

# Practical Application of UAV's for Fire

Innovative Case Studies for UAV Applications



David Herries, General Manager  
UAV Team: Chris Auchlin, Chris Scoggins, Robin Hartley

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Application of UAV's in Fire Management

Thermal (infrared) camera's  
mounted on UAV's and smartphones / tablets

Fire Monitoring  
Hot Spot Detection

Acknowledgement to Timberlands for Facilitating this Implementation



# UAV Equipment



# Handheld Equipment





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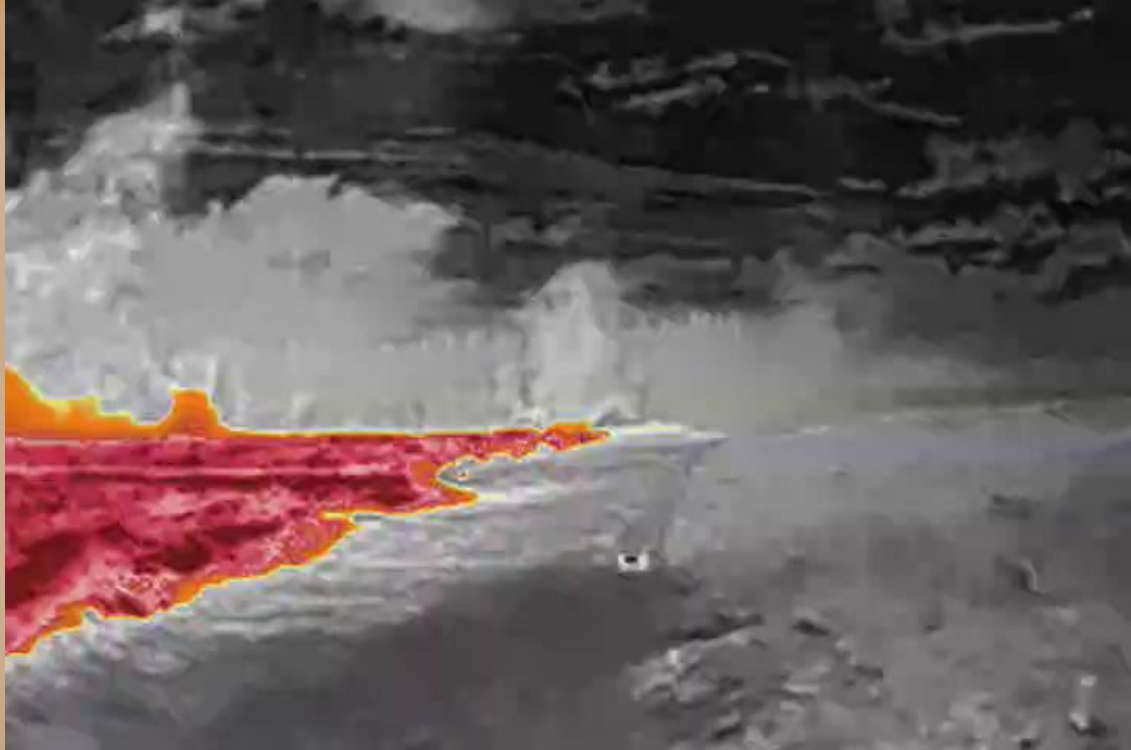
# Monitoring Fire



