



# Remote Sensing and Maritime Transparency

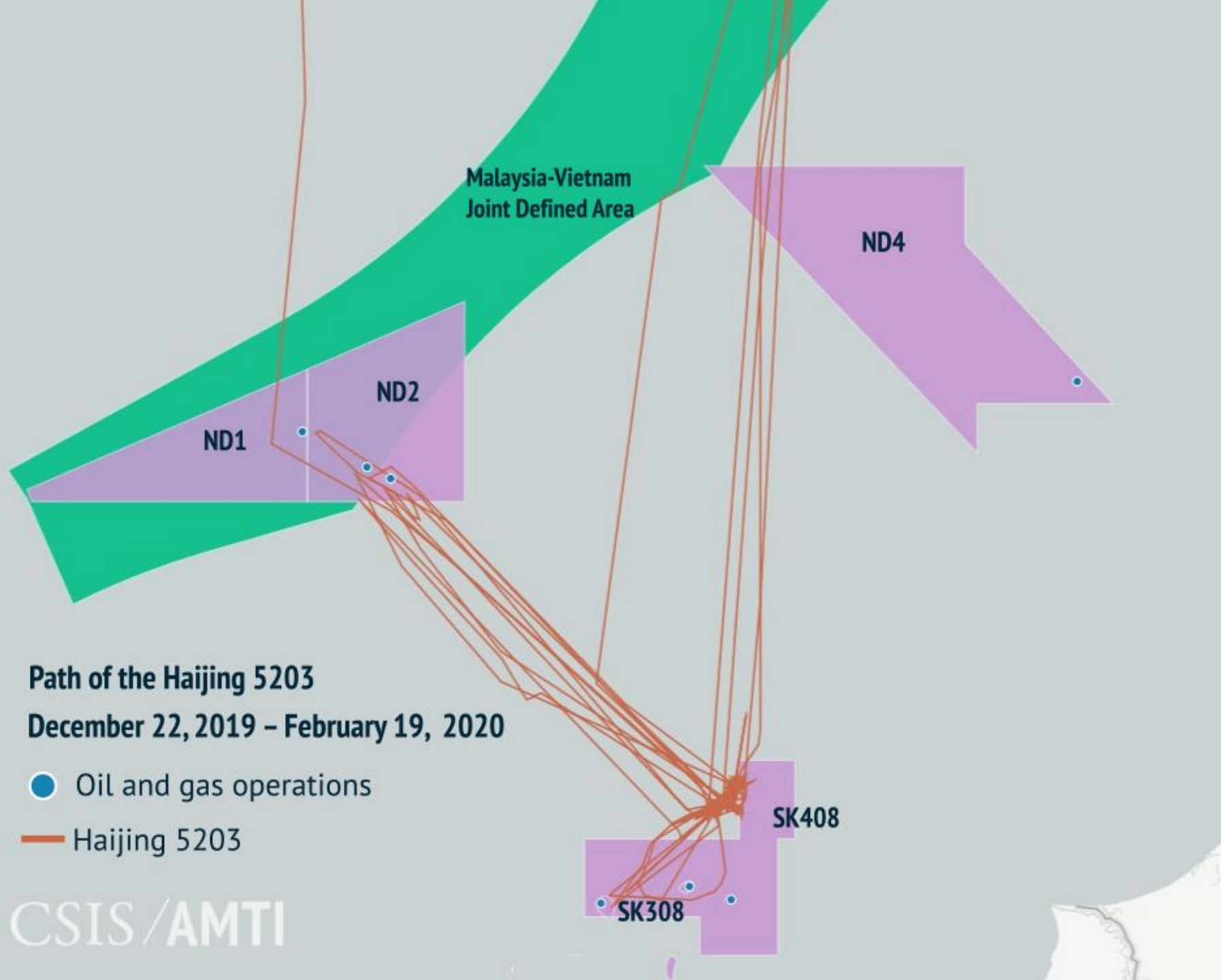


# Automatic Identification System (AIS)

# Days Patrolled by the China Coast Guard

December 1, 2019 - November 30, 2020





**Path of the Haijing 5203**  
**December 22, 2019 – February 19, 2020**

- Oil and gas operations
- Haijing 5203

