

Flood Rapid Intelligence (FRI)

Fast and accurate flood extent for Australia, New Zealand, and Japan

Unmatched situational awareness, speed, and precision for emergency responders, utility, and energy companies who need near real-time visibility into floods.

The advantage of Flood Rapid Intelligence

ICEYE's Flood Rapid Intelligence delivers fast, automated insights during flood events using SAR (Synthetic Aperture Radar) imagery, even through cloud coverage. The product generates accurate flood extent snapshots within hours, supporting early response efforts.

Activated at the first signs of flooding, FRI continuously processes data and releases updated flood extent within hours, rather than days. Designed for timely decision-making, it emphasises reliable detection and frequent updates throughout the event.

Trusted by government, utility, and energy organisations worldwide

"ICEYE's data proved essential during Storm Boris, particularly when other information sources were not available in such a timely manner. This timely data access helped make more informed decisions during critical periods."

- Jakub Ryzenko, Head of Crisis Information Centre, Poland



Global coverage of floods



Rolling updates every 6-12 hours



World's largest fleet of weather-independent radar satellites

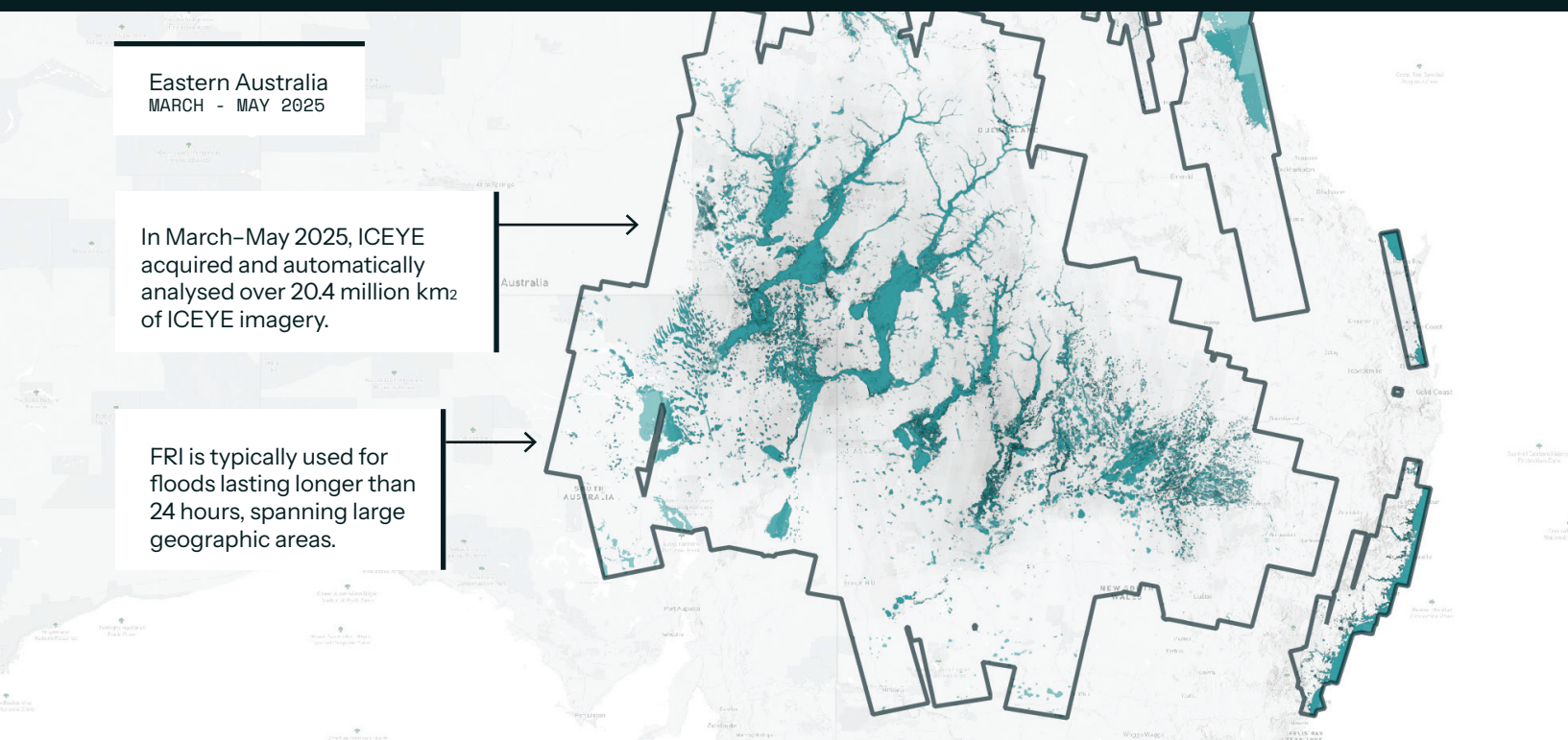


Flexible data delivery through API integrations and GIS platforms

Eastern Australia
MARCH - MAY 2025

In March-May 2025, ICEYE acquired and automatically analysed over 20.4 million km² of ICEYE imagery.

FRI is typically used for floods lasting longer than 24 hours, spanning large geographic areas.





FRI leverages four key strengths:

- Fully automated, fast flood extent analysis: We use AI-powered analysis of ICEYE SAR satellite constellation data to create a more rapidly available and frequently updated, evidence-based estimate of flood extent.
- Always-on weather monitoring: Our in-house team provides 24/7/365 weather forecasting to anticipate flooding events and task SAR imagery accordingly.
- Unmatched scale in one central place: Our solution can map hundreds of thousands of kilometres at once, eliminating the need to piece together flood results across multiple counties, states, or countries.
- Observation-based actionable insights: The data we provide is clear, actionable, and supports confident, informed decision-making.



Rapid Emergency Response

Deliver near real-time flood visibility to support critical decision-making during disaster response. Ideal for first responders, state emergency services, and humanitarian teams.



Infrastructure & Asset Protection

Safeguard roads, airports, hospitals, utilities through timely flood extent mapping and support to remote and regional communities.



Disaster Recovery Planning

Enable post-flood damage assessments, planning and long-term resilience strategies. Tailored for water management authorities and land use planners.



Public Alerts & Transparency

Enhance public safety and trust with precise, visual flood data for alerts and community engagement. For flood control teams at the local, state, and national levels.

Flood Rapid Intelligence vs. Flood Insights

FRI provides a frequently updated view of the current flood extent during an event, allowing you to see the flood event as a sequence. In contrast, Flood Insights offers the most comprehensive information on maximum peak flood extent and depth during and after a flood event.

Learn how ICEYE helps you act faster, plan smarter, and respond better — across the full flood lifecycle.



For more information, visit
iceye.com/solutions/contact