# Monitoring Fire

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# Monitoring Fire



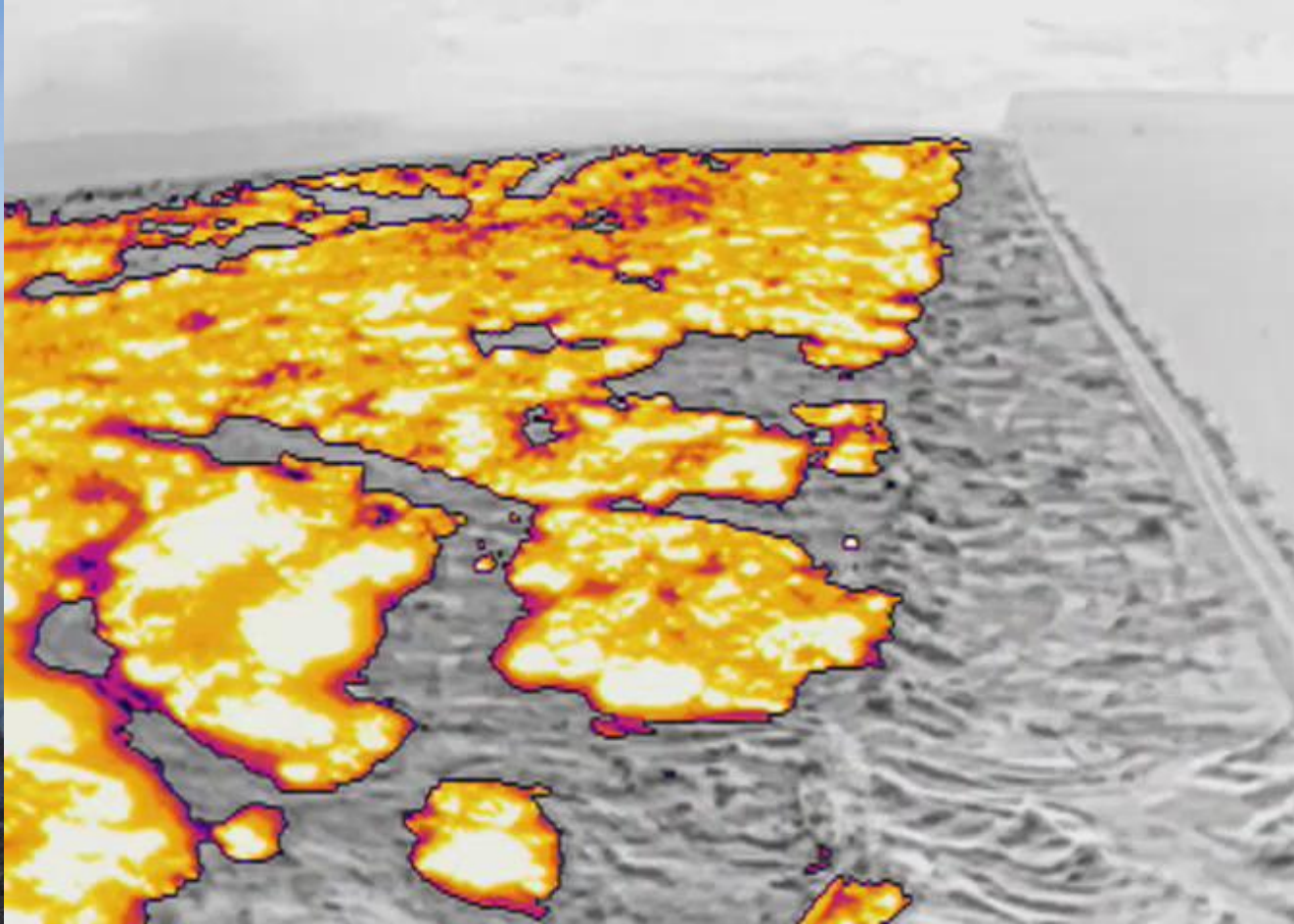




# Monitoring Fire

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