## Block ND 1

February 17, 2020

● West Capella

— Supply vessels






— Chinese fishing vessel

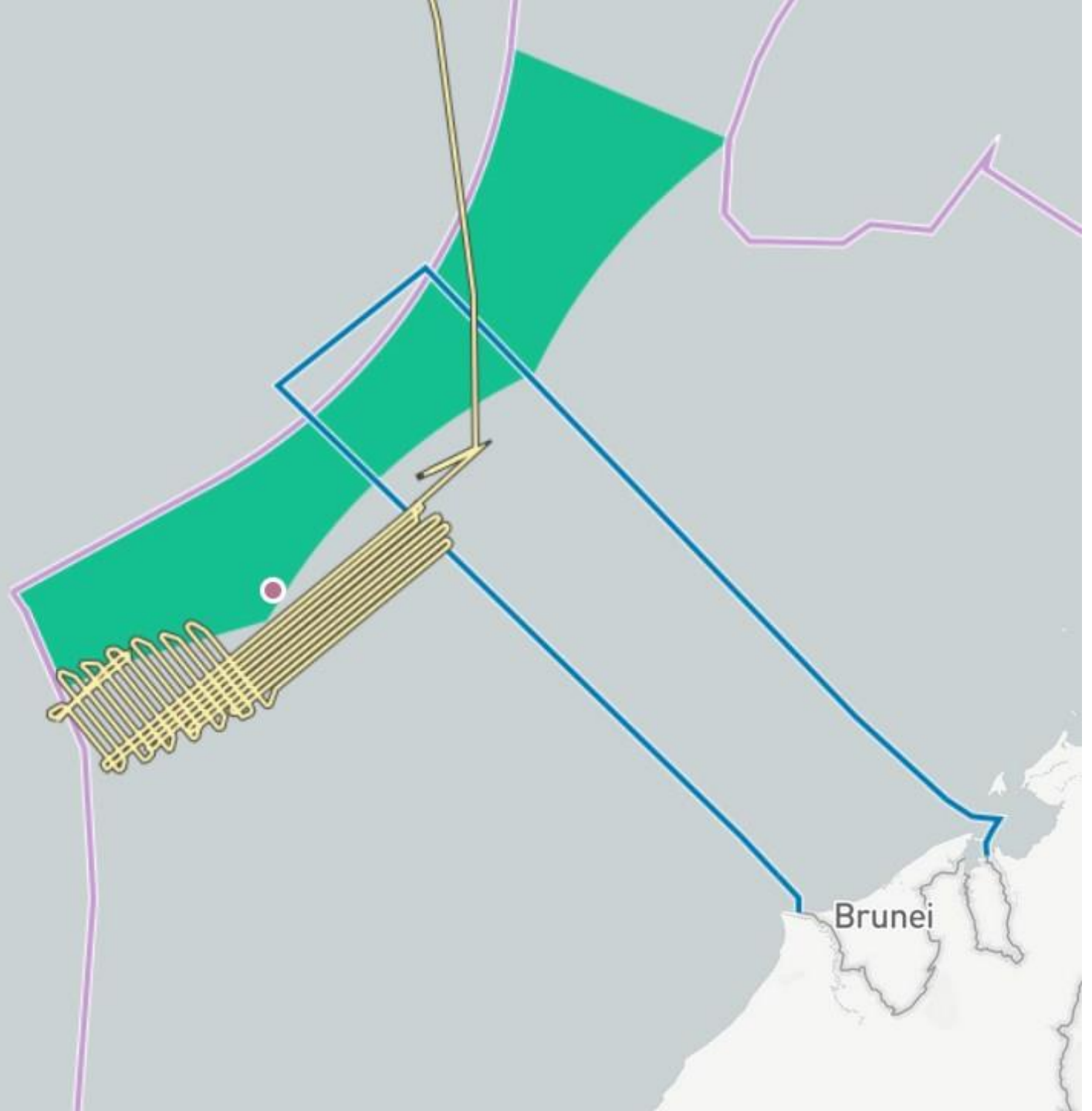
— China Coast Guard ships



# Haiyang Dizhi 8 Survey

April 13-28, 2020

-  Haiyang Dizhi 8
-  West Capella
-  Malaysia-Vietnam Joint Defined Area
-  Malaysia continental shelf claim
-  Brunei continental shelf claim





