

◆ SENSITIVE // FOR OFFICIAL USE ONLY ◆

MARITIME INTELLIGENCE DOSSIER

Area of Interest Report — ENGLISH CHANNEL

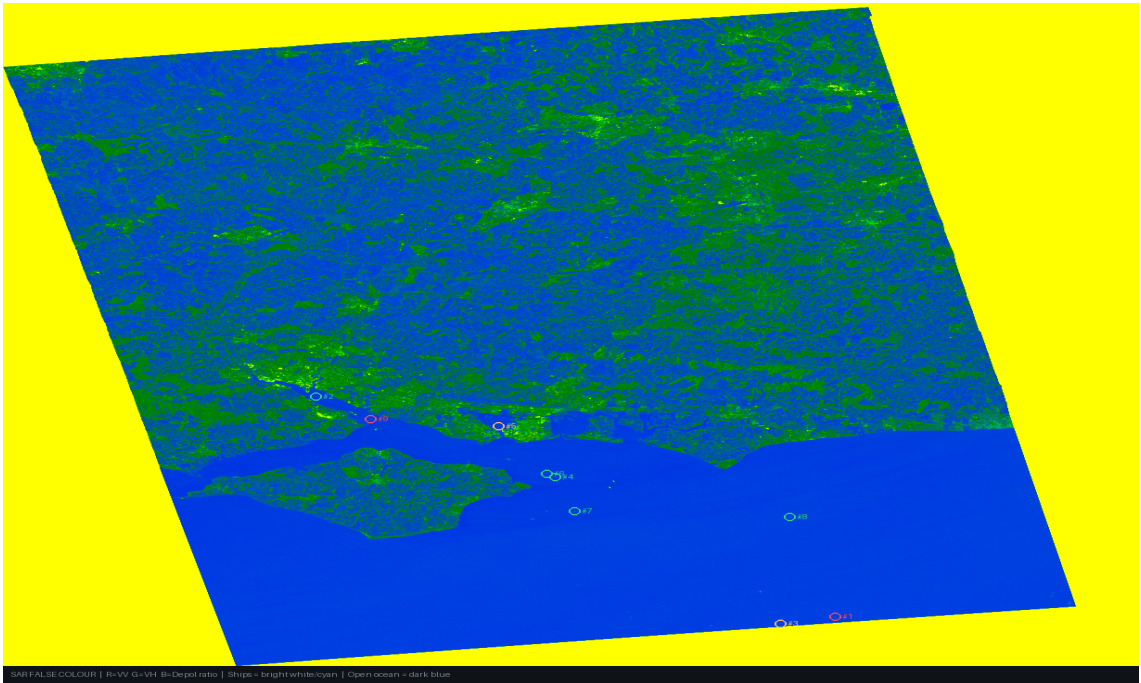


FIGURE 1 — Full-scene SAR false-colour composite. $R=VV \cdot G=VH \cdot B=Depol$ ratio. Circles mark all SAR detections.

MISSION ID	MISSION_ENGLISH_CHANNEL_20260726T224554
AOI	ENGLISH CHANNEL
SCENE TIME	2026-07-26 22:45 UTC
TOTAL DETECTIONS	9
DARK VESSELS	0
UNCERTAIN	2
AIS MATCHED	0

PRODUCED

2026-07-26T17:44:22Z

SECTION 01

Detection Summary

Scene acquired over **ENGLISH CHANNEL** on **2026-07-26 at 22:45 UTC**. Sentinel-1C IW GRD processed through the Dark Ships 5-phase calibration and YOLO detection pipeline. 9 vessel(s) resolved above confidence threshold.

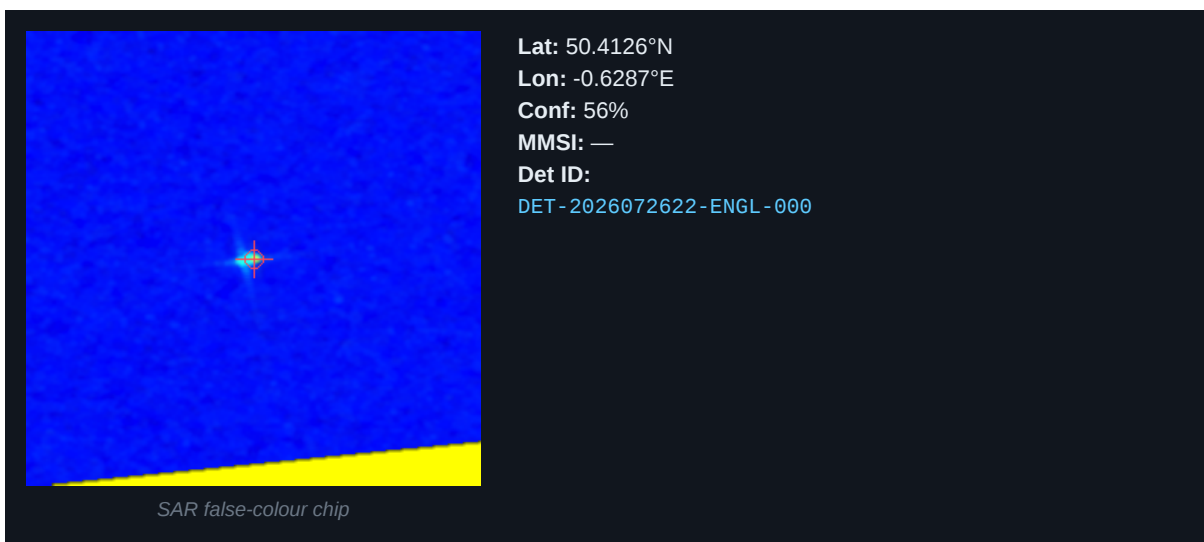
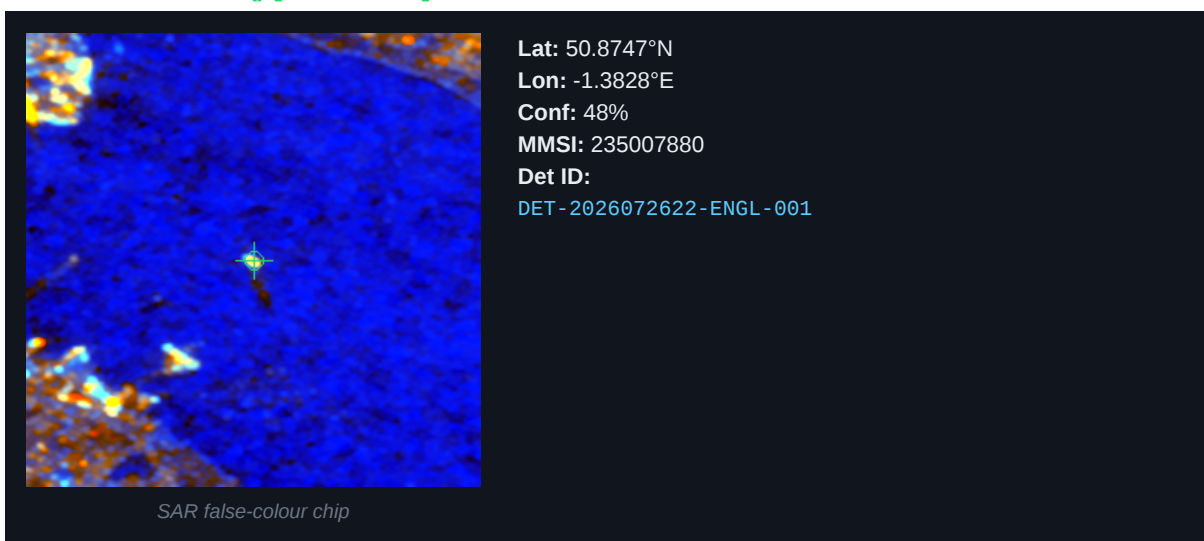
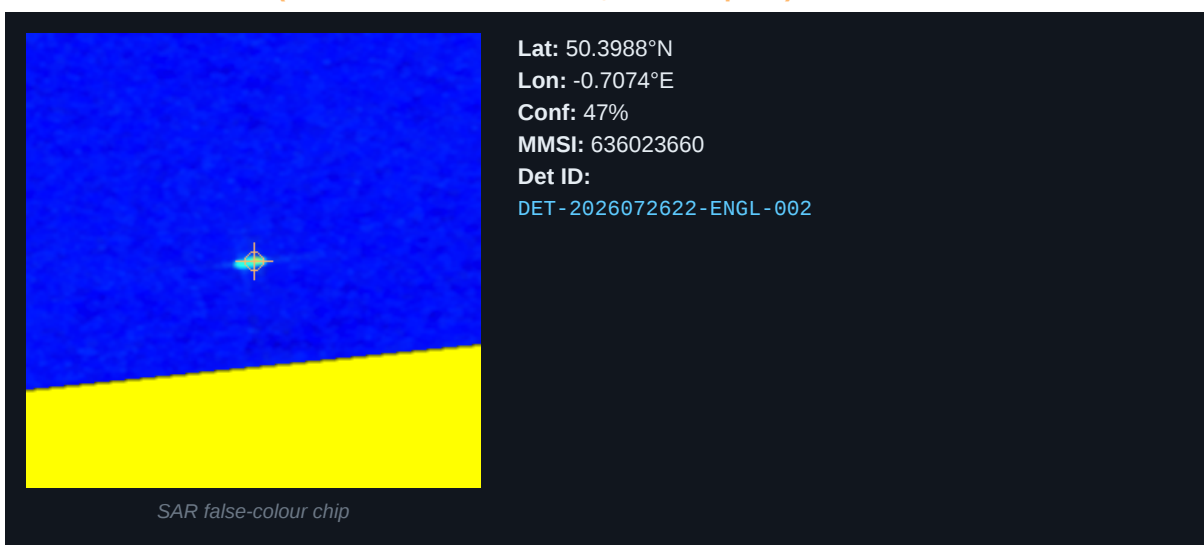
ID	LAT	LON	CONF	STATUS	MMSI
DET-2026072622-ENGL-000	50.4126	-0.6287	56%	Dark Vessel (H3 Missing)	—
DET-2026072622-ENGL-001	50.8747	-1.3828	48%	AIS Match () [last-known]	235007880
DET-2026072622-ENGL-002	50.3988	-0.7074	47%	UNCERTAIN (AIS GAP — active vessel, silent at pass)	636023660
DET-2026072622-ENGL-003	50.7059	-1.0348	46%	AIS Match () [last-known]	248102000
DET-2026072622-ENGL-004	50.8117	-1.1179	39%	UNCERTAIN (AIS GAP — active vessel, silent at pass)	235109129
DET-2026072622-ENGL-005	50.7130	-1.0480	37%	AIS Match (RIX SPIRIT) [last-known]	210549000
DET-2026072622-ENGL-006	50.6341	-1.0073	33%	AIS Match () [last-known]	256809000
DET-2026072622-ENGL-007	50.6217	-0.6938	31%	AIS Match () [last-known]	247353200
DET-2026072622-ENGL-008	50.8267	-1.3035	30%	Dark Vessel (H3 Missing)	—

