

Near Real-Time Situational Awareness for Bushfires

Addressing a critical national safety challenge

There is no doubt that climate change is impacting the frequency and severity of bushfires worldwide. However, modeling bushfire risk and gaining visibility into impacted areas immediately after a fire both remain challenging. Environmental factors like air temperature and humidity, combined with the unpredictability of human actions and dense smoke, often hinder visual assessments and complicate bushfire analysis.



Climate change is increasing the occurrence of bushfires globally



The 2019–2020 bushfires burned over 24.3 million hectares, destroyed over 3,500 homes, and affected nearly 3 billion animals, leaving lasting damage on communities and ecosystems.



With nearly half of Australians living in high-risk areas, proactive planning, stronger fire prevention, and better emergency responses are essential to reduce future impacts.

ICEYE BUSHFIRE INSIGHTS

Precise

Building-level impact data

Consistent

Acquire data regardless of weather, light and smoke conditions

Reliable

Able to capture every bushfire catastrophe in Australia

Timely

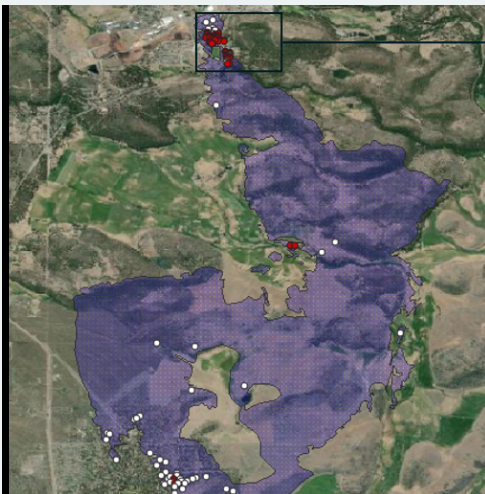
Delivers data every 24 hours during a given bushfire event

What if you could understand bushfire damage within hours vs. days?

Owning the world's largest synthetic-aperture radar (SAR) constellation, ICEYE combines earth observation insights from space with advanced data analytics and machine learning. As a result, for the first time in history, we can provide accurate and immediate, building-level insights into the situation on the ground.

Enhance response and recovery efforts with ICEYE

Until now, governments have faced significant challenges in rapidly assessing the extent of bushfire damage for response and recovery purposes. Traditional methods can be labor intensive and still may not provide the timely, detailed information necessary due to dangerous ground and air conditions. ICEYE is transforming this process with our groundbreaking Bushfire Insights, delivering near real-time, extent and building-level impact data, that enables more accurate and expedient decision-making during bushfire emergencies without risking the safety of responders.



Affected area Damage No damage

- With ICEYE's radar technology, you can **take out the guesswork** of looking at news reports and aerial imagery, and reduce the stress on your team who is working under extreme time pressure. This empowers rapid and efficient responses to bushfire events. The result? Better resource management and enhanced safety for affected communities.
- ICEYE's bushfire building damage assessment product delivers the **output in a vector format** (either latitude, longitude points or building footprints) with a binary classification of damage (likely destroyed / likely not destroyed) per location, within 24 hours.



Improve situational awareness



Enhance disaster response



Accelerate recovery efforts