

# ICEYE

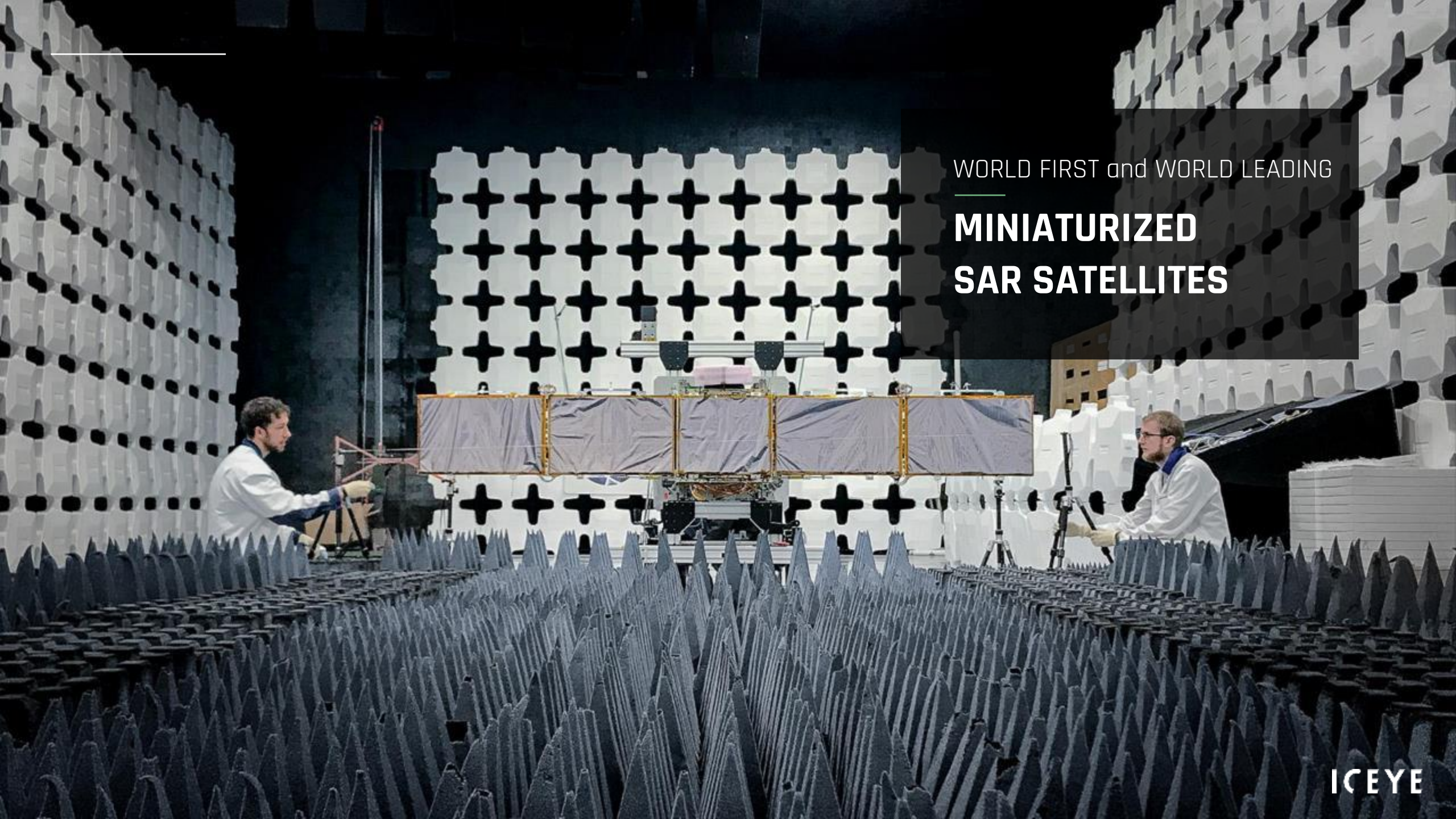


## IoT for EO SAR Data and EO

16<sup>th</sup> February 2023

[www.ICEYE.com](http://www.ICEYE.com)

Tero Vauraste, Senior BD Advisor, ICEYE Oy;  
Global Fellow Woodrow Wilson Center

A photograph of a satellite in a test chamber. The satellite is a long, rectangular object with a central section and four larger rectangular panels extending outwards. It is mounted on a complex mechanical structure. Two technicians in white lab coats are visible, one on the left and one on the right, both working on the satellite. The chamber walls are covered in white, cross-shaped absorbers. The floor is covered in a dense array of dark, pointed absorbers. The lighting is dramatic, with strong highlights and deep shadows.

