

# Harnessing the application of technology and open data to monitor and manage fisheries in the Western Indian Ocean region

## Abstract

Effective fisheries management relies on accurate monitoring of fishing activities to ensure compliance, assess fishing effort, and support the sustainable management of fish stocks. In the Western Indian Ocean (WIO) region, many countries face challenges in monitoring due to resource constraints and vast maritime domains. However, new tools and approaches, such as satellite-based monitoring and open-access data, are creating opportunities to improve oversight and support national and regional priorities. In line with these developments, Global Fishing Watch, a technology-focused non-profit, is partnering with institutions and stakeholders to promote transparency and accelerate the application of technology and innovation into practice.

This special session, organised by Global Fishing Watch in collaboration with the Western Indian Ocean Marine Science Association (WIOMSA), builds on our initiatives in the region. Largely hands-on, this session is for practitioners, analysts, and decision-makers interested in applying satellite and open data to monitor fishing activities. This session will also provide a platform for dialogue with country representatives and regional scientists about the relevance and potential of these tools. Outputs from the session are expected to contribute to developing effective strategies for harnessing technology and open data to improve fisheries management in the WIO region.

## Session Outcomes

By the end of this one-day hands-on training workshop, participants will be able to:

1. Describe how satellite data can be used to monitor fisheries
2. Differentiate between manual and automated methods to interpret vessel tracking data
3. Apply satellite data within common fisheries compliance and due diligence scenarios
4. Discuss regional opportunities for applying these data types and approaches

| Time          | Agenda item                                                                       |
|---------------|-----------------------------------------------------------------------------------|
| 09:00 - 09:30 | Opening and context setting                                                       |
| 09:30 - 10:30 | Session 1 How satellite data can be used to monitor fisheries                     |
| 10:30 - 11:00 | Coffee break + Group Photo                                                        |
| 11:00 - 13:00 | Session 2 Manual and automated methods to interpret vessel positional information |
| 13:00 - 14:00 | LUNCH                                                                             |
| 14:00 - 15:15 | Session 3 What benefits does AIS data offer your fisheries monitoring toolkit?    |
| 15:15 - 15:30 | Certificate ceremony and close                                                    |

## Co-hosts (Global Fishing Watch and WIOMSA)

**Mr Maxwell Azali**, Fisheries Analyst (Africa), Global Fishing Watch

**Mr Sitraka Randrianofidina**, Country Officer (Madagascar), Global Fishing Watch

**Dr Paul Tuda**, Fisheries Analyst (Applied Research), Global Fishing Watch

**Mr Kelvin Kaari**, User Researcher, Global Fishing Watch

**Dr Aimée Komugabe-Dixon**, Senior Manager (Capacity Development & Knowledge Exchange), Global Fishing Watch

### WIOMSA Representatives

**Speaker: Ms Tsoa Rakotoarimalala**, Fisheries Monitoring Center (CSP), Ministry of Fisheries and Blue Economy, Madagascar