

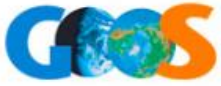


The Global Ocean Observing System



GOOS vision

A fully integrated global ocean observing system that delivers the essential information needed for our sustainable development, safety, wellbeing and prosperity



The Global Ocean Observing System



By 2030 we envision an ocean observing system with greatly expanded coverage, delivering a wider variety of essential information to a broader range of end users.



The Global Ocean Observing System



GOOS defines:

essential

- The GOOS priority is to focus on the Essential Ocean Variables and essential information that have the highest impact on society: answering the most important global questions and delivering vital services; and greatest feasibility to collect: from a financial, technical, and human capacity perspective.*

integrated

- A fully integrated system encompasses concurrent threads of integration, including integration from open ocean to coast, from local to national to global initiatives, from physical to chemical to biological realms, serving users from climate to ocean health, and from observation through data management and modelling to information for end users: the full ocean observing **value chain**.*

sustained observations

- GOOS coordinates routine, systematic and essential observations that are sustained over multiple years, beyond the time-span of single research or experimental projects.*



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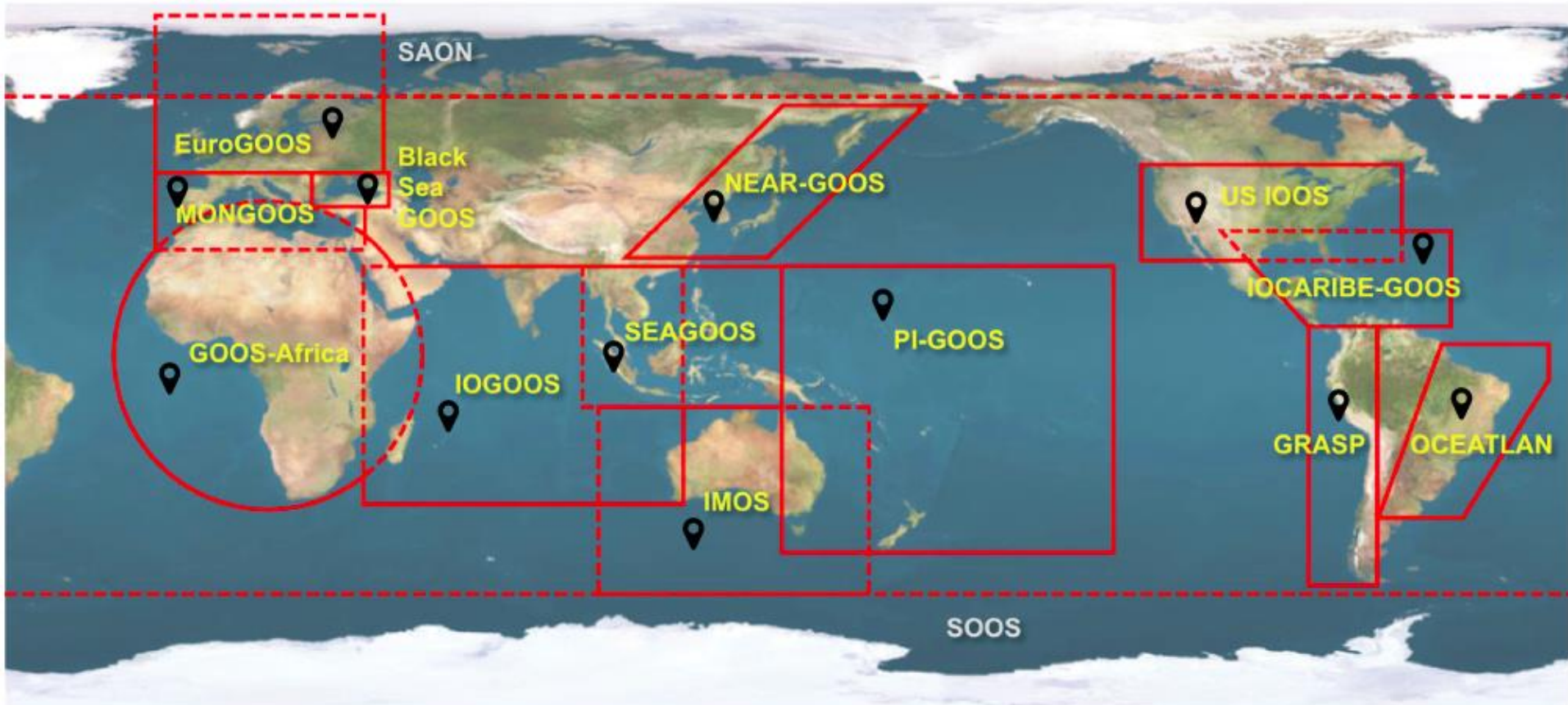
GOOS mission