WORLD FIRST and WORLD LEADING

**MINIATURIZED  
SAR SATELLITES**

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EUROPEAN NEW SPACE LEADER

2018

**WORLD'S FIRST NEW SPACE  
SAR SATELLITE LAUNCHED**

50+

PEOPLE WITH  
**60+ NATIONALITIES**

\$304M

SECURED  
**FINANCING**

**HEADQUARTERS IN FINLAND,**  
SUBSIDIARIES:  
POLAND, US, AND UK

**WORLD LEADER**  
IN SAR MINIATURIZATION  
TECHNOLOGY

EXISTING PORTFOLIO OF  
**INTERNATIONAL  
CUSTOMERS**

**ICEYE**

# The ICEYE CONSTELLATION

96 minute orbits

Low Earth Orbit 500 km

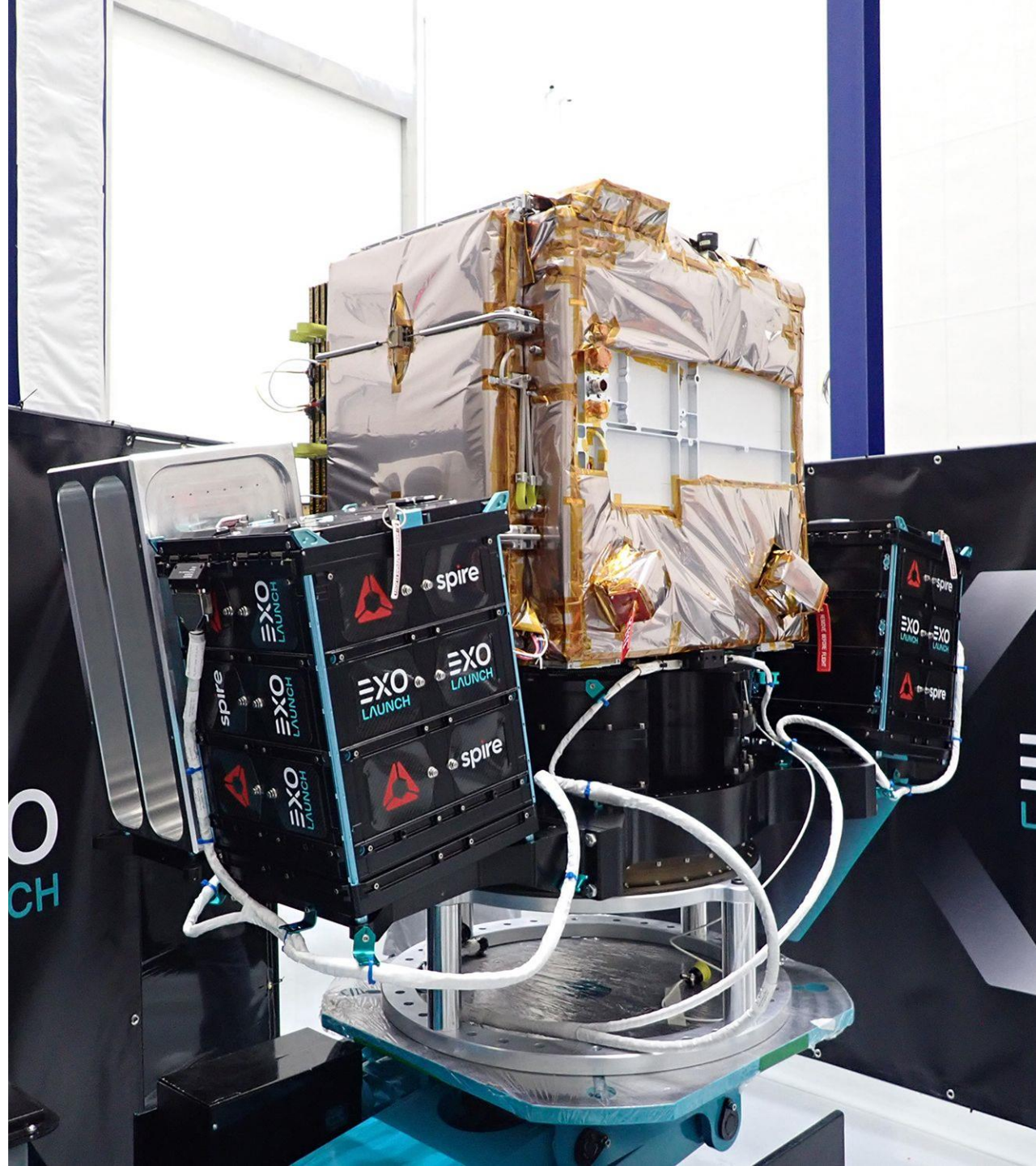


# 24 SATELLITES

LAUNCHED TO DATE



Credit: SpaceX, Exolaunch



## IMAGING MODES - ICEYE COVERAGE

### HIGH AGILITY, RESOLUTION, COVERAGE, AND MULTI-MODE

ICEYE is optimising to  
deliver persistent  
monitoring worldwide

NEW  
YORK

