

# Determining Threshold Conditions for Extreme Fire Behaviour

Research advisory forum / 2019

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/ The University of Melbourne

 @bnhcrc  @bnhcrc

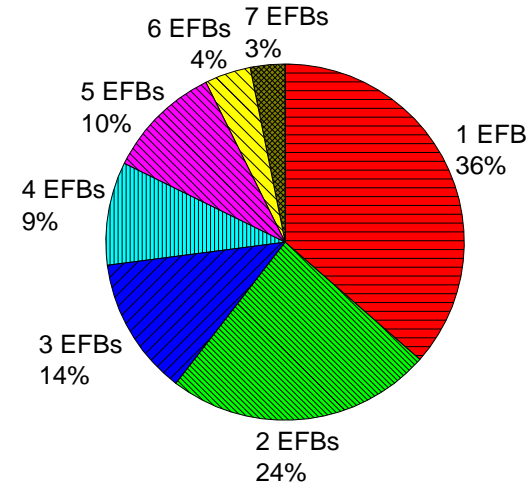
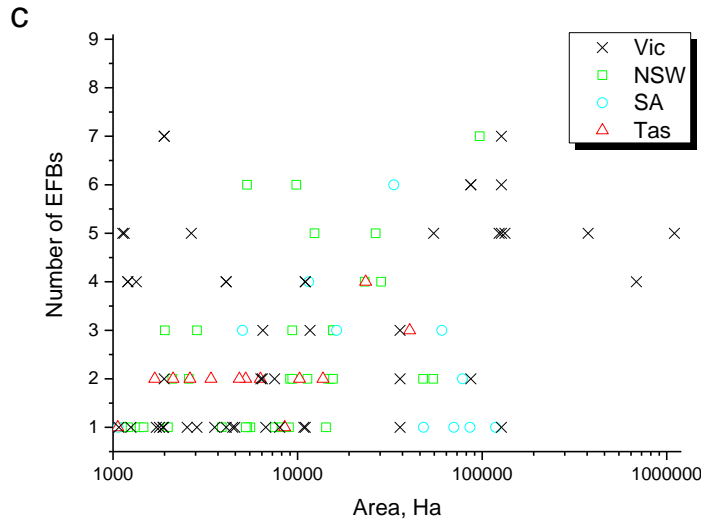


**Business**  
Cooperative Research  
Centres Programme

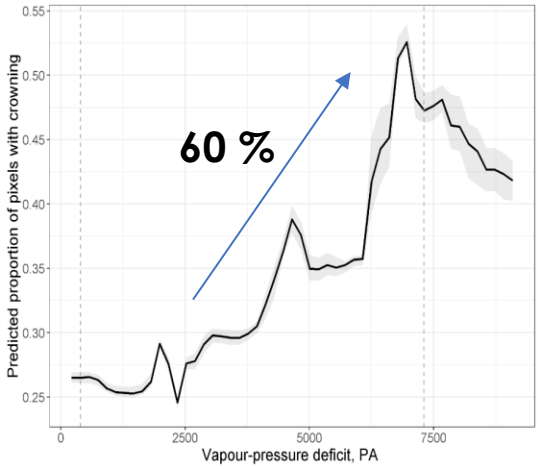
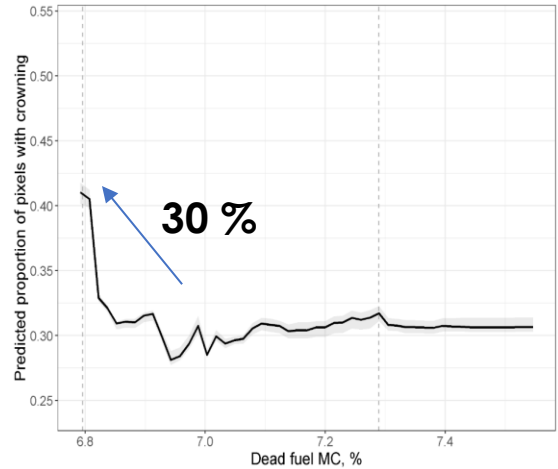
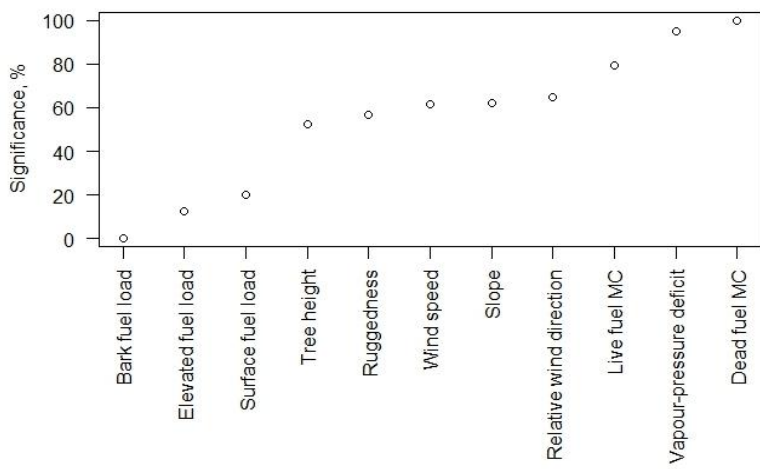


