Location:	CO	Site:	JPMST	Date:	20250212
Time:	1115	Observers:	EMC CG		

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	7	5.5	79	N
Sample B	7.2	5.5	76	
Sample C	7.2	5.5	76	
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)		20cm		

Instrument	Y/N	SN	Instrument	Y/N	SN
Digital LWC	N		Snow Scope	Y	
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	N		Snow Scope Transects	N	
Pit Pictures	Y		SSA / NIR Box	Y	0101
Other					

Additional Comments

Weather

Pit

CT15SC @ 53↑
CT11SC @ 53↑
ECTN11 @ 53↑

Hardness

Misc

RADIOMETER CLOUDCOVER 1117

Location (Regional Scale)	Date (YYYYMMDD)	Observers (first initial & last name):				Comments/Notes:
CO	20250212	GWC CE			Temperature profile times: START 1130 END 1204	
Site (Study Plot)	Time (pit opened)					
JPLM4T	1130					
Pit ID (SITEYYYYMMDD)	Snow Depth (cm)	LWC Device & SN	UTME	UTMN	Zone (two digit)	GPS device & uncertainty:
JPLM4T20250212	76	CRIM 250 kg/m3 527nV 12V5	0424546	4417700	13	GARMIN GPS ~2m

Density

Height above ground top (cm)	bottom (cm)	Density profile A kg/m3	Density profile B kg/m3	Extra Density kg/m3
76	66.2	7.8	6.5	83
66.2	60.2	6	8	133
60.2	56.8	3.4	13	382
56.8	33.6	23.2	53	228
33.6	14.6	19	43.5	229
14.6	0	14.6	36.5	243
76	66	83	90	
66	56	220	211	
56	46	209	213	
46	36	236	226	
36	26	222	227	
26	16	227	233	
16	6	226	229	
12	2	248	244	

LWC

Permittivity profile A (unitless)	Permittivity profile B (unitless)
86.8	86.3
77.6	76.5
44.9	46.8
49.6	52.3
52.5	51.4
32.5	33.5
34.4	32.8
24.3	25.3
37.9	37.2

Temperature

Height above ground (cm)	T oC
76	-10
70	-8.5
68	-8
60	-6.5
57	-6.5
50	-5.5
40	-4
33	-3
30	-3
20	-1.5
15	-1.5
10	-1.5
0	0.7

Stratigraphy

Height above ground top (cm)	bottom (cm)	Grain Size (mm) Max	Min	Avg	Grain Type	Hand Hardness	Manual Wetness	Stratigraphy Comments
76	68	2	0.5	1	DFBK	F	D	FIST
68	60	0.5	0.1	0.3	FCSF	F	D	ROUNDING
60	57	0.5	0.1	0.3	MFCL	K	D	MFPC BIG CLUMPS
57	33	1	0.3	0.5	FCXR	F	D	
33	15	3	0.5	1	DHXR	F	D	DHCH
15	0	6	1	2	DXRR	F	D	
0						F	D	

Location:	C6	Date:	20250212								
Site:	JPLMGT	Time:	1237					Force	Depth	Depth	
Pit:	JPLMGT 20250212	Observers:	Eric L					max	manual	digital	Grnd
X-Coord	Y-Coord	Time	Data Type	SN	Profile #	Force Gage	N	cm	cm	Y/N	Comments
0	30	1237	STD Ram					80		Y	
30	↓	1240	Slow Ram					~~75~~		↓	
0	60	1259	Scope	151	905			80	76	Y	Towards
30	↓	1300	↓	↓	906			~~78~~	71	↓	↓
60		1301			907			~~77~~	69		
90		1303			908			77	70		
120	↓	1304	↓	↓	909			76	64	↓	↓
0	90	1314	Force Ram			1060N	148	~~65~~		N	
30	↓	1314	↓			↓	137	70		↓	
60		1314					120	70			
90		1315					132	68			
120	↓	1315	↓				108	70			
0	120	1320	Force Scope		911		81	70	~~63~~		Towards
~~30~~	↓	1320	↓		912		67	~~70~~	61		↓
~~60~~		1326			913		~~72~~	~~70~~	~~59~~		
90		1324			914		72	70	65		
120	↓	1323	↓		915	↓	54	70	61	↓	↓

Ram Penetrometer Field Data Sheet

Location: CO
Site: JPLM4T
Associated pit/transect/point: JPLM4T 20250212
Date: 20250212 Time: 1237 / 1240
Observer: EmmaCE
UTME: UTMN: Zone:
Ram type: STD / POW 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
1	0	0	0	17	0.1	0.1	3	5	41					
1	0.5	0	0	17					42					
		4	5	18			2	5	43					
		2	5	19			3	5	44					
		2	10	20					45					
		1	10	80					46					
							2	5	47					
0.1	0	0	0	9			2	5	48					
0.1	0.1	0	0	9					49					
		1	1	13					50					
		2	1	14			1	5	51					
		3	1	15					52					
		5	1	15.5					53					
		1	25	16			2	5	54					
		5	25	17			1	5	55					
		5	25	18			2	5	56					
		5	25	19					57					
		1	25	20			1	5	58					
		2	5	21					59					
		2	3	22			3	5	60					
				23			2	5	61					
		3	3	24					62					
		1	5	25					63					
				26			3	5	64					
				27			4	5	65					
				28			2	10	66					
				29			2	10	67					
		2	5	30					68					
				31			1	10	69					
				32					70					
				33					71					
				34			2	10	72					
				35					73					
				36					74					
				37					75					
				38										
		3	5	39										
				40										

Notes: