

# ACTIONABLE NATCAT INTELLIGENCE TO **TRANSFORM GOVERNMENT RESPONSE, RECOVERY & RESILIENCE**

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10<sup>th</sup> of May 2023, International conference on "Innovation  
in Disaster Risk Reduction", Kraków, Poland.

ICEYE



# UNMATCHED PERSISTENT MONITORING CAPABILITIES WITH THE WORLD'S LARGEST SAR CONSTELLATION

2014

ICEYE  
LAUNCHED

550+

PEOPLE WITH  
**60+ NATIONALITIES**

\$304M

SECURED  
**FINANCING**

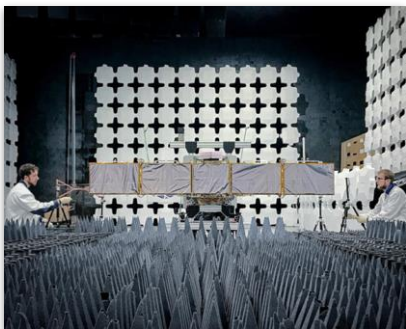
**HEADQUARTERS IN FINLAND**  
**US HEADQUARTERS IN IRVINE, CA**

PRESENCE IN:  
POLAND, SPAIN, JAPAN,  
LUXEMBOURG, & UK

**WORLD LEADER**  
IN SYNTHETIC APERTURE RADAR  
(SAR) MINIATURIZATION  
TECHNOLOGY  
&  
NATURAL CATASTROPHE  
MONITORING

1st SATELLITE LAUNCHED:  
2018  
23rd SATELLITE LAUNCHED:  
Jan 2023

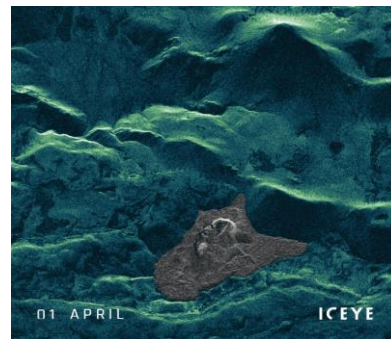
## BEST-IN-CLASS CATASTROPHE AND PERSISTENT MONITORING CAPABILITIES



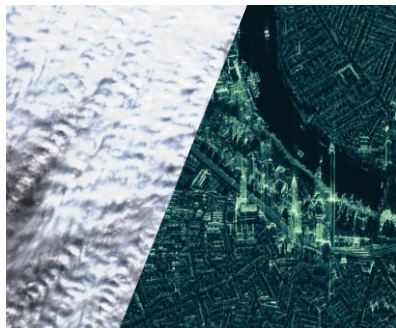
**In-house satellite design,  
build and operation**



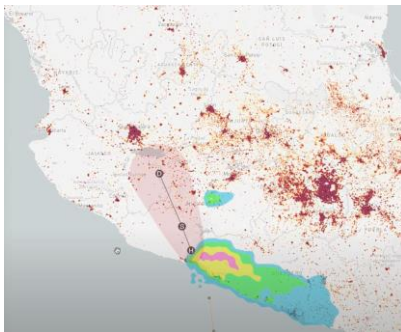
**World's largest SAR  
constellation**



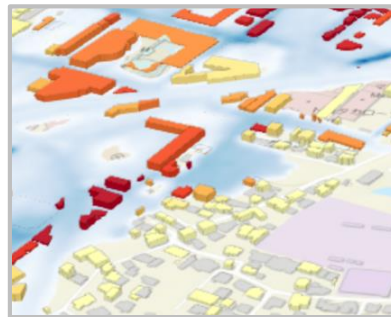
**Exceptional global coverage  
and 4-8x daily revisit**



**All-weather information  
through Clouds, Smoke and Darkness**



**Event forecasting,  
monitoring, and tracking**



**Near real-time, high precision  
analysis and reporting**




# ICEYE'S VISION FOR NATCAT SOLUTIONS

ICEYE's vision is to deliver a **comprehensive suite of insight solutions** related to a **wide range of natural catastrophe events** that **enable** government agencies and insurance industry customers to **achieve substantially better outcomes** for their stakeholders

Government Agencies	Insurance Industry			
<ul style="list-style-type: none"> <li>● Rapid Situational Awareness</li> <li>● Event Response</li> </ul>	<ul style="list-style-type: none"> <li>● Rapid Situational Awareness</li> <li>● Sizing Losses</li> </ul>	<ul style="list-style-type: none"> <li>● Communication</li> <li>● Resource Allocation</li> </ul>	<ul style="list-style-type: none"> <li>● Claims Triage</li> <li>● Remote Assessment</li> </ul>	<ul style="list-style-type: none"> <li>● Risk Management</li> <li>● Parametric / ILS</li> </ul>

