



T4-A5: Why fly?

How do we know that aerial
firefighting operations are effective
and efficient?

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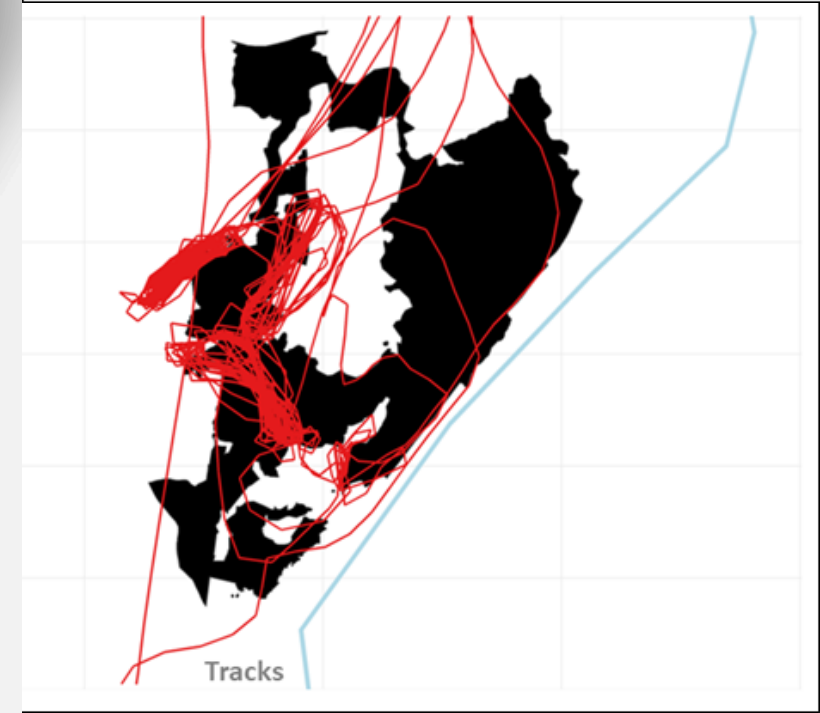
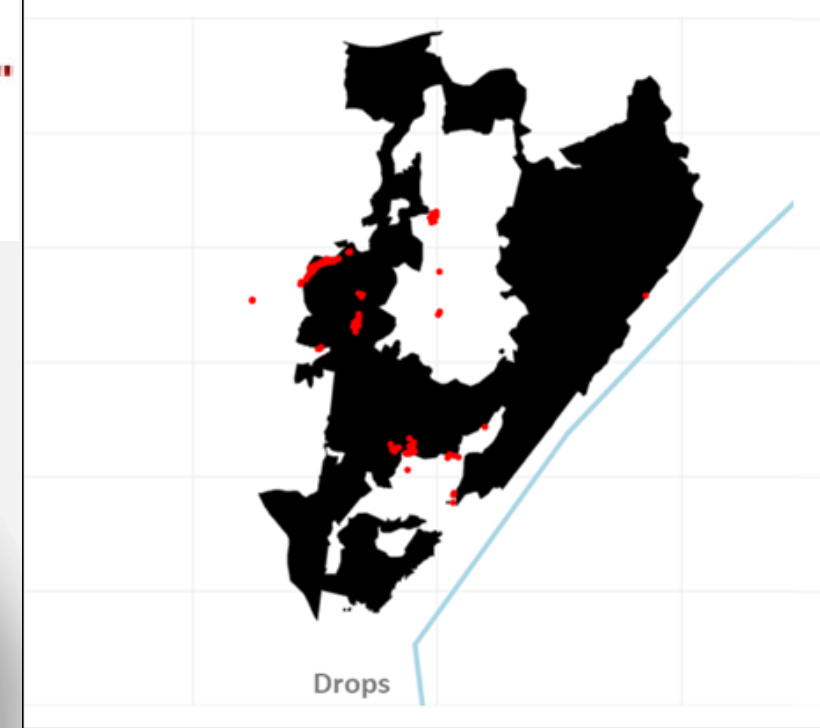
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Objectives



