GOOS Regional Alliance Council Meeting

13:30 - 16:00, CEST, 16 April 2025, online
Meeting webpage: https://oceanexpert.org/event/4760

1. Opening

1.1. Membership updates

- *Carl Gouldman* (NOAA/NOS/IOOS) is retiring from NOAA as of April 2025, and stepping down as Chair of the GOOS Regional Alliance Council. *Gabrielle Canonico* will replace him representing IOOS in the GRA Council.
- *Inga Lips* (EuroGOOS): Left EuroGOOS and the GRA as of April.
- *John Cortinas* (NOAA/former coordinator for IOCARIBE GOOS): Retired and a new coordinator is being identified by IOCARIBE. *Devin Burri* (IOCARIBE): No longer with NOAA; now an IOCARIBE consultant.
- *Vanessa Cardin* (MonGOOS): Mandate ended last year; a new chair is in place, with Vanessa providing transitional support for 6–12 months.

1.2. Uptakes from GOOS Steering Committee Meeting (presentation)

- To propose application areas to support data access and delivery to GOOS, as well as purport increases in data flow and national-level engagement of GOOS;
- Virtual meeting between GRAs and other GOOS components for a strengthened engagement and data sharing;
- Long-term mechanism to optimise and facilitate NFP and GRA engagement;
- To use OceanExpert for GRA meetings;
- Regional Experts in the GOOS Steering Committee (Annex 3) to better interact with GRAs. SC regional experts and other GRA council members are encouraged to be invited in GRA meetings/activities and facilitate the connection between GRAs and NFPs;
- GOOS Stakeholder meeting to be held in 2027.

2. Report outs from the GRAs

2.1. IOCARIBE - Doug Wilson (presentation)

- Progress and achievements with reinvigoration of activities. IOCARIBE-GOOS held a session at the IOCARIBE XVII April 2025 meeting and received recommendations and expressions of support at the meeting. IOCARIBE has expanded coordination with other GOOS networks and UN Ocean decade programmes.
- Coordination at the OGC-16 - discussed potential collaboration and encouraged broad engagement in the region and better support the observations of these networks that exist in the 28 national jurisdictions in the Caribbean.
- Opportunities:
  - Global collaboration Decade programmes, activities and other IOC Programs

        - IOCARIBE regional program collaborations
        - Developing MOU for regional OCG observations across National Jurisdictions
    - Challenges:
        - Funding availability
        - Leadership Turnover
        - Large number of member states (need to build regional collaborations)
    - Work Plan 2025 and Onward
        - Capacity/stakeholder need survey;
        - Develop and maintain partnerships;
        - Develop the new Work Plan 2025-2027;
        - Develop initial observing and forecasting system
    - Support needed from GOOS includes technical support for development of initial Observations/product Framework system; shared governance best practices; Global GOOS-facilitated regional Workshops or trainings; cross-representation among GRAs; and facilitation collaborative guidance across GRAs for common issues such as navigating EEZs and legal requirements.

2.2. IMOS - Michelle Heupel (presentation)

- Progress and achievements include IMOS AODN was accredited as a National Ocean Data Centre; IMOS gliders approaching 400 missions; started investing in deep ARGO floats to supplement other Argo investments; establishment a Fishing Vessels of Opportunity Network (FVON) with Australian fishers; employed an indigenous partnership coordinator.
- Work plan 2025 and onward - IMOS will celebrate 20 years of operation! They are also working to establish a national coastal research infrastructure - **CoastRI**. IMOS is also developing a revised Decadal Strategy planned for release in June. Lastly, the Australian Government will go through their next cycle of 5 year funding for research and infrastructure.
- Opportunities and Challenges:
    - Working to establish CoastRI
    - Current base-funding is available until mid-2027, work is needed to secure coastal expansion and full operations until 2028 when the current funding cycle ends.
- Support needed from GOOS - guidance on GOOS messaging that we should be relaying to the government and others and to identify common global priorities that GRAs can promote. For example, increased investment in Argo off Africa and in the Southern Ocean to improve our understanding.
- Best Practices/Lessons Learned - Ocean best practices advancement and increased submissions to the repository.

