

**REGIONAL MARINE
OBSERVATIONS AND HOW
THEY COULD BE USED FOR
MARINE AND COASTAL
PLANNING AND SAFETY
(AND MUCH MUCH MORE)**

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**IF YOU LIKE YOUR
WEATHER FORECAST,
THANK AN
OCEANOGRAPHER**

CRAIG MCLEAN, NOAA ACTING CHIEF SCIENTIST

**But first, what
do we mean
by marine
observations?**

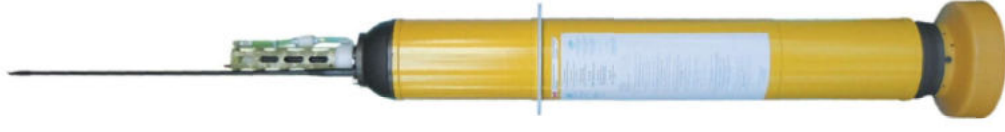


But first, what do we mean by marine observations?

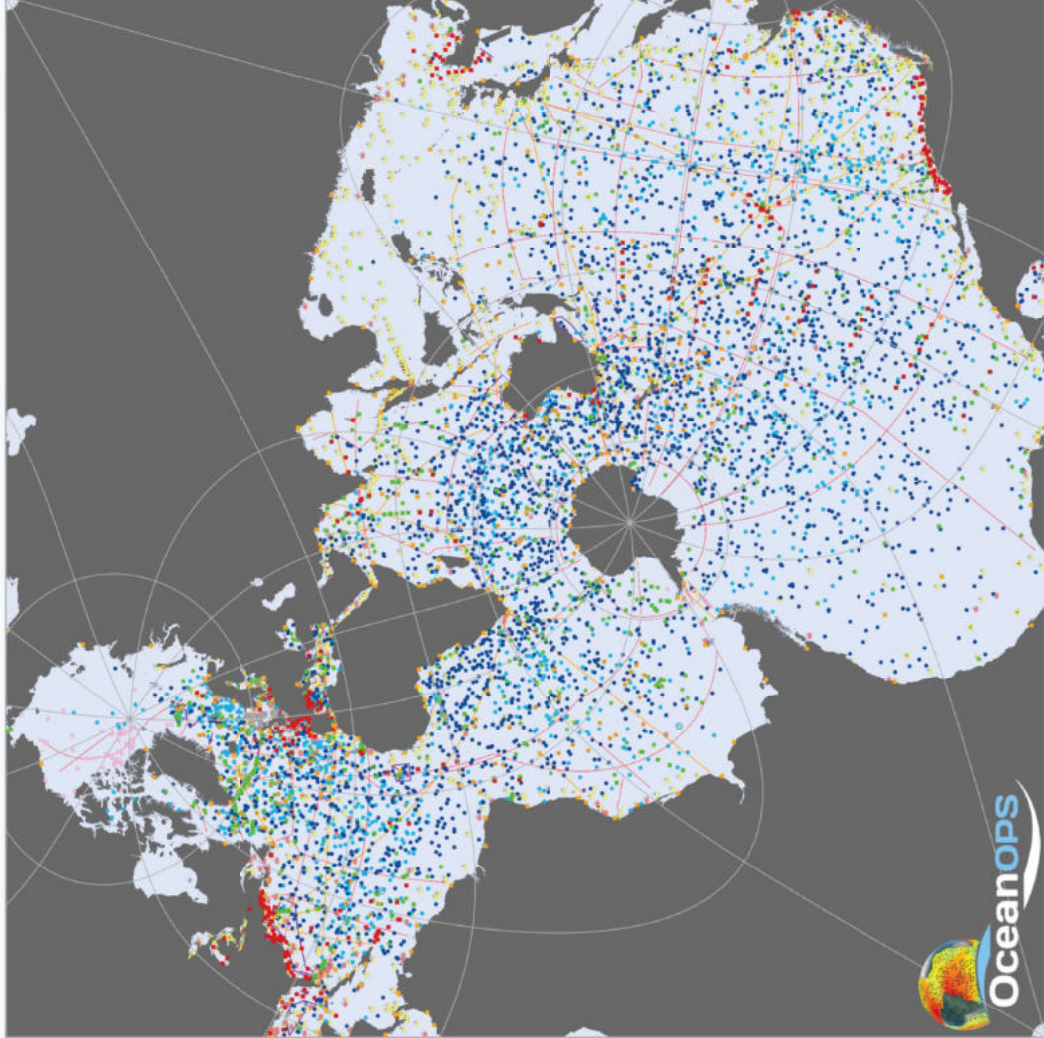
Physical and BGC observations

- 1) Coastal observations using,