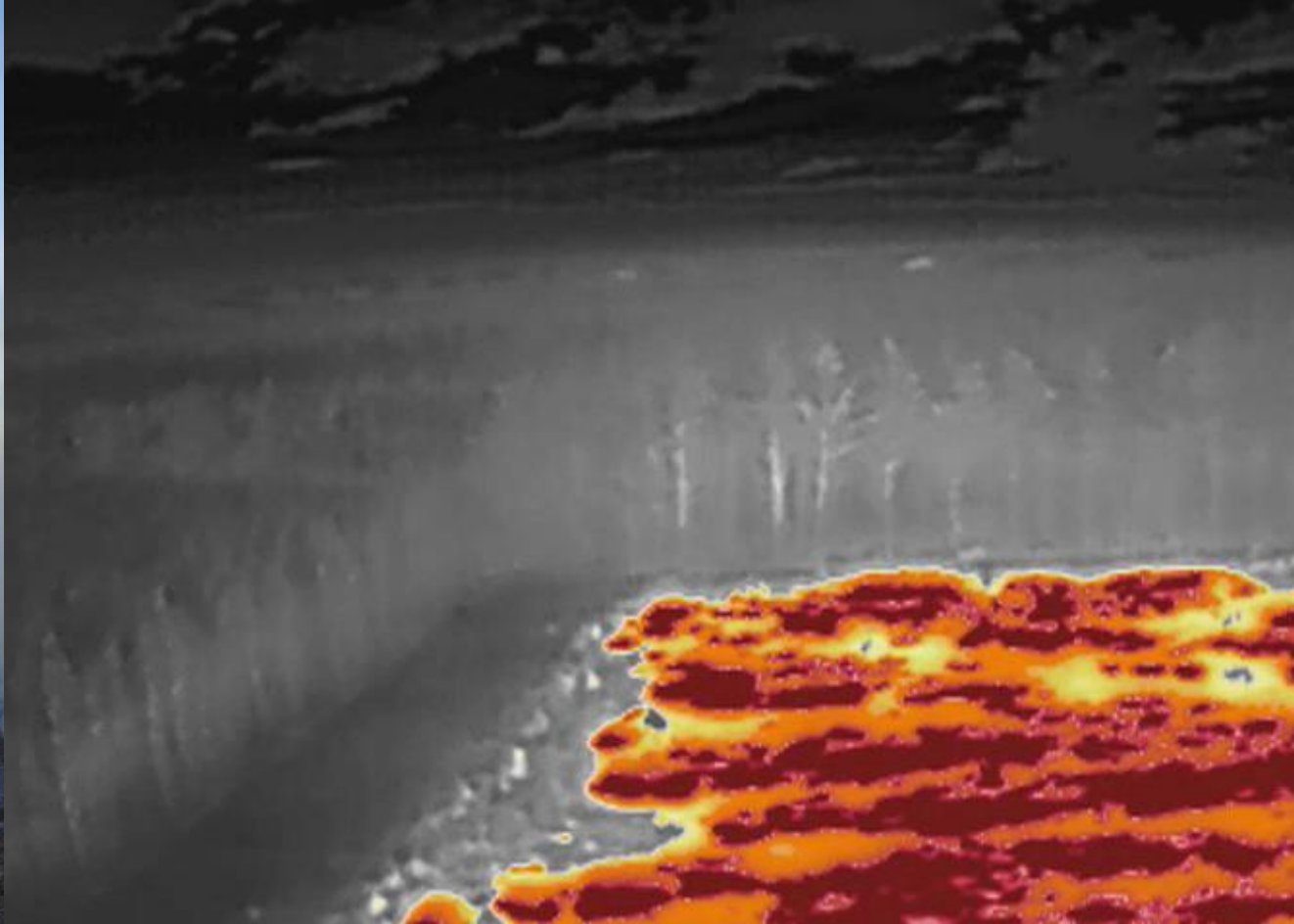
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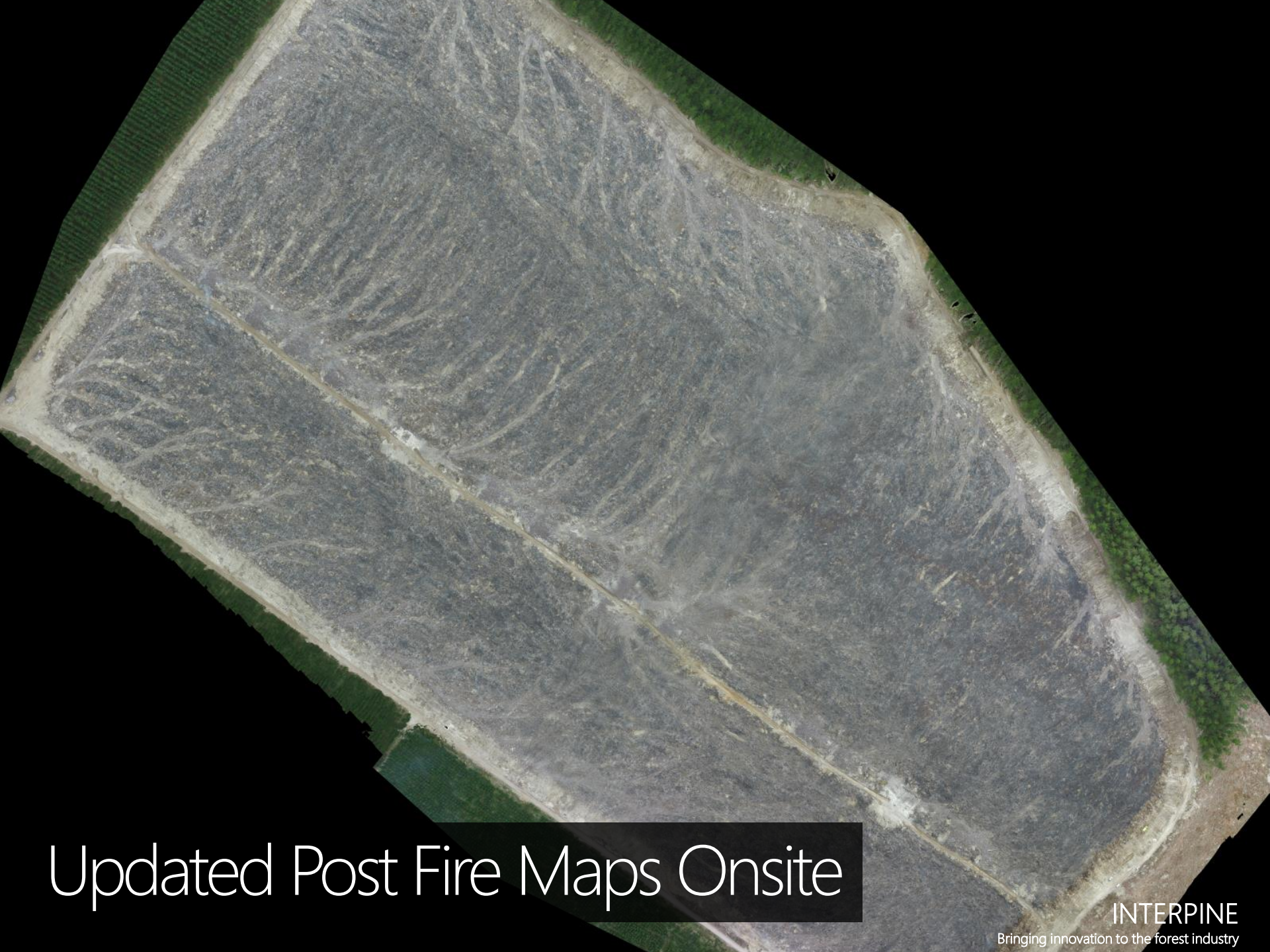
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# Normal Helicopter Operator View