**SPOTLIGHT**  
5 X 5 KM  
25 CM res

**STRIPMAP**  
50 X 30 KM  
3 M res

**SCAN**  
100 X 100 KM  
15 M res

**MAKE THE RIGHT DECISIONS FAST**

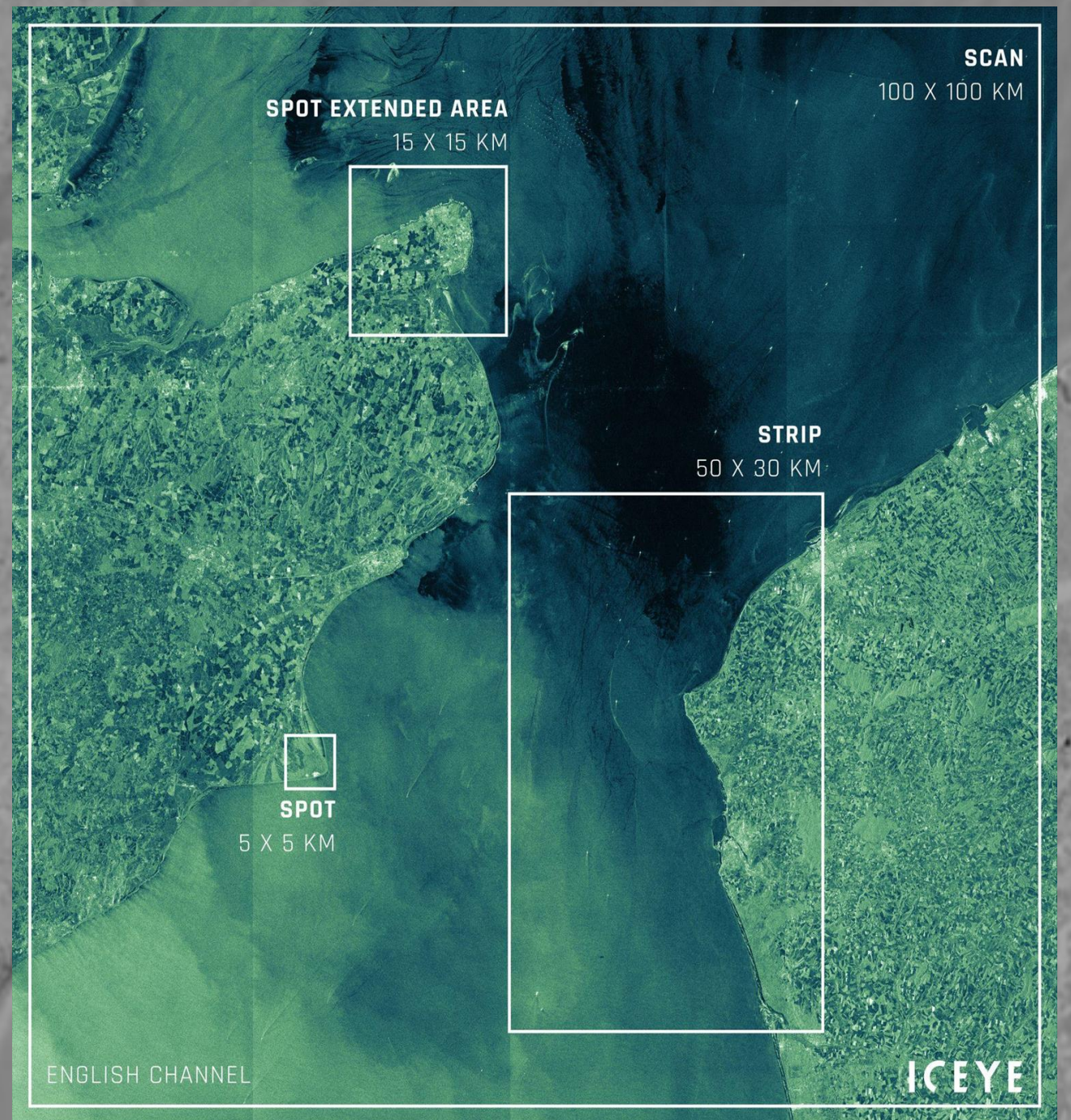
SEE THE DETAIL, UNDERSTAND THE CONTEXT

**UP TO 25 CM**

RESOLUTION

**UP TO 10.000 KM<sup>2</sup>**

SCENE SIZE



# DATA AVAILABLE THROUGH ESA & EUROPEAN COMMISSION PROGRAMMES



## ESA EARTHNET THIRD PARTY MISSION

Sponsored data available  
for research

## International Disaster Charter

Available for use in disaster  
monitoring and response activities

## Copernicus Contributing Mission

Data available through the six  
Copernicus services



A satellite is shown in orbit above the Earth's surface, which is covered in clouds. The satellite has large solar panels and various instruments. The entire image has a green color overlay.