# FREQUENCY OF EXTREME FIRE BEHAVIOURS IN FOREST ENVIRONMENTS

Number of EFBs versus fire area for four states      Percentage of fires with different quantities of different EFBs



# THE DETERMINANTS OF CROWN FIRE RUNS DURING EXTREME WILDFIRES IN BROADLEAF FORESTS IN AUSTRALIA



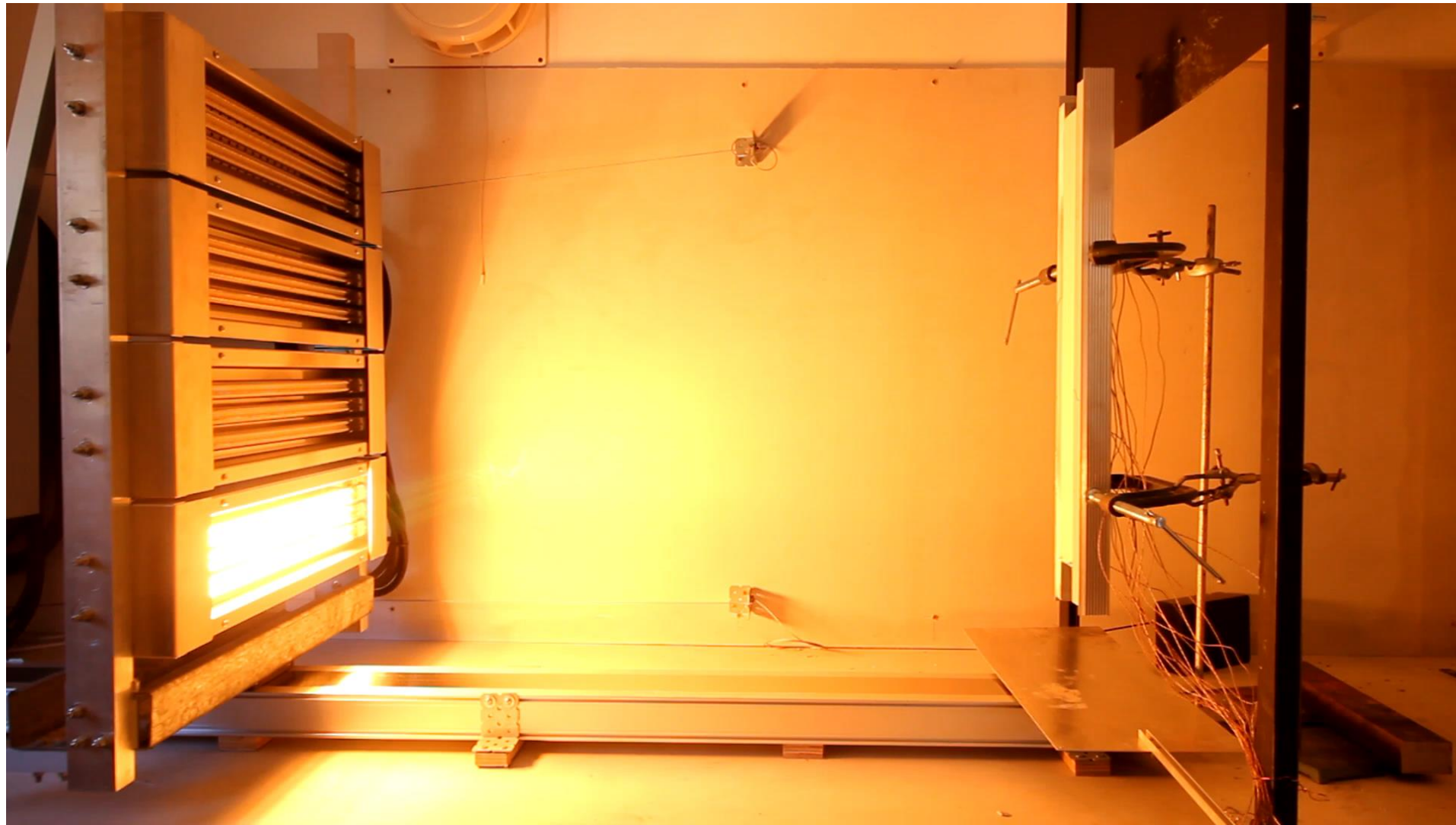
*Importance of predictor variables for the prediction of crown fire extent*

