Metadata for SnowEx campaign 2017, week 1
Grand Mesa, Colorado.

Feb. 7, 2017
Ryan Webb & Noah Molotch
Snowing, windy
GPR malfunction/battery dead, instrument got wet
800 MHz antenna not working, 1.6 GHz antenna accidentally set as 800 MHz
afternoon spent making setup more water resistant

Feb. 8, 2017
Ryan Webb & Mark Thomas
Hot and sunny, Skyway Rec. area
ASO flight midday
only 1.6 GHz antenna
completed transects: 46, 47, 49, 52, 54, 56, 50, 48
running entire time between transects, skiing between
battery died ~2 pm between transects

Feb. 9, 2017
Ryan Webb & Mark Thomas
South of Lands End Visitors center (West edge of mesa)
very hot and sunny, observed surface melt increasing throughout day
1.6 GHz antenna
completed transects: 26, 18, 17, 16, 14, 12, 7, 5, 4
small grid: offset from transect 26, measurements ~60 m or less
transect 12 had SSA and SMP team
GPR running between, mix of ski and snowmobile between, 5 and 4 completed on snowmobile

Feb. 10, 2017
Ryan Webb & Clint Boaz
East of Lands End Visitors Center (West edge of mesa)
windy and overcast
1.6 GHz antenna
completed transects: 1, 3, 6, 9, 13, 15, 19, 44
small grid: offset from transect 6
transect 6 had SMP team
GPR running all day, snowmobile between transects

Feb. 11, 2017
Ryan Webb and entire week 1 SnowEx team
overcast, snowing
large trench near Mesa Top Trailhead
grid offset from trench
scan of trench working face ~30 cm from face with SMP between face and GPR
avalanche probes inserted horizontally at 50 cm spacing W/ clear diffractions in trace

heights of probes above ground: 17 cm, 67 cm, 117 cm.
pit height ~ 160 cm

Week 2

Transects completed on foot unless noted by (s) for snowmobile

Feb. 14, 2017

Dan McGrath and Carl Green
Sunny and warm
East side of the mesa

1.6 GHz antenna

completed transects: 100, 103, 101, 104, 86, 87, 83, 84, 88, 85

Feb. 15, 2017

Dan McGrath and Carl Green
Sunny and warm

West side of the mesa

1.6 GHz antenna
completed transects: 45, 42, 39, 38(s), 36(s), 34(s), 31, 24(s), 23, 11 (s), 9 (s), 3
GPR run continuously between transects (where possible)

Feb. 16, 2017

Dan McGrath, Hans Lievens, and HP Marshall
Sunny and warm

1.6 GHz antenna
Middle-west on mesa

completed transects: 38(s), 37(s), 33, 32, 28(s), 29, 26, 22(s), 21, 17, 15 (s; partial), 24
GPR run continuously between transects (where possible)
walking grid completed to the west of 15

Feb. 17, 2017
Dan McGrath, Hans Lievens, and HP Marshall
Partly cloudy in the AM, clear in the afternoon, snow starting ~5 pm

1.6 GHz antenna

Far east on mesa

completed transects: 94 (partially s), 95(s), 96(s), 99(s), 97, 84, 86(s), 87(s), 74(s), 72(s), 73, 68, 69

GPR run occasionally between transects (i.e., 96 to 99).
Large snowmobile grid completed to the east/northeast of transect 99.

Feb. 18, 2017
Dan McGrath and Ludo Brucker
Partly cloudy, ~10 cm of snow overnight
1.6 GHz antenna

large trench across the road from the LSOS site and also at Mesa Top TH
completed GPR grids near both trenches
completed profiles along each trench
at second trench, installed probes at 8.45 m at 49 cm above ground, at 7.5 m at 99/100 cm above ground, and at 6.55 m at 124/125 cm above ground

Week 3
Grand Mesa, CO

February 21, 2017
Kate Hale and Amaya Odiaga
Partly cloudy, breezy
1.6 GHz antenna
Grid: Parallel to transect 45 (N/S), grid lengths the length of transect (~300m), 8 passes through.
Completed transects: 62 (62.7–62.1), 42 (42.1–42.8)
Pit/transect team at 62 and 42 during time of GPR
During transport from 62 to 42, antenna connection wiring became bent and disconnected. Metal collar around connection point fell off, adhesive exposed. Used ballpoint pen and gorilla tape to re-straighten the connection wires and hold the antenna in place. Functioned properly after this fix.
GPR turned off during transport between transect sites, snowmobile

February 22, 2017
Kate Hale and Mark Thomas
Partly cloudy, calm
1.6 GHz antenna
Completed transects: 29 (29.7–29.1), 27 (27.1–27.8), 26 (26.1–26.8), 32 (S to N), 36 (36.1–36.7), 37 (37.1–37.7) and 38 (38.7–38.1)
Pit/transect team at 27 and 26 during time of GPR, walked around pits

on E end of these transects
GPR turned off during transport between transect sites, combination of snowmobile and snowshoe

February 23, 2017
Kate Hale and Lindsay Sheridan
Partly cloudy, windy
1.6 GHz antenna
Grid: TLS site K (transect 55), TLS site F (transect 27) – grid lines running N–S and E–W across length and width of each TLS site. Approximately 8 x 6 grid lines over site K and 6 x 6 grid lines over site F.
GPR turned off during transport between TLS sites, snowmobile

February 24, 2017
Kate Hale and week 3 SnowEx team
Partly cloudy, windy, intermittent snow, cold (–10 F)
Large trench near Mesa County line
Small GPR grid offset of trench, 3 grid lines parallel to the pit face, closest pass ~20 cm from face. SMP calculations between GPR and face of pit.

February 25, 2017
Kate Hale and Mark Thomas
Overcast, intermittent snow in PM, cold (–10 F)
1.6 GHz antenna
Grid: TLS site J (transect 50) – grid lines running N–S and E–W across length and width of TLS site. Approximately 8 x 6 grid lines over site J.
GPR turned off during transport between car and site.
Walked in and out, via snowshoe, from site

February 26, 2017
Departure
Antenna connection worked properly for the duration of the week – I never removed the tape. Took a photo of the splint fix and separated pieces. Likely an easy fix upon returning to the lab.