WORLD'S FIRST  
**DAILY COHERENT  
GROUND TRACK REPEAT**



YULIN NAVAL BASE  
1-DAY COHERENT REVISIT  
MAR 30, 2021+



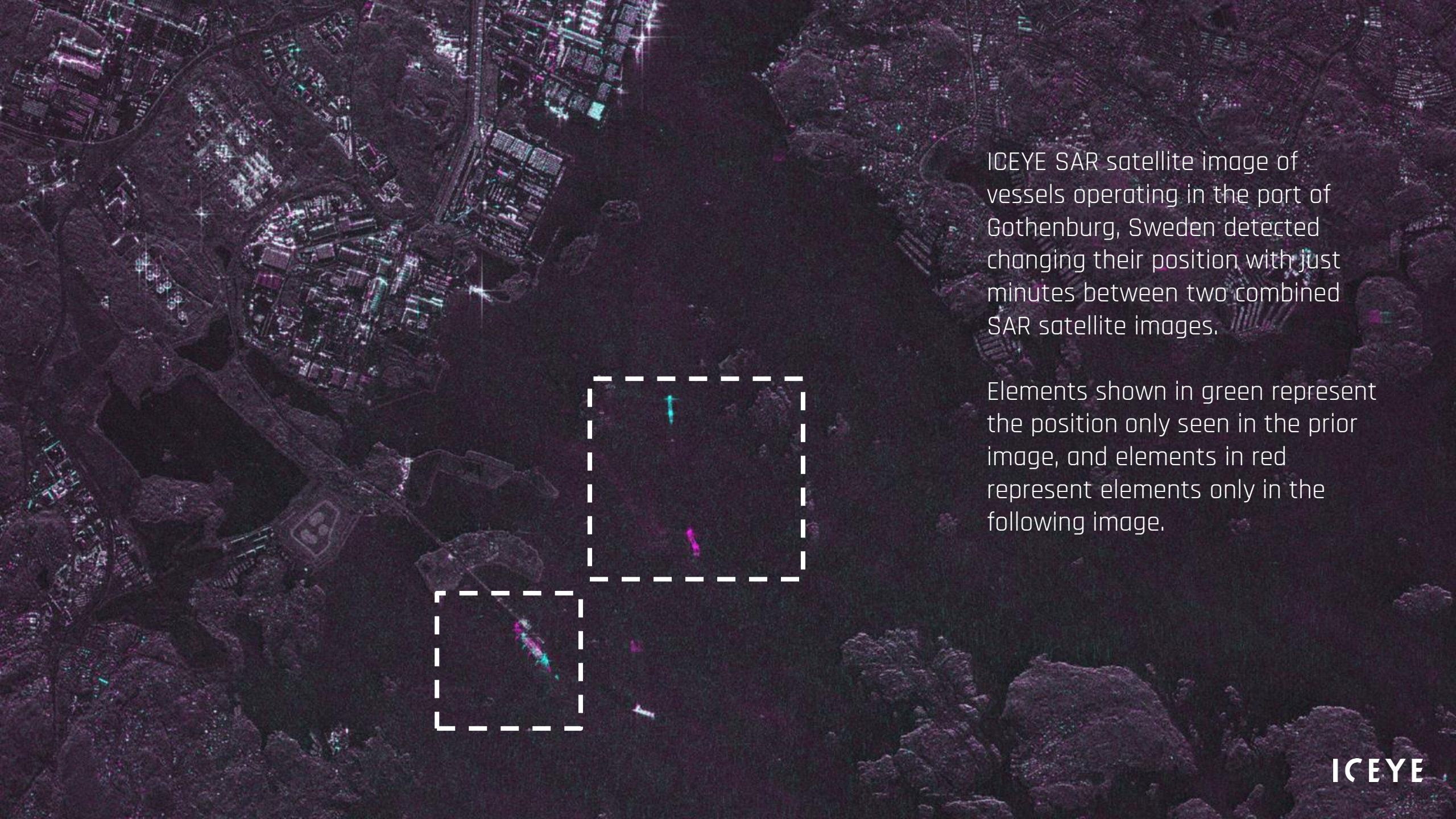
SUBMARINES



DESTROYERS

EXAMPLE DAILY COHERENT  
GROUND TRACK REPEAT  
AMPLITUDE DATA STACK  
ACQUIRED OVER  
**THE PORT OF ROTTERDAM,  
THE NETHERLANDS**

