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Prepared & Delivered on
August 7th 2022

Prepared & Delivered to
BOXMICA LLC

SAR INTELLIGENCE REPORT

Monitoring Project Status
COMPLETE | Mission Day(s) 7 / 7

Satellite Tasking Date & Time
August 1 - 7 2022 | 24 Hour Revisit | 10:41 AM EST

Data Provider
ICEYE 5x5 KM Spot Ground Track Repeat

View Report & Data Online at
boxMica.com/775642 PIN: 428672

CONTRACT ID: 775642

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REPORT CONTENTS

SAR INTELLIGENCE REPORT

Large Scale Commercial SAR Analysis with Artificial Intelligence

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- 20-22. Day 6 SAR Tasking / Annotations / POI
- 23-25. Day 7 SAR Tasking / Annotations / POI

HIGHLIGHTS

- **Mission Scope Alignment:** Using archived or provided data, object and change detection scope is explicitly defined for accurate analysis.
- **Actionable Dashboard:** Rapidly digestible intelligence via our at-a-glance dashboard for mission critical decision making.
- **Artificial Intelligence:** AI enhanced imagery & automated object detection assist experts in rapidly turning over tasking data with actionable intelligence that scales with your mission.

Commercial SAR represents an amazing opportunity for cost effective, large scale intelligence monitoring. Growing commercial SAR constellations, combined with AI workflows, will enable efficient analysis of a large number of tasking missions.

boxMica's SAR Intelligence Services provides revolutionary monitoring for defense & intelligence entities. Our partnership with ICEYE to deliver Daily Coherent Ground Track Repeat Spot Scanning combined with our Artificial Intelligence and reporting workflows creates a new path toward large scale SAR intelligence.

The following Case Study is an example of a boxMica SAR Intelligence Report. Such a report is delivered within 45 minutes of each SAR Satellite tasking capture and the analysis aggregates until the completion of the 1-2 week tasking mission.

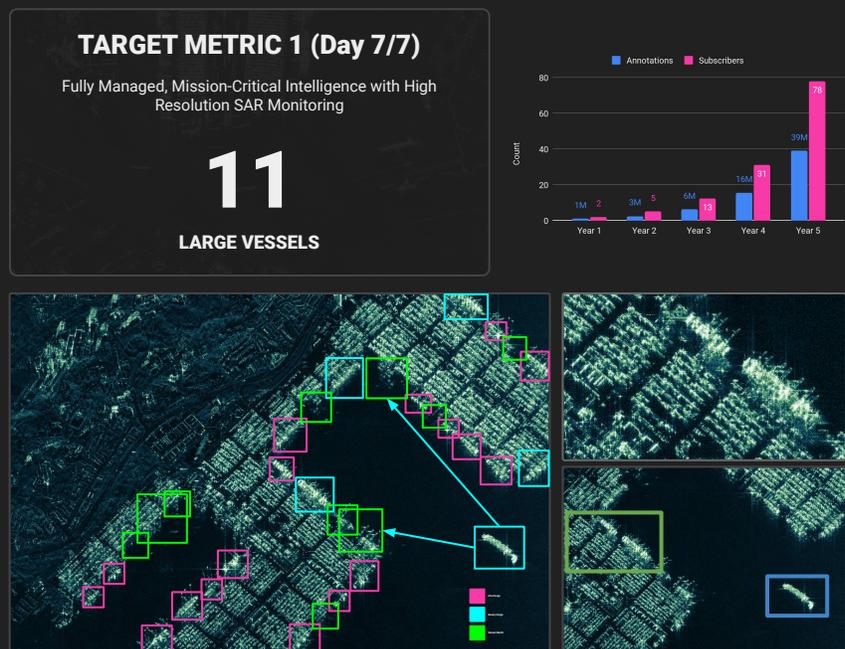


Figure 1. Example Rapid Review Intelligence Briefings materials.

