

◆ SENSITIVE // FOR OFFICIAL USE ONLY ◆

MARITIME INTELLIGENCE DOSSIER

Area of Interest Report — DOVER STRAIT

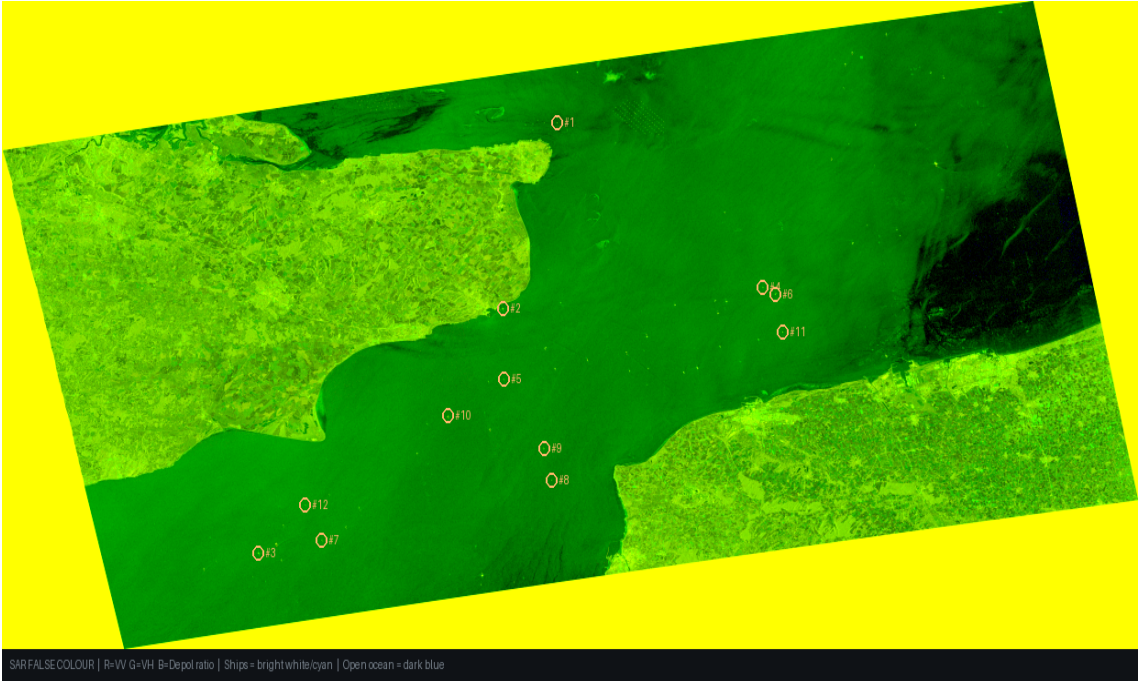


FIGURE 1 — Full-scene SAR false-colour composite. $R=VV \cdot G=VH \cdot B=Depol$ ratio. Circles mark all SAR detections.

MISSION ID	MISSION_DOVER_STRAIT_20260504T163827
AOI	DOVER STRAIT
SCENE TIME	2026-05-04 16:38 UTC
TOTAL DETECTIONS	12
DARK VESSELS	0
UNCERTAIN	12
AIS MATCHED	0

PRODUCED

2026-05-26T16:21:08Z

SECTION 01

Detection Summary

Scene acquired over **DOVER STRAIT** on **2026-05-04 at 16:38 UTC**. Sentinel-1A IW GRD processed through the Dark Ships 5-phase calibration and YOLO detection pipeline. 12 vessel(s) resolved above confidence threshold.