Before	During	After
Near-term forecast for proactive response	Near real-time reporting to optimise response	High definition historical event analysis to support modeling / planning

## NatCat Perils



Live      Beta      R&D

Continued R&D



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## GLOBAL FLOOD MONITORING STATS UNTIL MARCH 2023

1450+

MONITORED POTENTIAL  
FLOOD EVENTS

100+

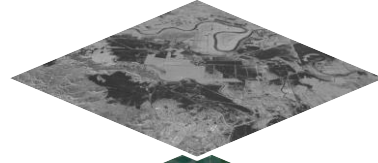
ANALYSES PERFORMED  
IN 12 DIFFERENT COUNTRIES

11,100+

IMAGES OF POTENTIAL  
FLOODING CAPTURED

# AI POWERED MULTI-SOURCE INSIGHTS

OBSERVE FLOODS DAY,  
NIGHT, AND THROUGH  
CLOUDS...



SAR satellite imagery

...AUGMENT WITH  
TRADITIONAL FLOOD  
DATA...



Optical satellite imagery



Open-source images

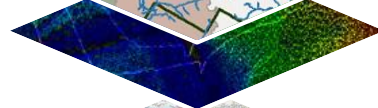


River / tidal gauges

...AND ACCOUNT FOR  
TERRAIN AND  
HYDROLOGY...

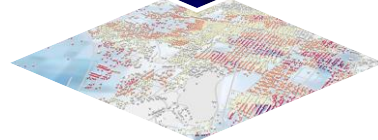


Watersheds



Digital elevation models

...TO GENERATE  
**ACTIONABLE OUTPUT**



**Flood extent and depth**

# Flood Insights: Depth & Extent

“We have never been able to confirm support for such facilities so quickly before, and we consider this alone to be an epoch-making advance”

