Location:	CO			Site:	SC Met	Date:	20250305
Time:	1300		Observers:	E McCue S. Kimmel			

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	12.8	9.5	74	
Sample B	12.2	9.5	78	
Sample C	12.4	9.5	77	

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	3081 151
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	Y	0101
Other					

Additional Comments

Weather

Pit

Hardness

Misc

HS @ Stake 105cm

Location (Regional Scale)	Date (YYYYMMD)	Observers (first initial & last name):				Comments/Notes:
CO	20250305	E McCue			Temperature profile times START: 1302	END: 1335
Site (Study Plot)	Time (pit opened)	S Kinney				
SCMet	1300					
Pit ID SITEYYYYMMDD	Snow Depth (cm)	LWC Device & SN	UTME	UTMN	Zone (two digit)	GPS device & uncertainty:
SCMet20250305	100	1347	0425748	4419935	13	665 4-2m

Density

Height above ground top (cm)	Height above ground bottom (cm)	Density profile A kg/m3	Density profile B kg/m3	Extra Density kg/m3
100.6	96.6	4.	2	50
96.6	88.6	[illegible]	9.5	119
88.6	85	[illegible]	6.5	81
85	56.6	[illegible]	[illegible]	259
56.6	53.6	[illegible]	[illegible]	[illegible]
53.6	36.4	[illegible]	[illegible]	[illegible]
36.4	13.6	[illegible]	62.5	300
13.6	0	[illegible]	[illegible]	262
[illegible]	[illegible]			
100	90	81	73	
90	80	224	223	
80	70	251	248	
70	60	277	276	
60	50	254	255	
50	40	263	266	
40	30	290	302	
30	20	305	307	
20	10	316	284	
12	02	296	284	695

LWC

Permittivity profile A (unitless)	Permittivity profile B (unitless)
53.5	57.8
65.7	66.1
62.3	65.9
70.2	70.3
69.7	70.3
46.0	45.2
46.2	48.3
48.3	51.7
47.5	48.6
42.1	42.8
44.5	44.9

Temperature

Height above ground (cm)	T oC
102	-0.5
100	0
97	-0.5
89	-1.5
86	-1.5
80	-2.5
70	-2.5
60	-2.5
58	-2.5
56	-2.5
50	-2
40	-1.5
33	-1.5
20	-0.5
13	-0.5
10	-0.5
0	0

Stratigraphy

Height above ground top (cm)	Height above ground bottom (cm)	Grain Size (mm) Max	Grain Size (mm) Min	Grain Size (mm) Avg	Grain Type	Hand Hardness	Manual Wetness	Stratigraphy Comments
102	97	2	0.5	1	PPco	F	D	
97	89	0.8	0.1	0.5	DFdc	F	M	
89	86	1	0.3	0.5	MFcr	K	D	MFpc
86	58	0.8	0.3	0.5	RGir	4F	D	
58	56	1.5	0.5	0.8	MFcr	K	D	Frozen fooling MFpc
56	33	1.5	0.5	1	FCxr	F	D	
33	13	2.5	0.5	1	DHxr	4F	D	
13	0	4	0.5	1	DHxr	1F	D	

Ram Penetrometer Field Data Sheet

Location: CO

Site: SLMCT

Associated pit/transect/point: SLMCT20250305

Date: 20250305 Time: 1412 / 1418

Observer: EMcCue SKinney

UTME: UTMN: Zone: 13

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
0	0	0	0	23			2	3	87			2	20	28
1	0.5	0	0	23			1	5	88					29
		2	1	24			2	5	89					30
		2	3	25			2	10	90			3	20	31
		1	5	26			1	10	91			3	25	32
		2	5	27					92			2	25	33
		1	5	28			2	10	93			3	25	34
		2	5	29			1	10	94			4	25	35
		1	10	30					95					36
				31					96					37
				32					97					38
		2	10	33			2	10	98					39
		1	10	34					99			3	25	40
				35					100			9	25	41
		3	10	36					101			4	25	42
				37			3	10	103					43
				38								3	25	44
		1	20	39	0.1	0	0	0	8			2	25	45
		2	20	40	0.1	0.1	0	0	8			3	25	46
		1	20	41			1	1	9					47
				42			4	1	10			4	25	48
				43			1	5	11			3	25	49
				68					12			2	25	50
		1	5	69					13					51
		2	5	70			3	5	14			1	25	53
				71			3	15	15			1	20	54
		2	10	72			3	20	16					55
				73			7	20	17					57
		1	10	75			3	10	18			1	10	58
		1	5	77			2	10	19					59
		2	3	78			1	10	20					60
				79					21			2	10	61
				80			2	10	22			2	15	62
		1	5	81			2	15	23					63
				83			2	20	24					64
		1	3	84			1	20	25					65
				85			2	20	26					66
				86					27					67

Notes:

Location: CO			Date: 20250305									
Site: SCMet			Time: 1412									
Pit: SCMet20250305			Observers: E McCue S Kinney									
X-Coord	Y-Coord	Time	Data Type	SN	Profile #	Force Gage	Force max N	Depth manual cm	Depth digital cm	Grnd Y/N	Comments	
0	30	1412	STD RAM					103		Y		
30	30	1418	PEN RAM					75		N		
0	60	1427	SnowScope	309	154			97	86	Y	Towards	
30	60	1432	↓	↓	155			98	87	↓	↓	
60	60	1437			156			97	99			
90	60	1442			157			98	97			
120	60	1448	↓	↓	158			105	100			
0	90	1430	Force RAM			1000	69	89		N		
30	90	1431	↓			↓	78	89		↓		
60	90	1431					54	88				
90	90	1431					57	87				
120	90	1431	↓			↓	68	93				
0	120	1434	Force Scope	151	1047	50	23.45	75	76		Towards	
30	120	1434	↓	↓	1048	↓	22.1	75	71			
60	120	1434			1049		13.4	74	72			
90	120	1435			1050		16.0	77	58			
120	120	1435	↓	↓	1051	↓	17.05	82	80			

Location (regional scale)	Site (study plot)	Transects	Date	Time	
				Start	End
CO	SL Met	A/B	20250305		
Observer(s)	Wx Description				
EMcCue SKinner	5-1 light BKN No None				

1238 Transect A 1243				1244 Transect B 1249			
Point	HS (cm)	Point	HS (cm)	Point	HS (cm)	Point	HS (cm)
0	85	31	62	0	89	31	110
1	84	32	65	1	64	32	58
2	102	33		2	97	33	79
3	106	34		3	99	34	
4	106	35		4	102	35	
5	104	36		5	104	36	
6	91	37		6	106	37	
7	89	38		7	110	38	
8	93	39		8	108	39	
9	89	40		9	102	40	
10	90	41		10	107	41	
11	83	42		11	109	42	
12	80	43		12	109	43	
13	81	44		13	100	44	
14	84	45		14	100	45	
15	84	46		15	99	46	
16	78	47		16	97	47	
17	74	48		17	105	48	
18	74	49		18	92	49	
19	76	50		19	110	50	
20	93	51		20	112	51	
21	88	52		21	101	52	
22	96	53		22	113	53	
23	90	54		23	112	54	
24	87	55		24	120	55	
25	85	56		25	120	56	
26	93	57		26	122	57	
27	75	58		27	131	58	
28	55	59		28	118	59	
29	43	60		29	120	60	
30	53			30	119		

105 @ 5 shrubs