

IUU Fishing is a Global Challenge



11–26%

of global marine catches
linked to IUU fishing



\$10–23B

annual economic
losses

Monitoring Madagascar Waters · Proof of Concept

Near Real-Time Ocean Protection Intelligence

OceanSentinel empowers coastal nations to detect, track, and respond to illegal fishing — powered by AI, satellite intelligence, and real-time vessel monitoring.

[Launch Dashboard](#)[Explore Features](#)**36**

VESSELS TRACKED

10

ACTIVE ALERTS

6

ZONES MONITORED

1.14M km²

EEZ COVERAGE

PLATFORM FEATURES

Everything You Need to Protect Your Waters

OceanSentinel combines satellite intelligence, real-time vessel tracking, and AI-powered analysis into one unified, deployable platform.



Live Vessel Tracking

Monitor all vessels in your EEZ in real time via AIS, VMS, and satellite feeds. Color-coded risk indicators give you situational awareness at a glance.



AI Anomaly Detection

Rule-based and ML-driven algorithms automatically flag dark vessels, unauthorized entries, suspicious loitering, and AIS signal gaps.



SentinelAI Chatbot

Ask questions in plain language. SentinelAI analyzes live dashboard data and answers instantly — no data science degree required.



Protected Zone Monitoring

Define and enforce marine protected areas and exclusive fishing zones. Authorities receive instant alerts the moment boundaries are crossed.



Multi-Country Scalability

Each nation gets its own configuration — EEZ boundaries, data sources, alert thresholds — ready to deploy in days, not months.



Tiered Alerts & Reporting

Critical, warning, and informational alerts with exportable reports for maritime authorities, patrol teams, and international partners.



HOW IT WORKS

Three Steps to Protect Your Waters

From data ingestion to operational alerts — OceanSentinel handles the full intelligence pipeline.

01

Connect Your Data

Plug in your region's vessel data — AIS transponders, VMS feeds, or satellite imagery. OceanSentinel works with sources you already have, or runs on built-in dummy data for development.



02

AI Detection Runs Automatically

Our detection engine continuously analyzes vessel behavior — checking zone boundaries, AIS gaps, compliance whitelists, and kinematic anomalies in real time, 24/7.



03

Monitor, Alert, and Act

Authorities receive tiered alerts and can query SentinelAI for instant operational briefings. Coordinate patrol responses, export reports, and protect your EEZ with confidence.

GLOBAL REACH

Built for Any Coastal Nation

OceanSentinel is designed from the ground up to scale across countries. Madagascar leads as the first Proof of Concept — with more nations on the roadmap.