# Electro-optical (EO) Satellite Imagery



# Block ND1

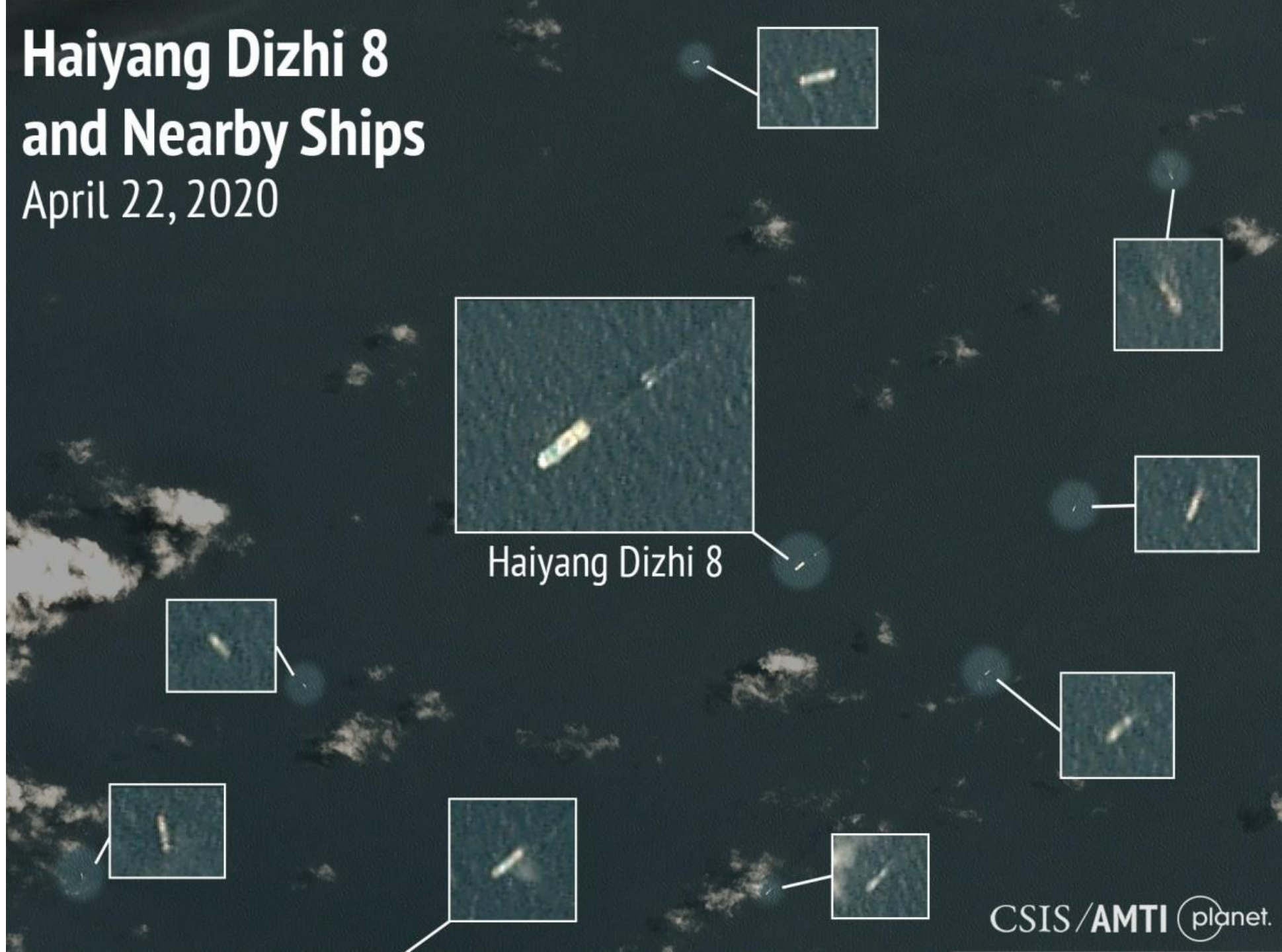
February 15, 2020