2.3. NEAR-GOOS - Peter You (presentation)

- Progress and achievements include annual meetings held in April 2024 and March 2025 and the development of the NEAR-GOOS gateway website. They are also working on joint observation and research activity which includes 3

working groups (Development of the operational ocean forecasting system, Data Management, and Products) and 1 pilot project (climate monitoring). They have established a UN Ocean Decade working group to strengthen international marine science collaboration for sustainable ocean development.

- Challenges and opportunities include difficulties in collaborative activities among member states due to data sharing limitations and international issues. Need to further develop the gateway website.
- Support needed from GOOS includes any guidance that would support activities related to the UN Ocean Decade; financial support in operating a stable NEAR-GOOS Portal, and also GOOS's support in providing a platform or site to manage basic meeting documents and regulations.

2.4. PIGOOS - Bipen Prakash (presentation)

- *Progress and achievements* include securing IOC-UNESCO funding for system development; development of the FISH SOOP programme in the Pacific; a spotter buoy deployed in the Solomon Islands; on-going development of regional SOP templates and national SOP for wave buoy deployment and maintenance; promoting establishment of the GOOS NFP in the region; and actively contributing to OOPC panel and the GOOS SC.
- *Workplan for 2025* includes engaging with Coast Predict for developing regional CoastPredict pilot project; securing IMOS funding; collaborating with Australian Ocean Data Network; international exchange of wave buoy data; developing state of the art data management system for ocean observations; revamping the pacific ocean portal; capacity development; supporting and enhancing ocean observation networks in the regions; supporting Cook Islands national ocean monitoring program; developing regional SOP templates and supporting national SOPs; actively contributing to OOPC and GOOS SC, and updating PIGOOS website.
- *Challenges* include lack of national investment in a sustained ocean observing system - no national ocean observing system; limited coordination across ocean disciplines and sectors; high cost of procurement and communication; limited capacity; lack of GOOS NFPs in the region; poor ocean data curation.
- *Support needed from GOOS* includes funding support to improve ocean observations, technical guidance for ocean observations best practices, and collaboration and partnership with neighboring GRAs.

2.5. CIOOS - Anne-Sphoie Ste-Marie/Brad deYoung (presentation)

- *Progress and achievements* include navigating uncertainty with regards to funding, development of a coordinating office; regional associations secured funding through March 2027.
- *Workplan 2025* - developing a new strategic plan for 2026-2031, setting up a coordinating office focused on setting up new national resources to increase efficiency and effectiveness. Also working to expand interregional collaboration opportunities, communities of practice, sustainability, and extension into the Arctic and Great Lakes.

- *Challenges* include changing political landscape with a Canadian Federal election approaching and a changing landscape in US-based partner organisations. *Opportunities* include a new CIOOS coordination office as opportunities to launch CIOOS into a new momentum, and a need for information services to serve a wider audience and demonstrate value.
- *Support needed from GOOS* includes international standardization (standard from GOOS and international coordination to converge on standards, methodologies, and software/tools) and international interoperability (Ocean InfoHub, help coordination interoperability, etc.)
- *Best Practice/Lessons Learned* - data is important, but information services / tools help broaden reach. Delicate but necessary to maintain a balance between back-end versus improving front-end end user tools and features. Resilience capacity to face uncertainty and funding delays.

2.6. U.S. IOOS - Carl Gouldman (presentation)

- *Progress and achievements* include celebrating 25 years of IOOS in March 2025; new high frequency radars installed in Alaska, Maine, and Florida; expansion of backyard buoys and a new app launched; harmful algal bloom forecasting projects; and completing a 12-year retrospective of the LiveOcean model. On the funding side, IOOS awarded Phase 2 of the Ocean Enterprise Accelerator Program in January 2025 with 4 awards totaling $54M and awarded $101.5M to U.S. IOOS Regional associations in 2024. US legislation to reauthorize the U.S. IOOS was introduced in congress this year. Lastly, there has been good progress on the development of BOOC.
- Carl provided an overview of the **Benefits of Ocean Observing Catalog (BOOC)** project and progress. Final testing is being conducted within IOOS for the BOOC website and submission portal. It will be initially populated with use cases provided by IOOS Regional Associations. IOOS will work with the GOOS Office to develop a call for use cases and open the site to the GOOS GRAs for submission. The use case template and guidance is available now.
- *Workplan 2025 and onward* - IOOS is working to develop value chain for Ocean Observing, will continue to develop the BOOC, and make advances in Data Management & Cyberinfrastructure including data coordination and implementation of waves, water level, ecosystem change, and webcoos projects, HFRNet migration, and cloud optimization.
- Challenges & opportunities - new US government administration transition and priorities; NOAA, National Ocean Services, and IOOS Office Leadership changes.