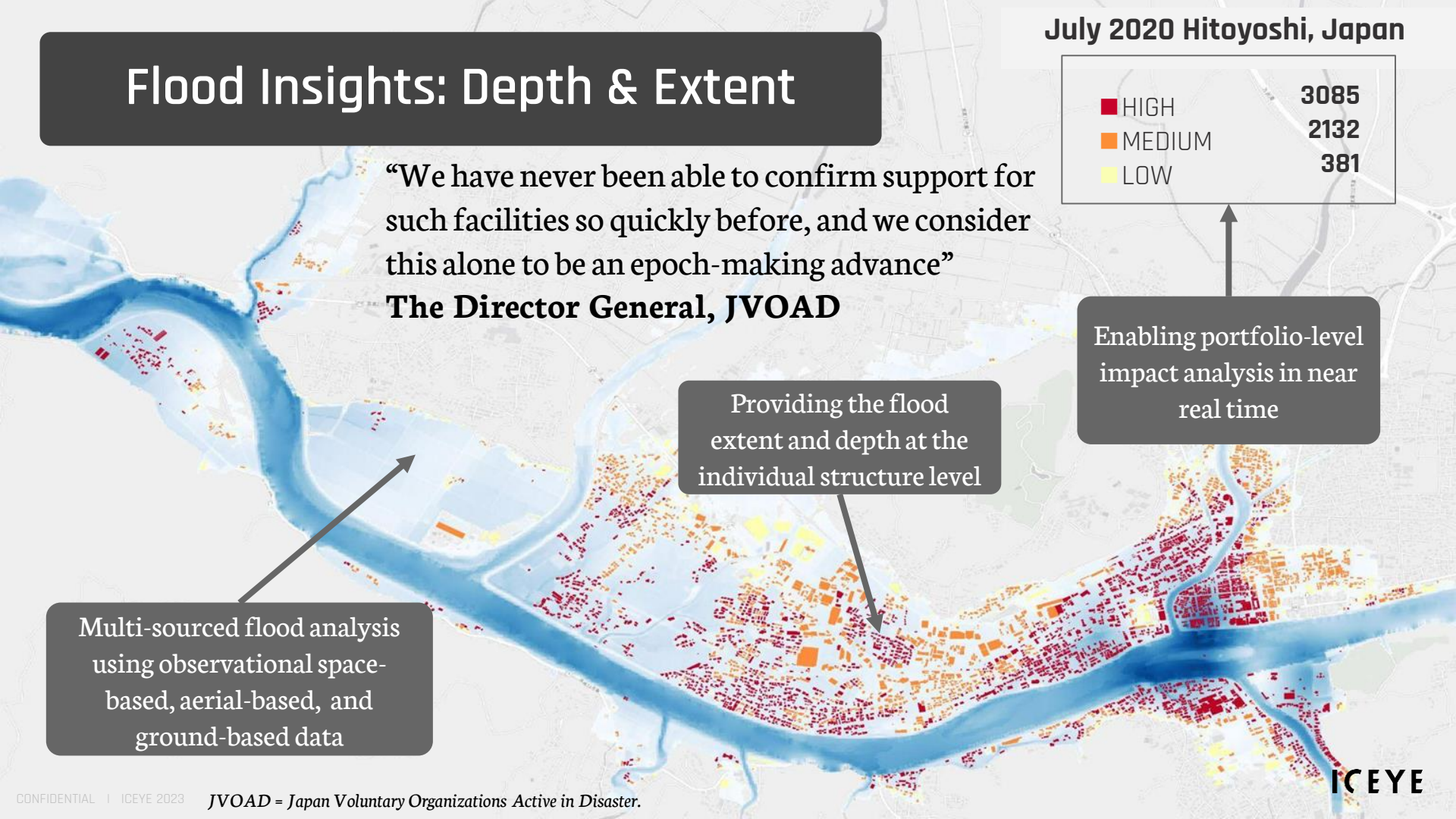
**The Director General, JVOAD**

■ HIGH	3085
■ MEDIUM	2132
■ LOW	381

Enabling portfolio-level impact analysis in near real time

Providing the flood extent and depth at the individual structure level

Multi-sourced flood analysis using observational space-based, aerial-based, and ground-based data





ICEYE

## Flooding From Hurricane Ian in Florida, US

September 2022

- 5000 km<sup>2</sup> total flood extent.
- 40 cm average inundation at building level

Total buildings affected

- 2,231 very high (>2.5 m)
- 11,132 high (1.5-2.5 m)
- 70,887 medium (0.5-1.5 m)
- 274,608 low (<0.5 m)



They've attempted to get Civil Air Patrol... to do flyovers but they won't be able to... [ICEYE is] the only ones in these situations that can get eyes on what's happening on the ground in a timely fashion that makes a difference to response and recovery"

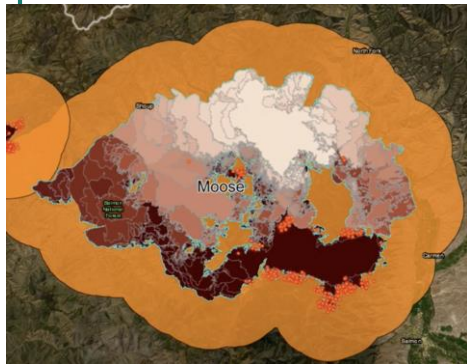


# FEMA



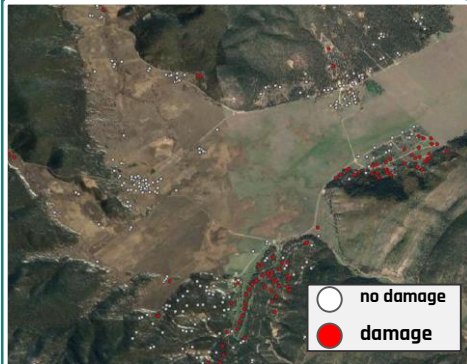
# ICEYE Wildfire Products in Development

## Wildfire Monitoring App



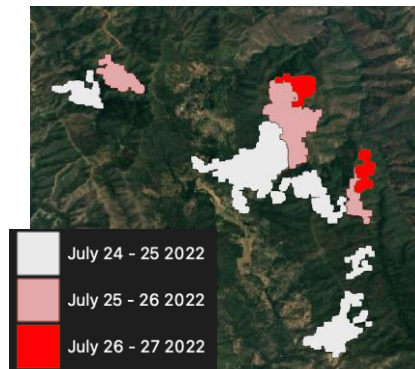
- Wildfire Monitoring and Targeting
- Web Application displaying all active wildfire events in the US and Australia

## Building Damage Assessment



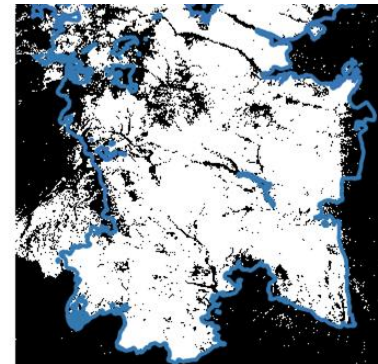
- Detects the number and location of impacted buildings
- Binary classification of damages - delivery target within 24 hours

## Wildfire Progression Maps



- Detects burned areas and delivers an outputs on a daily basis

## Wildfire Footprint



- Historic burned areas incorporated into underwriting and pricing models, including risk assessment

# ICEYE

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