

McGill University Field Stations

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Schefferville, Qc.:

- 54°49'N; 66° 50'W
- Established 1954
- Subarctic boreal forest-tundra transition,
- Discontinuous permafrost to 90m,
- MAAT of -4.7°C
- Climate data semi-continuous from 1954- -1996
- (DOT airport data also available)
- Permafrost and active layer data from several locations for variable time frames, contract research with EMR, thesis research, Environment Canada
- Permafrost network 1988-96, sporadic snow depth and lake ice thickness data
- Large environmental data base contained in thesis and contract reports but no central data base
- Partners: EMR, Environment Canada, EMAN
- Remote sensing involving H. Granberg (Sherbrooke U.)
- **Future activities:**
 - CFI support for the development of ecological monitoring network - ECONET involving a network of 4-5 climate and ground temperature monitoring sites for typical ecotones.
 - New biodiversity and permafrost research

▪ Expedition Fiord, NU.

- 79°25'N, 90° 30'W
- Established 1959.
- West central Axel Heiberg Island
- High arctic polar desert, ice cap, cirque and valley glaciers.
- Continuous permafrost 500-600 in
- MAAT -17°C
- Summer climate data on ice cap 1960-1963
- Mass balance record since 1960 (Trent University)
- Limited permafrost and active layer data, 1960s & 90s
- Summer climate record for base camp and a range of sites during the 1960s, continuous record since
- 1988, max min data since 1985
- Lake ice patterns since 1988

- Lake water column temperature profiles since 1994 Perennial spring, icing & frost mound data, since 1988
- Active layer temps, sporadically in the 1960s & 90s Environmental isotopes in the active layer and surface water 1990s
- Partners: **NASA**, Trent U. Waterloo U., Wilfred Laurier, CCRS
- **Future activities:**
 - CFI support for the development of ecological monitoring network - ECONET involving a network of 4-5 climate and ground temperature monitoring sites for typical ecotones.
 - Extreme environment ecology