

ANU Institute for Space

RESILIENCE MISSION



Catastrophic bushfires are increasing all over the world. It's undeniable that Australia faces a future living with bushfires. Between climate volatility and a rise in extreme weather events, it's vital that we work with our communities, our industries, and our governments to build our resilience infrastructure to ensure a safe environment for us all to live.

The Australian National University (ANU) and its partners have developed a Resilience Mission to provide landscape flammability risk data at a continental scale to support effective planning and preparation.

Over the past three years, ANU has made major investments in developing a new spaceborne sensor, OzFuel. This sensor has been designed to be sensitive to leaf-level flammability traits in Eucalypt trees as well as being capable of detecting changes

in the flammability traits of other bushfire fuels. With the data provided by the OzFuel sensor, we can mitigate fire risks by knowing where the fuel is, how much there is, how dry it is, and what the risk is to communities.

The Resilience Mission will be a satellite mission with the OzFuel sensor as its payload to provide the nation with the most cost-effective way to measure the daily to weekly changes of bushfire risk over the whole of the Australian landmass, as well as on a global scale.



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THE EXPERTS DRIVING THE RESILIENCE MISSION COMBINE:

- World class research in remote sensing of bushfires,
- Innovation by leveraging advanced instrumentation technologies from astronomy to develop the OzFuel sensor, and
- Key industry partnerships in space systems technology.

The Resilience Mission aims to utilise the Ozfuel advanced sensor system to acquire high spatial, spectral, and radiometric resolution data. The mission will provide this data freely to anyone involved in assessing bushfire risk, predicting fire behaviour, informing suppression efforts, and planning prescribed burns, and other users to make our communities more resilient.



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Are you interested in using the Resilience Mission Data and partnering with us to build bushfire resilient communities?

PLEASE CONTACT:



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