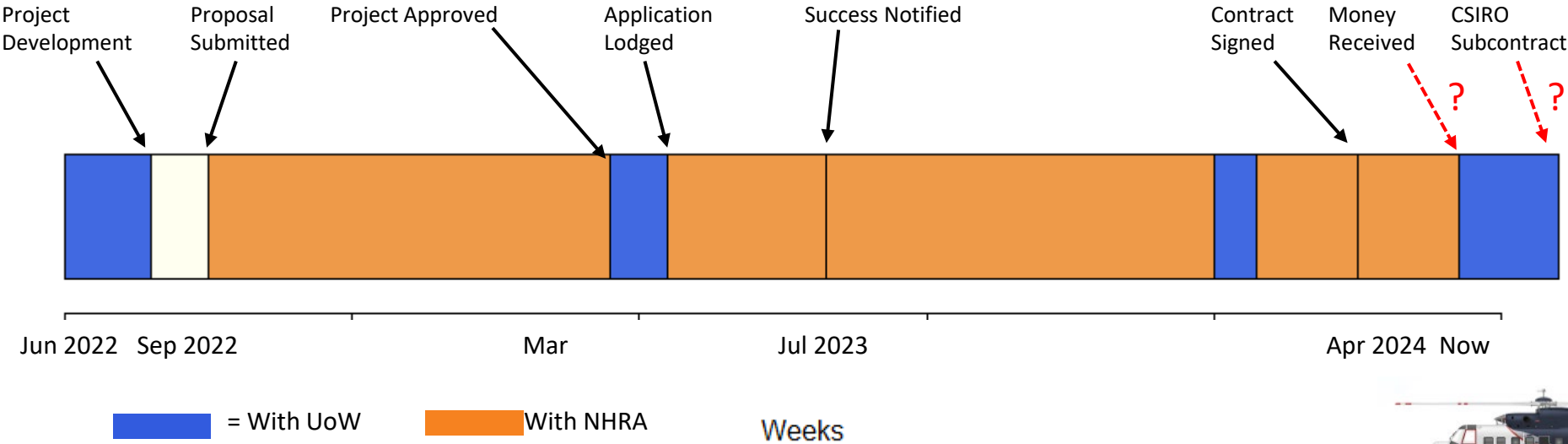
- 1) Undertake assessment of how aircraft are currently used in Australia (Profile of use).
- 2) Develop methods for estimating objectives from available data and undertake profile analysis of these (Purpose of use).
- 3) Undertake broad assessments of effectiveness by comparing objectives with outcome measures (Assessment of effectiveness).



Project Action Timeline

Task description	March 2023	June 2024	Sept 2024	Dec 2024	March 2025	June 2025
Literature review		X				
Data acquisition & processing		X				
Data availability assessment			X			
Research data potential & workshop priorities		X				
Case study data collection					X	
Aircraft use profile					X	
Purpose of use					X	
Assessment of effectiveness						X
Final Reporting						X

Project Development Timeline



So far its just a plan

Based on our 2021 pilot



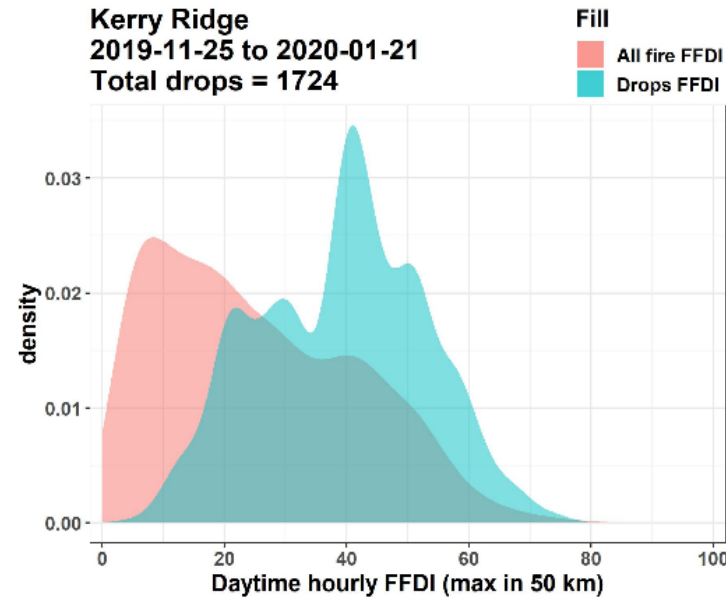
Profile of use

For example:

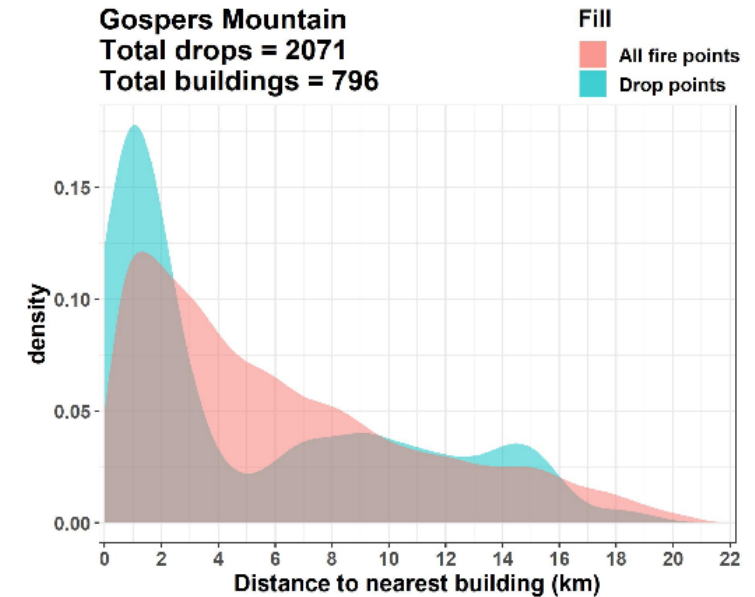
- What is the fire weather envelope for aerial?
By aircraft type?
- Does aerial tend to occur near houses or far away?
By aircraft type?



Drops in relation to fire weather



Drops in relation to distance from houses

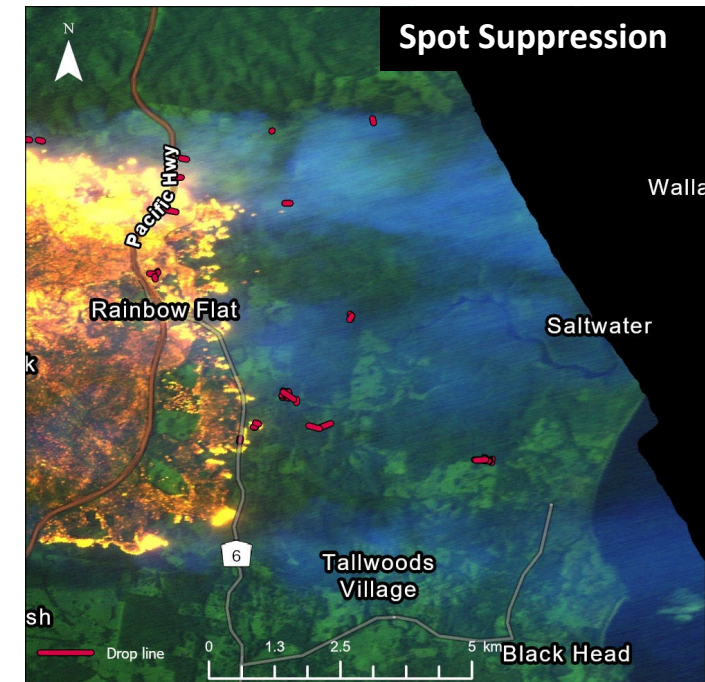
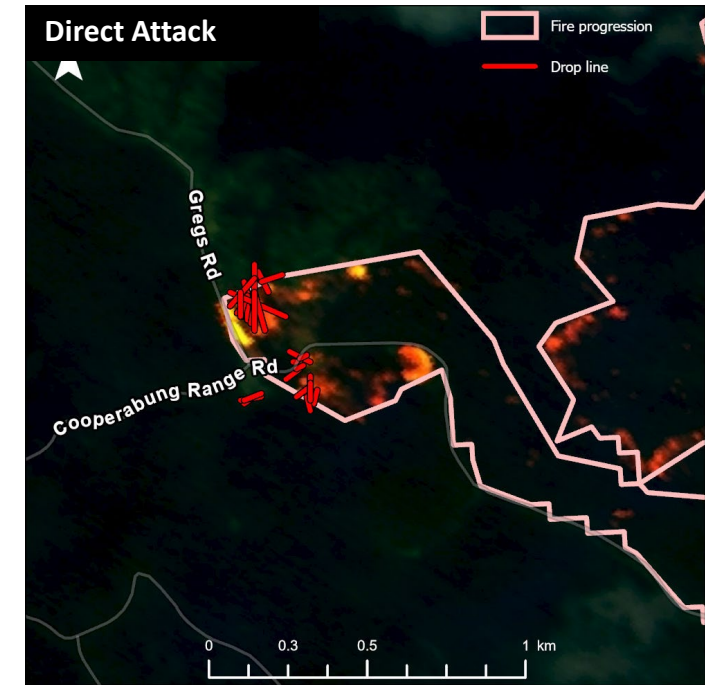




Automated objective detection

Using:

- Drop Data
- Fire Progression / Linescan
- Asset locations
- And time matching



Effectiveness