2.7. ArORA - Arctic Regional Alliance - Craig Lee (presentation)

- Craig provided an update on the progress of the Arctic Task Team and development of an Arctic Ocean Regional Alliance which would give formal representation of the Arctic within GOOS.

- ArORAto complement existing regional alliances & organizations by facilitating pan-Arctic communication and coordination; connecting Arctic efforts and global networks; and matchmaking between data providers and users.
- A proposal (to GOOS, SAON) for a pan-Arctic ocean observing alliance, including goals, functionality, governance and relationship to existing organizations is under development. The proposal is planned for public comments in Q3 and delivery in Q4 2025.

2.8. MonGOOS - Not presented (presentation)

- *Progress and achievements in 2024-2025* - MonGOOS observational capacity Dashboard was updated (Fixed platforms, glider activities and HR Radars); MonGOOS as a Regional Node for Mediterranean & Black Seas continue with the compilation of the ATLAS Survey on the forecasting modeling system; maintain strong collaboration with EU-funded projects (AMRIT and AQUARIUS), general assembly and scientific workshop held in September 2025 in Malaga, Spain.
- *Workplan 2025 and onward* - Election of new chairs; update the MonGOOS Strategy Plan, Link MonGOOS Strategies and objectives with Mediterranean Fisheries Management Organizations; ATLAS Survey on the forecasting modeling systems in the Med Sea; increase scientific knowledge by participating regional and international workshops; finalize and update the observational dashboard.
- *Challenges* - Increase link with neighboring GOOS Regions; link MONGOOS strategies and objectives with Mediterranean Fisheries Management Organizations; Network participation to EU projects and programs for sustainable funds; Improve best practices and capacity building across the Mediterranean; Support the planning and implementation of international initiatives involving operational oceanography and promote the participation of non-EU Mediterranean countries.
- *Support needed from GOOS Structures*: More coordination between GRAs, National Focal points and other GOOS structures; Improving the linkage between GOOS Observation Coordination Group (OCG) and the GRAs; A Support to ocean observations in coastal States EEZs is needed -Cruises activities. *Support needed from other GRAs*: Strength link with neighbouring GOOS Regions: Black Sea GOOS and GOOS Africa, sharing activities information.

3. GOOS Office Update - Joanna POST (presentation)

- GOOS Steering Committee Workplan (2025–2027): The Steering Committee met in February 2025 in Paris to shape the 2025–2027 workplan. Discussions focused on aligning GOOS efforts with Strategy 2030 through six priority areas:
  - *Core Coordination and Collaboration:* The GOOS Secretariat team is strengthening links across GOOS components - Panels, GRAs, Projects - ensuring better internal alignment and support to Member States.