# Haiyang Dizhi 8 and Nearby Ships

April 22, 2020



Haiyang Dizhi 8





CSIS

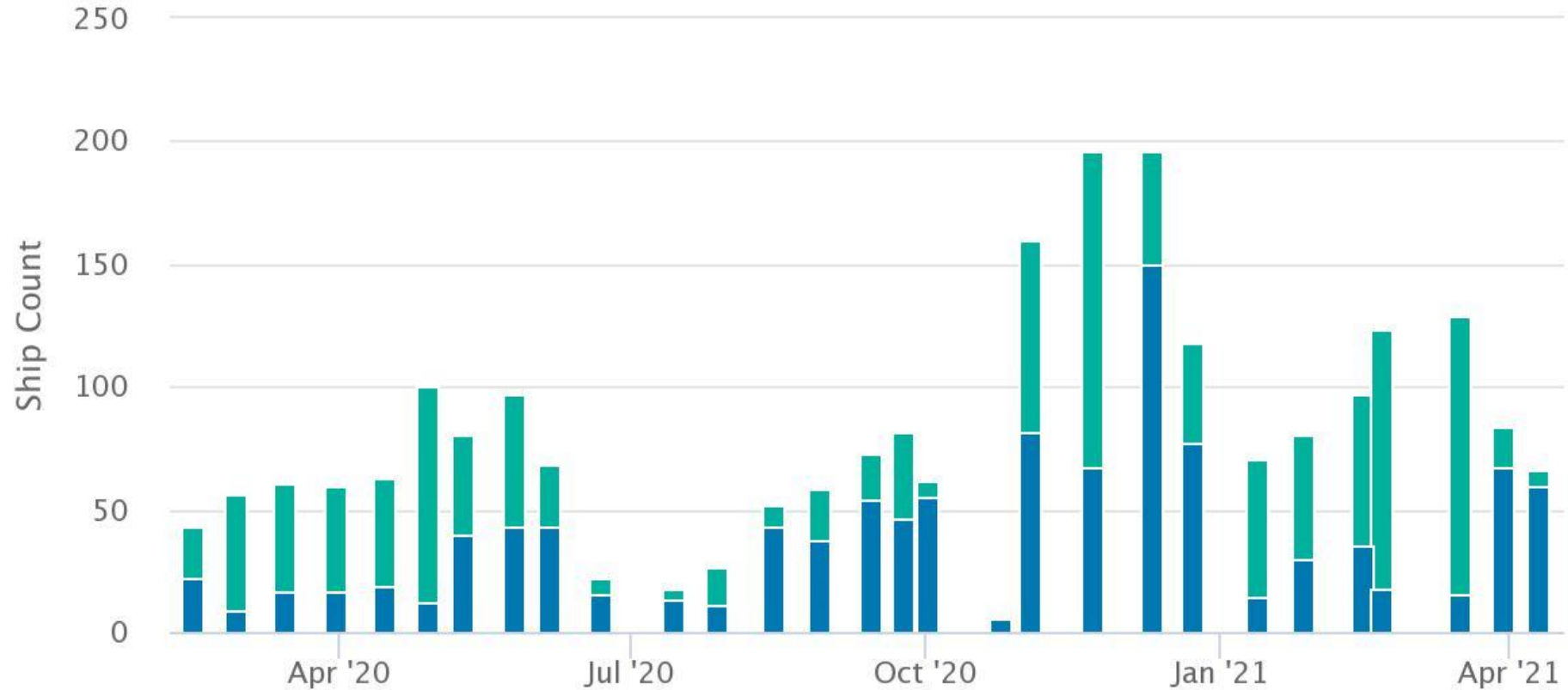
AMTI

MAXAR  
TECHNOLOGIES



