Location:	Co	Site:	JPLMET	Date:	20241204
Time:	1117	Observers:	E.M.C.L.E		

Precip Rate	None	Very Light (0.5 cm / hr)	Light (1 cm / hr)	Moderate (5 cm / hr)	Heavy (10 cm / hr)
Precip Type	Rain	Snow	Graupel	Hail	Rain/Snow
Sky	Clear	Few (< 1/4 of sky)	Scattered (1/4-1/2 of sky)	Broken (> 1/2 of sky)	Overcast (complete cover)
Wind	Calm (0 mph)	Light (1 - 16 mph)	Moderate (17 - 25mph)	Strong (26 - 38 mph)	Extereme (> 38 mph)
Tree Canopy	No trees	Sparse (5 - 20%)	Open (20 - 70%)	Closed (> 70%)	

Interval board SWE measurement

	Depth (cm)	SWE (mm)	Density (kg/m3)	Evidence of melt resulting in SWE loss? (Y/N)
Sample A				
Sample B				
Sample C				

Ground condition	Frozen	Moist	Saturated	
Ground roughness	Smooth (< 5 cm)	Rough (5 - 20 cm)	Rugged (> 20 cm)	
Ground Vegetation	Bare	Grass	Shrub	Deadfall
Height of Ground Vegetation (cm)				

Instrument	Y/N	SN	Instrument	Y/N	SN
Digital LWC	N		Snow Scope	Y	234
Stratigraphy pictures	Y		Lyte Probe	N	
Standard ram	Y		SMP	N	
Powder Ram	Y		Force Ram	Y	
Slush Ram	N		Force Snow Scope	Y	
HS Transects	Y		Snow Scope Transects	N	
Pit Pictures	Y		SSA / NIR Box	N	
Other					

Additional Comments

Weather

Pit

Hardness

Misc

Location (Regional Scale)	Date (YYYYMMDD)	Observers (first initial & last name):				Comments/Notes:
CO	20241204	EM, CLC			Temperature profile times: START 1123	END 1131
Site (Study Plot)	Time (pit opened)					
JPLMET	1120					

Pit ID (SITEYYYYMMDD)	Snow Depth (cm)	LWC Device & SN	UTME	UTMN	Zone (two digit)	GPS device & uncertainty:
JPLMET20241204	42	N/O	0424541	4417704	13	GARMIN 655 ~2m

Density

Height above ground top (cm) - bottom (cm)	Density profile A kg/m3	Density profile B kg/m3	Extra Density kg/m3
42 - 21	35.5	169	
21 - 14	11.5	164	
14 - 0	22	157	
-			
20 - 17.5	33.5	36.5	185
20 - 19	33.5	39	186
20 - 19.5	33.5	39.5	185
-			
-			
-			
-			
-			
-			
-			
-			
-			
-			
-			
-			
-			
-			
-			

LWC

Permittivity profile A (unitless)	Permittivity profile B (unitless)

Temperature

Height above ground (cm)	T oC
42	-4
30	-8
20	-6
10	-3
0	0

Stratigraphy

Height above ground top (cm)	-	bottom (cm)	Grain Size (mm) Max	Min	Avg	Grain Type	Hand Hardness	Manual Wetness	Stratigraphy Comments
42	-	41.5	2	.5	1	SHxr		M	SOME PPSO/DFBK
41.5	-	21	1.5	.5	1	FCxr	F	M	SOME NECKS
21	-	14	1.5	.3	.5	RGxF	4F	D	OLD SURFACE, MAYBE MF
14	-	0	3	1	2	DFBK	F	D	SOME CLOS/STRIATIONS
0	-								
	-								
	-								
	-								
	-								
	-								
	-								
	-								
	-								

Location: CDT			Date: 20241204								
Site: JPLMET			Time: 1203				Force	Depth	Depth		
Pit: JPLMET 20241204			Observers: CM, CMS				max	manual	digital	Grnd	
X-Coord	Y-Coord	Time	Data Type	SN	Profile #	Force Gage	N	cm	cm	Y/N	Comments
15	15	1205	Pow Ram					41.5		Y	
30	↓	1216	SnO Ram					45		Y	
15	30	1221	Scope	834	821			39.5	31	Y	
30		1222			824			41	32		
45		1227			830			43.5	32		
60		1223			832			41	29		
75	↓	1225	↓	↓	836			41	30	↓	
15	45	1226	Force Ram			1000	6	29		N	
30		1227					7	26			
45		1227					5	19			
60		1229					6	28			
75	↓	1230	↓			↓	6	30		↓	
15	60	1233	Force Scope	834	837	1000	6	36	22	N	
30		1235			843		2	28	24		
45		1237			846		1	34	28		
60		1237			847		6	29.5	27		
75	↓	1238	↓	↓	849	↓	0	36	25	↓	

Ram Penetrometer Field Data Sheet

Location: CO

Site: JPLMET

Associated pit/transect/point: JPLMET20241204

Date: 20241204 Time: 1204/1216

Observer: EM, CM2

UTME: UTMN: Zone:

Ram type: POW/STD Ram mass: kg

Tube weight	T	kg
Hammer weight	H	kg
Number of falls	n	
Fall height	f	cm
Location of point	p	cm
RN = T + H + nfH/p		kg
RR = 9.81 (T + H + nfH/p)		N

T	H	n	f	p	T	H	n	f	p	T	H	n	f	p
0.1	0	0	0	9	1	.5	0	0	45					
0.1	.05	0	0	9	1	.5	0	0	45					
		1	1	10										
		2	1	11										
		2	1	12										
		2	1	13										
		5	1	14										
		5	1	15										
		7	1	16										
		2	5	17.5										
		1	5	18										
		2	5	19										
		4	5	20										
		4	5	21										
		4	5	22										
		2	5	23										
		2	5	24										
		2	5	25										
		10	5	26										
		2	10	27										
		1	10	28										
		1	5	29										
		1	5	30										
		1	5	31										
		1	5	32										
		1	5	33										
		1	5	34										
		2	5	35										
		2	5	36										
		2	5	37										
		2	5	38										
		2	10	39										
		4	10	40										
		5	10	41										
		9	10	41.5										

Notes:

Location (regional scale)	Site (study plot)	Transects	Date	Time	
				Start	End
CO	JPLMET	RADAR 1/2	20241204	1248	1256

Observer(s)	Wx Description
EW, CG	CLR LIGHT NO WIND

Transect A 1				Transect B 2			
Point	HS (cm)	Point	HS (cm)	Point	HS (cm)	Point	HS (cm)
0	40	31		0	33	31	
1	42	32		1	38	32	
2	41	33		2	39	33	
3	43	34		3	41	34	
4	41	35		4	40	35	
5	40	36		5	40	36	
6	40	37		6	41	37	
7	41	38		7	42	38	
8	41	39		8	41	39	
9	38	40		9	43	40	
10	41	41		10	41	41	
11	39	42		11	42	42	
12	47	43		12	46	43	
13	45	44		13	43	44	
14	45	45		14	43	45	
15	41	46		15	42	46	
16		47		16	45	47	
17		48		17	43	48	
18		49		18	38	49	
19		50		19		50	
20		51		20		51	
21		52		21		52	
22		53		22		53	
23		54		23		54	
24		55		24		55	
25		56		25		56	
26		57		26		57	
27		58		27		58	
28		59		28		59	
29		60		29		60	
30				30			

Location (regional scale)	Site (study plot)	Transects	Date	Time	
				Start	End
CO	JRLMET	JRL 1, 2	20241204	1256	1306
Observer(s)	**Wx Description**				
Em Cuq	CLR, LIGHT NW WIND			HS 40cm	

Transect A 1				Transect B 2			
Point	HS (cm)	Point	HS (cm)	Point	HS (cm)	Point	HS (cm)
0	42	31		0	0	31 A	30
1	44	32		1	21	32 B	28
2	46	33		2	30	33 C	27
3	43	34		3	41	34 D	25
4	43	35		4	43	35 E	38
5	43	36		5	43	36 F	40
6	40	37		6	36	37 G	35
7	44	38		7	40	38 H	45
8	38	39		8	45	39 I	39
9	40	40		9		40 J	4
10	46	41		10		41	
11	40	42		11		42	
12	44	43		12		43	
13	43	44		13		44	
14	42	45		14		45	
15	48	46		15		46	
16	44	47		16		47	
17	40	48		17		48	
18	40	49		18		49	
19	43	50		19		50	
20	39	51		20		51	
21	40	52		21		52	
22		53		22		53	
23		54		23		54	
24		55		24		55	
25		56		25		56	
26		57		26		57	
27		58		27		58	
28		59		28		59	
29		60		29		60	
30				30			

Location (regional scale)	Site (study plot)	Transects	Date	Time	
				Start	End
CO	JRLMCT	JPLA	20241204	1312	1334
Observer(s)	**Wx Description**				
EmCox	CLR LIGHT NO WIND				

Transect A				Transect B			
Point	HS (cm)	Point	HS (cm)	Point	HS (cm)	Point	HS (cm)
0	49	31	44	0	47	31	
1	50	32	45	1	43	32	
2	48	33	44	2	25	33	
3	48	34	41	3	47	34	
4	49	35	40	4	44	35	
5	41	36	30	5	50	36	
6	44	37	44	6	50	37	
7	46	38	39	7	47	38	
8	46	39	46	8	41	39	
9	50	40	47	9	37	40	
10	49	41	46	10	23	41	
11	41	42	47	11	41	42	
12	45	43	46	12	48	43	
13	34	44	44	13	49	44	
14	38	45	45	14	49	45	
15	39	46	50	15	35	46	
16	49	47	50	16		47	
17	47	48	48	17		48	
18	29	49	42	18		49	
19	48	50	34	19		50	
20	28	51	31	20		51	
21	47	52	48	21		52	
22	45	53	55	22		53	
23	43	54	41	23		54	
24	40	55	49	24		55	
25	45	56	24	25		56	
26	39	57	18	26		57	
27	45	58	42	27		58	
28	47	59	44	28		59	
29	37	60	45	29		60	
30	42		38	30			