Reynolds Mountain East FMCW Radar Autopicked Snow Depths, Version 1 Technical Reference

1 INTRODUCTION

1.1 Data Set Overview

This dataset contains semi-automatically picked snow depths from FMCW radar transects in Reynold's Mountain East, in the Reynold's Creek Experimental Watershed, Idaho. Available parameters include two-way travel time and calculated snow depth. Also included are the processed radiogram files, which were used to determine two-way travel time. More details regarding data acquisition and processing can be found in the Supplementary Documentation.

1.2 File Information

1.2.1 Format

The data are available in 58 granules. The primary data, including two-way travel time and calculated snow depth, is available in a single-file granule formatted as a .csv file. Processed radiogram files are available in 56 single-file granules formatted as netCDF files (.nc). A multi-file granule formatted as a compressed .tgz file contains shapefiles which define the boundary of the data collection site.

1.2.2 Naming Convention

The primary data files is named:

`RME_FMCW_SD_rdpicks_1000scale_100size_1mod_20090319_v01.csv`.

The .tgz file containing the shapefiles is named:

`RME_FMCW_SD_rdpicks_1000scale_100size_1mod_20090319_v01.csv`.

The data files containing the radiograms conform to the following naming convention:

`RME_FMCW_SD_[site]_[NN]_[YYYYMMDD].nc`,

where `RME_FMCW_SD` is the short-name for the data set title, `SITE` indicates the sampling location, `YYYYMMDD` indicates the date of data acquisition, and N is a single-digit number distinguishing data

files which were collected at the same site on the same day. Details about each radar transect and SITE can be found Supplementary Radar Notes.

1.3 Spatial Information

1.3.1 Coverage

Northernmost Latitude: 43.071° N

Southernmost Latitude: 43.063° N

Easternmost Longitude: 116.749° W

Westernmost Longitude: 116.760° W

1.3.2 Geolocation

This data set conforms to the WGS 84 / UTM zone 11N coordinate reference system (EPSG 32611).

1.4 Temporal Information

1.4.1 Coverage and Resolution

19 March 2009 to 19 March 2009