## Vessels at Union Banks

As visible in Planet Labs satellite imagery

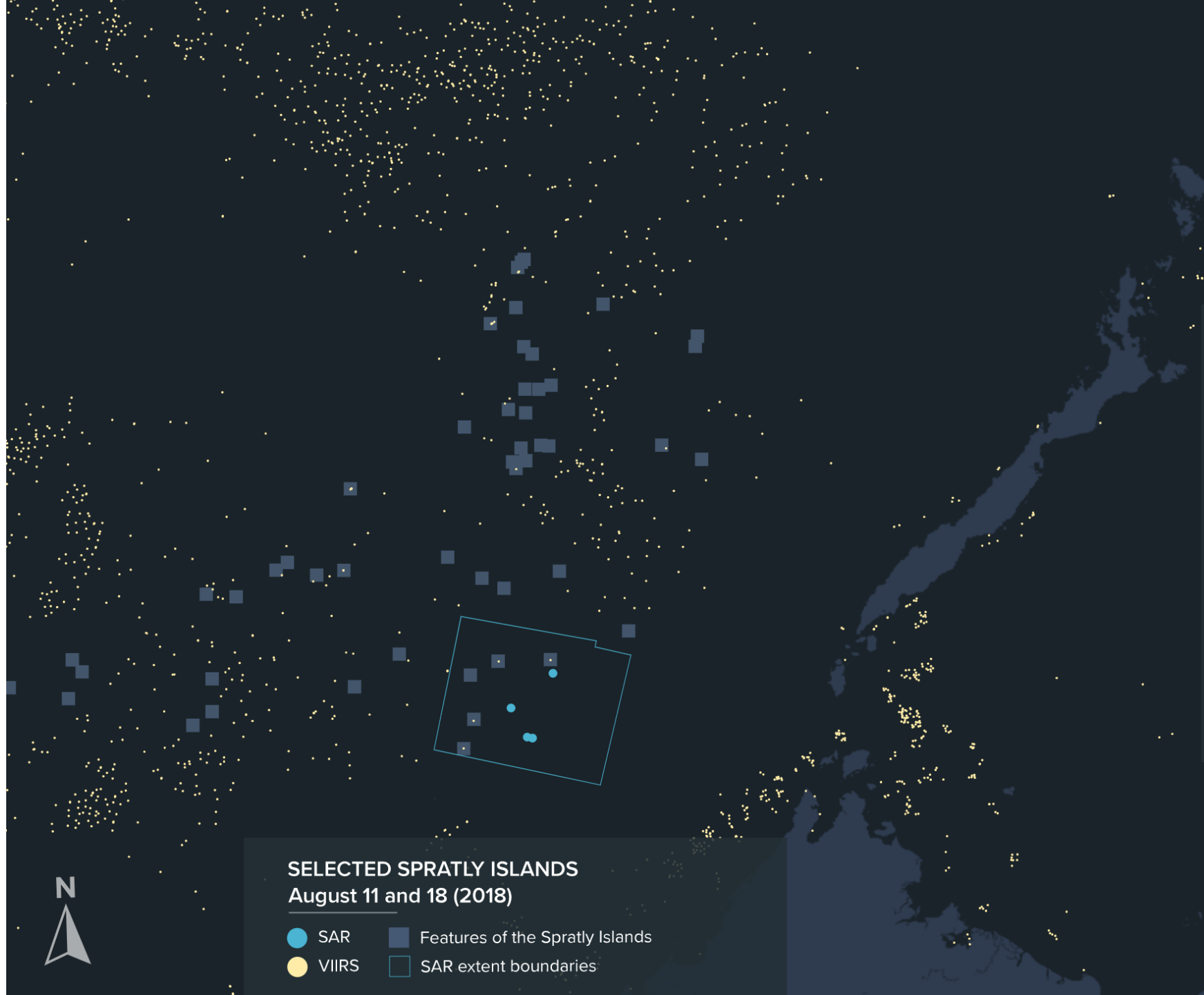


(Click to hide)

● Vessels at Whitsun Reef ● Vessels at Other Locations

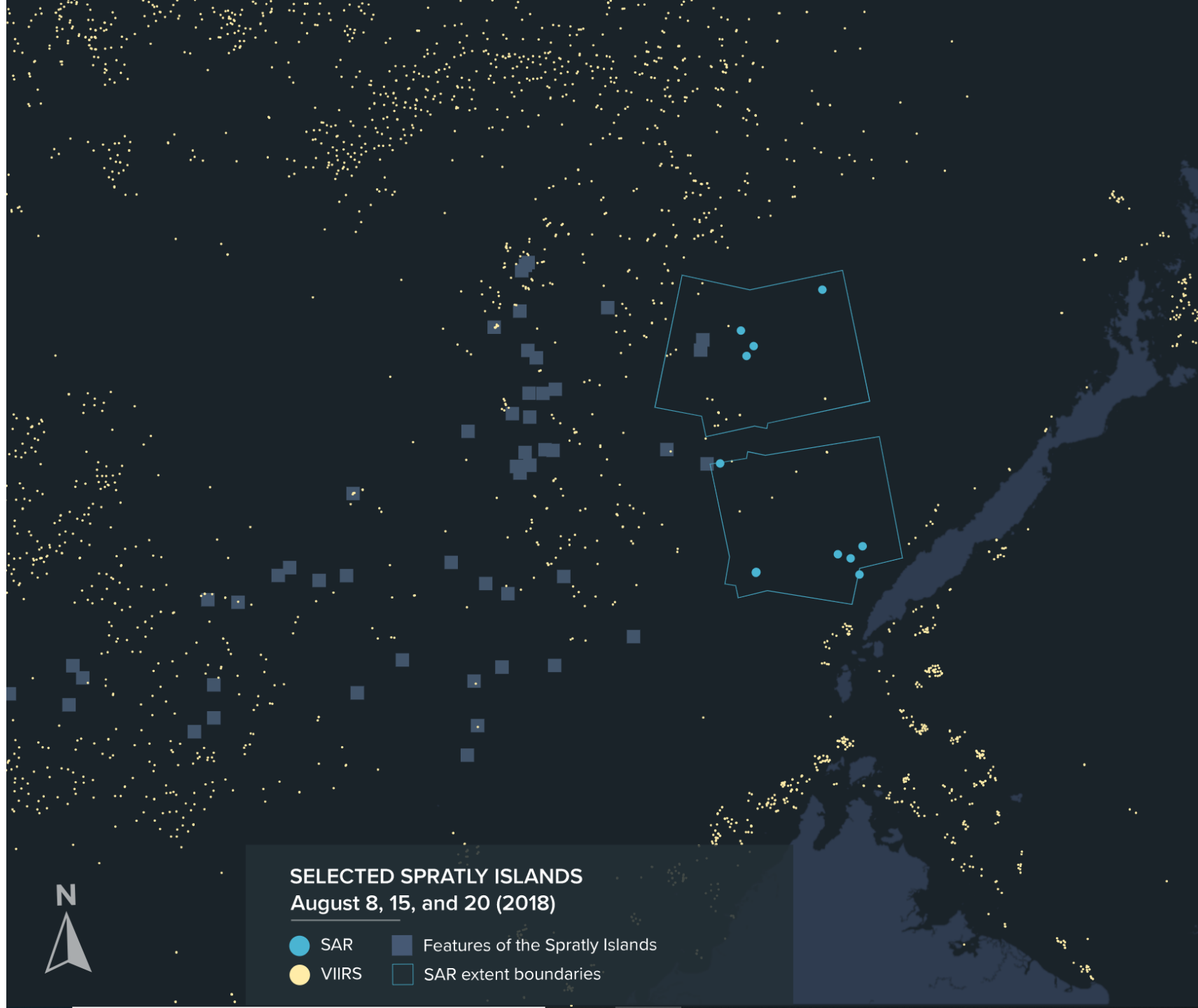


# **Synthetic Aperture Radar (SAR) and VIIRS**



**SELECTED