# Updated Post Fire Maps Onsite

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Mop up

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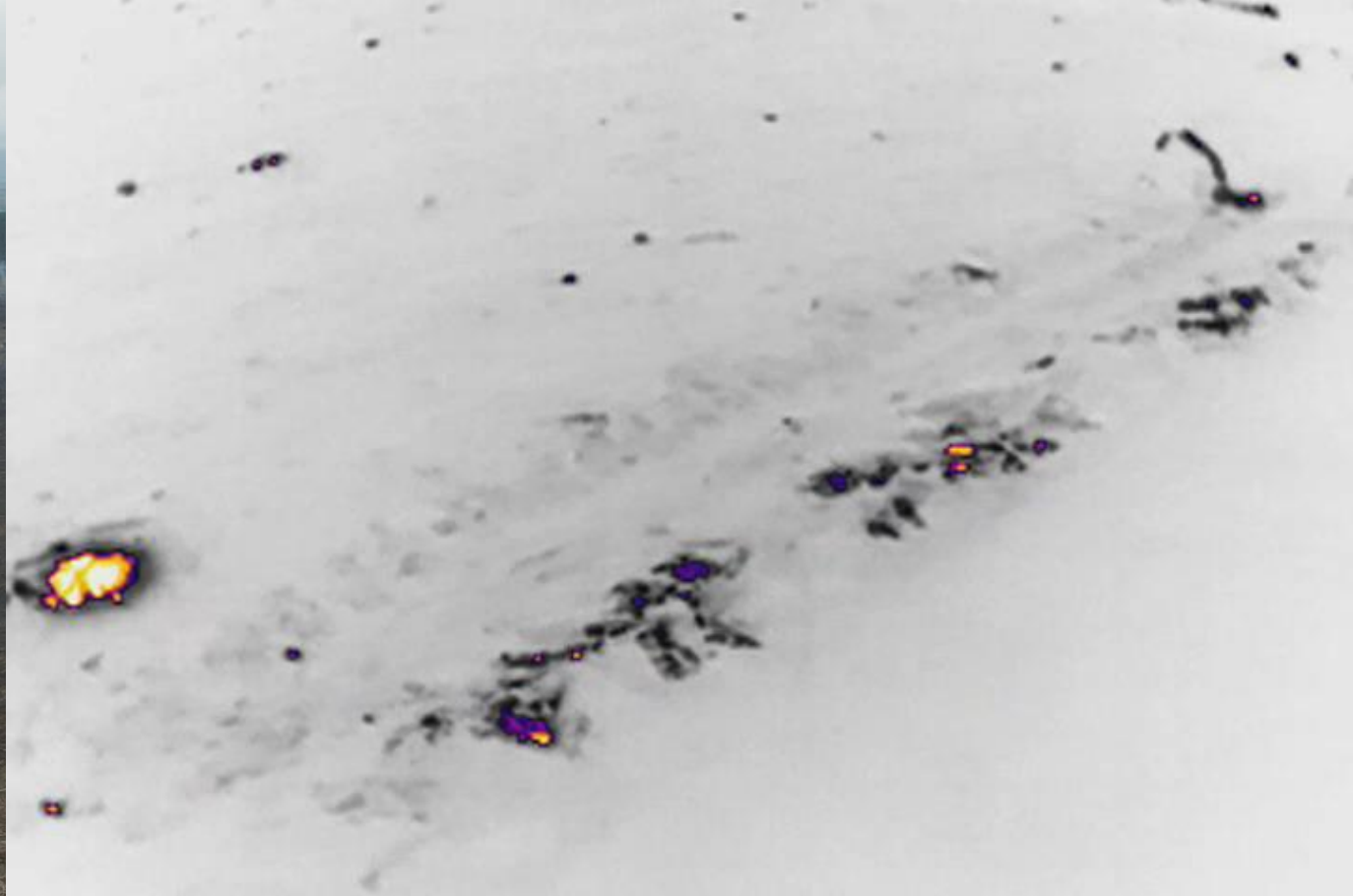


