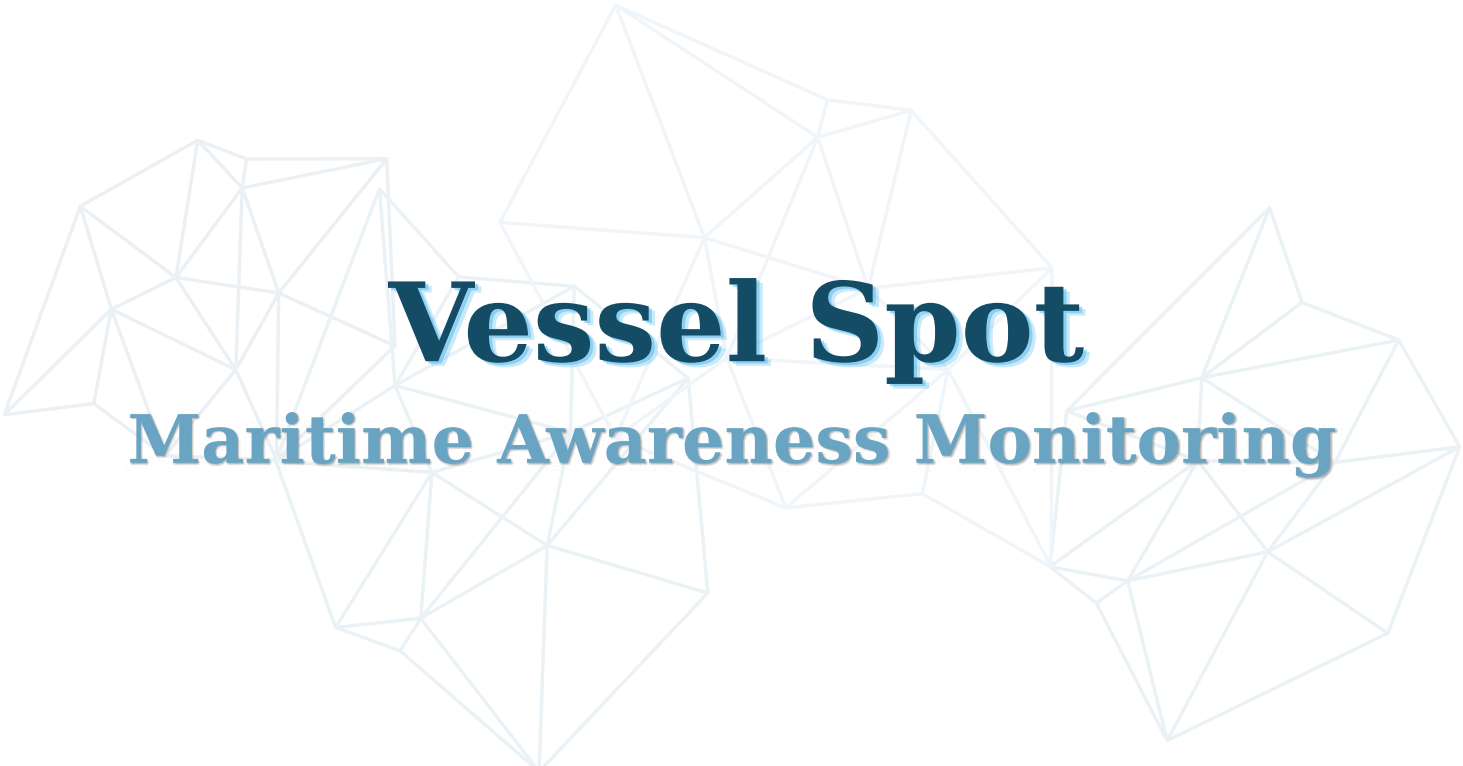




Vessel Spot

Maritime Awareness Monitoring





DARK VESSEL DETECTION AND IDENTIFICATION

Satellite imagery with improving spatial and temporal resolution enables effective monitoring of open-sea and coastal areas.

Vessel Spot combines **optical and SAR Earth Observation imagery** with **AIS data** to detect vessels and highlight suspicious or unmatched activity.

