



geo-Vessel

Vessel Spot Monitoring



Maritime domains are becoming increasingly complex, requiring advanced, reliable, and scalable monitoring solutions.

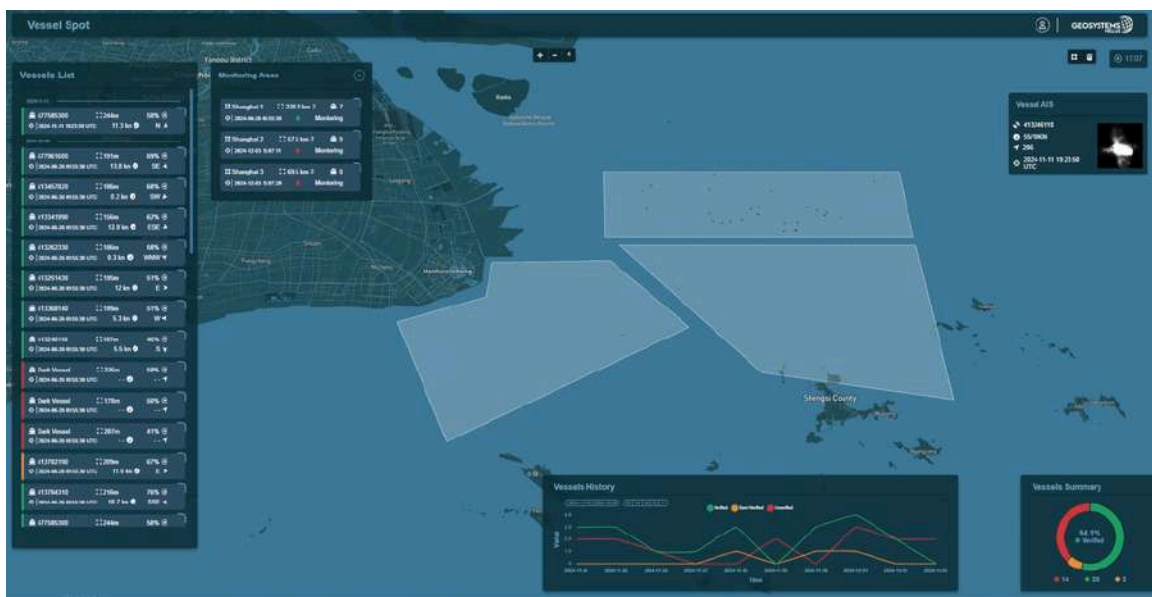
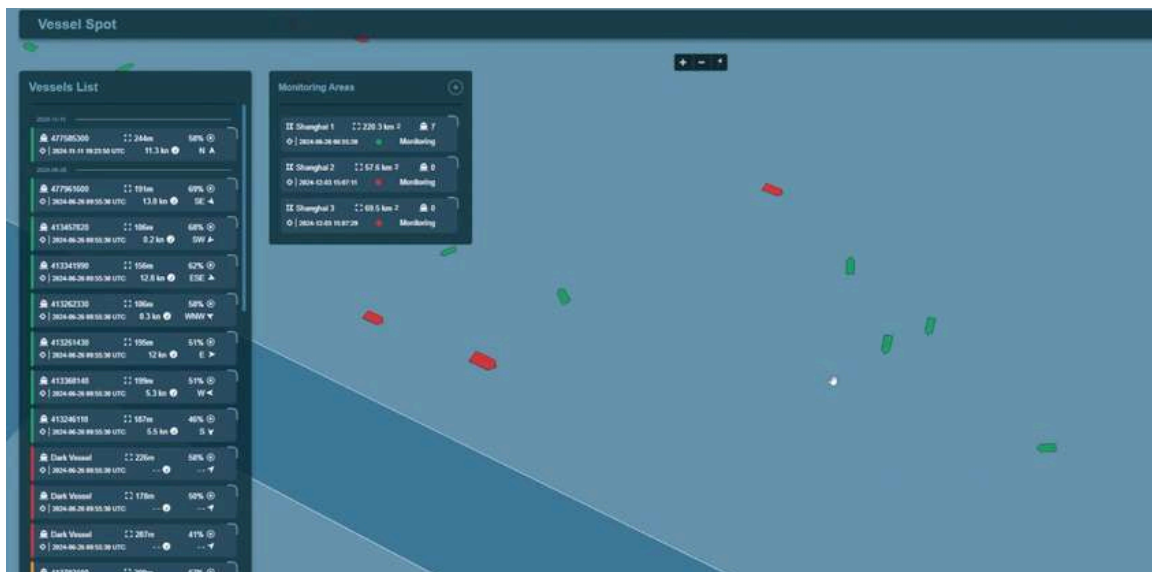
Integrated Vessel Traffic Monitoring & AIS Intelligence

GeoSystems Hellas S.A. delivers a next-generation vessel traffic monitoring system combined with AIS intelligence, designed to enhance maritime awareness, security, and operational decision-making across open seas and coastal environments.

By fusing Earth Observation (EO) satellite imagery with Automatic Identification System (AIS) data, our solution provides a comprehensive and interoperable framework for detecting, identifying, and tracking vessels, even in challenging operational scenarios where AIS data is missing, degraded, or intentionally disabled.



Platform dockerized environment



	EO image analysis workflows	AIS-only maritime tracking	Vessel Spot
Scalability by exploiting vast amount of daily EO imagery	✓	-	✓
Robust image processing ML workflows	✓	-	✓
Precise vessel detection and identification	◐	◐	✓
Fusion with AIS and RF systems	-	◐	✓
Archive and near-real time operations	◐	✓	✓
Compatibility with major AIS providers	-	✓	✓
Multisensory satellite imagery (SAR, multispectral, VHR, nighttime)	✓	-	✓
Timely results through customised interface	◐	✓	✓
Detection export to geoJSON via CRS	✓	-	✓
Multi-detection correlation for illegal activity tracking	-	-	✓
Terrain masking, cloud removal, spectral combinations	✓	-	✓
Flexible deployment anywhere	◐	◐	✓
High TRL / operational maturity	◐	✓	✓
Successfully tested with multiple API repositories	◐	◐	✓
Scalability by exploiting vast amount of daily EO imagery	◐	-	✓

: yes - : no ◐ : not fully