SPRATLY ISLANDS**  
August 11 and 18 (2018)

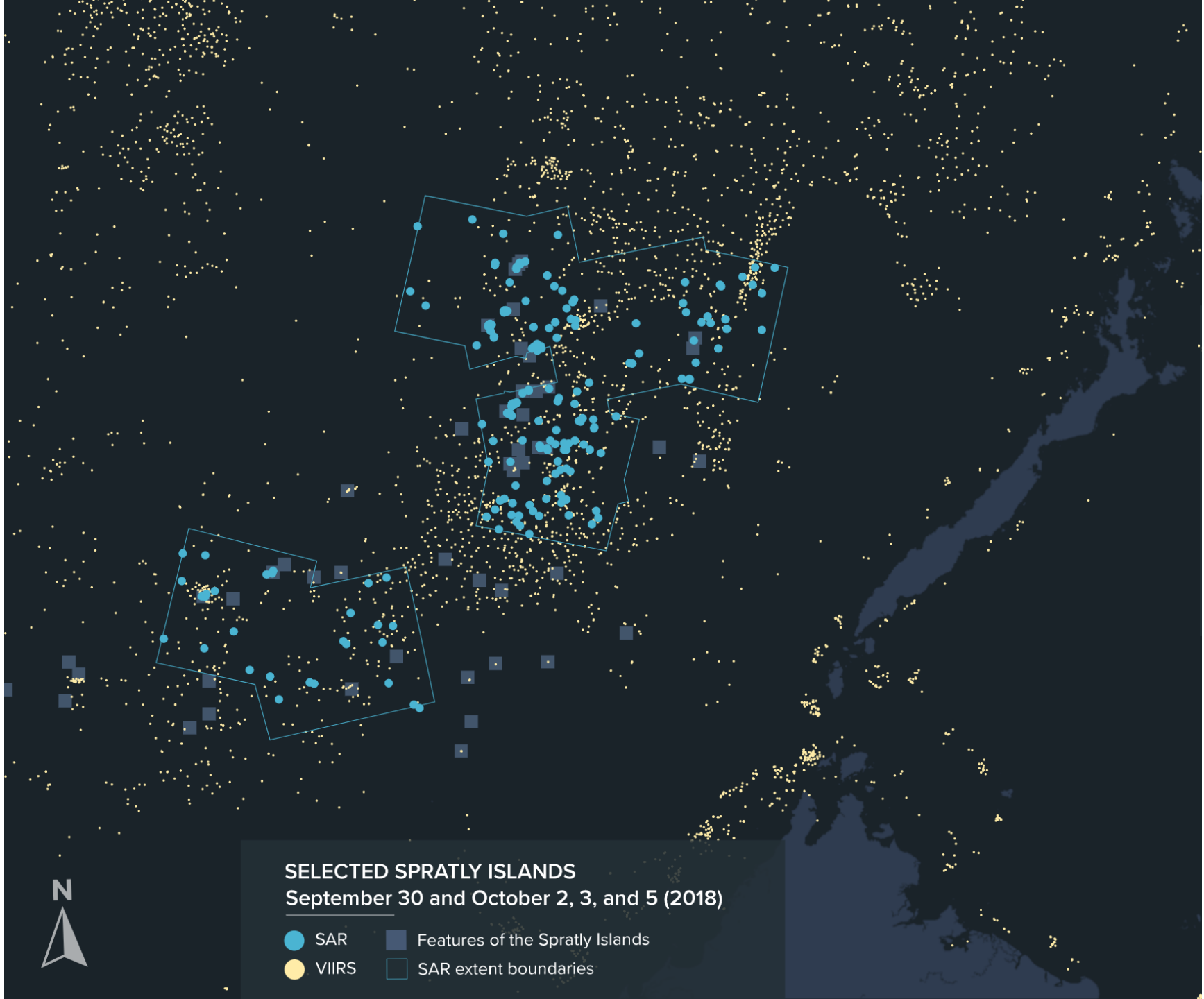
- SAR
- VIIRS
- Features of the Spratly Islands
- SAR extent boundaries



