

Toolik Field Station Extreme Winter Weather Operation Guidelines

Winter Operations at Toolik Field Station (TFS) involve working in unique and often dangerous environmental conditions. Severe cold, high winds, blowing snow, darkness, and limited visibility are just a few variables that can cause a hazardous working environment. This document describes the Winter Weather Operation Guidelines for Toolik Field Station. Adhering to these guidelines will minimize exposure to the most extreme winter conditions and the risks associated with them. It is important to remember that Arctic winter can always be dangerous and the proper training, preparation, equipment, and procedures are essential. Ultimately everyone must accept personal responsibility for their own safety in the harsh Arctic winter. Never work in winter conditions you feel are unsafe or for which you are not adequately prepared.

Limited Camp Functions in Extreme Environmental Conditions

During extreme winter weather events most outdoor operations at Toolik Field Station will be limited to ensure the safety of the community. These include:

- All outdoor operations, maintenance, science support, and upgrade projects that are not essential to the everyday operation of the station and safety of the community. Examples of essential operations are road maintenance to ensure safe camp access to scheduled arrivals and departures, daily maintenance checks, and emergency repair work.
- Transportation between Fairbanks and TFS.
- Personal recreation further than two miles from camp without the approval of the on-site camp manager and the company of at least one partner in the field.

All science users are strongly recommended to limit their activities and follow these guidelines for their field work under extreme environmental conditions.

Extreme Environmental Conditions Defined

Extreme environmental conditions are any combination of meteorological variables that the on-site camp manager deems severe enough to limit outdoor activity. These include, but are not limited to:

- Temperatures below -45 °F
- Windchill categorized as 5 minute frostbite time as determined by the NWS Windchill Chart (see attached figure).

Temperatures below 0°F with substantially limited visibility (This pertains only to activity off the road system, driveway, gravel pad, or Toolik Lake and its tributaries). The on-site camp manager will determine the visibility conditions under which outdoor work can occur.



NWS Windchill Chart

