

DRONE USE IN FORESTRY OPERATIONS

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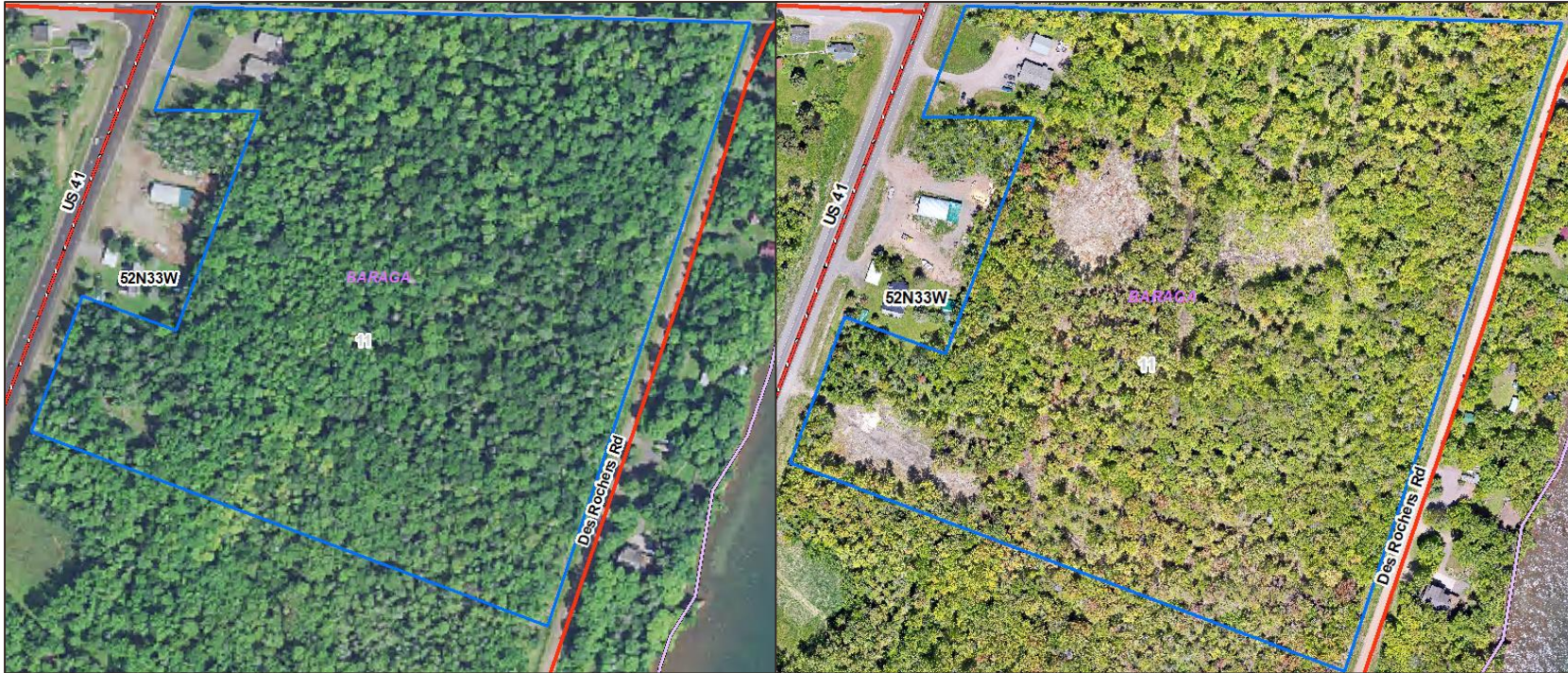
PRESENTATION OVERVIEW

- Advantages / Limitations
- Forestry reconnaissance work with example
- Forestland reality work with example
- Mapping capabilities
- Cutting edge research / future uses



ADVANTAGES

- Capture documentation of real-time conditions, not the last time satellite data was



ADVANTAGES

- Incredible scale of improved resolution from easily accessible satellite imagery



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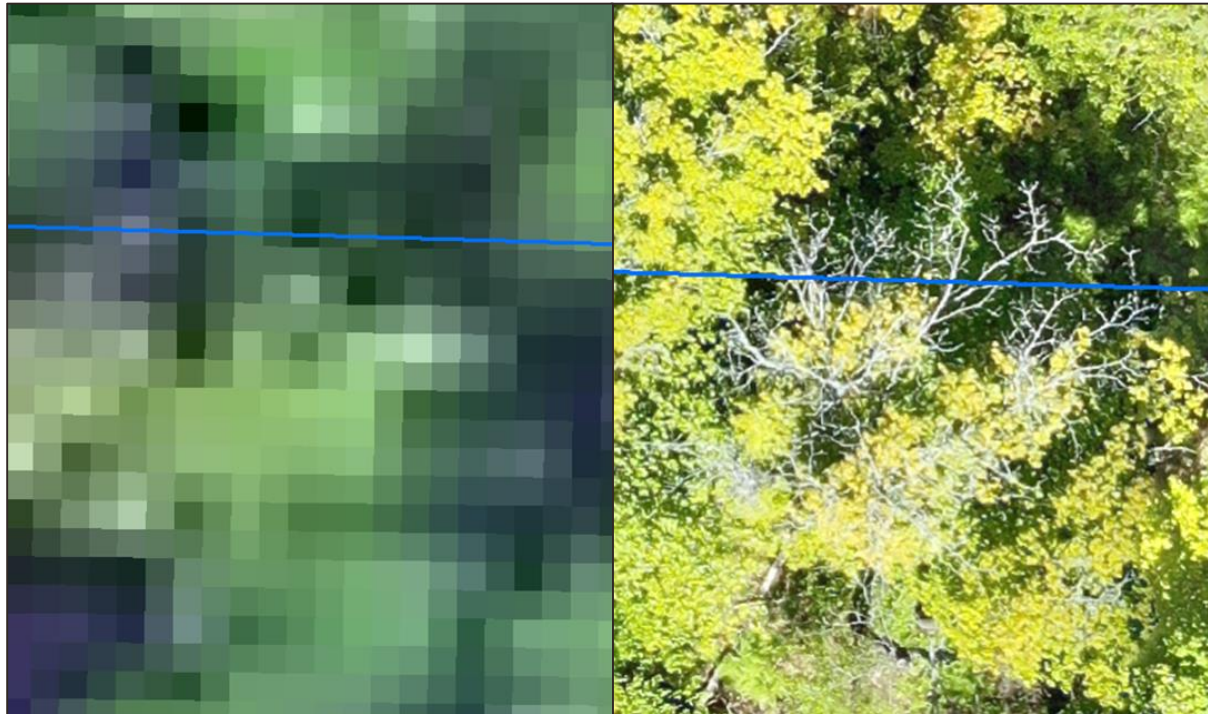
ADVANTAGES

- Incredible scale of improved resolution from easily accessible satellite imagery



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LIMITATIONS

- Weather dependent
 - ▶ Temperature
 - ▶ Precipitation
 - ▶ WIND!

