



**N|V|5** GEOSPATIAL



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# Lidar Remote Sensing: Operating in Rural Alaska

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## Lidar for Remote Communities

Impact of reliable geospatial information



## Acquisition

- Safety
- Knowing your community
- Having the right tools
- Accounting for the unexpected



## Processing

- Solutions for diverse landscapes
- Anchorage staff

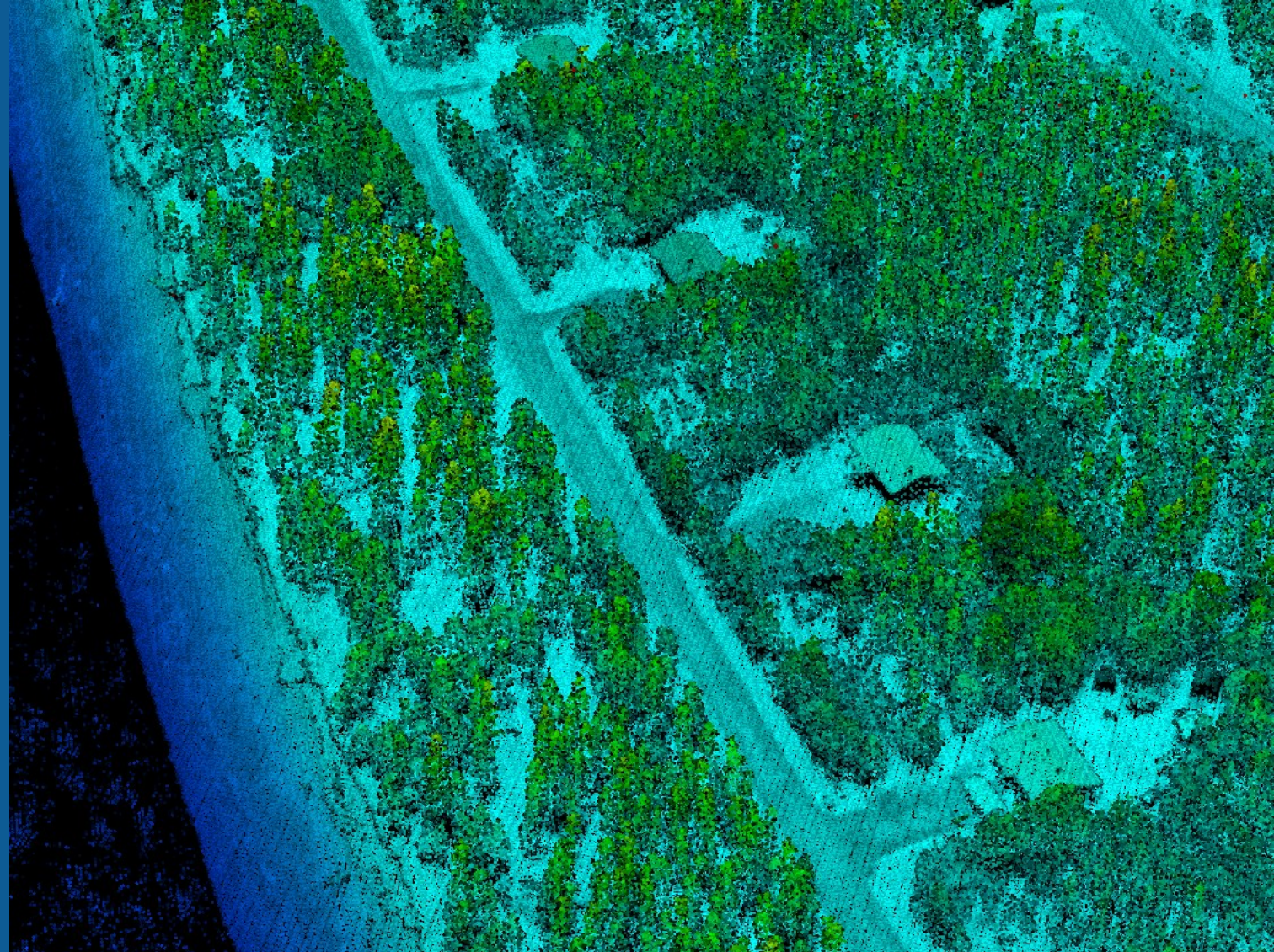


## Q&A





- Uncertainty caused by a dynamic landscape
  - Landslides
  - Permafrost impacts on infrastructure
  - Coastal flooding and storm surges
- Lidar is a proven strategy for assessing these issues
- Much of Alaska remains to be mapped with high quality data





- IS-BAO Stage Two Certified
- Safety culture from the top down
- **Pilot is the ultimate authority in the field**
- Specialized training for Alaska crews





# Knowing your Community



- Weather and climate patterns
- Building and maintaining relationships across Alaska
- Understanding where your resources are, e.g.:
  - Fuel
  - Mechanics