 - moored buoys, boat based surveys, tide gauges, HF radar, coastal weather observations, etc
- 2) Offshore observations using,
 - Argo floats, drifters, animal-borne telemetry systems, moored buoys, gliders, etc

**But what of the
costs?**



So how do we
increase our
knowledge, and
plan for the future,
if we cannot
(always) afford the
tools?



THE GLOBAL OCEAN OBSERVING NETWORK



THE OCEAN COORDINATION GROUP (OCG)

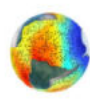
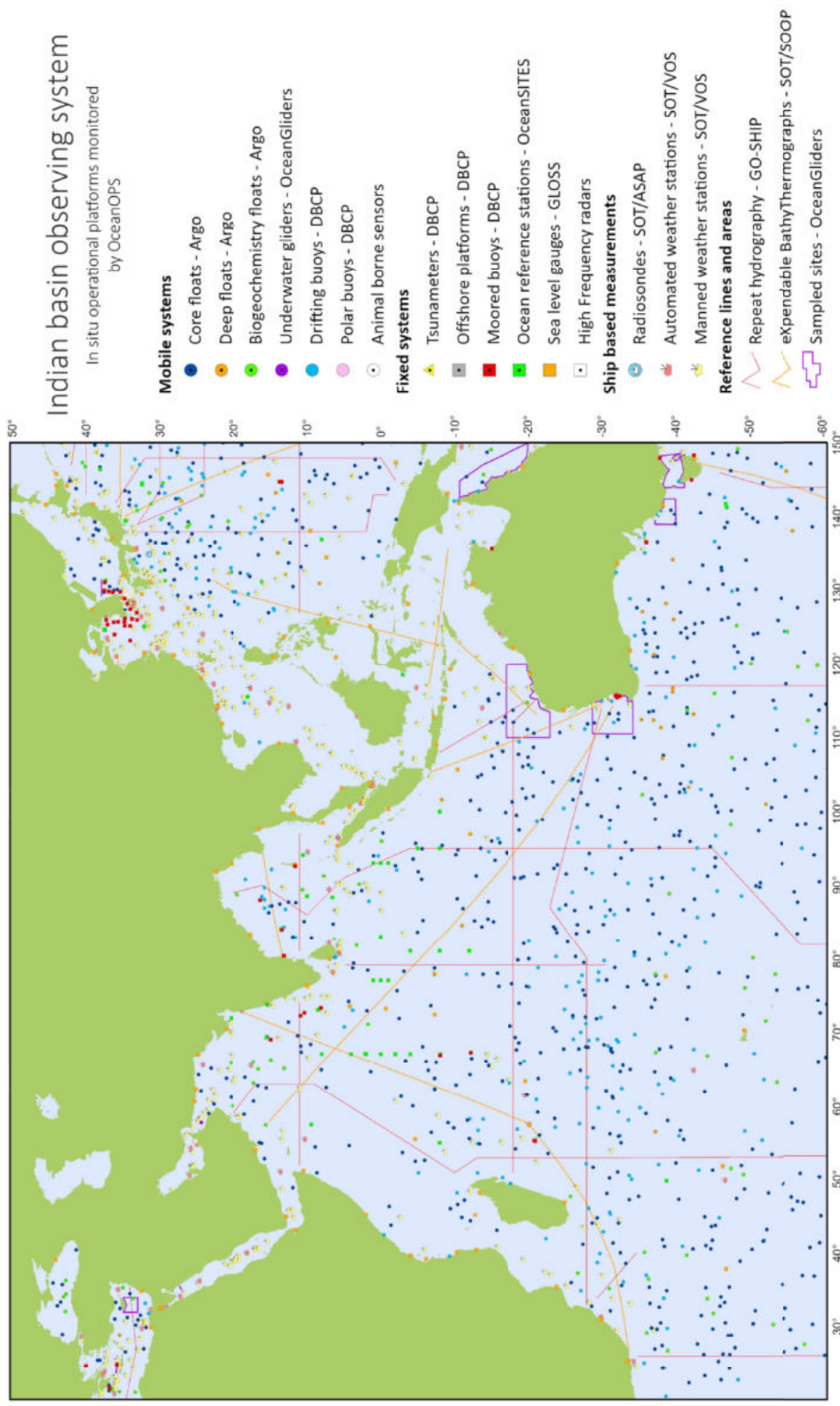
Reports to the GOOS and
oversees the Ocean Observing
Networks