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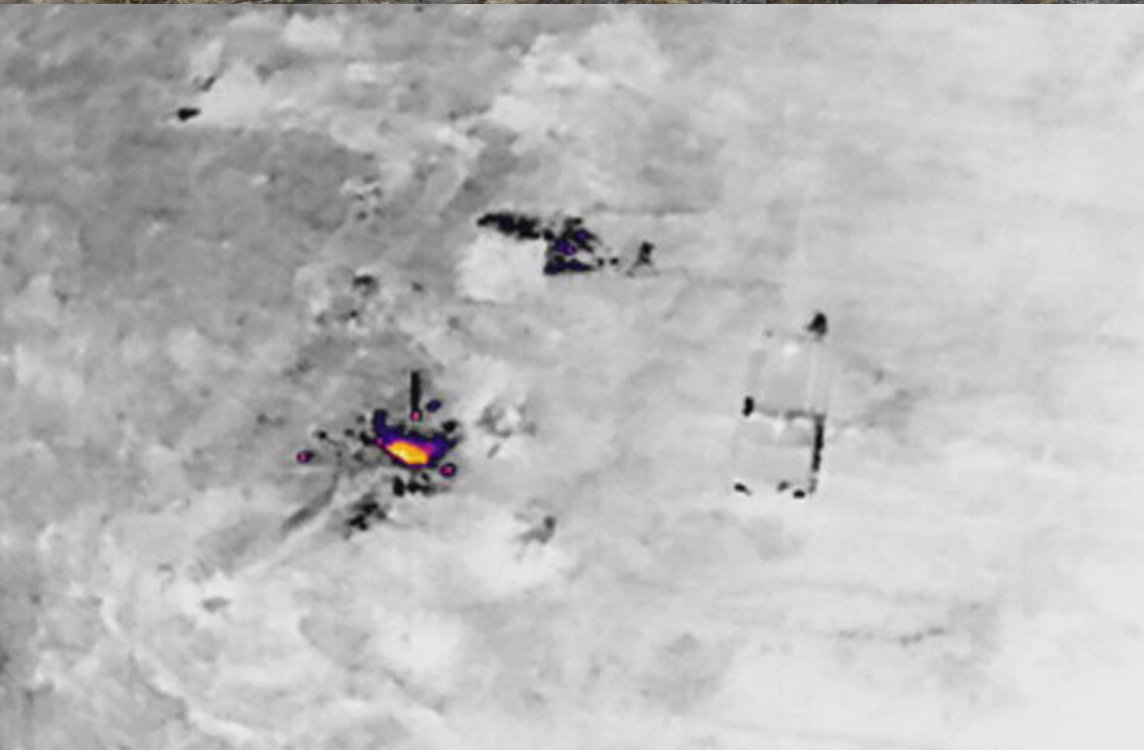
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Mop up

