

Spatial and Environmental Data Center Discussion

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A La Carte



- Chemicals, specialized deionized water, supplies
 - TFS does not provide any chemicals, we do provide RO and DI water.
- Dry ice
 - TFS can provide up to four bricks (10 pounds) of dry ice per project, per season. > 4 bricks will be a charge of \$25 per brick.
 - Fairbanks does not provide dry ice but you can order it online.
- Compressed Gas
 - TFS may provide compressed gasses at cost.
- Liquid nitrogen
 - TFS can provide liquid nitrogen, via UAF's Institute of Arctic Biology, subject to local availability. We are charged \$3.50/liter, which we will pass on to the research groups.
- SIPRE auger blades
 - A project will be charged \$250 (market cost) for a blade set, the first time that you want to use the auger. Your project will own your blades, and can use them multiple times.
- Remote food
 - TFS can provide limited fresh food from the kitchen for spike camps, on a case-by-case basis.
 - We will charge \$30/per person per day for perishable supplies like dairy or vegetables that would be difficult to purchase in advance.



Toolik GIS & RS



- Proposed new charges for drone services:
 - Charge users for Toolik GIS' time spent collecting and processing drone imagery.
 - Suggest that the first 40 hours are free for each project (the same as remote access).
 - Funds would be used to pay for replacement drones in the future and to potentially rent sensors in the short term.
- We will need to replace our DJI (Chinese) drones before Dec. 2025 to meet new federal regulations in the American Security Drone Act.
- What sensors would best support the Toolik research community?



Drone-mounted methane sensor. Data available real-time and post-collection.



Drone-mounted GPR kit. Model shown can penetrate 12m below ground surface.



Thermal and RGB sensors integrated into small drone platform.

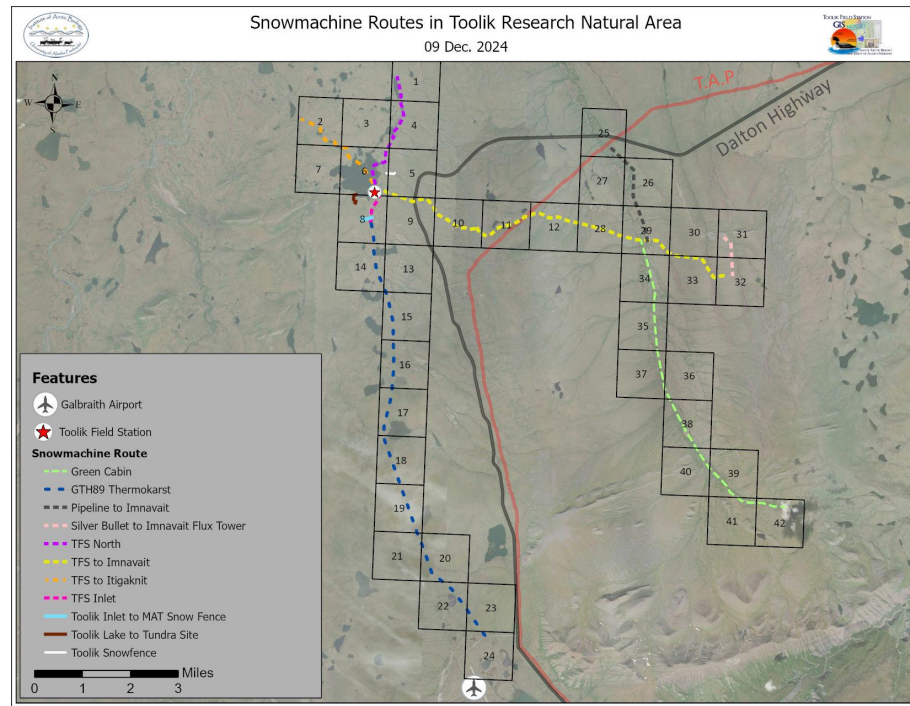
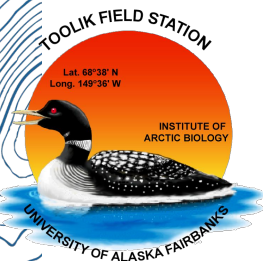


Handheld LiDAR sensor also mounts onto some drone platforms!



Snowmachine Route Authorization Map

- Toolik Management is concluding work with the BLM on a 'common-use' snowmachine route Right-of-Way authorization.
- Once approved, any Toolik-based project or contractor will be able to use these common-use routes (assuming snow-depth requirements are met) without applying (and paying!) for their own snowmachine permit.
- This will be a significant time and cost savings to Toolik projects.
- Special thanks to BLM Realty Specialists Matt and Melissa for all their help and guidance with this effort!



Environmental Data Center



- Decluttering of the station
- Hospitality lab spaces
 - Feedback? Are groups getting what they need?
 - Are we missing any key facilities which would promote better current work or future projects?
- Dark Datasets we should prioritize
 - Climate Variables?
 - Early project data such as R4D?
 - Ideas on finding data?