THE OCEAN OBSERVING NETWORKS

Eleven ocean observing
networks collecting freely
available data

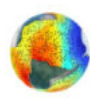
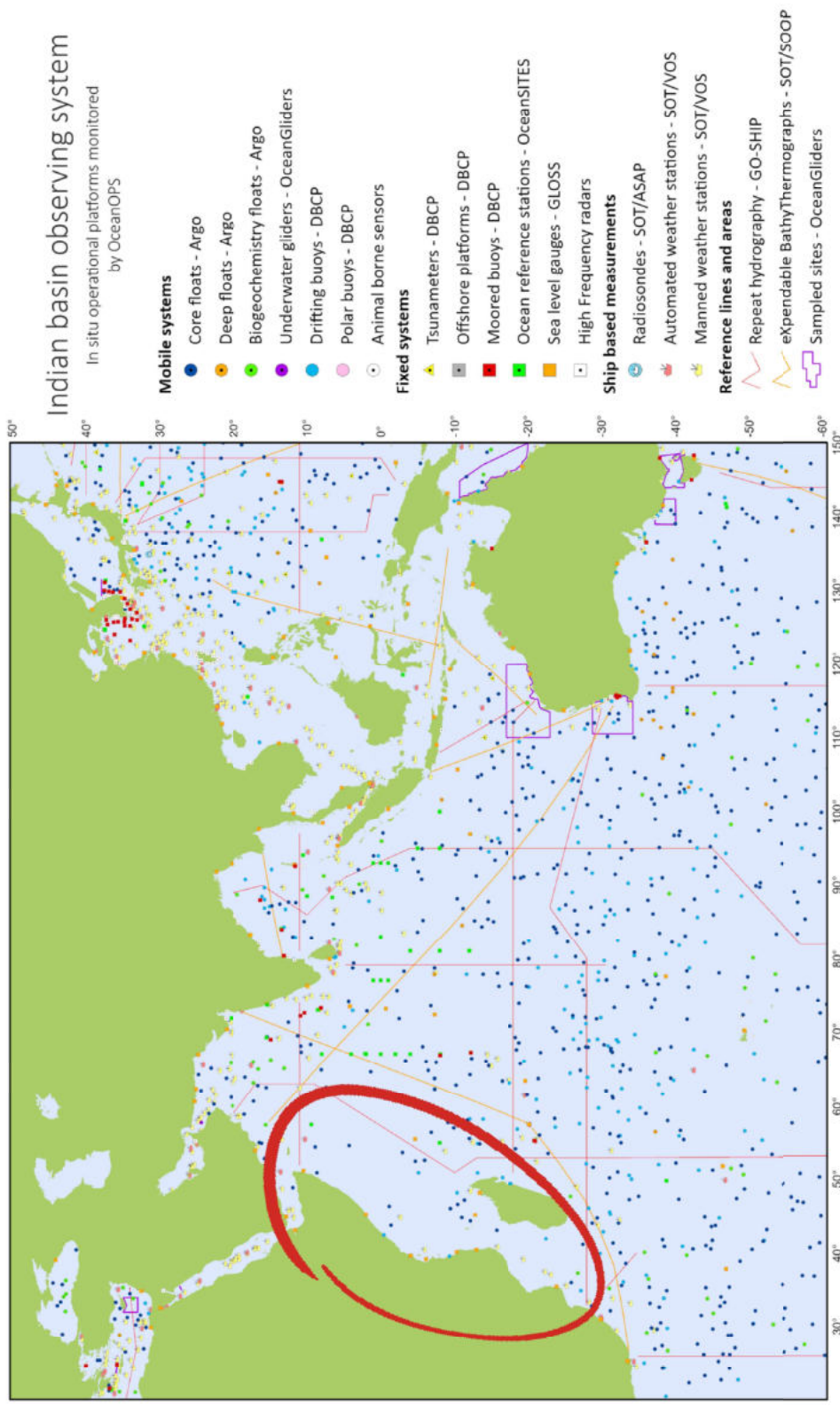
TECHNICAL SUPPORT THROUGH OCEAN-OPS