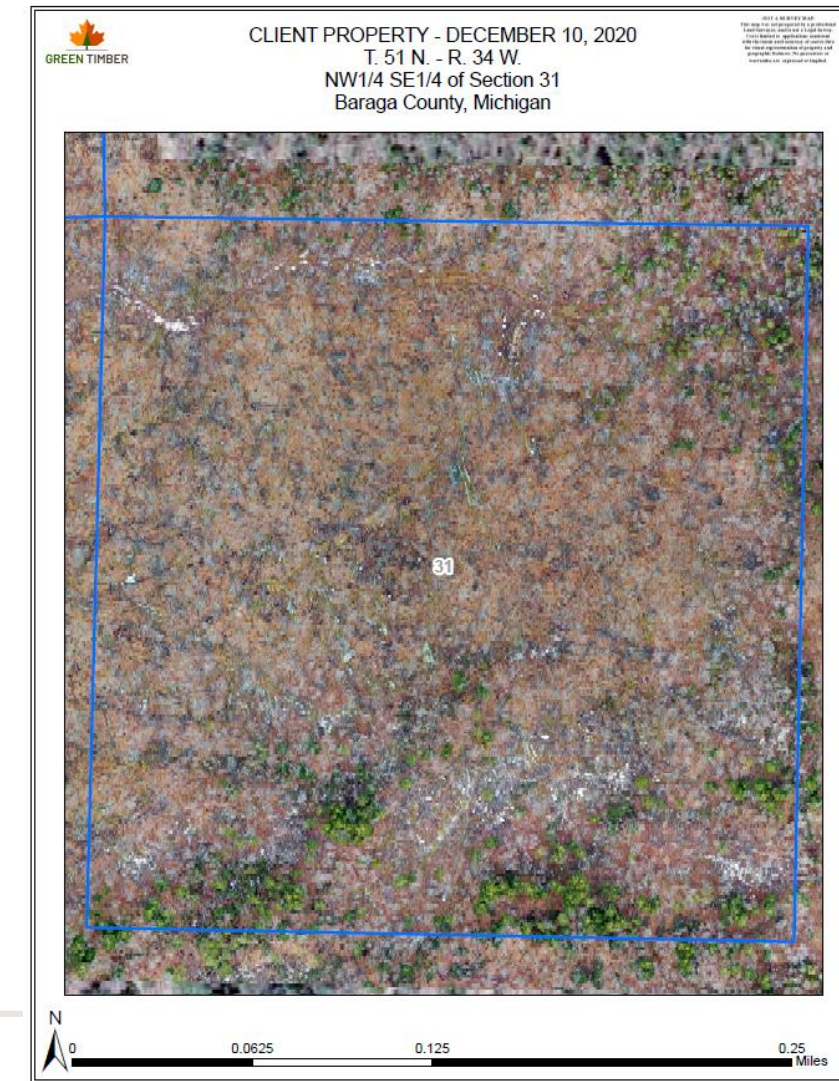


LIMITATIONS

- Legality
 - ▶ Remote Pilot's License for commercial use
 - ▶ Visual line of sight
 - ▶ 400 feet Above Ground Level (AGL)
 - ▶ Controlled vs. uncontrolled airspace



FORESTRY RECONNAISSANCE – BLOWDOWN



FORESTLAND REALITY – VIDEO CAPTURE



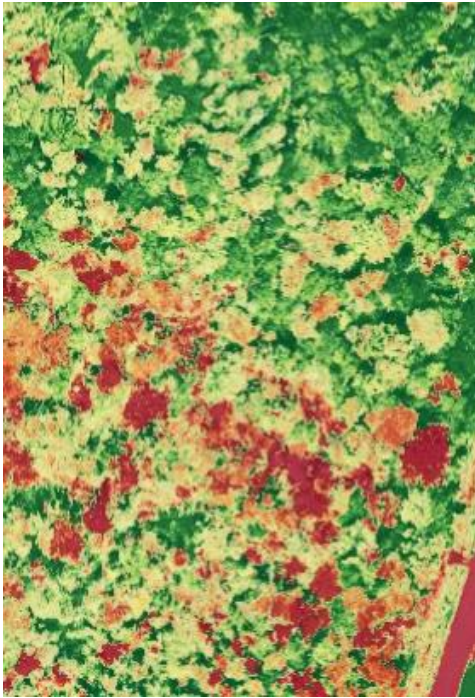
MAPPING CAPABILITIES – DRONE DEPLOY

- Delineate areas of interest precisely

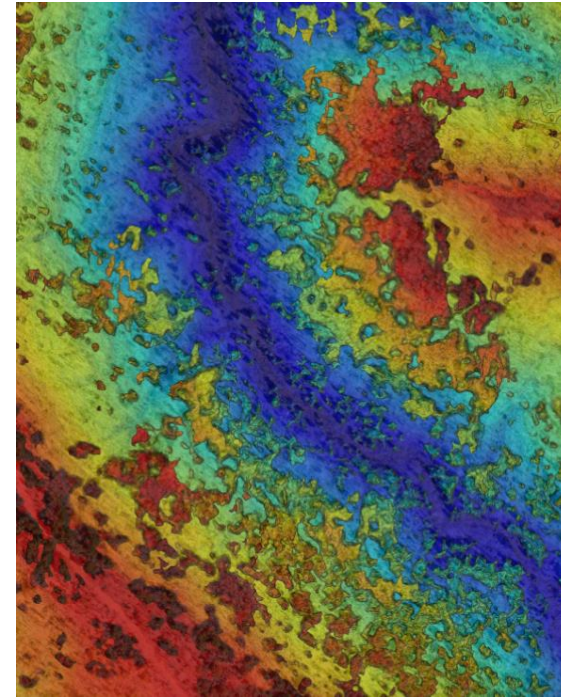


SPATIAL ANALYSIS CAPABILITIES – DRONE DEPLOY

Assess Plant Health



Digital Elevation Model
(DEM)