SECTION 02

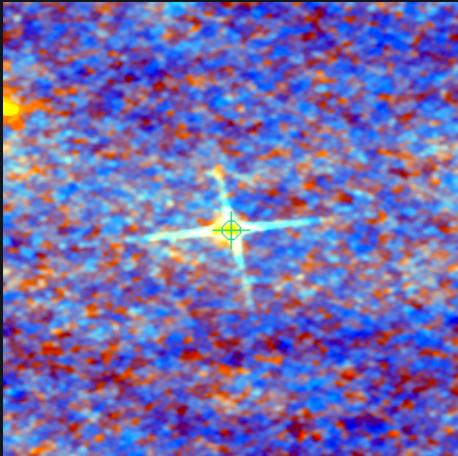
Per-Vessel Intelligence

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

Vessel #1 · Dark Vessel (H3 Missing) · DET-2026072622-ENGL-000

**Vessel #2 · AIS Match () [last-known] · DET-2026072622-ENGL-001****Vessel #3 · UNCERTAIN (AIS GAP — active vessel, silent at pass) · DET-2026072622-ENGL-002**

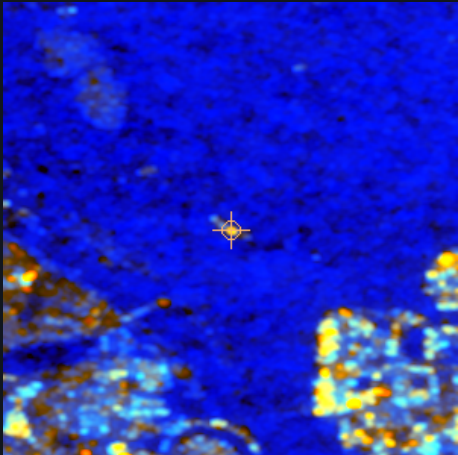
Vessel #4 · AIS Match () [last-known] · DET-2026072622-ENGL-003



SAR false-colour chip

Lat: 50.7059°N
Lon: -1.0348°E
Conf: 46%
MMSI: 248102000
Det ID:
DET-2026072622-ENGL-003