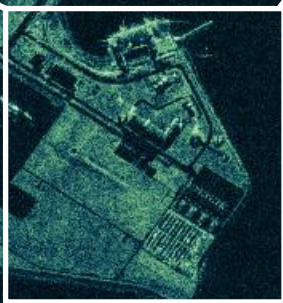
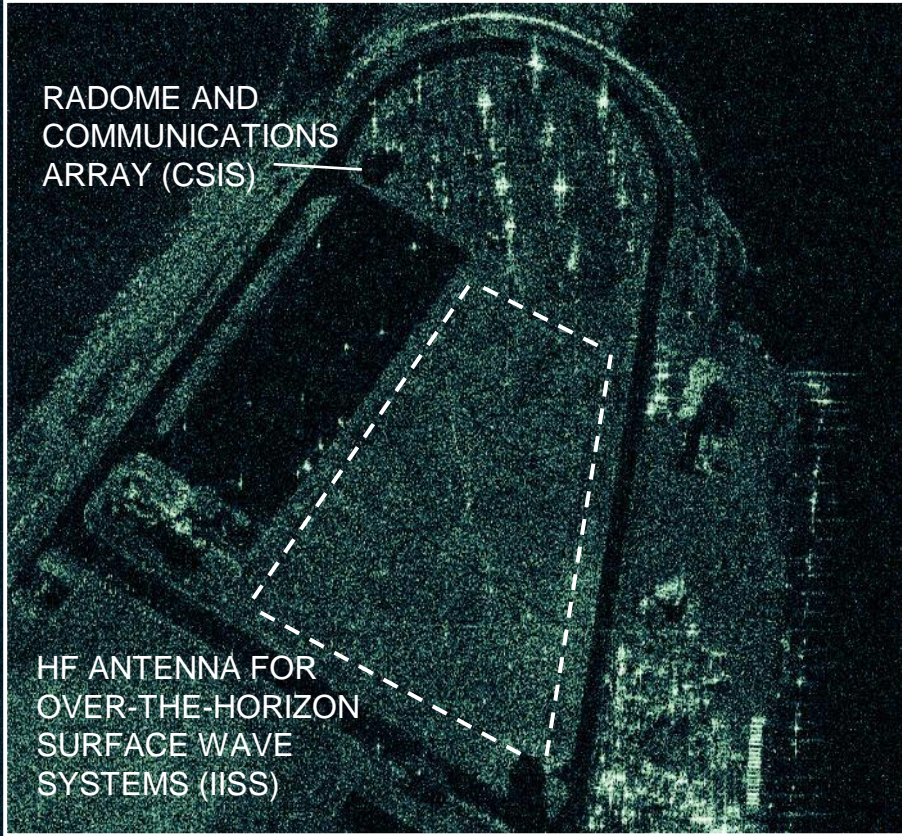
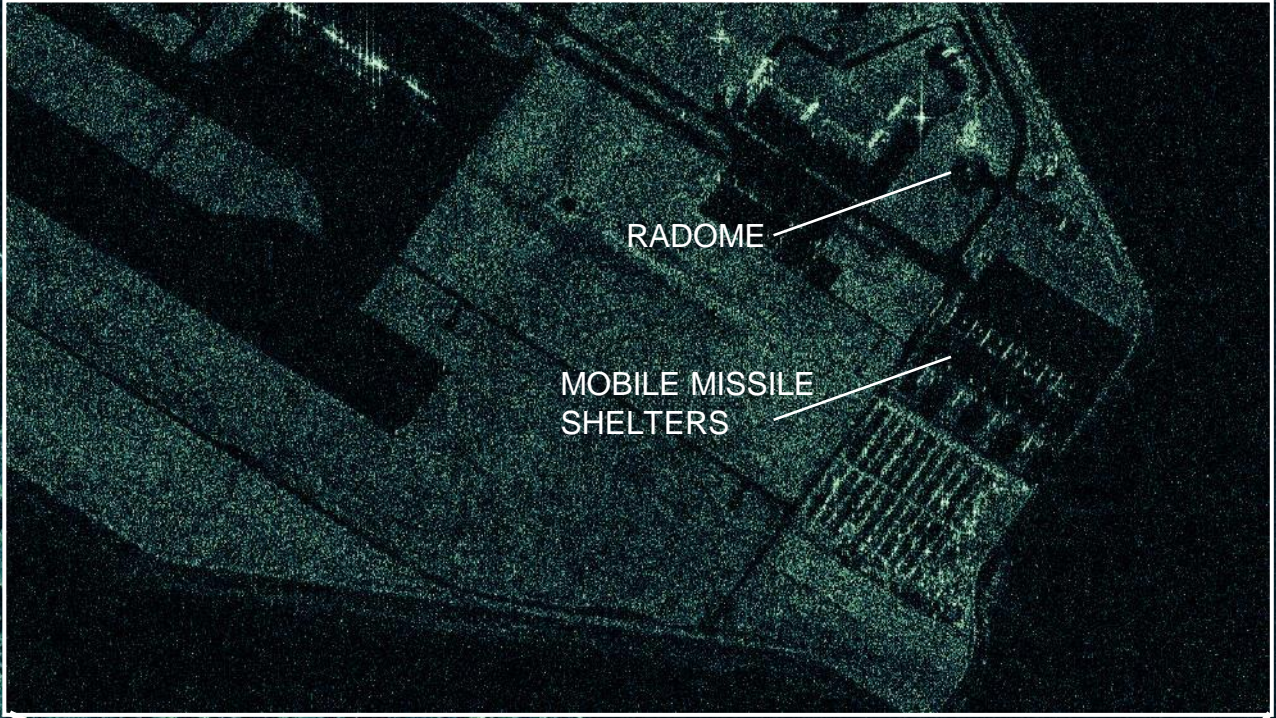
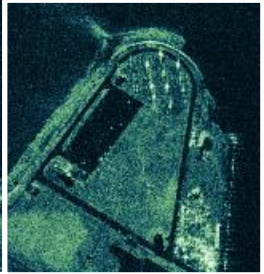




ICEYE SAR satellite image of vessels operating in the port of Gothenburg, Sweden detected changing their position with just minutes between two combined SAR satellite images.

Elements shown in green represent the position only seen in the prior image, and elements in red represent elements only in the following image.

