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MARITIME INTELLIGENCE DOSSIER

Area of Interest Report — ENGLISH CHANNEL

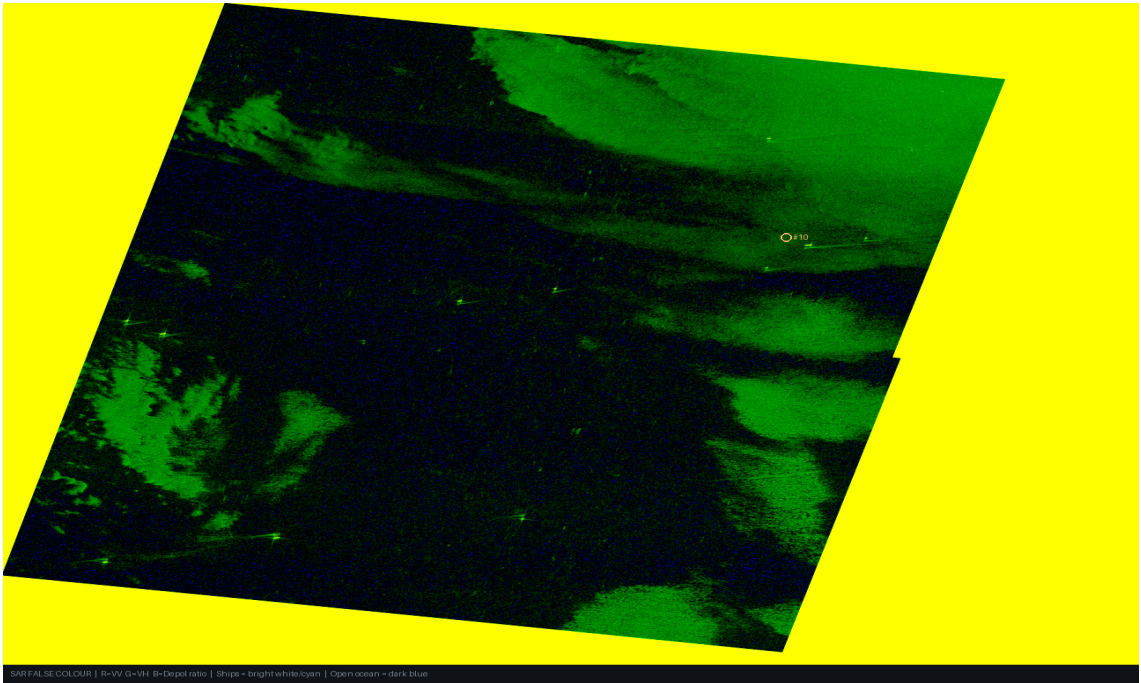


FIGURE 1 — Full-scene SAR false-colour composite. $R=VV$ · $G=VH$ · $B=Depol$ ratio. Circles mark all SAR detections.

MISSION ID	MISSION_ENGLISH_CHANNEL_20260504T160311
AOI	ENGLISH CHANNEL
SCENE TIME	2026-05-04 16:03 UTC
TOTAL DETECTIONS	14
DARK VESSELS	0
UNCERTAIN	14
AIS MATCHED	0

PRODUCED	2026-05-26T16:21:09Z
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SECTION 01

Detection Summary

Scene acquired over **ENGLISH CHANNEL** on **2026-05-04 at 16:03 UTC**. Sentinel-1A IW GRD processed through the Dark Ships 5-phase calibration and YOLO detection pipeline. 14 vessel(s) resolved above confidence threshold.

ID	LAT	LON	CONF	STATUS	MMSI
DET-2026050416-ENGL-000	49.6501	-1.6305	99%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-ENGL-001	49.6693	-1.6819	51%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-ENGL-002	50.5210	-2.4496	50%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-ENGL-003	49.9405	-2.0820	43%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-ENGL-004	49.5629	-4.4676	42%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-ENGL-005	49.5645	-3.4612	36%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-ENGL-006	50.6540	-3.2302	35%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-ENGL-007	49.4597	-2.5376	35%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-ENGL-008	50.1316	-2.0378	32%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-ENGL-009	50.3287	-1.0998	32%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-ENGL-010	49.4318	-2.3527	31%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-ENGL-011	49.5272	-1.2653	31%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-ENGL-012	49.8560	-2.6104	31%	UNCERTAIN (AIS DATA GAP)	—
DET-2026050416-ENGL-013	49.9838	-1.9167	31%	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-ENGL-000

