

★ FIRE FLIGHT ★

★ AERIAL FIRE MAPPING SYSTEMS ★

FireFlight Test Project: Near real time fire mapping

On the 19th November 2015 Spatial Scientific undertook thermal mapping of a small bushfire near Kyeema, South Australia, which was first reported on the 17th November. The fire eventually burnt approx. 100 hectares before it was fully contained.

The fire was still burning when the thermal mapping flight took place, but due to its small size, most of the assets (including all of the air assets) had been stood down.

This fire was used to test the newly developed fire detection and mosaicking algorithms that form part of the near real time fire mapping system, as well as the web delivery component of the system.



Over 250 thermal images were acquired by flying seven parallel flight runs at a height of 5000 feet. Within one hour of landing, the acquired thermal image frames were mosaicked into a thermal heat map showing the fire and the surrounding terrain.

This test project validated the following components of the FireFlight system:

- Data was quickly mosaicked into geometrically accurate thermal heat maps
- A colour ramp was easily applied to highlight the fire
- The thermal heat map was uploaded to a secure website for distribution to users

The resulting thermal heat maps are available to view online at:

www.fire.aero/Examples/KyeemaFire-Nov2015