*Influence of predictor variables on crown fire extent*



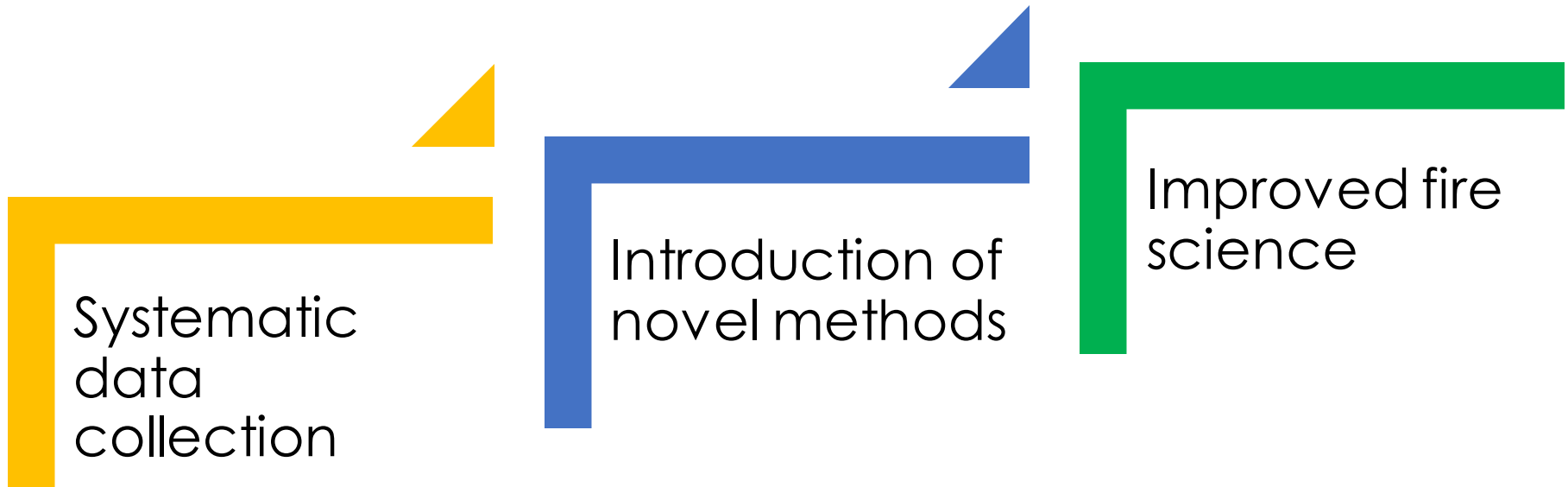
Microsoft Hyperlapse Pro





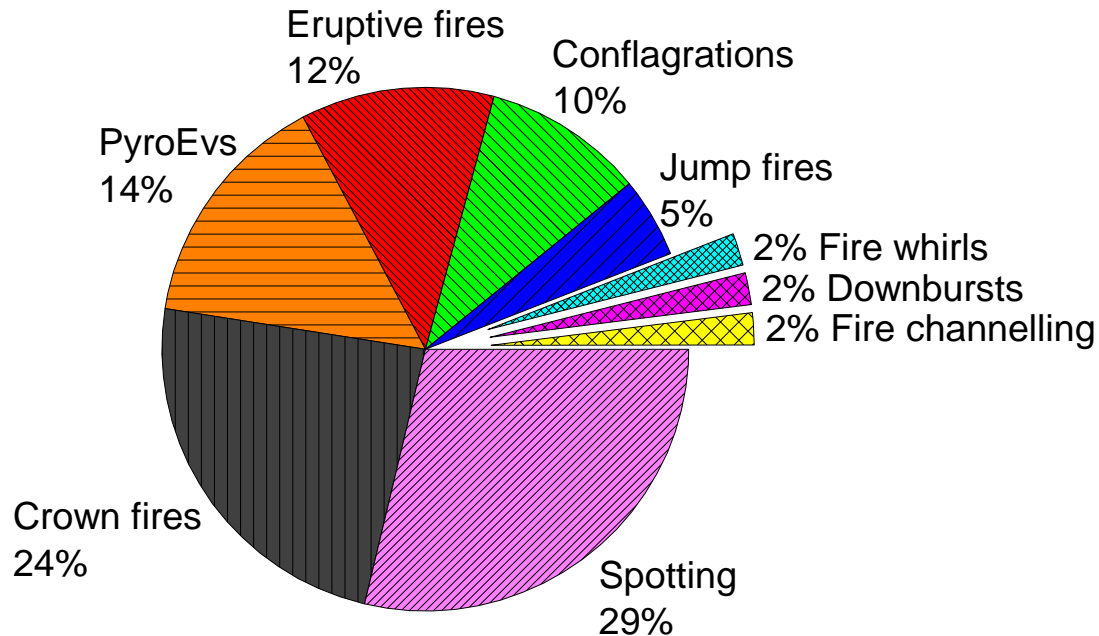
# Utilisation outputs

- *Set of suggested optimal data collection protocols.*



# Utilisation outputs

- *Prioritisation of extreme fire behaviours.*



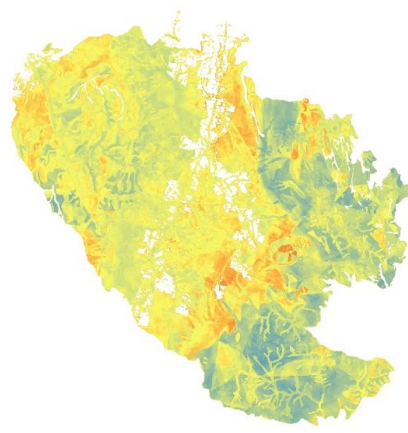


# Utilisation outputs

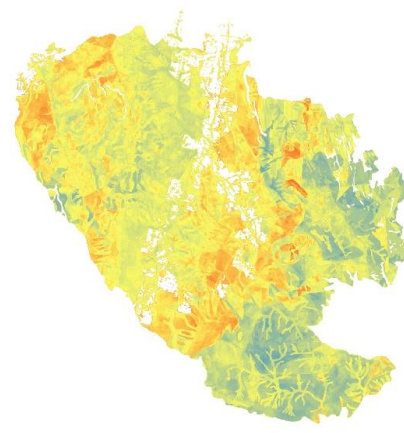
- *Model for forecasting of crown fire potential at hourly to daily scales.*



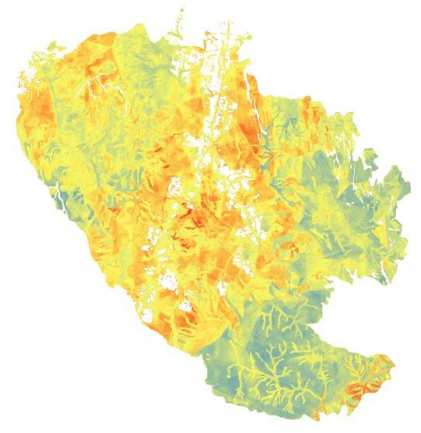