Machine-learning models trained on medium and high resolution imagery support an automated pipeline from data retrieval and alignment through **vessel detection, AIS correlation, and user notification.**

Detection confidence and review states

	GREEN	High-confidence detection with complete AIS matching.
	ORANGE	Moderate confidence: verify the detection against secondary data.
	RED	Low-confidence or AIS-unmatched candidate; manual review is required and false positives remain possible.

BEYOND AIS: SEE THE UNSEEN

Vessel Spot turns satellite observations into georeferenced maritime detections, then compares detections with available AIS data to highlight matches and review candidates.

An EO detection without a corresponding AIS track is reported as a candidate for analyst review, not as a confirmed violation.

INGEST

SAR / Optical imagery

DETECT

Locate vessel targets

CORRELATE

Compare with AIS tracks

DELIVER

Reports, maps and outputs

ONE PLATFORM : FOUR OPERATIONAL MODULES

Modular processing supports focused deployments or a complete maritime-awareness workflow.

Vessel detection

Dark vessel detection



Port congestion

Dark vessel frequency



SENSOR-AGNOSTIC BY DESIGN

Mission-specific preprocessing normalizes heterogeneous imagery before a common detection and correlation workflow.

SAR

Day or night acquisition

Sentinel-1, ICEYE,
COSMO-SkyMed,
TerraSAR-X and
TanDEM-X.

OPTICAL

High-detail visual context

Sentinel-2, Landsat,
SPOT, Pleiades,
PlanetScope and
Satellogic.

IMAGERY

Mission-
specific
normalization

INFERENCE

Vessel
localization

CORRELATION

EO + AIS
association

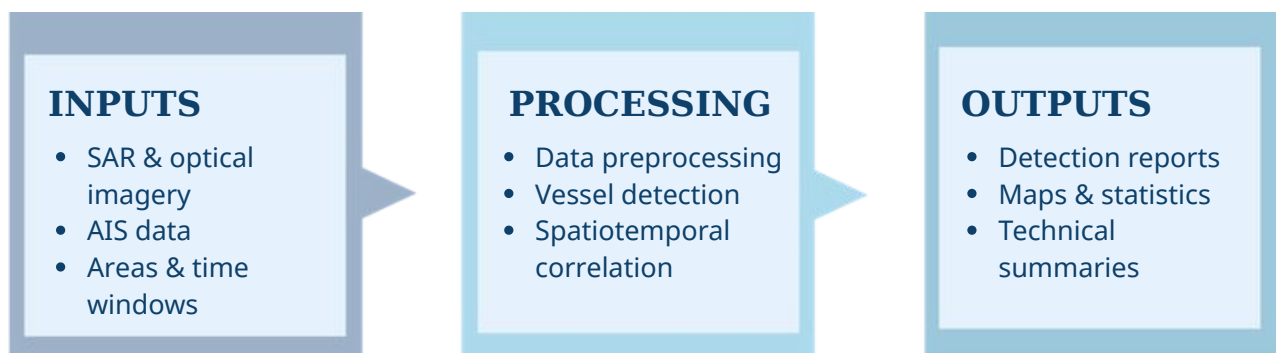
REPORT

Maps and
technical
reports

Capability	EO Based Solutions	AIS Providers	Vessel Spot
Scales across EO imagery	Yes	No	Yes
Robust ML image processing	Yes	No	Yes
Vessel detection and correlation	Part	Part	Yes
AIS correlation	No	Part	Yes
Archive and near-real-time operations	Part	Yes	Yes
Major AIS provider compatibility	No	Yes	Yes
Sensor-agnostic EO imagery	Yes	No	Yes
Customizable interface	Part	Yes	Yes
Interoperable data export	Yes	No	Yes
Multi-detection correlation	No	No	Yes
Terrain masking / cloud filtering	Yes	No	Yes
Flexible deployment	Part	Part	Yes
Operational maturity	Part	Yes	Yes
Tested with multiple APIs	Part	Part	Yes

FROM PIXELS TO DECISIONS

Deploy the full workflow or integrate selected outputs into existing maritime systems.



[Request a demo](#) | [Detection output](#) | [Integration options](#) | [Sensor fit](#)

[Talk to our team](#)