To lead the ocean observing community and create the partnerships to grow an integrated, responsive and sustained global observing system

GOOS Regional Alliances

Prof. Ade Adigun Abiodun

Prof. Satheesh Shenoil
Prof Nagaraja Kuma



What is what and what is relevant to East Africa and SIDS

- IOGOOS
- IORP
- IndOOS
- GOOS Africa
- IOC Africa
- IOCINDIO

Under IOGOOS a number of scientific alliances and related science projects have formed:

- [CLIVAR/IOC-GOOS Indian Ocean Region Panel \(IORP\)](#)
- [Sustained Indian Ocean Biogeochemistry and Ecosystem Research \(SIBER\)](#) alliance is an association of international marine researchers who motivate and coordinate international research to better understand the Indian Ocean's role in global biogeochemical cycles and their interaction with marine ecosystem dynamics.
- **IndOOS Resources Forum (IRF)** is an international group of leaders from governments and institutions that contribute operational resources to IndOOS and/or facilitate resourcing for IndOOS. IRF activities include: Reviewing the operational and scientific requirements for IndOOS as presented to the IRF by IORP and SIBER; facilitating and coordinating resources to address these needs, especially ship time for the Research Moored Array for African-Asian-Australian Monsoon Analysis and Prediction ([RAMA](#)); and encouraging scientific and technological initiatives in participating countries to meet the objectives of IndOOS. The IOC PPO acts as IRF Coordinator and provides secretariat support to IRF members.

Name	Role		Institute	Country
Roxy Mathew Koll	Co-Chair	2021	IITM	India
Lisa Beal	Co-Chair	2019	University of Miami	USA
Jerry Wiggert	Member	2019	University of Southern Mississippi	USA
Caroline Ummenhofer	Member	2018	Woods Hole Oceanographic Institution (WHOI)	USA
Dongxiao Wang	Member	2019	The South China Sea Institute of Oceanology (SCSIO), Chinese Science Academy (CAS)	China
Juliet Hermes	Member	2020	South African Environmental Observation Network	South Africa
Lisan Yu	Member	2020	Woods Hole Oceanographic Institution (WHOI)	USA
Nick Hardman-Mountford	Member	2020	CSIRO	Australia
Elaine McDonagh	Member	2020	National Oceanography Centre	UK
Weiqing Han	Member	2018	University of Colorado	USA
Lin Liu	Member	2018	First Institute of Oceanography	China
Tomoki Tozuka	Member	2018	University of Tokyo	
Agus Atmadipoera	Member	2019	Bogor Agricultural University	
Satheesh Shenoi	Ex officio		Indian National Centre for Ocean Information Services (INCOIS)/Chair of IOGOOS	
Michael McPhaden	Ex officio		Chair / Tropical Moored Buoy Implementation Panel	

CLIVAR/IOC-GOOS Indian Ocean Region Panel



The CLIVAR/IOC-GOOS Indian Ocean Region Panel provides scientific and technical oversight for implementation of the sustained ocean observing system for the Indian Ocean and coordinates research on the role of the Indian Ocean on the climate system.

Terms of Reference

1. Provide scientific and technical oversight for a sustained ocean observing system for the Indian Ocean in order to provide ocean observations needed for climate variability research, and to underpin operational ocean applications and services relevant to the region, particularly with regard to ocean-state estimation and climate prediction.
2. Coordinate, and complete the implementation of the sustained ocean observing system for the Indian Ocean, to: (a) meet the common requirement of CLIVAR research foci and WCRP grand challenge, (b) satisfy the common requirements of GOOS and its modules; and (c) coordinate implementation activities in collaboration with relevant regional and global bodies, in particular IOGOOS and JCOMM.
3. Review and promote frontier multi-disciplinary research themes related to CLIVAR research foci and WCRP grand challenges. Liaise with relevant research panels of CLIVAR for coordinating scientific initiatives.