**SELECTED SPRATLY ISLANDS**  
August 8, 15, and 20 (2018)

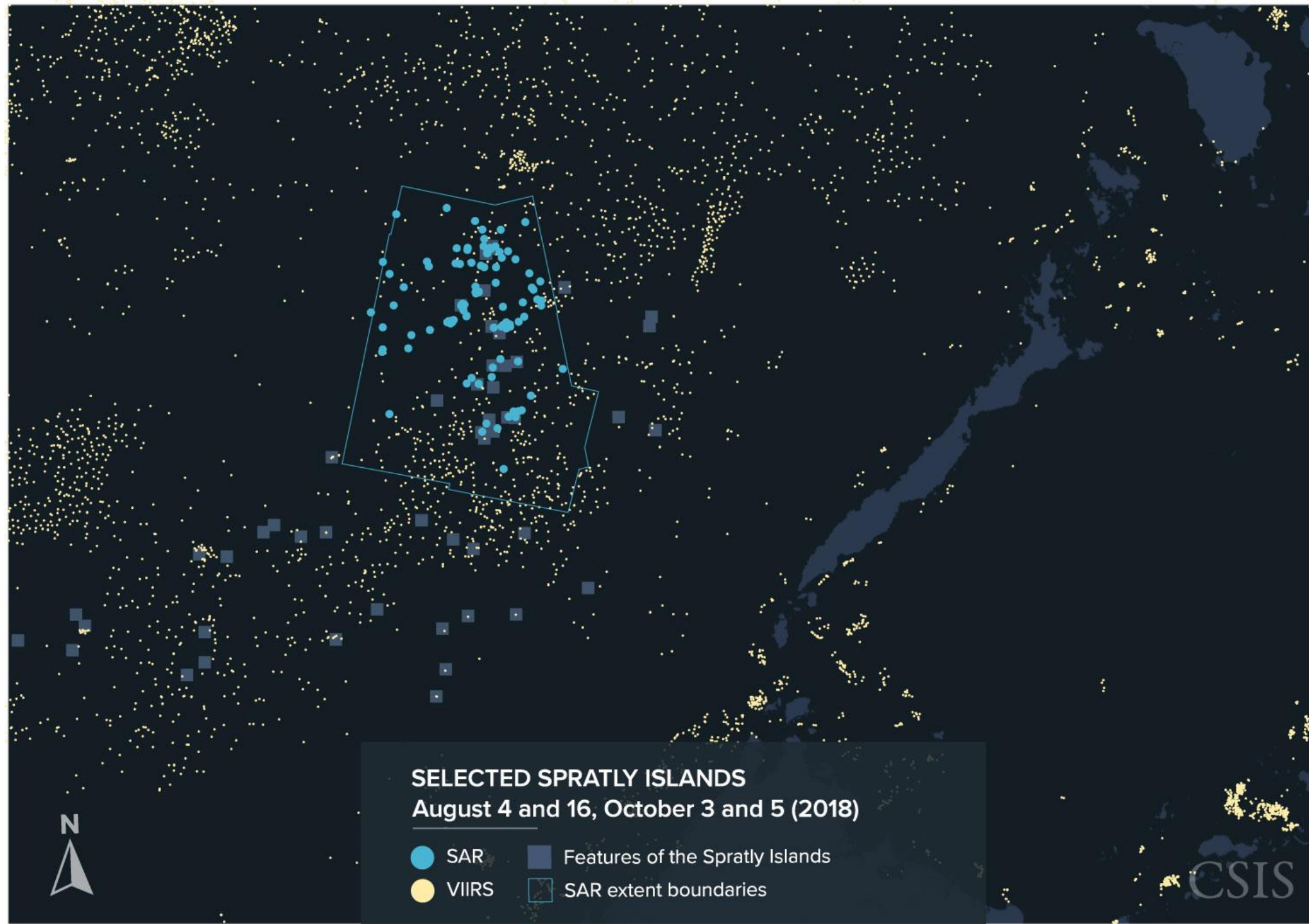
- SAR
- VIIRS
- Features of the Spratly Islands
- SAR extent boundaries





**SELECTED SPRATLY ISLANDS**  
September 30 and October 2, 3, and 5 (2018)

- SAR
- Features of the Spratly Islands
- VIIRS
- SAR extent boundaries



**SELECTED SPRATLY ISLANDS**  
**August 4 and 16, October 3 and 5 (2018)**

- SAR
- VIIRS
- Features of the Spratly Islands
- SAR extent boundaries





# Radio Frequency (RF) Detection





# Homeports of Chinese Vessels Identified at Whitsun Reef