[chip not available]	Lat: 49.6501°N
	Lon: -1.6305°E
	Conf: 99%
	MMSI: —
	Det ID:
	DET-2026050416-ENGL-000

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

[chip not available]	Lat: 49.6693°N
	Lon: -1.6819°E
	Conf: 51%
	MMSI: —
	Det ID:
	DET-2026050416-ENGL-001

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

[chip not available]	Lat: 50.5210°N
	Lon: -2.4496°E
	Conf: 50%
	MMSI: —
	Det ID:
	DET-2026050416-ENGL-002

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

[chip not available]	Lat: 49.9405°N
	Lon: -2.0820°E
	Conf: 43%
	MMSI: —
	Det ID:
	DET-2026050416-ENGL-003

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

[chip not available]	Lat: 49.5629°N
	Lon: -4.4676°E
	Conf: 42%
	MMSI: —
	Det ID:
	DET-2026050416-ENGL-004

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

[chip not available]	Lat: 49.5645°N
	Lon: -3.4612°E
	Conf: 36%
	MMSI: —
	Det ID: DET-2026050416-ENGL-005

Vessel #7 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-ENGL-006

[chip not available]	Lat: 50.6540°N
	Lon: -3.2302°E
	Conf: 35%
	MMSI: —
	Det ID: DET-2026050416-ENGL-006

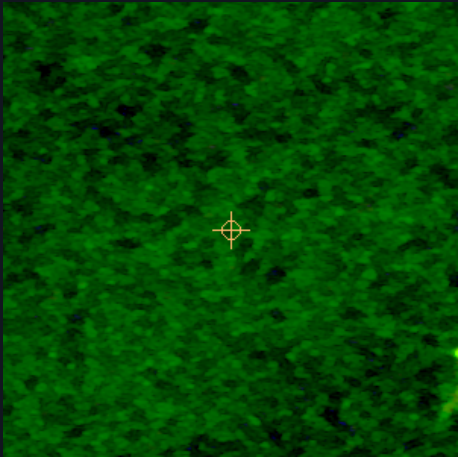
Vessel #8 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-ENGL-007

[chip not available]	Lat: 49.4597°N
	Lon: -2.5376°E
	Conf: 35%
	MMSI: —
	Det ID: DET-2026050416-ENGL-007

Vessel #9 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-ENGL-008

[chip not available]	Lat: 50.1316°N
	Lon: -2.0378°E
	Conf: 32%
	MMSI: —
	Det ID: DET-2026050416-ENGL-008

Vessel #10 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-ENGL-009



SAR false-colour chip

Lat: 50.3287°N
Lon: -1.0998°E
Conf: 32%
MMSI: —
Det ID:
DET-2026050416-ENGL-009

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

[chip not available]

Lat: 49.4318°N
Lon: -2.3527°E
Conf: 31%
MMSI: —
Det ID:
DET-2026050416-ENGL-010

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

[chip not available]

Lat: 49.5272°N
Lon: -1.2653°E
Conf: 31%
MMSI: —
Det ID:
DET-2026050416-ENGL-011

Vessel #13 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-ENGL-012

[chip not available]

Lat: 49.8560°N
Lon: -2.6104°E
Conf: 31%
MMSI: —
Det ID:
DET-2026050416-ENGL-012

Vessel #14 · UNCERTAIN (AIS DATA GAP) · DET-2026050416-ENGL-013

[chip not available]

Lat: 49.9838°N
Lon: -1.9167°E
Conf: 31%
MMSI: —
Det ID:
DET-2026050416-ENGL-013

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_ENGLISH_CHANNEL_20260504T160311
REPORT PRODUCED	2026-05-26T16:21:09Z
PIPELINE	Dark Ships v1.0 · Phase 3 Validated (2026-04-13)
VESSELS IN REPORT	14
CLASSIFICATION	SENSITIVE — INTELLIGENCE PRODUCT