SOUTH CHINA SEA  
FIERY CROSS REEF

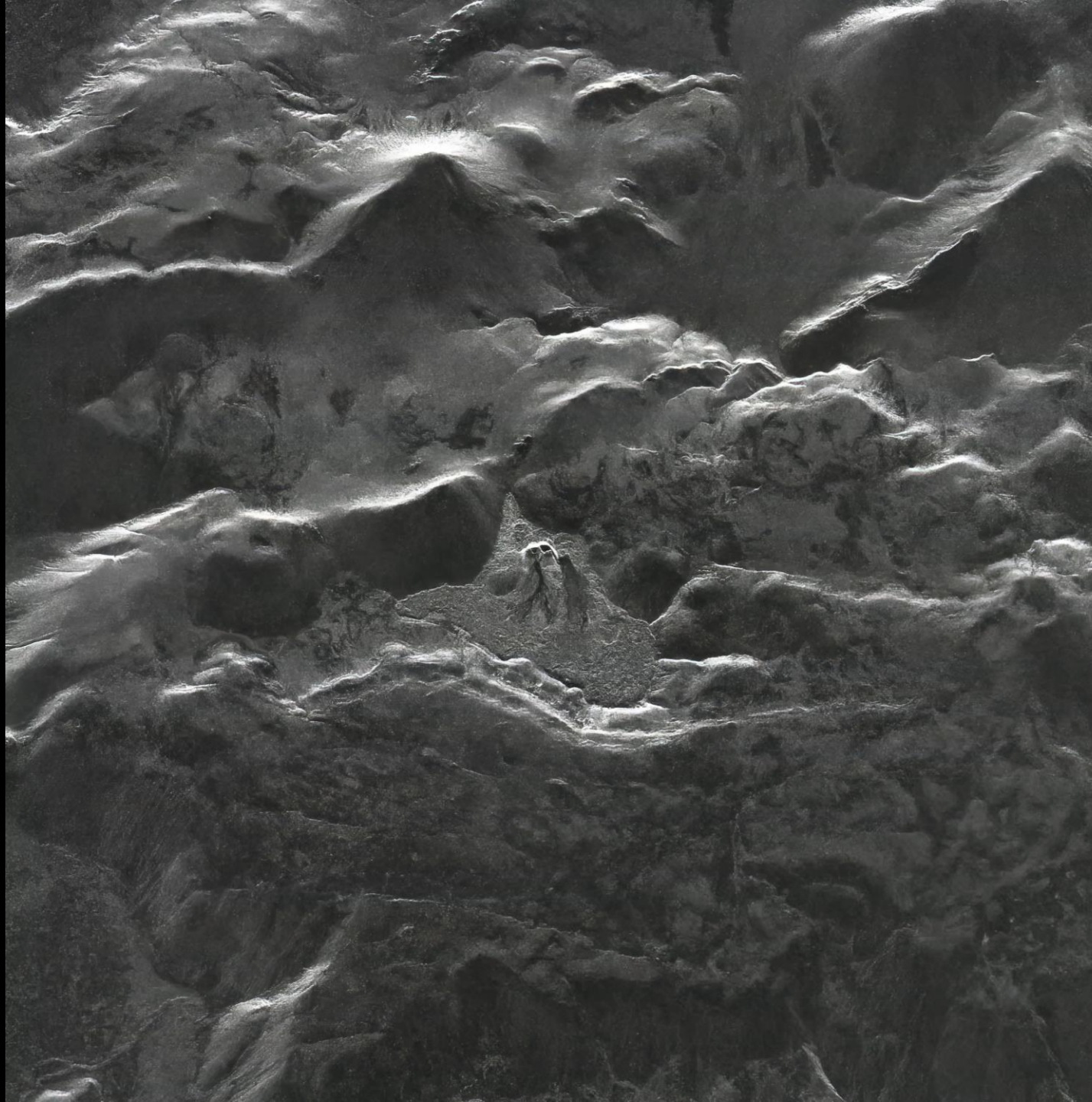


MURMANSK RUSSIA  
NAVAL BASE



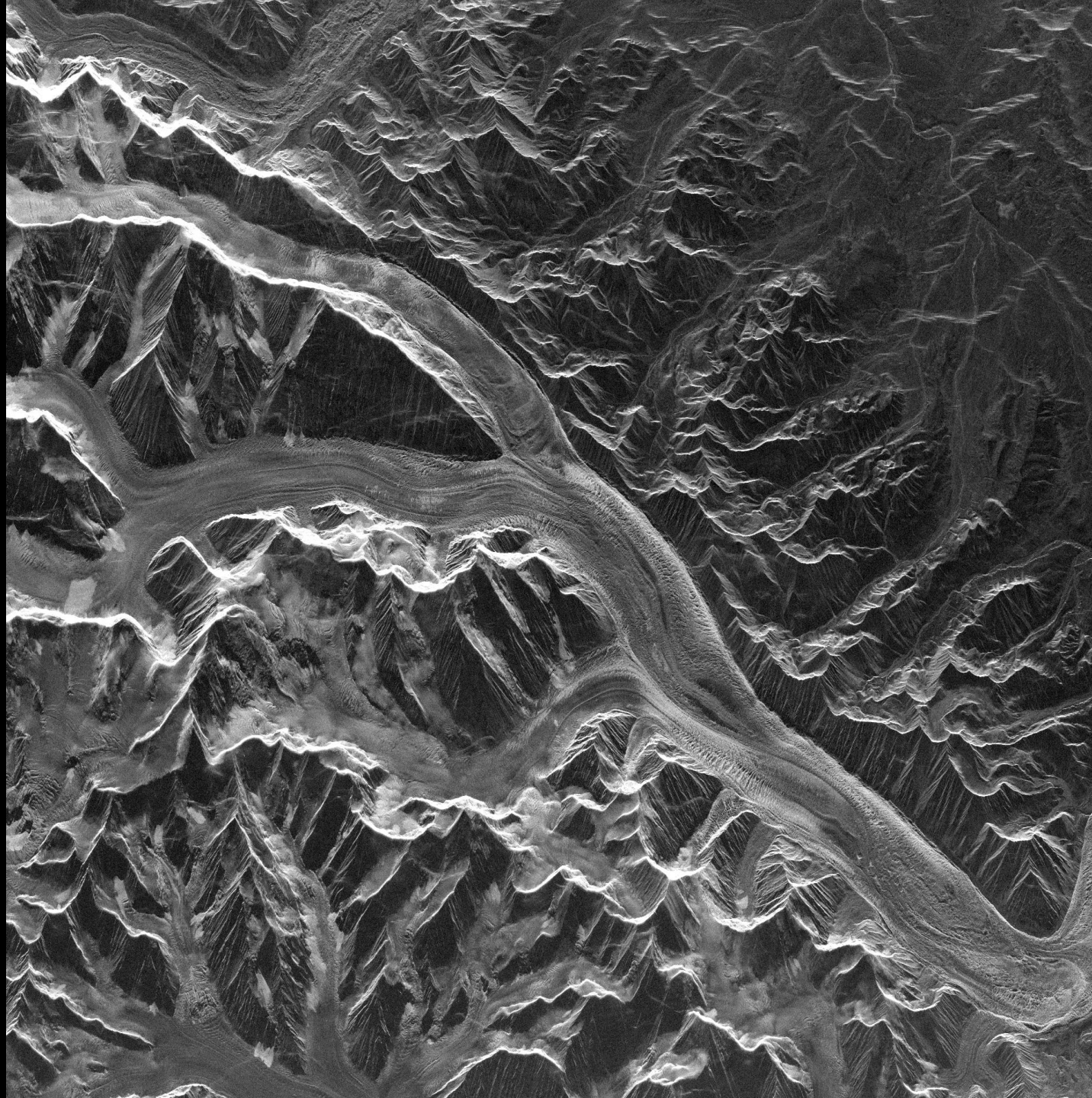
1-DAY COHERENT REVISIT  
FAGRADALSFJALL  
VOLCANO, ICELAND  
18-DAY STACK  
EARLY MARCH 2021

