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# Canopy penetration of airtanker drops in forest fuels treatments and untreated stands

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# Background

- Convincing the public to support forest fuels treatment
  - Open canopy allows more of an airtanker's load to reach the forest floor
  - Increase the effectiveness of airtanker drops

# Objective

- Measure and compare the amount of an airtanker drop that reaches the forest floor in a forest fuels treatment and in a untreated stand

# Methods

- 2 drop plots in Slave Lake, Alberta

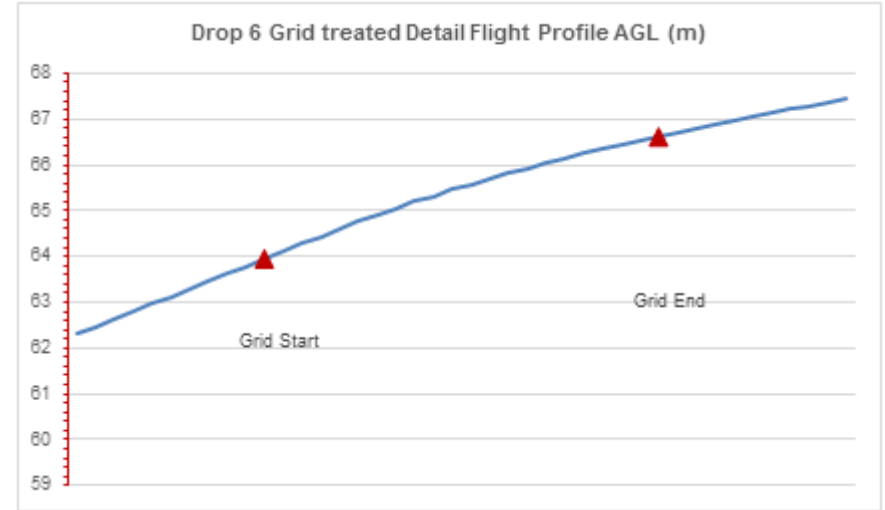
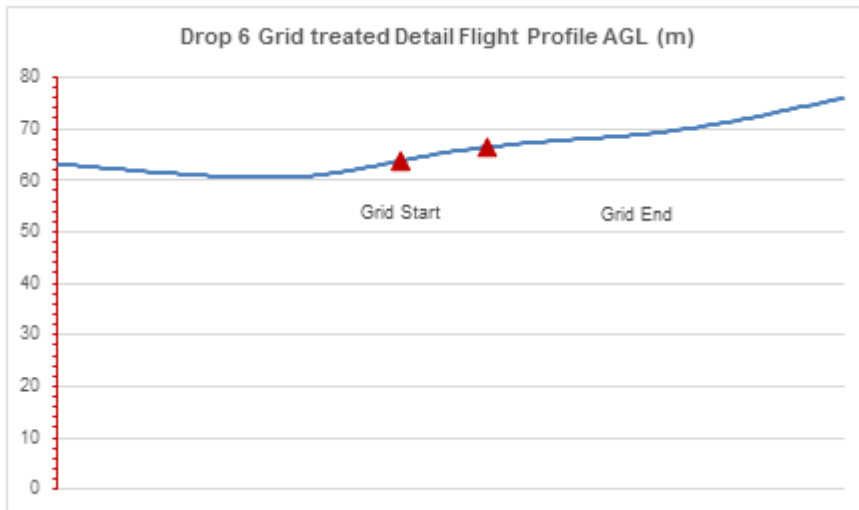
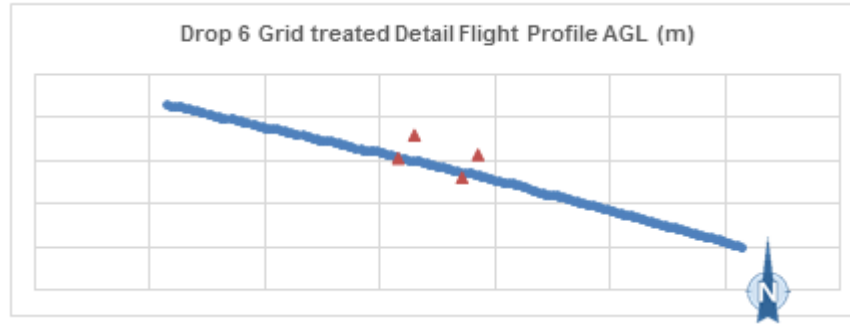


# Methods

- CL-215 Airtanker (1440 US gallons)
- Coverage Level 4
- Class – A foam
- Video cameras
- Ground cup measuring
- Track flight path by GPS



# Results



# Results

- Total 8 drops
- 5 drops over 50% coverages and considered as valid drops
- Paired up the similar coverages to compare



# Results

Drop No	Recovery volume (Gal)	Recovery rate (%)	Average CL (gal/100ft <sup>2</sup> )
4 (Treated)	688.782	47.83	3.146
7 (Untreated)	410.750	28.52	1.944
2 (Treated)	856.377	59.47	2.497
5 (Untreated)	798.251	55.43	1.799
3 (Untreated)	512.055	35.56	1.737

# Results

- [https://youtu.be/X1Q6K\\_Du6cw](https://youtu.be/X1Q6K_Du6cw)

# Acknowledgements

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