	◉	○

23. Please indicate the **biology and ecosystems EOVs** that have been/are being measured by your GRA. *

	Yes	No	No info
Phytoplankton biomass and diversity	◉	○	○
Zooplankton biomass and diversity	◉	○	○
Fish abundance and distribution	◉	○	○
Sea turtles abundance and distribution	○	◉	○
Seabirds abundance and distribution	○	◉	○
Marine mammal abundance and distribution	○	◉	○
Coral cover and composition	◉	○	○
Seagrass cover and composition	◉	○	○
Macroalgal canopy cover and composition	◉	○	○
Mangrove cover and composition	◉	○	○
Microbe biomass and diversity (*pilot)	○	◉	○
Benthic invertebrate abundance and distribution (*pilot)	○	◉	○

24. Please indicate the **cross-disciplinary (including human impact) EOVs** that have been/are being measured by your GRA. *

	Yes	No	No info
Ocean colour	○	◉	○
Ocean sound	○	◉	○
Marine debris (*pilot)	○	◉	○

25. **Additional comments on EOV measurement by your GRA.**

While we are involved in measurement of several EOVs, but many falls way short of the desirable resolution for space and time. As an example, we have only 3 out of the 22 Pacific Island Countries and Territories where we have environmental sensors measuring Particulate Matter.

Planning and Support

26. **Top 3 Challenges and Opportunities** *

To highlight the ***challenges*** for operation of GRA and how to address them; as well as the ***opportunities*** for new partnerships with regional networks, programme/project, countries; new funding opportunities including cooperation with industries; emerging requirements for delivery of information and services, and etc.

Challenges
1. Limited funding for observations requires extensive prioritization of investment. Many of the observation systems are supported by donor funded short-term projects.
2. There is a critical shortage of national oceanographic and technical expertise to manage and sustain observation systems.
3. None of the Pacific Island Countries currently has a designated GOOS NFP, which makes coordination at the national level particularly challenging.
Opportunities
1. Partnership opportunities with neighboring GRAs, in particular with IMOS with their funding commitment to strengthen ocean observations in the Pacific Island region.
2. Regionally developed data management system and portals provides opportunities for strengthening oceanographic data processing, archiving and sharing.
3. Decadal investment framework under the Weather Ready Pacific programme presents a valuable opportunity to secure long-term support for sustained ocean observing networks.

27. **Planning for 2026-2027** *

To highlight top 3-5 priorities of the GRA over next two years.

1. Secure increased funding, including programmatic funding, for strengthening ocean observations in the region, including leveraging multilateral climate funding mechanisms such as the Adaptation Fund.
2. Strengthen oceanographic data processing, archiving, and sharing through regionally developed data management system and portals, to improve interoperability and accessibility.
3. Capitalise on huge maritime transport sector and the industrial tuna fishing fleet for establishing VOS and SOOP.
4. Strengthen national technical capacity for maintaining ocean observing equipments.
5. Develop a strategic guiding document for ocean observations in the Pacific Island region.

28. **Requested Support from GOOS** *

May include but not limited to communication support; capacity building support; partnership building support; leveraging support from member states, etc. Indicate priority or urgency.

1. Support to build and sustain technical, operational, and analytical capacity for ocean observations and their applications across Pacific Island Countries and Territories, ensuring long-term reliability and locally driven capability development.
2. Guidance and structured opportunities for sharing best practices, technical standards, and lessons learned across GOOS components and GRAs to improve coordination and harmonization of observing activities in the Pacific.
3. Assistance in establishing and scaling VOS and SOOP contributions across the Pacific region, including partnership brokering with the maritime transport sector.
4. Technical and strategic support to pilot, demonstrate, and evaluate emerging ocean observing technologies suitable for Pacific contexts, ensuring their alignment with global standards and regional priorities from the Pacific Meteorological Council's Pacific Islands Marine and Ocean Services Panel.
5. Support to ensure Pacific initiatives are aligned with the GOOS and RBON frameworks, including guidance on integration, reporting, and recognition of Pacific contributions.