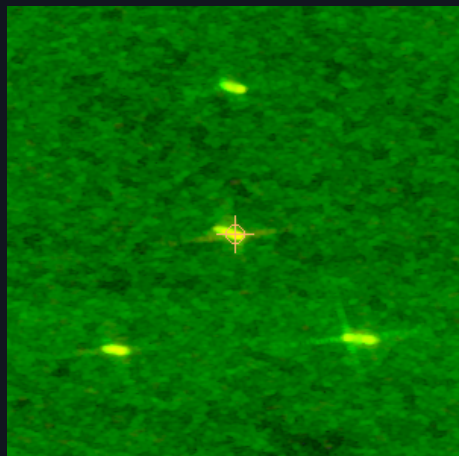
ID	LAT	LON	CONF	STATUS	MMSI
DET-2026050416-DOVE-000	51.4216	1.4614	100%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-DOVE-001	51.1234	1.3496	90%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-DOVE-002	50.7317	0.8470	81%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-DOVE-003	51.1582	1.8851	73%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-DOVE-004	51.0106	1.3514	71%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-DOVE-005	51.1472	1.9106	61%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-DOVE-006	50.7531	0.9772	43%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-DOVE-007	50.8491	1.4503	32%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-DOVE-008	50.8988	1.4341	31%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-DOVE-009	50.9513	1.2373	29%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-DOVE-010	51.0859	1.9256	28%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-DOVE-011	50.8091	0.9431	27%	UNCERTAIN (AIS DATA GAP)	—

SECTION 02

Per-Vessel Intelligence

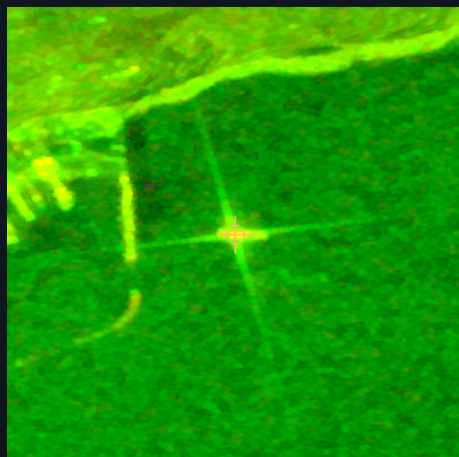
Each vessel card below shows the SAR chip, AIS status, and fused confidence score.

Vessel #1 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-DOVE-000



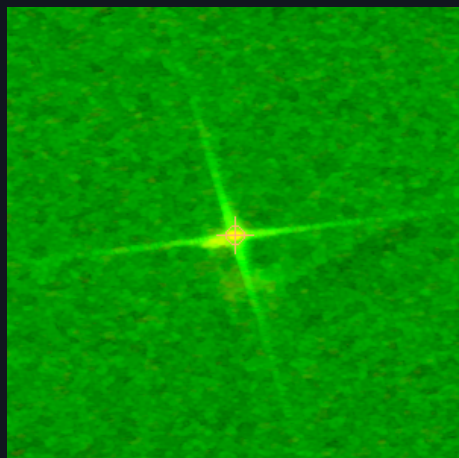
SAR false-colour chip

Lat: 51.4216°N
Lon: 1.4614°E
Conf: 100%
MMSI: —
Det ID:
DET-2026050416-DOVE-000

Vessel #2 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-DOVE-001

SAR false-colour chip

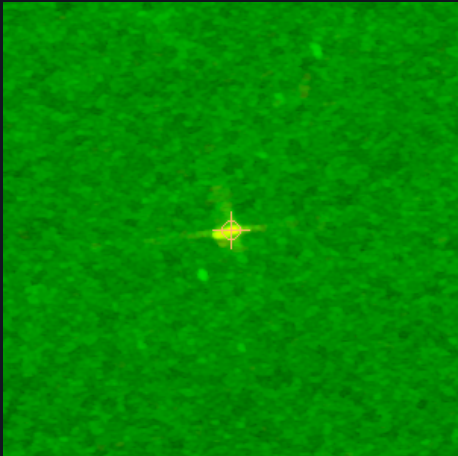
Lat: 51.1234°N
Lon: 1.3496°E
Conf: 90%
MMSI: —
Det ID:
DET-2026050416-DOVE-001

Vessel #3 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-DOVE-002

SAR false-colour chip

Lat: 50.7317°N
Lon: 0.8470°E
Conf: 81%
MMSI: —
Det ID:
DET-2026050416-DOVE-002

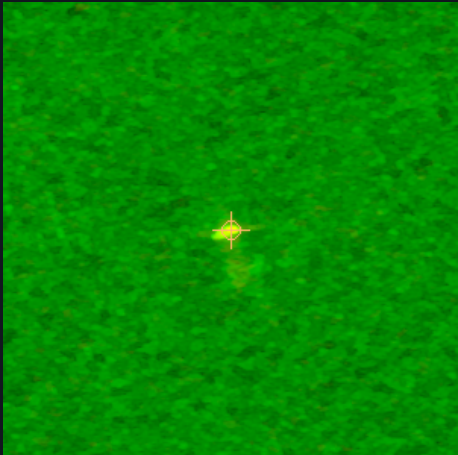
Vessel #4 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-DOVE-003