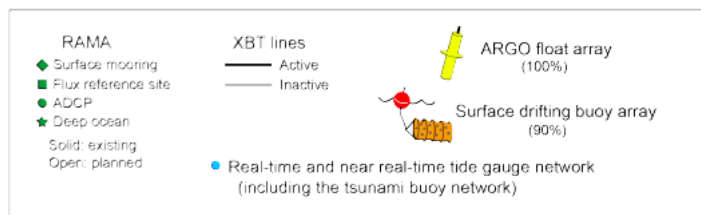
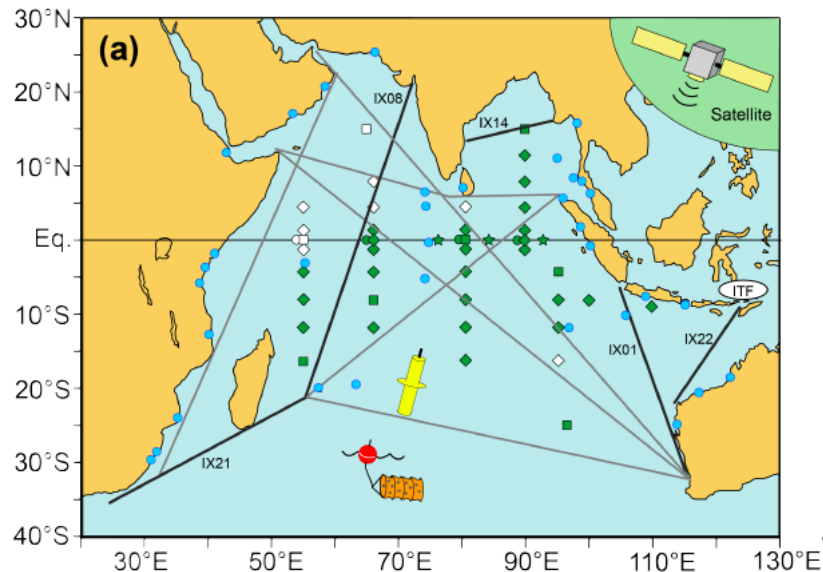
Indian Ocean Observing System (IndOOS)

CLIVAR, in collaboration with IOGOOS and the Intergovernmental Oceanographic Commission, is working to design and implement an integrated observing system for the Indian Ocean, including a basin-wide mooring array.

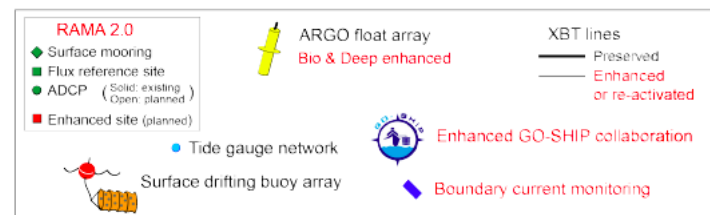
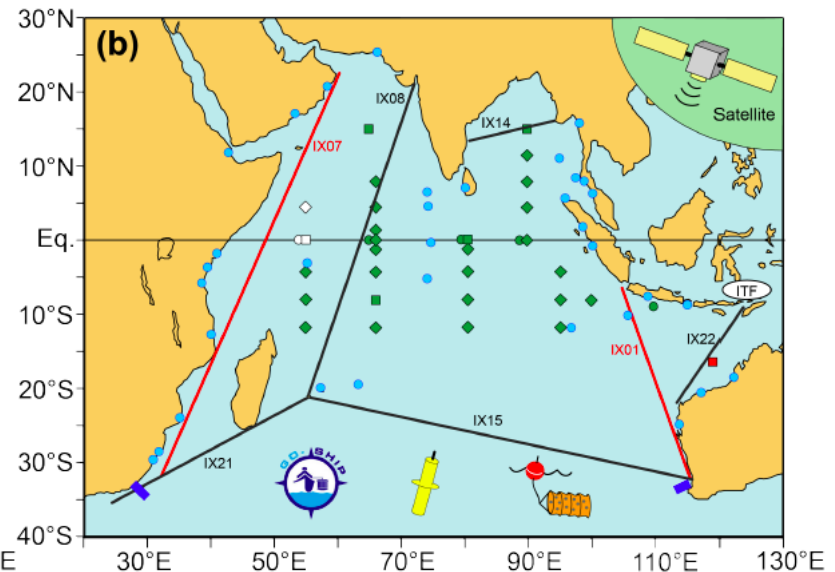
IndOOS decadal review – currently under review

<https://drive.google.com/drive/folders/1HiZ9ppHXiC2psU8Dpcafbo3cJmsAkxZc>

IndOOS: original design and current status



IndOOS: proposed evolution



IOCAfrica (Mika Oddida)

- Mohammed Said