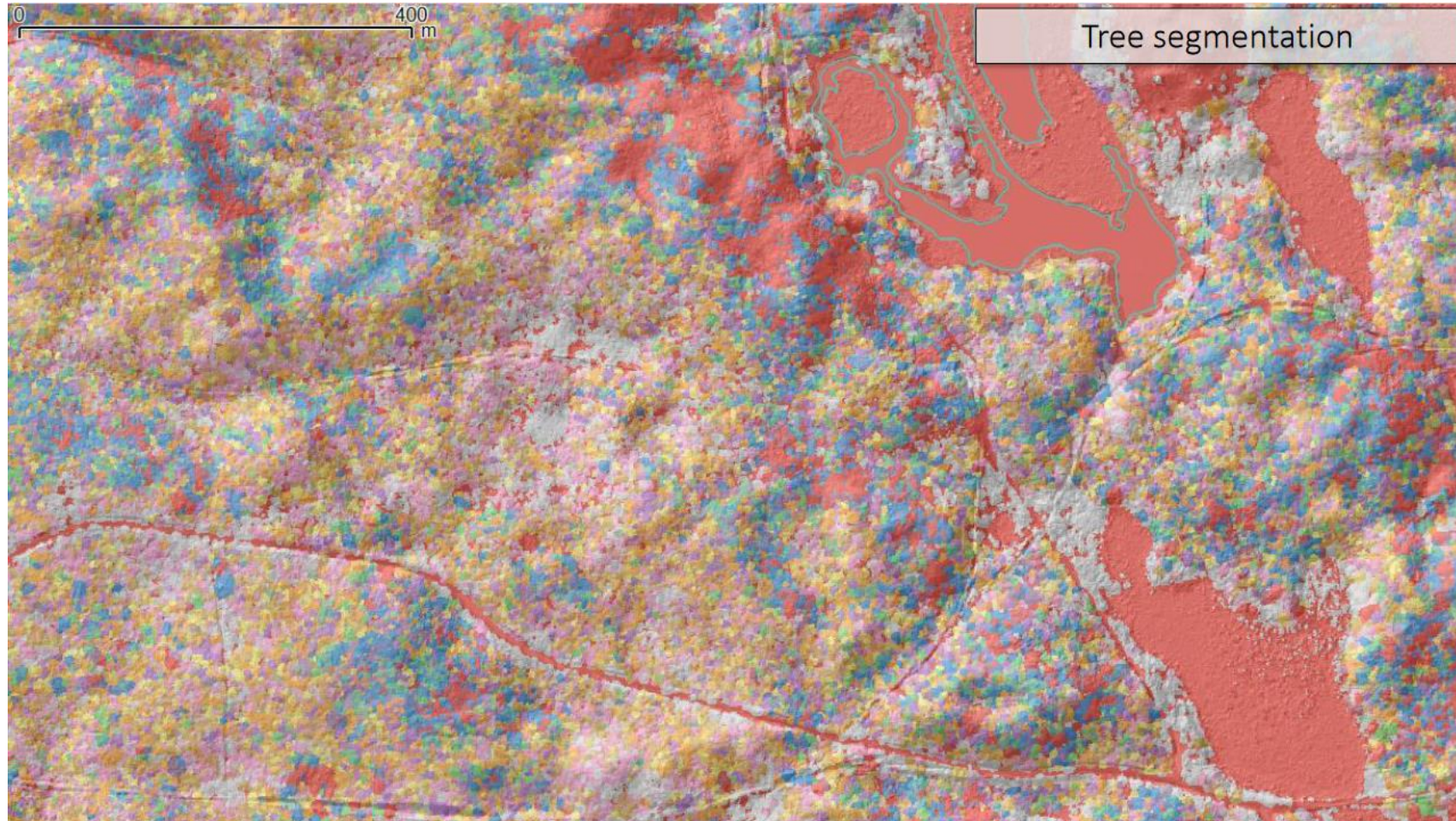


UNIVERSITY RESEARCH & FUTURE USES

- Currently many studies using drone collected data in conjunction with remote sensing technology to map / estimate:
 - ▶ Individual tree species
 - ▶ Precise areas of disease / pest mortality such as oak wilt
 - ▶ Volumetric or density estimates such as biomass or basal area
 - ▶ Suitable wildlife habitat