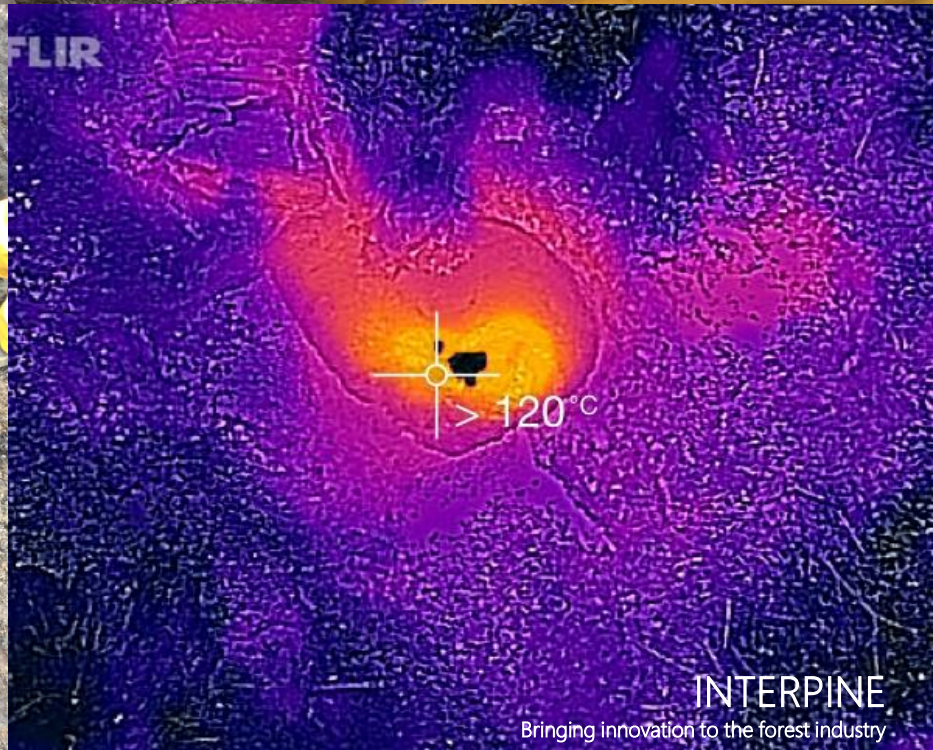




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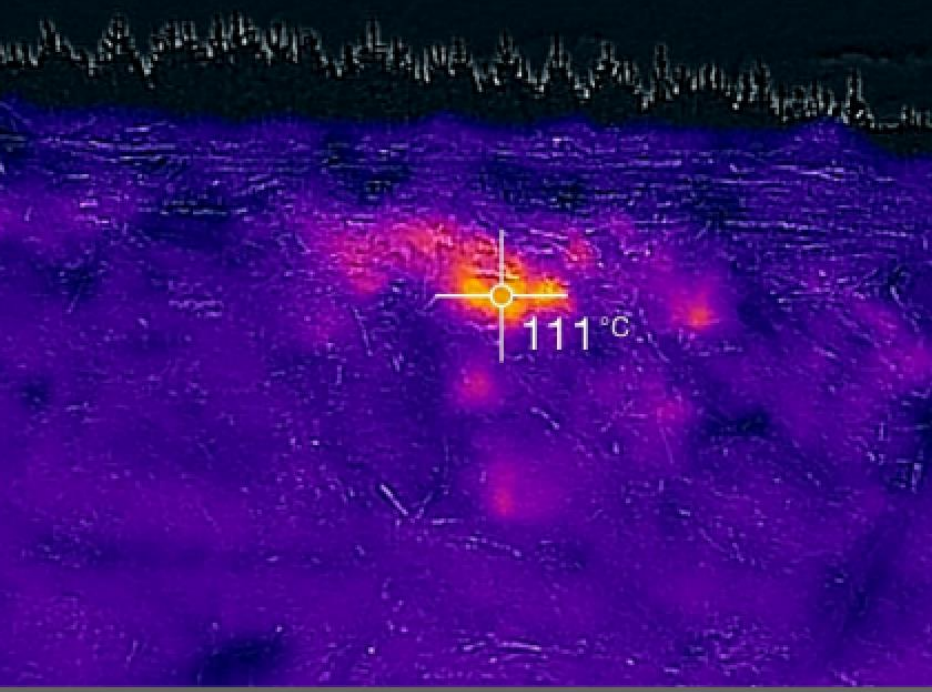
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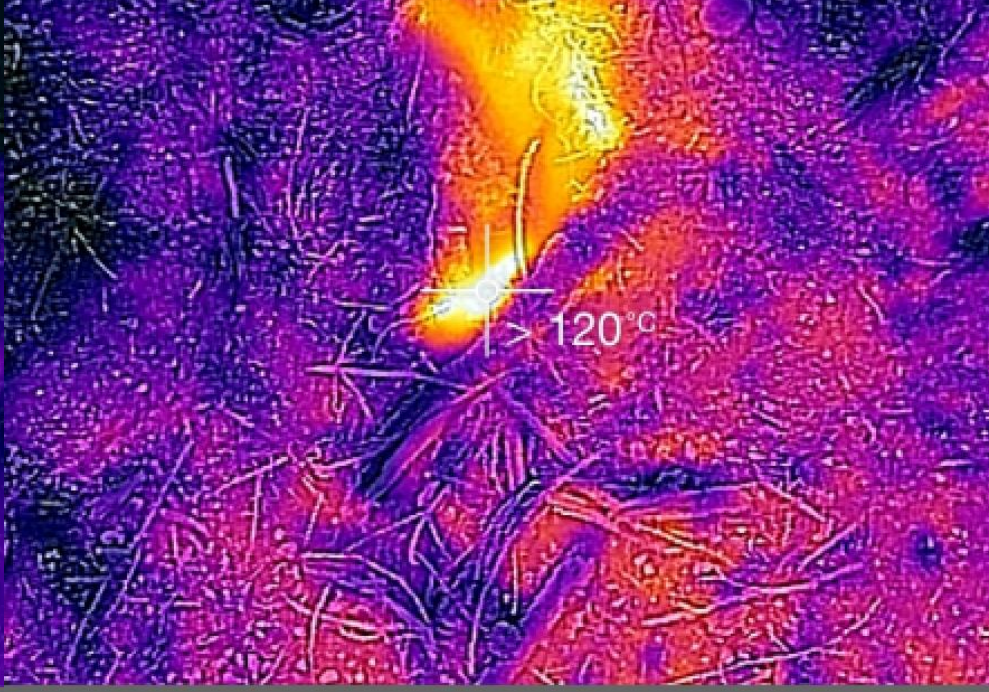