NOTE: MOUSE OVER THE  
EMBEDDED VIDEO TO PLAY



1-DAY COHERENT REVISIT  
MULDROW GLACIER  
ALASKA  
4-DAY STACK  
APRIL 2021

ICEYE HAS DETERMINED  
THE SPEED OF THE  
ICEFLOW TO BE AROUND  
70 FEET PER DAY.



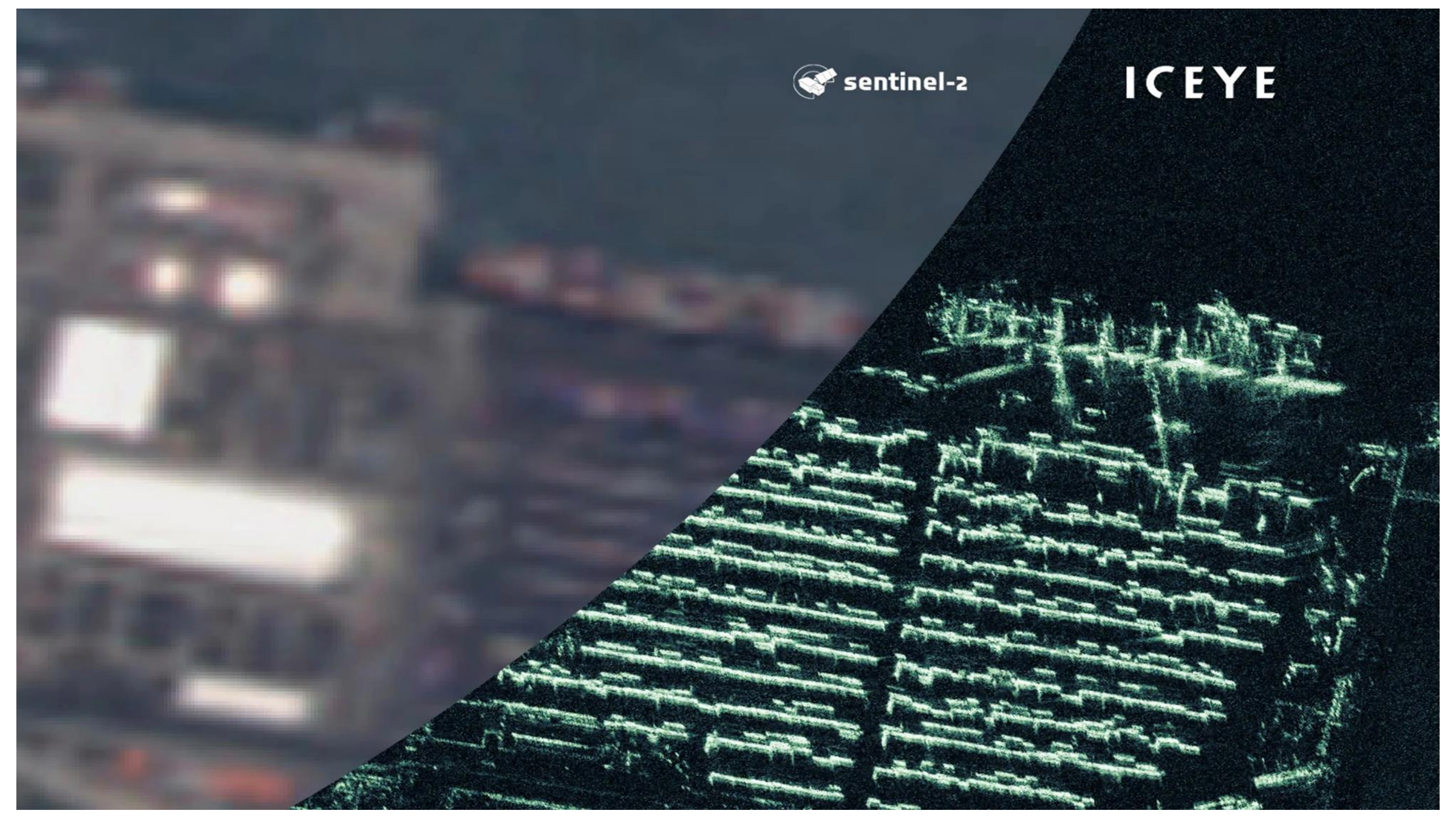


A satellite with large solar panels is shown in orbit above the Earth's cloud-covered surface. Another satellite is visible in the distance. The entire image has a greenish-blue color overlay.