SAR INTELLIGENCE REPORT

August 1, 2022 - August 7 @ 10:41 AM EST

Latitude: -18.6697 Longitude: 35.5273 | "Mozambique Site #7321"



PERIOD: 1 Week

REVISIT: 24 Hours

SOURCE: ICEYE SPOT GTR (50cm)

TIME (EST/GMT+2): 10:41 AM / 4:41 PM

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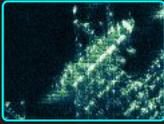
ICEYE

MISSION SCOPE

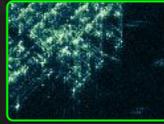
Monitor AOI for **General Change Detection & Objection Detection** of the following assets:



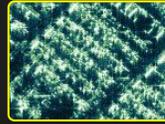
HEAVY CARGO (TRANSIT)



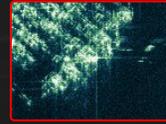
HEAVY CARGO (BERTHED)



VACANT BERTH



CONTAINER STORAGE



LITE CARGO (BERTHED)

POINTS OF CONTACT

For questions & clarifications on mission/analysis please contact the respective contractee/contractor:

CONTRACTEE

Company Name

First Last

+1 555-555-5555

CONTRACTOR

boxMica

Derek Tishler

+1 555-555-5555

ARCHIVE DETECTION BOOTSTRAPPING

Historical Sample #1
Lat: -18.6697 | Long: 35.5273
January 12, 2022 @ 01:57 AM
Detected Examples of:
Heavy Cargo (Transit), Heavy Cargo (Berthed),
Container Storage

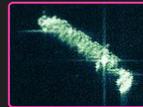
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OBJECT DETECTION SUMMARY & EXAMPLES

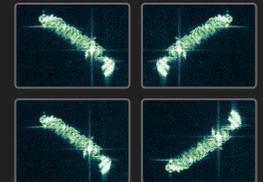


"HEAVY CARGO (TRANSIT)"

Marine Vessel

Vehicle Under Way / In Transit

Heavy Cargo Marine Vessels under transit are defined by their presence in active shipping lanes or proximity to ports & berths. Take note of the presence of exhaust fumes to confirm ship is underway vs moored at sea.

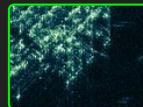
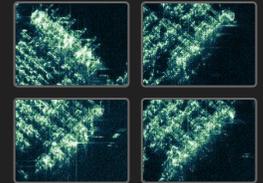


HEAVY CARGO (BERTHED)

Marine Vessel

Berthed / Moored Vessel

Heavy Cargo Marine Vessels under transit are defined by their presence in active shipping lanes or proximity to ports & berths. Take note of the presence of exhaust fumes to confirm ship is underway vs moored at sea.

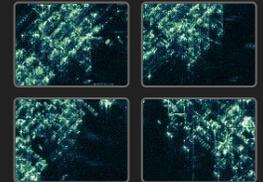


VACANT BERTH

Port Asset

Inactive Berth / Dock

Heavy Cargo Marine Vessels under transit are defined by their presence in active shipping lanes or proximity to ports & berths. Take note of the presence of exhaust fumes to confirm ship is underway vs moored at sea.

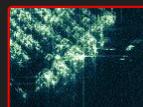
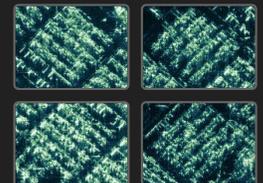


CONTAINER STORAGE DELTA

Port Asset

Block of Container Stacks

Heavy Cargo Marine Vessels under transit are defined by their presence in active shipping lanes or proximity to ports & berths. Take note of the presence of exhaust fumes to confirm ship is underway vs moored at sea.