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FLIR



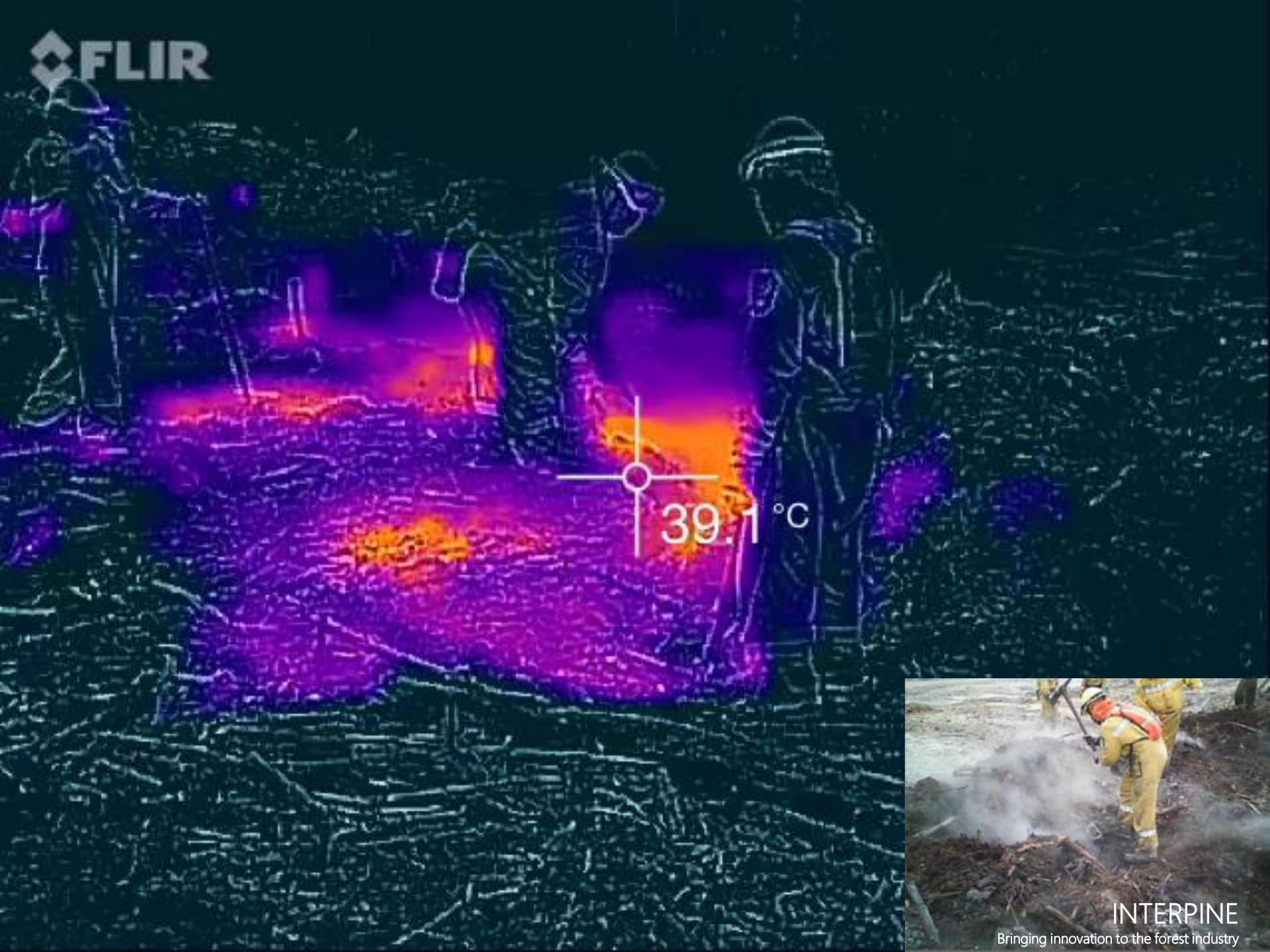
FLIR



INTERPINE

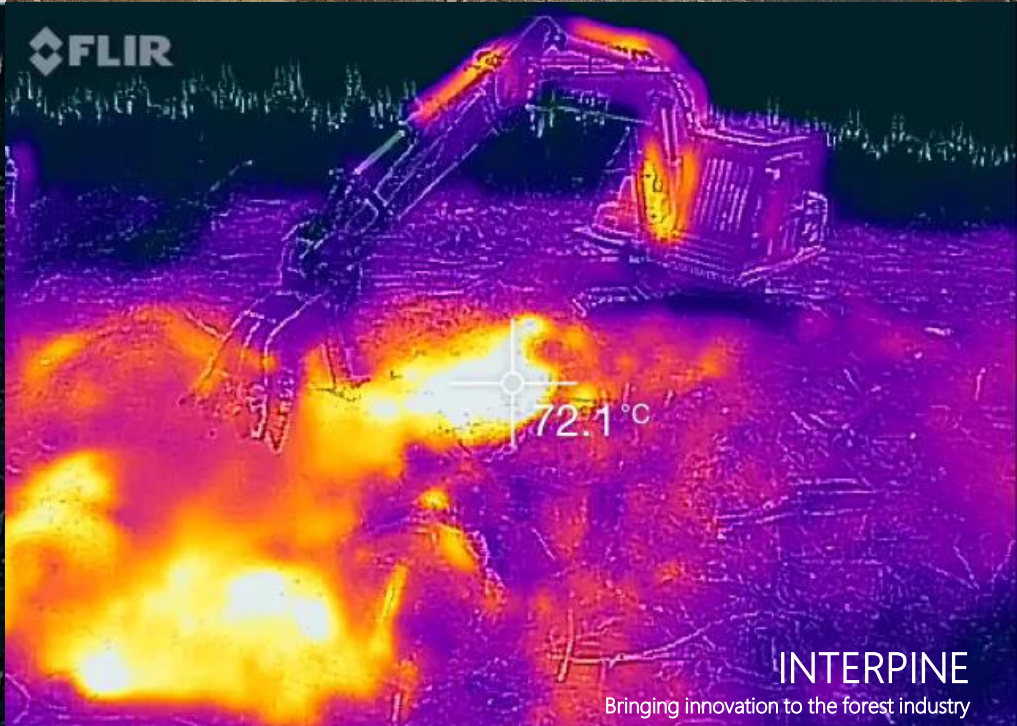
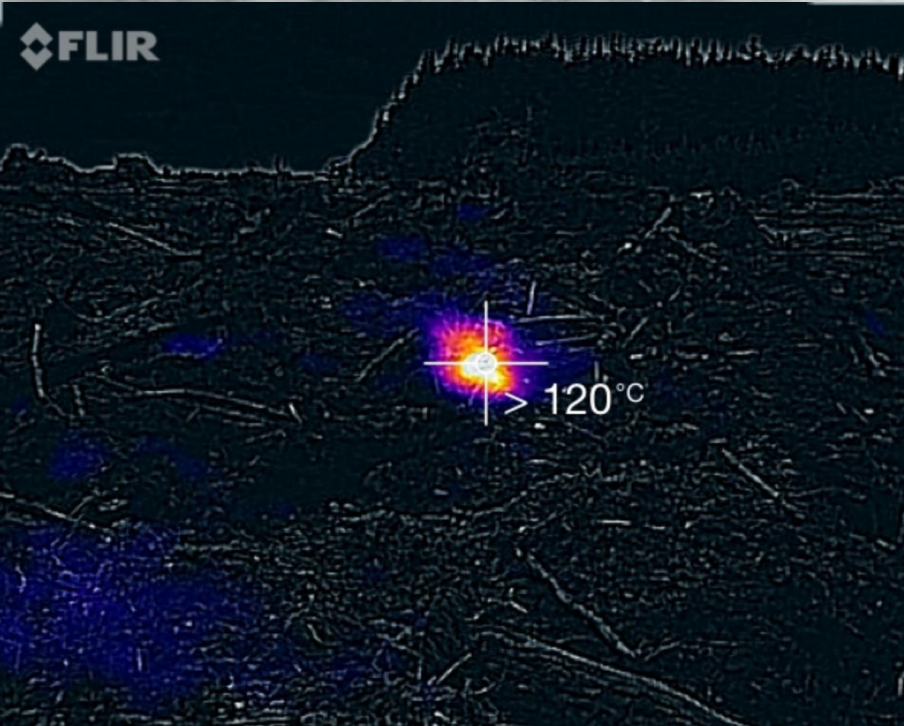
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 FLIR