# USE CASES



ICEYE



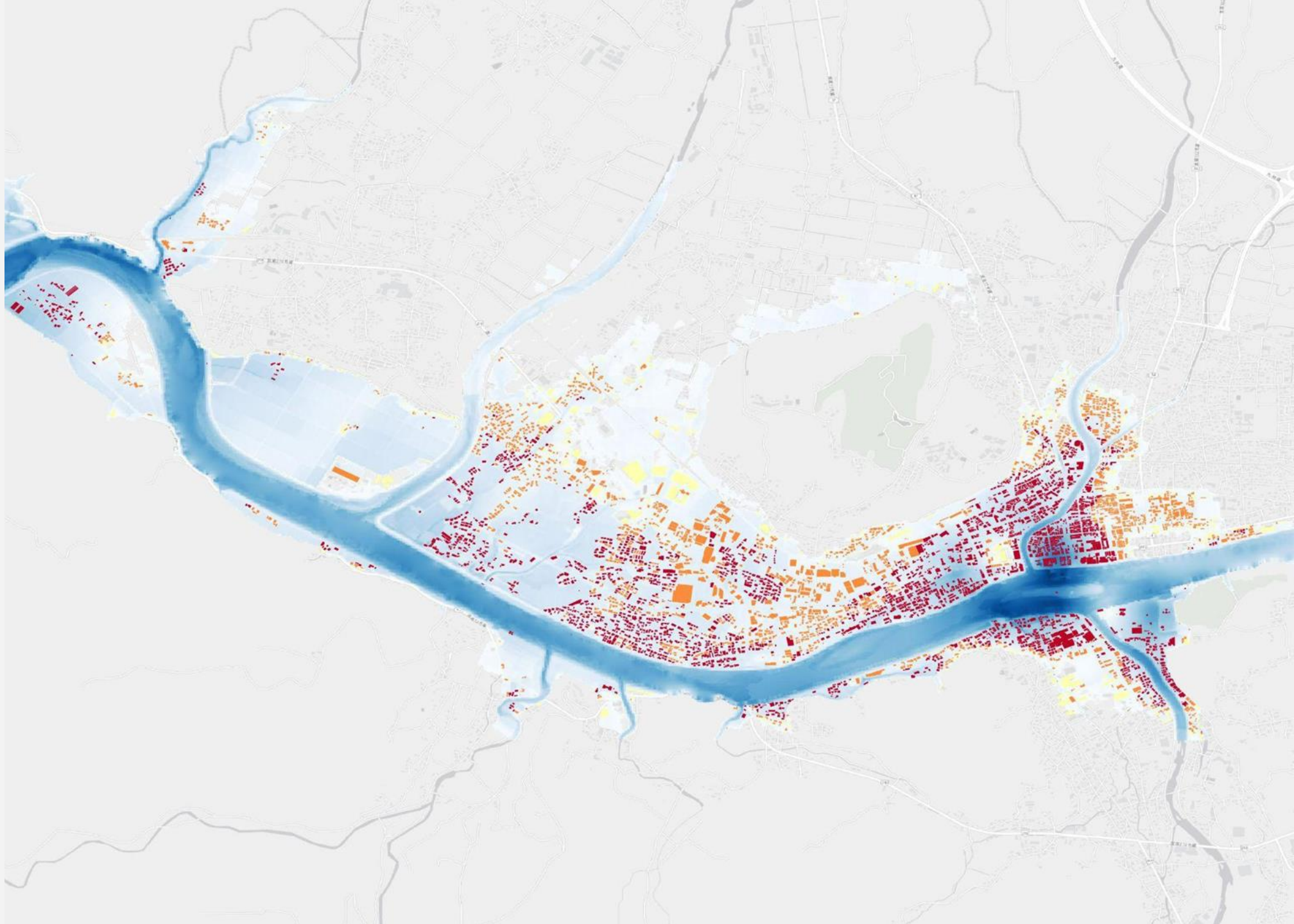
ICEYE

# Hitoyoshi, Japan Floods

**4.3 km<sup>2</sup>** flooding observed  
**5.598 buildings** impacted  
**7.500 km<sup>2</sup>** area analyzed

Total buildings inundated

**3.085 high (>1.5m)**  
**2.132 medium (0.5-1.5m)**  
**381 low (0-0.5m)**





# ICEYE

**TERO VAURASTE**

Senior Business Development  
Advisor; Lt Cdr (Ret), MSc  
Global Fellow, Woodrow Wilson  
Center

ICEYE.COM



[tero.vauraste@iceye.fi](mailto:tero.vauraste@iceye.fi) @Tvaurast