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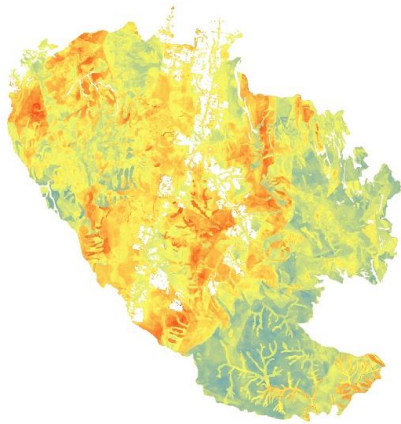
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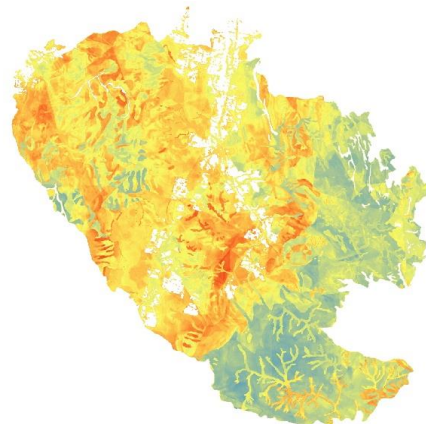
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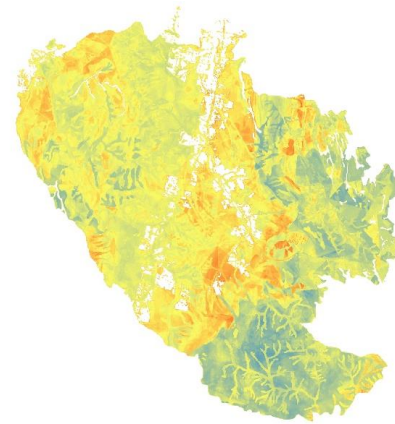
14.00



16.00



18.00



20.00



22.00



# Expected outputs

- *Development of guidelines/standard for testing of ignitability of fuels at dynamic conditions.*
- *Development an alternative tool for better understanding of fire behaviour and decision making.*
- *Development of quick-reference materials for operational guidance.*