    - *Observation System Design:* Focus includes evolving expert panels, developing Carbon/GHG and Biodiversity Plans, and advancing Ocean Indicators (led by OOPC). Collaboration with WMO continues on GBON expansion and the Rolling Review of Requirements (RRR).
    - *Data Integration and Delivery:* GOOS is implementing the **IOC Data Architecture**, aligned with ODIS, EOVs, and FAIR principles. GOOS aims to become a key "hyper node" for interoperable data. An implementation plan and MVP demonstrators will be shared at the IOC Assembly.
    - *System Implementation:* National Focal Points and GRAs are central to implementing observing systems. GOOS is also contributing to operational forecasting (via ETOOFS) and the Early Warning for All (EW4ALL) initiative. Partnerships with the private sector and satellite community are being explored.
    - *Outreach and Endorsement:* GOOS is moving from managing projects to endorsing externally-led initiatives. A task team is defining endorsement criteria. A Communications Toolkit is under development to strengthen GOOS branding and messaging.
    - *Governance Reform:* In response to EC-57/4.1, GOOS is using a Double Diamond approach:
        - Phase 1 (2024–2025): Discover and Define GOOS
          Current work includes a mission and scope review, structural review, preparation of a Draft Proposal for GOOS Reform to be presented at the 33rd IOC Assembly, and development of the Communications Toolkit.
        - Phase 2 (2026+): Develop and Deliver GOOS
          Future work will focus on revising the governance model, establishing a user and uptake strategy, finalizing the GOOS EOV implementation plan, executing the IOC Data Architecture, launching a full communications plan, and eventually revising the GOOS 2030+ strategy.
- *Observations Within National Jurisdiction:* A GOOS-led Working Group has continued its work on challenges related to Marine Scientific Research (MSR) clearance within EEZs. Since the last IOC Assembly, discussions have centered on streamlining approval processes and clarifying roles.New proposals to be presented at the Assembly include:
    - Raising awareness of the MSR process through communications and tools
      Consulting with DOALOS and partners on updating the 2010 MSR guide
    - Encouraging Member States to promote cross-border collaboration for MSR facilitation
    - Empowering IOC regional subsidiary bodies and GRAs to serve as intermediaries between national authorities and research networks
- *WMO/IOC Joint Collaborative Board (JCB)**:*** The WMO/IOC JCB continues to provide high-level strategic direction on cross-organizational efforts. Four priority areas were advanced in 2024 and will remain active in 2025:
    - GBON Expansion to Ocean: A working group is launching to define Ocean GBON. Terms are finalized; work starts in 2025.
    - Data Management and Interoperability: A new group will align marine data architecture (ODIS) with WIS2.0 and ensure compatibility across systems.

- Coastal and Maritime Resilience: GOOS is contributing to the IOC meteotsunami report and will lead input into Pillar 2 (infrastructure) of EW4LL.
- Capacity Development: Discussions are underway to establish joint WMO/IOC training centers and shared data management programs.

4. Operational Requirements(RRR, Co-Design, GBON) - Emma HELSOP (presentation)

- Provided an overview of the ongoing efforts under the Rolling Review of Requirements (RRR) process and its implications for GRAs. Also discussed how this process links to Co-Design initiatives and the development of the GBON.
- RRR, led by WMO, is a systematic and transparent process designed to support the design and evolution of the global observing system. It focuses on gathering user-driven observational requirements for operational services and synthesizing these into Statements of Guidance (SoGs). For the first time, an ocean application area was included in the RRR process, marking a significant milestone for GOOS.
- Seven ocean application areas have been identified as part of this effort:
  - AA 3.1 Ocean Forecasting and Real-Time Monitoring
  - AA 3.2 Coastal Forecasting
  - AA 3.3 Oceanic Climate Monitoring and Services
  - AA 3.4 Tsunami Monitoring and Detection
  - AA 3.5 Marine Environmental Emergency Response
  - AA 3.6 Maritime Safety (from ports to open ocean)
  - AA 3.7 Ocean Biogeochemistry (to be initiated in 2025)
- Key Variables and Gaps: Variables like temperature, sea level, waves, currents, salinity, pCO_2 were identified as highest priority across multiple applications. A detailed gap analysis showed challenges in data availability - especially in coastal, polar, and boundary current regions.
  - Variables and requirements were added to the OSCAR database:
    - Green-highlighted variables: already present in OSCAR and recognized within WMO's current observing frameworks
    - Bolded variables: required by three or more application areas, making them high priority across multiple services
    - Yellow-highlighted variables: managed under the cryosphere application area but are also relevant to ocean services
    - Several variables not yet in OSCAR, such as biogeochemical and cryosphere-related variables, were also identified for future inclusion.
- Launch & Impact: The SoGs for ocean, atmosphere, and cryosphere are under review (April 2025) by OCG, GOOS, and others. Final approval expected by June 2025, with full launch in September 2025. This is the first consolidated multi-application requirement set for operational ocean services, and a step toward defining ocean input to GBON.
- Connection to Co-Design: While RRR targets existing services, Co-Design focuses on emerging services not yet mature. Exemplar areas under Co-Design include marine heatwaves, tropical cyclones, carbon, storm surge, and boundary currents. Emma encouraged GRAs to consider both sets of priorities when identifying potential areas for collaboration.