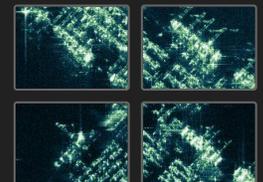


LITE CARGO (BERTHED)

Marine Vessel

Berthed / Moored Vessel

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ICEYE

Heavy Cargo in Transit (Day 7/7)

Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring

11

LARGE VESSELS

Heavy Cargo at Berth (Day 7/7)

Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring

211

SMALL VESSELS

Vacant Berths (Day 7/7)

Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring

7

DAYS @ 24H REVISIT

Container Storage Delta (Day 7/7)

Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring

37%

AFFECTED AREA

Lite Cargo at Berth (Day 7/7)

Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring

17

SMALL VESSELS

METRIC OVERVIEW

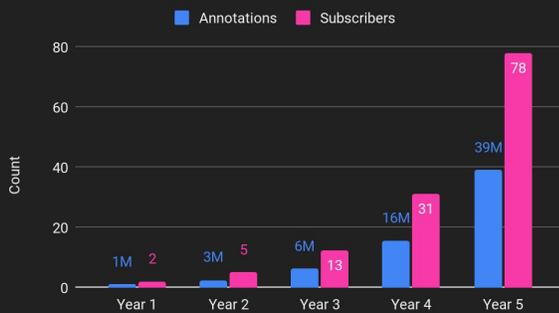
Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring

22

DAYS @ 24H REVISIT

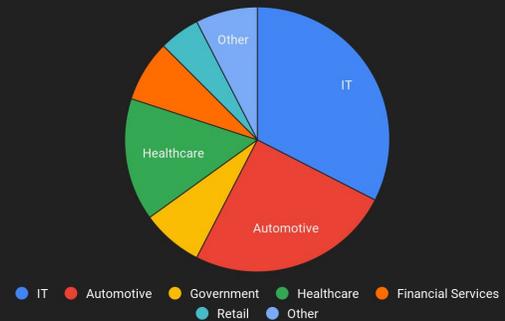
AGGREGATE SUMMARY

Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring



DELTA SUMMARY

Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring



GROUND TRACK REPEAT TASKING SUMMARY



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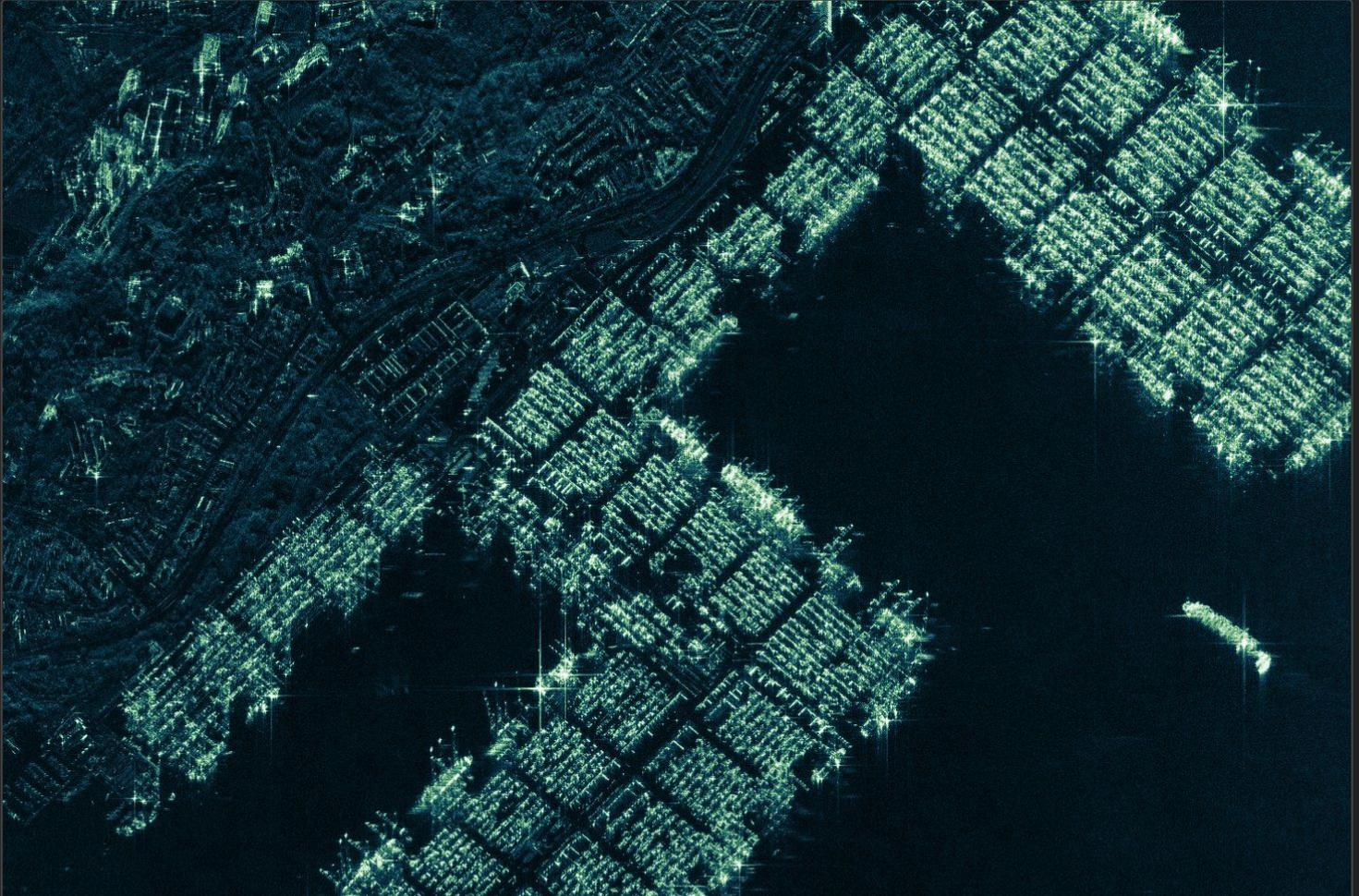
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August 1, 2022 | Day 1 / 7

