# ICEYE

## Future Computing of EO

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## **EUROPEAN NEW SPACE LEADER**

2018

WORLD'S FIRST SMALL
SAR SATELLTE LAUNCHED

450+

PEOPLE WITH
60 NATIONALITIES

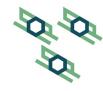
\$304M

FUNDING RAISED SINCE 2015

HEADQUARTERS IN FINLAND, 4 SUBSIDIARIES: POLAND, US, UK and SPAIN WORLD LEADER
IN SAR MINIATURIZATION
TECHNOLOGY

EXISTING PORTFOLIO OF INTERNATIONAL CUSTOMERS





## LARGE CONSTELLATION (16)



## **HIGH AGILITY**



#### **FAST REVISIT**

(1 day ground track repeat)



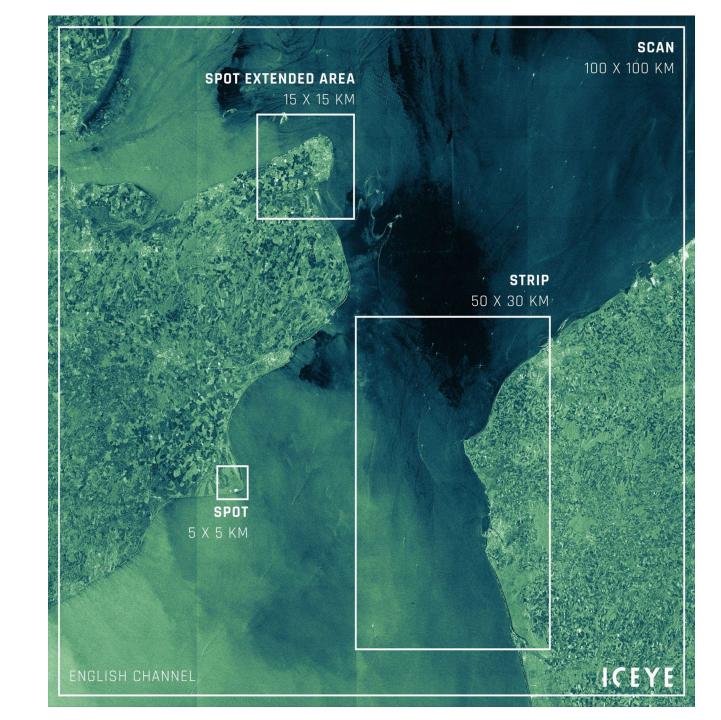
#### HIGH RESOLUTION

(down to 0.25)

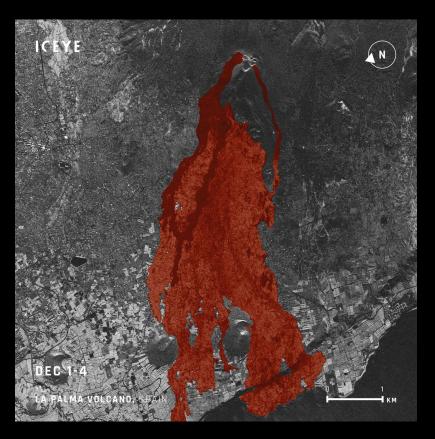


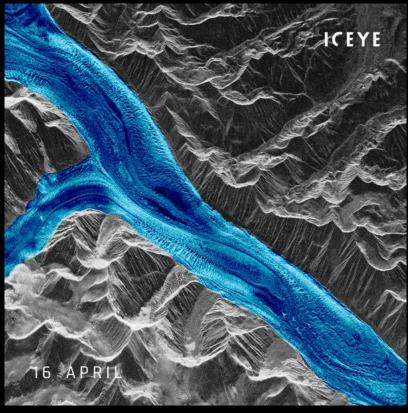
#### HIGH COVERAGE

(up to 10,000 square km in a single image)



## Natural Earth persistent change & monitoring







La Palma Volcanic Eruption (2021)

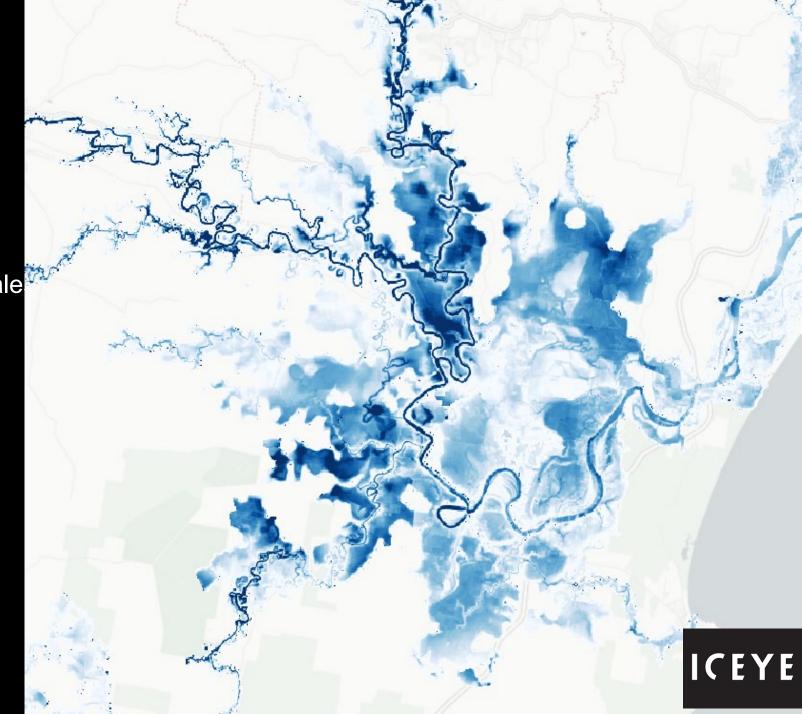
Muldrow Glacier, Alaska (2021)

Deforestation (2021)

AUS Queensland, New South Wale (April 2022)

• Mapped area = 1785 km<sup>2</sup>

• Analysis Start Date 2022-04-02



## Future advanced compute focus areas

## **Ground**

- ML/Al
  - Optimal constellation orchestration (e.g. Nat Cat response)
  - Ambiguity detection/removal
  - Geolocation

## <u>Space</u>

- Onboard SAR processing
  - Expedite feature extraction
  - Optimize data transfer/downlinking
  - FPGA low power/low latency
- Federated learning
  - O Tipping & Cueing
  - Adaptable SAR acquisition modes

Daily Revisit High Resolution Data Volume Preserve complex physics