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Area: 78.54 hect  
Distance: 13.20 km  
Max Speed: 15.0 m/s  
Duration: 15m 39s  
Batteries: 1  
Images: 164  
Find Size: Medium  
Find Temp: Mammal

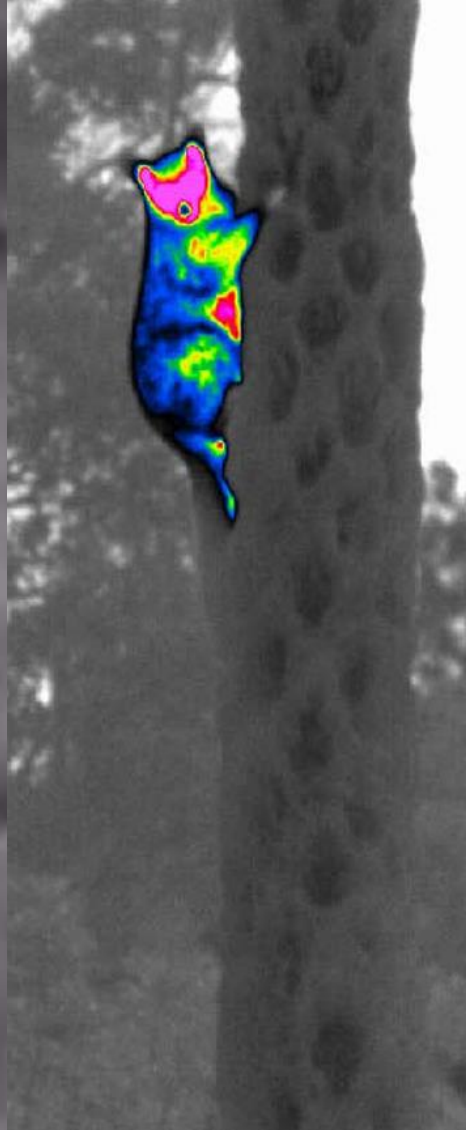
# Thermal Camera Applications

## Example Automated Flight for Heat Detection

Dist Flown: 0.7 km  
Speed: 15.0 m/s  
Altitude AGL: 59.9 m  
Images: 3  
Detections: 0  
Inspections: 0  
Flight Time: 01:28  
Remaining Time: No time limit  
This Mission: 14:36



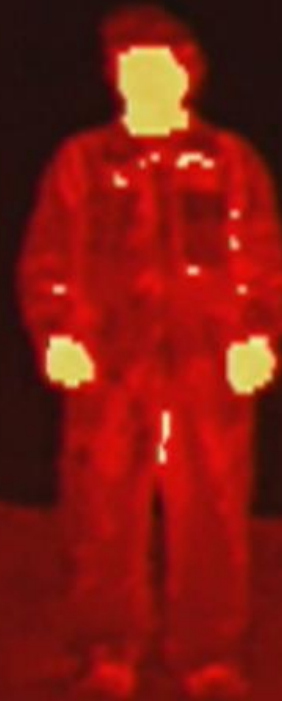




# Thermal Camera Applications Pest Management ?

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# Thermal Camera Applications

## Search and Rescue ?



# Questions ? And Next Steps

Talk to Our UAV Team for Deployment Throughout NZ

Interpine UAV Staff are:

International ITC Level 1 Thermography Certification

CAA Certified UAV Multi-Rotor Pilots

NZQA Qualified Rural Fire Vegetation Firefighters

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## MORE INFORMATION

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