

Additional metadata information for SnowEx ground penetrating radar raw dataset

Further description:

These data were collected using a Mala Geosciences ProEx controller that saves data in .rd3 format. These raw data and associated files will need to be read by GPR processing software that accepts this format. These data are raw, unprocessed with higher level datasets to be published at a later date. These future expected datasets include two way traveltime information of the bulk snowpack.

Description of files:

All files recorded by the Mala ProEx system are tab delimited

.MRK file: This file contains any digital markers that the surveyor marked in the field and should be associated with any field notes for specific information. Column 1 is the trace number of the marker, columns 2 and 3 contain internal program information about the marker type.

.RD3 file: This is the primary binary file that is read by software.

.ADD file: This file contains information to constrain data visualization when first loaded into a program

.COR file: This file contains the coordinate information logged from the GPS antenna during the survey. Column 1 is the trace number, column 2 the date in yyyy-mm-dd format, column 3 time (UTC) in hh:mm:ss format, column 4 is the latitude, column 5 latitude direction, column 6 is longitude, column 7 longitude direction, column 8 elevation above mean sea level, column 9 elevation units, column 10 the HDOP value that indicates a theoretical horizontal accuracy with lower values indicating better accuracy.

.RAD file: Header information file that records critical information concerning data collection required to appropriately process data.

.ele and .em files: These files are associated with some preliminary processing for associated with some of the files and should be blank. These are dummy files that processing software may search for.

File name format:

File names are formatted as follows:

SnowEx17_GPR_date(mmdd)_FileLineNumber