- *RRR and GBON:* GBON supports global numerical weather prediction (NWP). GBON is mandated and managed by WMO Members, covering national jurisdictions and high seas. SOFF (Systematic Observations Financing Facility) provides financial/technical support to help developing countries meet GBON targets. Currently, GBON includes atmosphere; hydrology is in development, and a pathway for the ocean is being actively pursued.
- Next Steps for GRAs: GRAs are invited to identify 2–3 priority application areas for collective collaboration. A follow-up working session is proposed post-June to rank priorities within each GRA, align with both RRR and Co-Design approaches, and define how collaboration would be coordinated and implemented.

5. AOB and Wrap-Up - Jing LI

- A GRA Reporting Template will be shared via Google Docs for comment. It is based on previous versions and aims to be simple but informative.
- Two upcoming GRA Council meetings were announced:
    - Virtual: October 2025 (intersessional, to continue application area discussions)
    - In-person: 23–25 March 2026, Hyderabad, India (followed by the GOOS SC meeting, 25 - 27 March 2026)
- The Council will adopt a co-chair model. Members are encouraged to express interest in serving alongside Alvaro by contacting Jing.
- All slides, including those not presented, will be available on OceanExpert, which will also be used for GRA membership and meeting management.

Annex 1:

Agenda

1. Updates from GRA Council Chair/Vice Chair (Carl/Alvaro, 10 mins)
2. Updates from GRAs (8 mins each = 6 mins talk + 2 mins Q&A)
    - IOCARIBE GOOS (Devin Burri/Doug Wilson)
    - IMOS (Michelle Heupel)
    - NEAR GOOS (Peter You)
    - PI GOOS (Bipendra Prakash)
    - CIOOS (Anne-Sphoie Ste-Marie/Brad deYoung/Shayla Fitzsimmons)
    - IOOS (Carl Gouldman)
    - ArORA Task Team (Craig M. Lee)

    Discussion (14 mins)
3. GRA Reporting (10 mins)
    - Introduction of the draft GRA Report Template (Jing Li, 5 mins)
    - Discussion (All, 5 mins)

*Short break (5 mins)

4. Updates from GOOS (Joanna Post, 10 mins)
5. Application Areas for Collaboration among GRAs (45 mins)
    - Brief introduction on WMO-RRR application areas (Emma Heslop, 10 mins)
    - Discussion (All, 35 mins) - with an online survey to get people's feedback
6. AOB and wrap-up (5 mins)
    - Key actions from the meeting
    - Time for next GRA Council meeting (Virtual: Oct, 2025;In-person: 26-28 March 2026, Nairobi, Kenya - provisional)
    - GRA Council leadership updates
    - Use OceanExpert for GRA meetings

Annex 2: List of Participants

Name	Affiliations
Carl Gouldman	GRA: IOOS, GRA Council Chair
Alvaro Scardilli	GRA: OCEATLAN, GRA Council Vice Chair
Brad deYoung	GRA: CIOOS
Anne-Sophie Ste-Marie	GRA: CIOOS
Keith Lennon	GRA: CIOOS
Ghada El Serafy	GRA: EuroGOOS
Inga Lips	GRA: EuroGOOS
Affian Kouadio	GRA: GOOS Africa
Doug Wilson	GRA: IOCARBIE GOOS
Cesar Toro	GRA: IOCARBIE GOOS
Edgard Cabrera	GRA: IOCARBIE GOOS
Devin Burri	GRA: IOCARBIE GOOS
Brett Molony	GRA: IOGOOS
Michelle Heupel	GRA: IMOS
Laura Gewain	GRA: IOOS
Vanessa Cardin	GRA: MonGOOS
Peter You	GRA: NEARGOOS
Bipen Prakash	GRA: PIGOOS
Chalermrat “Pom”	GRA: SEAGOOS
Alyce Hancock	GRA: SOOS
Craig Lee	ArORA Task Team
Joanna Post	GOOS Secretariat
Emma Heslop	GOOS Secretariat
Jing Li	GOOS Secretariat
Minseo Kang	GOOS Secretariat

Annex 3:

GOOS Steering Committee Regional Expert Representatives

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IOC Member States grouping: Link.