Ensuring infrastructure
deployed globally and
metadata acquired



Generated by ocean-ops.org, 2022-10-06
Projection: World Plate Carree

September 2022



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Projection: World Plate Carree

September 2022

Where can you find these resources?

Ocean-OPS

<https://www.ocean-ops.org/board>

GOOS

<https://www.goosocean.org/>

And the GOOS 2030 Strategy

https://www.goosocean.org/index.php?option=com_oe&task=viewDocumentRecord&docID=24590

And where can you find (some) of these data?

ARGO DATA

<https://fleetmonitoring.euro-argo.eu/dashboard>

DRIFTER DATA

<https://www.aoml.noaa.gov/phod/gdp/>

XBT DATA

<https://www-hrx.ucsd.edu/intro.html>

RAMA DATA

<https://www.pmel.noaa.gov/gtmba/pmel-theme/indian-ocean-rama>



DASHBOARD



Status

- Inactive 3
- Active 35

Year of deployment

- 2022 414
- 2021 658
- 2020 543
- 2019 510
- ...

Country

- United Kingdom 6
- Germany 4
- Europe 1
- United States 12
- ...

Basin

- Indian Ocean 35

Telecom

35 floats



A	WMO	Float S/N PTT	Float
3902011	AI2632- 21EU040 065637	ARVOR	
1902081	9201 9201j	APEX	
2902837	PF- 2021-01- 001 8861310	HM2000	
5905500	1322 1322	NAVIS_EBF	
5905510	1331 1331	NAVIS_EBF	
5906501	9178 n/a	APEX	
5906526	9256 n/a	APEX	

Depth : 0 m



3000 km
2000 mi
-4.5244 , 20.86853



Leaflet | World Imagery Tiles © Esri

SO HOW CAN COUNTRIES SURROUNDING THE INDIAN OCEAN GET MORE INVOLVED?

USE THE FREELY AVAILABLE DATA

Encourage your students, colleagues and research communities to explore the data sets

RAISE AWARENESS IN COMMUNITY

Around the data, but also how the technologies work - opening up the science to a greater community

DEPLOY INSTRUMENTS

Many groups need assistance getting infrastructure into less sampled regions - esp. the Indian Ocean!

OCEAN OBSERVATION NETWORK PANELS

The ocean observing networks are open and welcome input and involvement from all countries and communities



GET IN TOUCH

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