ICEYE



TARGET METRIC 1 (Day 1)

Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring

11

TARGET METRIC 2 (Day 1)

Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring

57

METRIC OVERVIEW

Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring



MONITORING NOTES

Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring

Due to this being the first image in the series, we are unable to perform any change detection. Therefore this image will act as our initial baseline for further detected changes of this mission site. Of note are **the 4-6 possibly available cargo-loading berths** that will be monitored for new arrivals.

The **detected maritime vessel in the bottom right of the image** is assumed to be underway due to the detection of heavy exhaust fumes. The assumed berth for this vessel can be seen in the image labeled as Vacant Berth #3, Vacant Berth #4 due to its size and proximity of the vessel and vacant berths.

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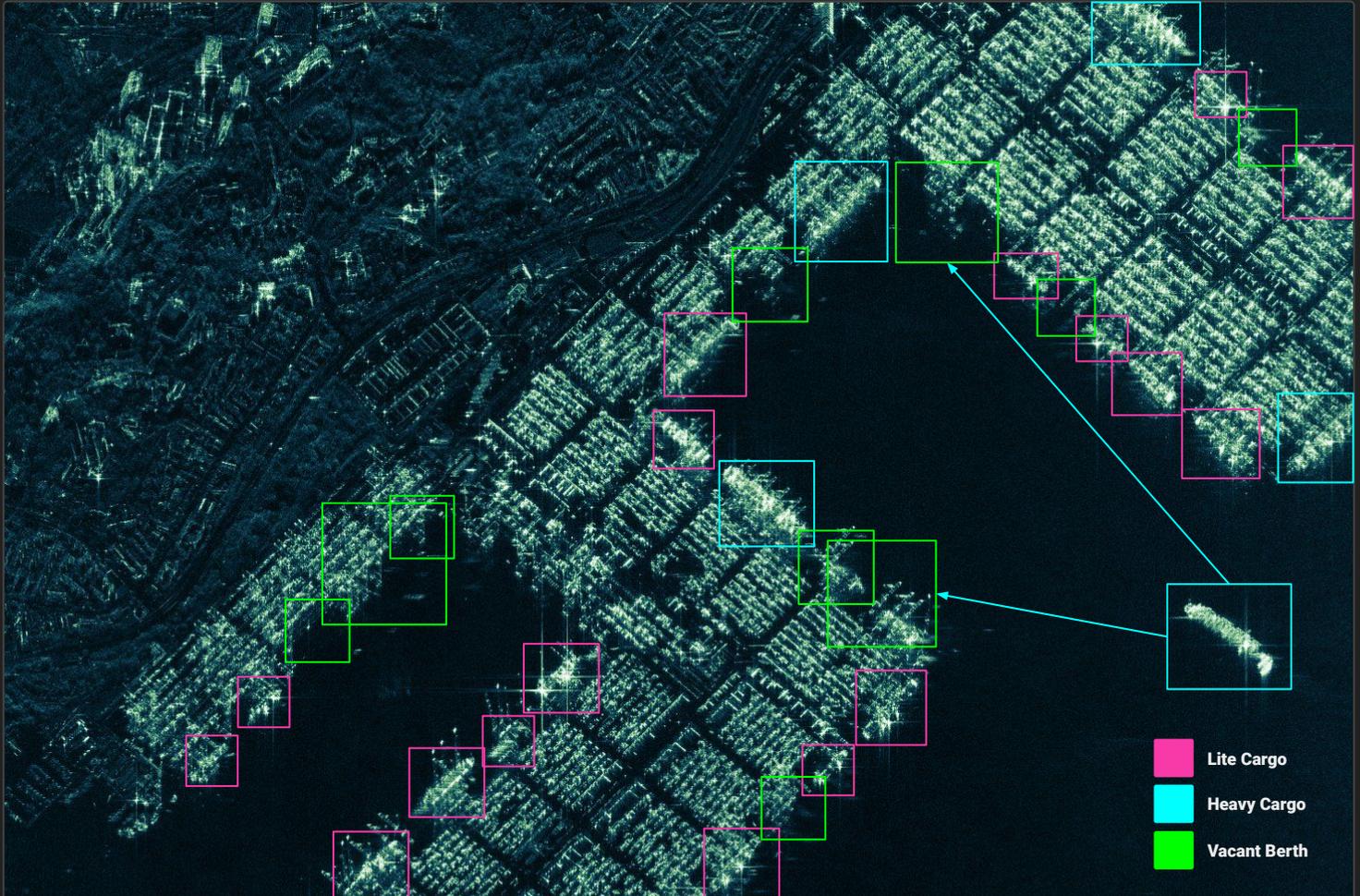
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August 1, 2022 | Day 1 / 7

ICEYE



TARGET METRIC 1 (Day 1)

Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring

11

TARGET METRIC 2 (Day 1)

Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring

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METRIC OVERVIEW

Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring



MONITORING NOTES

Fully Managed, Mission-Critical Intelligence with High Resolution SAR Monitoring

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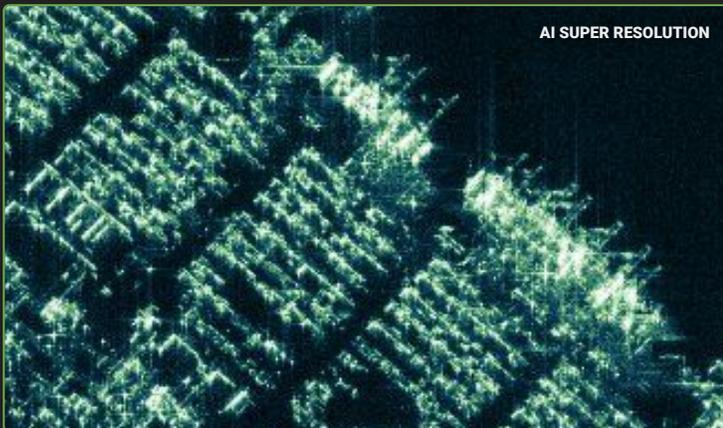
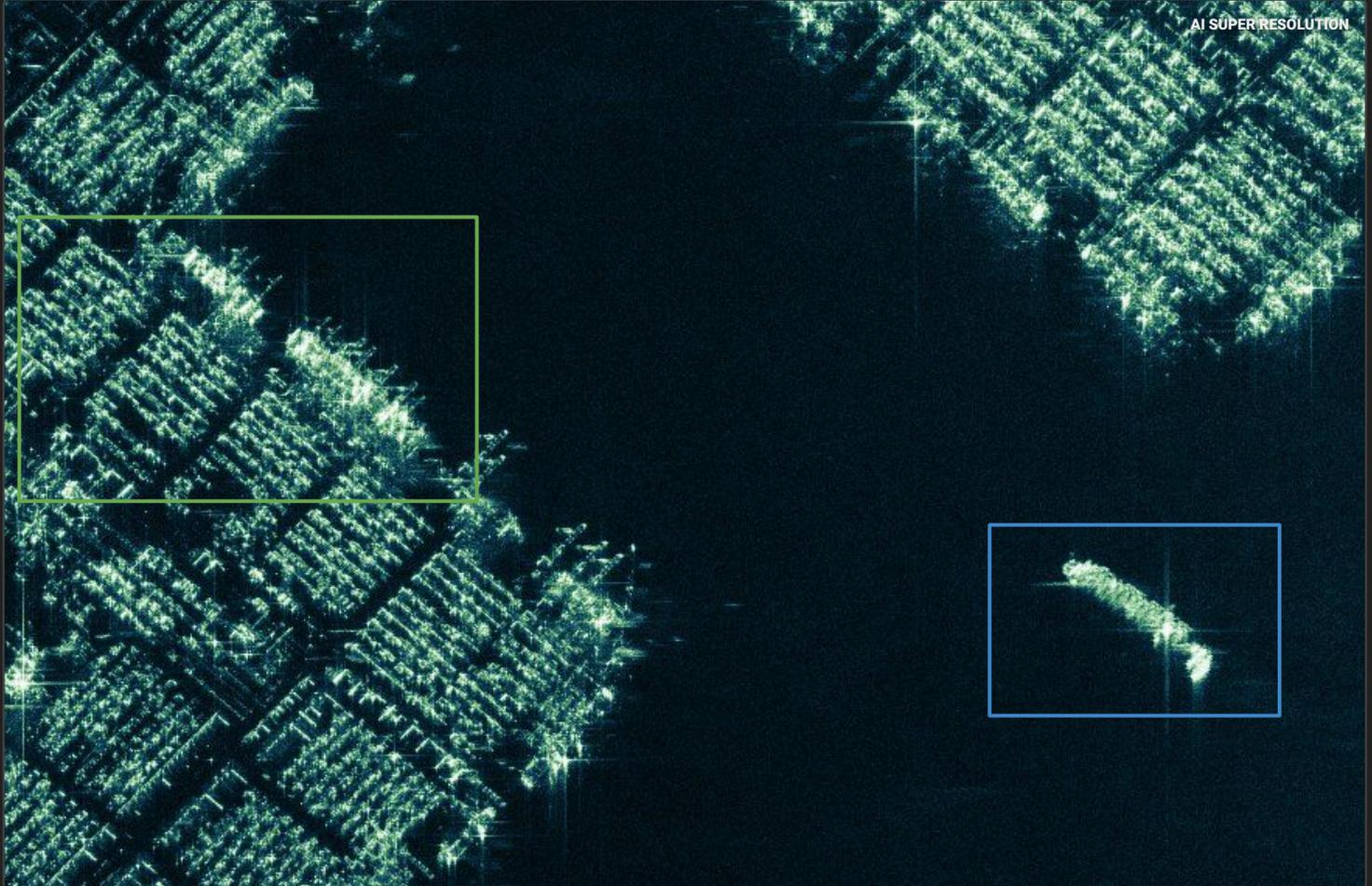
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August 1, 2022 | Day 1 / 7

ICEYE



MONITORING NOTES

Most notable, on Day 1, two particular regions of interest became apparent. (BLUE) The large incoming cargo vessel has disabled AIS since 12:00:00 (UTC), approximately 1 hour before satellite capture. (GREEN) Green may show two targets of interest and may require further investigation by the contractor.