SAR false-colour chip

Lat: 51.1582°N
Lon: 1.8851°E
Conf: 73%
MMSI: —
Det ID:
DET-2026050416-DOVE-003

Vessel #5 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-DOVE-004

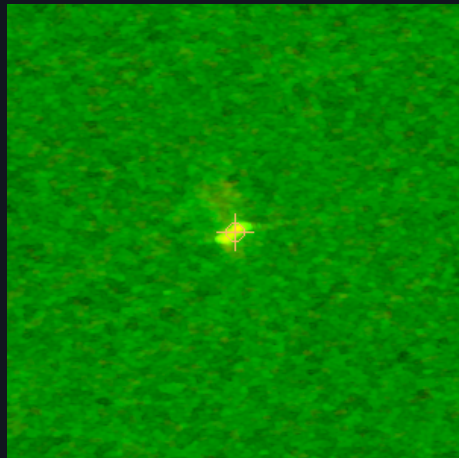


SAR false-colour chip

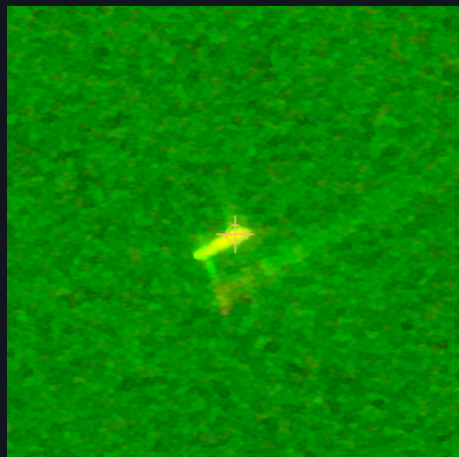
Lat: 51.0106°N
Lon: 1.3514°E
Conf: 71%
MMSI: —
Det ID:
DET-2026050416-DOVE-004

Vessel #6 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-DOVE-005

**Vessel #7 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-DOVE-006****Vessel #8 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-DOVE-007**

Vessel #9 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-DOVE-008*SAR false-colour chip*

Lat: 50.8988°N
Lon: 1.4341°E
Conf: 31%
MMSI: —
Det ID:
DET-2026050416-DOVE-008

Vessel #10 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-DOVE-009*SAR false-colour chip*

Lat: 50.9513°N
Lon: 1.2373°E
Conf: 29%
MMSI: —
Det ID:
DET-2026050416-DOVE-009

Vessel #11 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-DOVE-010



Vessel #12 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-DOVE-011



SECTION 03

Technical Methodology & Chain of Custody

ACQUISITION

Sentinel-1A IW GRD downloaded from Copernicus Data Space Ecosystem (CDSE).

CALIBRATION

ESA SNAP GPT 6-step chain: orbit → thermal noise removal → radiometric calibration → multilook → terrain correction (SRTM 1Sec) → dB conversion. Output: Sigma-0 dB GeoTIFF, 10 m GSD.

DETECTION

YOLOv8 ship detector (xView3-SAR + SARFish training set). Conf threshold 0.35. CFAR secondary validation (128×128 guard, 5 dB above local mean).

AIS FUSION

Cross-reference within 2 km / ±30 min of scene midpoint. Dark = no AIS. Uncertain = AIS gap at acquisition time.
Matched = confirmed transponder.

FALSE COLOUR

Chip extraction: VV→R, VH→G, (VV–VH)→B, 300×300 px per vessel, 10 m native resolution.

MISSION ID	MISSION_DOVER_STRAIT_20260504T163827
REPORT PRODUCED	2026-05-26T16:21:08Z
PIPELINE	Dark Ships v1.0 · Phase 3 Validated (2026-04-13)
VESSELS IN REPORT	12
CLASSIFICATION	SENSITIVE — INTELLIGENCE PRODUCT