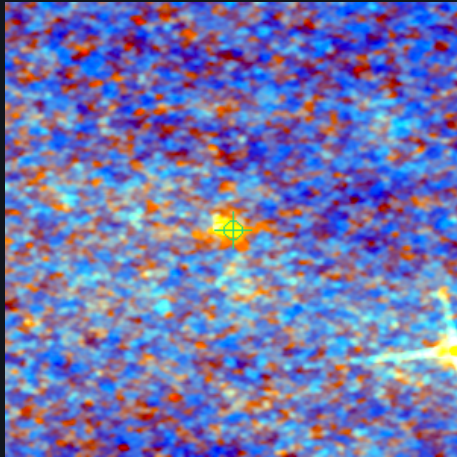
Vessel #5 · UNCERTAIN (AIS GAP — active vessel, silent at pass) · DET-2026072622-ENGL-004



SAR false-colour chip

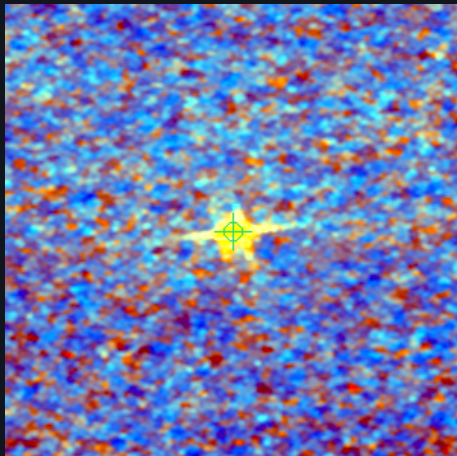
Lat: 50.8117°N
Lon: -1.1179°E
Conf: 39%
MMSI: 235109129
Det ID:
DET-2026072622-ENGL-004

Vessel #6 · AIS Match (RIX SPIRIT) [last-known] · DET-2026072622-ENGL-005



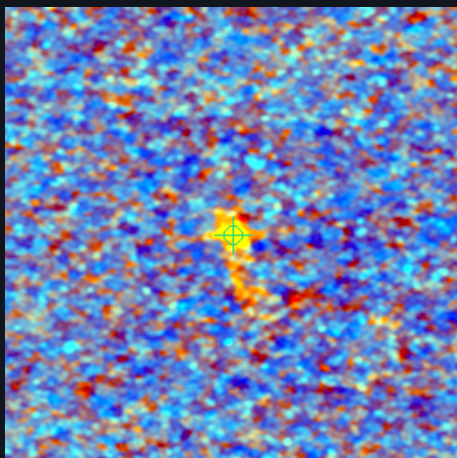
SAR false-colour chip

Lat: 50.7130°N
Lon: -1.0480°E
Conf: 37%
MMSI: 210549000
Det ID:
DET-2026072622-ENGL-005

Vessel #7 · AIS Match () [last-known] · DET-2026072622-ENGL-006

SAR false-colour chip

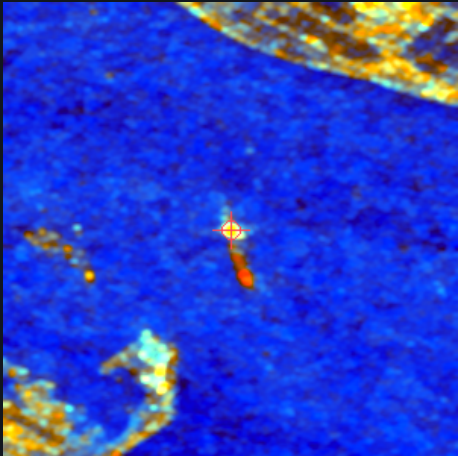
Lat: 50.6341°N
Lon: -1.0073°E
Conf: 33%
MMSI: 256809000
Det ID:
DET-2026072622-ENGL-006

Vessel #8 · AIS Match () [last-known] · DET-2026072622-ENGL-007

SAR false-colour chip

Lat: 50.6217°N
Lon: -0.6938°E
Conf: 31%
MMSI: 247353200
Det ID:
DET-2026072622-ENGL-007

Vessel #9 · Dark Vessel (H3 Missing) · DET-2026072622-ENGL-008



SAR false-colour chip

Lat: 50.8267°N
Lon: -1.3035°E
Conf: 30%
MMSI: —
Det ID:
DET-2026072622-ENGL-008

SECTION 03

Technical Methodology & Chain of Custody

ACQUISITION

Sentinel-1C 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_20260726T224554
REPORT PRODUCED	2026-07-26T17:44:23Z
PIPELINE	Dark Ships v1.0 · Phase 3 Validated (2026-04-13)
VESSELS IN REPORT	9
CLASSIFICATION	SENSITIVE — INTELLIGENCE PRODUCT