Madagascar

LIVE POC

1.14M km² EEZ · Mozambique Channel · 6 monitored zones



Mozambique

COMING SOON

High IUU pressure in Channel and northern coastal waters



Senegal

COMING SOON

Major West African fishing nation with rich Atlantic EEZ



Indonesia

COMING SOON

World's largest archipelagic state — 5.8M km² EEZ



67

Vessels Tracked



6

Critical Alerts



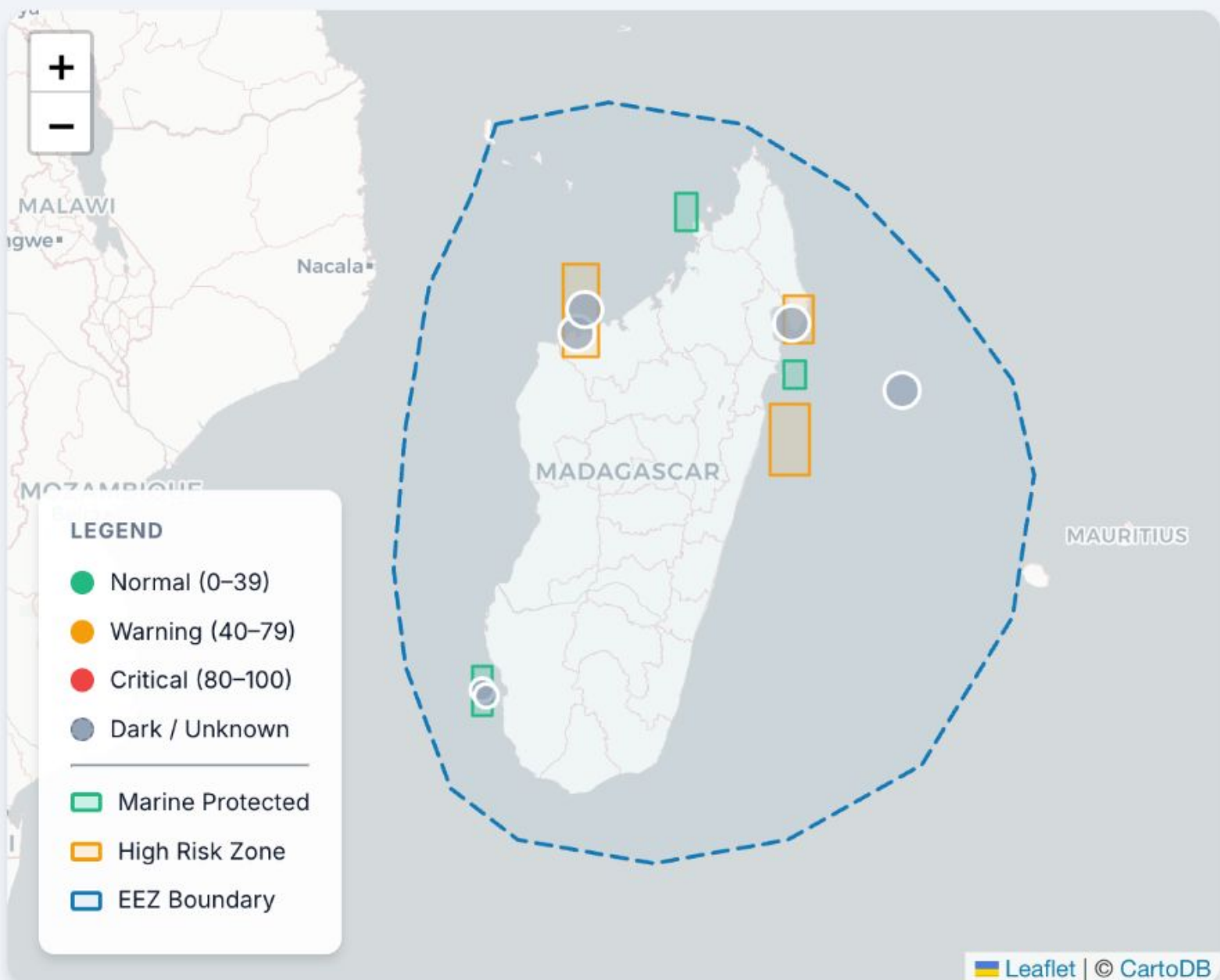
5

In Protected Zones



6

Dark Vessels



Active Alerts

10

DARK ACTIVITY

16:22:24

Tml

AIS transmission gap of 6101.3 hours detected. Potential dark activity.

View Tactical Dossier

UNKNOWN VESSEL

16:22:24

Ocean Guardian

UNAUTHORIZED FISHING VESSEL. MMSI 647101202 is not on the national whitelist. Immediate CSP intercept recommended.

View Tactical Dossier

DARK ACTIVITY

16:22:24

Ocean Guardian

AIS transmission gap of 1517.0 hours detected. Potential dark activity.

View Tactical Dossier



SentinelAI

Maritime intelligence assistant



SentinelAI

Hello! I'm your maritime intelligence assistant. I have access to the live dashboard data — ask me about vessel activity, alerts, suspicious behavior, or anything about Madagascar's waters.

Which vessel has the highest risk score and why?

The vessels with the highest risk score are "Ocean Guardian", "Unknown Target (Dark)", and "Red Dragon", each with a risk score of 100.

These vessels are flagged as critical due to a combination of alert types, including unknown vessel status and dark activity. "Ocean Guardian" and "Red Dragon" are identified as unauthorized fishing vessels not on the national whitelist, while "Unknown Target (Dark)" is a dark vessel tracked via Synthetic Aperture

Violations Dark vessels Highest risk Compliance check

Vessel Registry (67)

Ask about vessel activity...



Market Gap

From Detection to Action

Current solutions answer:

"Where are the vessels?"

Ocean Sentinel answers:

"Which vessel should we inspect next, and why?"

Financial statement

COST

High-resolution satellite imagery, Paid service - Planet Lab,
Software development and maintenance cost

REVENUE

Annual subscription - Demo to Premium mode

Development Roadmap

Phase 1 – MVP Development (0–6 Months)

- Integrate Paid data from Sentinel-1, AIS, and regulatory data
- Develop vessel detection capability
- Deploy AI-based risk scoring
- Generate priority interception lists
- Build operational dashboard

Estimated Cost

€250,000

Development Roadmap

Next Phase (Months 7–12)

- Pilot deployment with fisheries authorities
- Validate risk-scoring models
- Test operational workflows
- Enhance recommendation engine