# The Right Tool for the Job



- Engineers on staff for 24-hour support
- Top-of-the-line sensors allow for faster collections and better data
- Cessna Caravans have long range and fly at ideal speeds (100-150 kt)



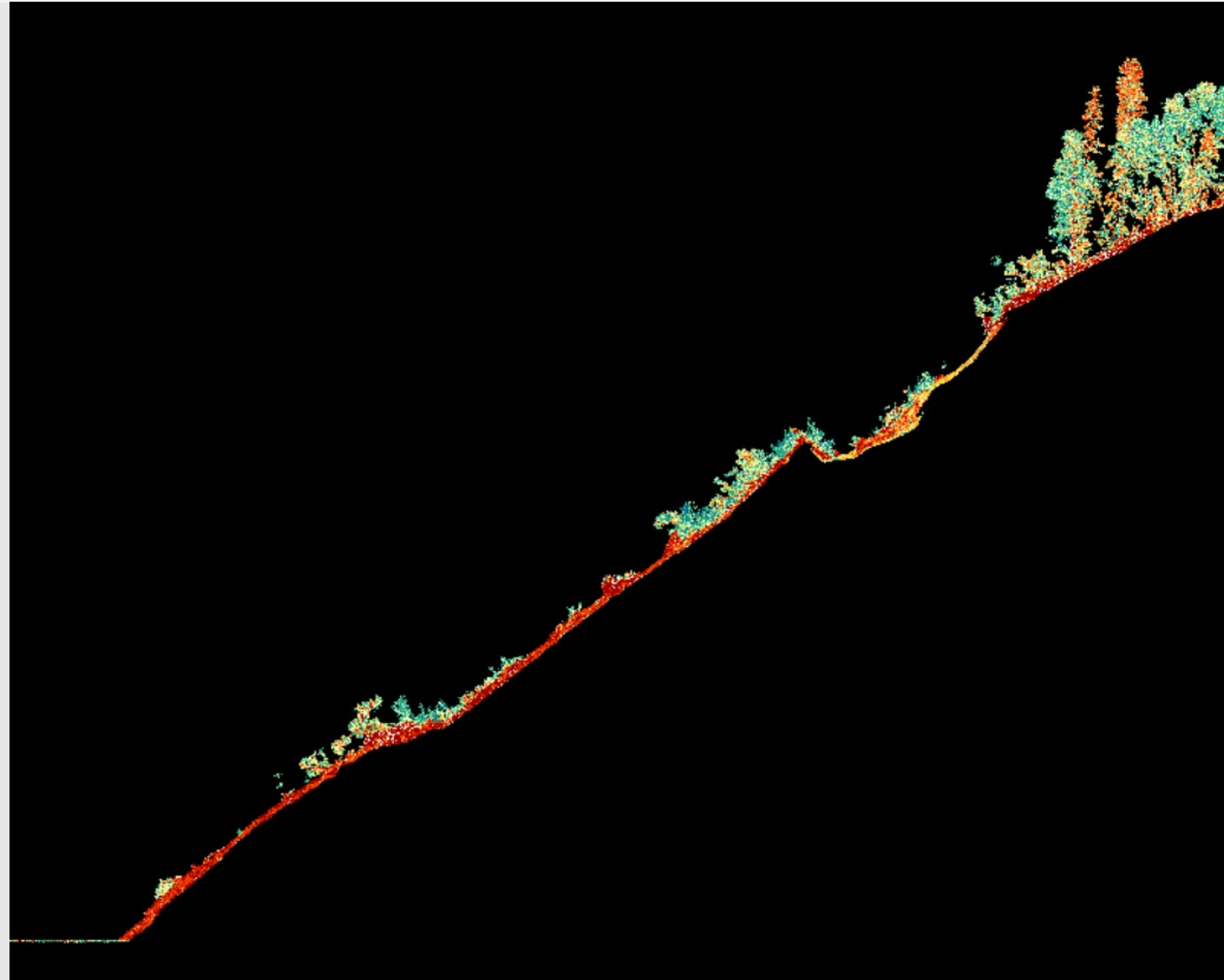


# Expect the Unexpected



- Establishing a local base of operations
  - Reduce travel distance for weather opportunities
- Accounting for standby time
  - Plan to have personnel and equipment on site for a while
- Crew rotation
- BE AGGRESSIVE

- No one-size-fits-all solution
  - Bespoke processing for unique terrain/vegetation
- Point classification methods are influenced by the geometry of the project area





# For Alaskans by Alaskans



- Low-latency integration between processing team and field crews
  - Identifying required “re-flies” while crews are still mobilized
  - GoldStreak hard drives
- Experienced personnel
  - Some with over 40 years experience in AK



# Questions



Thank You!

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