

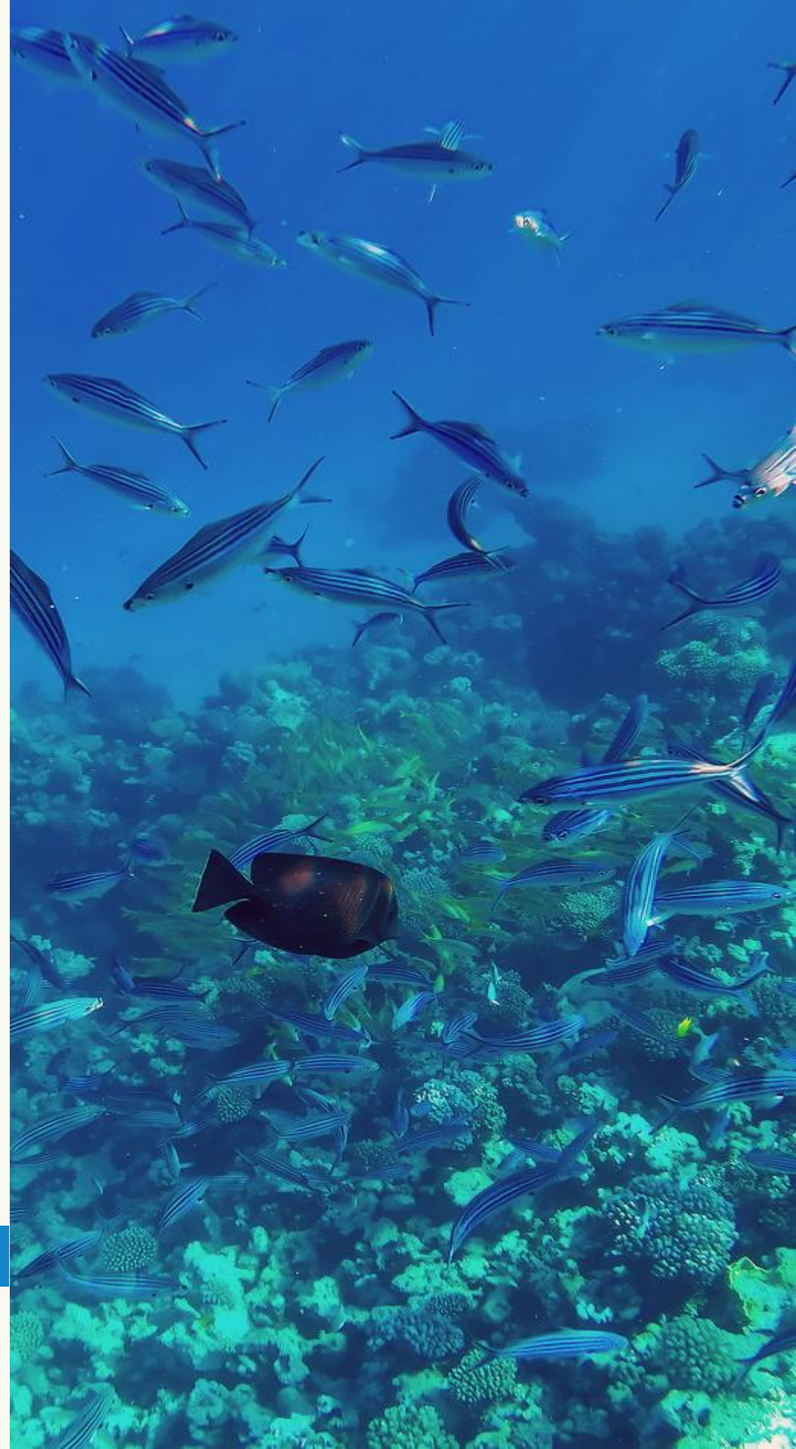
WESTPAC Ocean Remote Sensing Programme

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Summary Outline

1. **Justification** and project/WG **duration**
2. Project/WG **objectives**
3. **Major activities and outputs** (particular those accomplished during 2025-2026)
4. **Current critical situation**
5. **Strategic recommendations** for future development



1. Justification and project/WG duration

- Brief overview of the project's origin, relevance, context, and duration

The marine system provides us a rich source of food and helps stabilize our climate. However, coastal reclamation, pollution with plastic garbage and rise in water temperature due to global warming are causing serious damage to marine ecosystems.

In order to maintain or conserve a healthy marine ecosystem, it is essential to have an accurate understanding of the current situation.

Remote sensing can quantitatively and efficiently obtain information on marine ecosystems over a wide area, and is expected to make a major contribution to marine ecosystem monitoring.

2. Project/WG objectives

- Clear articulation of project objectives (specific, measurable, attainable, relevant and time-bound)

Coastal habitat mapping (Leader: Dr. Sagawa)

Seagrass beds, coral reefs, tidal flats, mangroves are important coastal habitats.

To conserve and restore habitats, accurate map is required.

Blue Carbon (Sub leader: Dr. Cao)

Blue carbon is the carbon captured by coastal and marine ecosystems.

Pollution (Sub leader: Dr. Laongmanee)

Oil spills

Harmful algal blooms

Marine garbage

3. Major Activities and Outputs

- (Particular those accomplished during 2025-2026)

Annual meeting (2025 Mar, 2026 Mar)

JAXA's 4th Research Announcement on the Earth Observations (EO-RA4) : Research and Development of Monitoring Techniques for Coastal Biological Habitats Using ALOS-2/ALOS-4 (2025 April – 2028 Mar)

JST Strategic International Collaborative Research Program e-Asia: Coastal Ecosystems as nature climate solution in Asia (2024 April – 2027 Mar)

4. Current critical situation

Absence of a leader

There is no strong leader who can drive the program from a remote sensing perspective.

Most of the current members are experts on coastal habitats such as seagrass beds or coral reefs, but they are only using remote sensing as a tool.

Members from space agencies and other organizations to widely promote remote sensing technology are needed.

Mismatch of purpose

Each researcher's primary objective is to produce results in the form of research papers.

What WESTPAC should do does not necessarily align with the researchers' objectives.

Funding and priorities

We don’t have own funding to our activities. Therefore, priority is given to carrying out projects that have sufficient funding.

5. Strategic recommendations for future development

- Key insights, lessons learned, and specific recommendations for enhancing the project's impacts and visibility

A strong leader is needed who has a keen interest in ocean remote sensing within the WESTPAC region.

Database construction, sharing of tools and knowledge, and educational activities are expected.