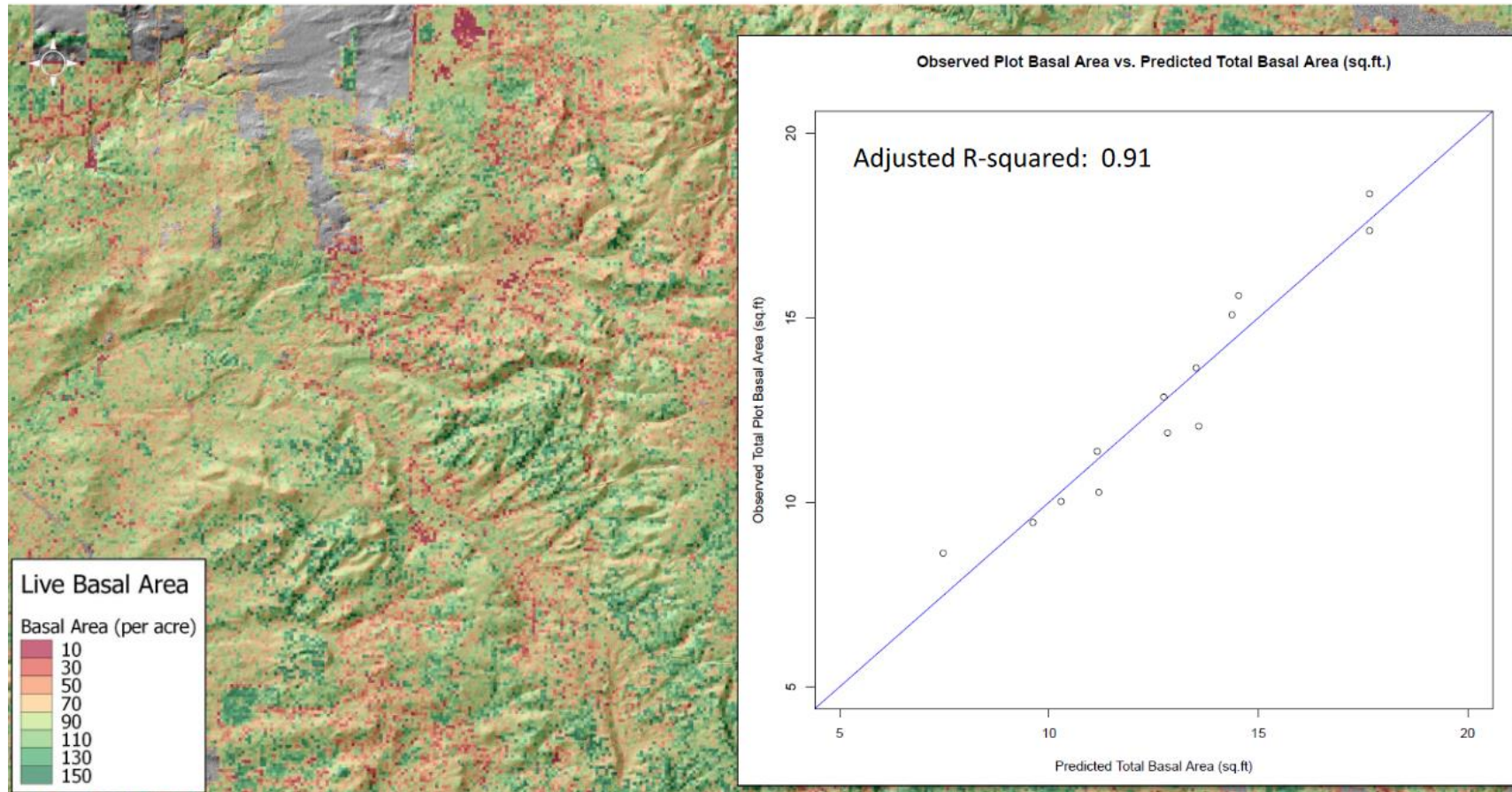


UNIVERSITY RESEARCH & FUTURE USES



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Mapping Basal Area Acre Across Wide Areas





GREEN TIMBER

QUESTIONS?

We welcome your questions and
feedback!

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