

Location:	Colorado		Site:	A/P		Date:	20250121		
Time:			Observers:	H. K. Kinney J. L. Anderson		Interval board SWE measurement			
Precip Rate	None	Very Light (0.5 cm/hr)	Light (1 cm/hr)	Moderate (5 cm/hr)	Heavy (10 cm/hr)	Depth (cm)	SWE (mm)	Density (kg/m³)	Evidence of melt resulting in SWE loss? (Y/N)
Precip Type	Rain	Snow	Graupel	Hail	Rain/Snow	Sample A	4.8	7.5	
Sky	Clear	Few (< 1/4 of sky)	Scattered (1/4-1/2 of sky)	Broken (1/2 of sky)	Overcast (complete cover)	Sample B	3.2	7.5	
Wind	Calm (0 mph)	Light (1-16 mph)	Moderate (17-25 mph)	Strong (26-38 mph)	Extreme (> 38 mph)	Ground condition	Frozen	Moist	Saturated
Tree Canopy	No trees	Sparse (5-20%)	Open (20-70%)	Closed (> 70%)	Ground roughness	Smooth (< 5 cm)	Rough (5-20 cm)	Rugged (> 20 cm)	
Instrument	Y/N	SN	Instrument	Y/N	SN	Additional Comments		Height of Ground Vegetation (cm)	Grass
Digital LWC	Y		Snow Scope	Y		Very little snow response		10	
Stratigraphy pictures	Y		Lyte Probe	N		Weather			
Standard ram	Y		SMP	N		CTN R@ 25° C 111 N 32° E (X) 1032			
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						Misc			

Location (Regional Scale)	Date (YYYYMMDD)	Observers (first initial & last name):						Comments/Notes:
COLORADO	20250121	E MCCULLY S KINNAR K ENDER A CONNELL						HS STRIKE: 105cm
Site (Study Plot)	Time (pit opened)							Temperature profile times
Pit ID	SITEYYYYMMDD							START      END
		Snow Depth (cm)	LWC Device & SN	UTIME	UTMN	Zone (two digit)	GPS device & uncertainty:	
20250125NM		16	N/D	100	4442428	6800ft +2m GRS		
Density		LWC		Temperature		Stratigraphy		
Height above ground	Density profile A (kg/m³)	Density profile B (kg/m³)	Extra Density	Permittivity profile A (unitless)	Permittivity profile B (unitless)	Height above ground (cm)	T (°C)	Height above ground (cm)
top - bottom (cm)	(kg/m³)	(kg/m³)	(kg/m³)	(unitless)	(unitless)	(cm)	oC	top - bottom (cm)
0 - 8.3	14.3	14.3		N/D	N/D	77	-13	0 - 8.3
- 7.3	19.2	15.3				70	-18	- 7.3
- 6.3	23.1	23.0				80	-16.3	- 6.3
- 5.3	24.4	24.4				70	-13	- 5.3
- 4.3	23.6	26.1				60	-9.5	- 4.3
- 3.3	24.3	22.5				50	-9.0	- 3.3
- 2.3	24.8	25.1				40	-8.6	- 2.3
- 1.3	22.5	24.3				30	-4.5	- 1.3
- 0.3	24.0	25.0				20	-3	- 0.3
1.1	16	24.4	22.9			10	-2	1.1
-	-	-	-			0	-1	-
-	-	14.3	14.3			10	-1	-
-	-	cm	cm			10	-1	-
9.6.2 - 90.6	15.6	24.5	15.3-0.5			10	-1	9.6.2 - 90.6
80.6 - 68.6	17.8	26.5	17.4-5.3			10	-1	80.6 - 68.6
68.8 - 54.6	14.2	39.5	7.9-0.16			10	-1	68.8 - 54.6
54.6 - 41.6	7.0	18.5	16.4-1.1			10	-1	54.6 - 41.6
41.6 - 13.6	15.6	39.5	18.4-1.56			10	-1	41.6 - 13.6
-	18.4	47.5	18.4-1.56			10	-1	-
13.6 - 0	13.6	35.6	13.6-1.56			10	-1	13.6 - 0
-	-	-	-			-	-	-
-	-	-	-			-	-	-

**Ram Penetrometer Field Data Sheet**

Location: CO										Tube weight		T	kg		
Site: AM										Hammer weight		H	kg		
Associated pit/transect/point: AM 20250121										Number of falls		n			
Date: 2025 01 21					Time: 1444 / 1452					Fall height		f	cm		
Observer: E. Miller S. Kline										Location of point		p	cm		
UTME:		UTMN:		Zone:		$RN = T + H + nfH/p$						kg			
Ram type:				Ram mass: kg				$RR = 9.81(T + H + nfH/p)$							
T	H	n	f	p	T	H	n	f	p	T	H	n	f	p	
1	0	0	0	31					9			3	10	47	
1	1	0	0	31					10					48	
	7	1	32						11.5					49	
	3	3	33				1	2	12					50	
			54				2	2	13			4	10	51	
			35						14			2	10	52	
			36				3	2	15			1	10	53	
			37				2	5	16					54	
	4	3	38						17					55	
	2	5	39.5						18			1	5	56	
	1	3	40				4	5	19			2	5	57	
	3	3	41				2	10	20					58	
	4	3	42				1	10	21					59	
			43						22			1	5	60	
			44						23			2	5	61	
	2	3	45				2	10	24					62	
	1	3	46				1	10	25			3	5	63	
	2	3	47				2	10	26			2	5	64	
	1	3	48				2	10	27					65	
			50				4	10	28			3	5	66	
	1	1	93				2	15	29			2	5	67	
	3	1	94						30					68	
	3	2	95				4	15	31					69	
			96				2	20	32					70	
			97				3	20	33					71	
	4	3	98				2	25	34					72	
	2	5	99						35			3	5	73	
	6	5	99.5						36			5	5	74	
	End 1451					3	25	37				10	5	75	
									38			End 1500			
0.1	0	0	0	2.5			2	25	39						
0.1	0.1	0	0	2.5					40						
	1	1	3				4	15	41						
			4				3	15	42						
	3	1	5						43						
	4	1	6				4	20	44						
	2	3	7				3	20	45						
	2	2	8				2	10	46						

Notes:

Location: 60 Date: 10/25/21  
Site: AM Time:

Location: Co  
Site: AM

Date: 2015/01/11  
Time:

Force	Depth	Depth
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1

Location:	60	Date:	2025-01-21	Force	Depth	Depth	
Site:	AM	Time:		max	manual	digital	Grnd
Pit:	AW10150121	Observers:	S. Kinney, L. McElvee, K. Eddle, A. Conner				Y/N
X-Coord	Y-Coord	Time	Data Type	SN	Profile #	Force Gage	N
0	30		5 min avg				
30	30		0.5 sec				
0	60	1501	5 min avg		1117		
30	60	1502			1118	97	97
60	60				1219	94	98
90	60	1504			1720	91	93
120	60	1504			1121	109	100
0	60	1502	5 min avg		5580	37.97	78
30	90		15 sec avg		33.2	86	
60	90		15 sec avg		38.4	87	
90	60	1502			36.2	90	
120	90		15 sec avg		35.3	80	
0	120		15 sec avg		15.2	104.5	50
30	120		15 sec avg		15.2	104.5	50
60	120		15 sec avg		15.2	104.5	50
90	120		15 sec avg		15.2	104.5	50
120	120		15 sec avg		15.2	104.5	50

Location (regional scale)		Site (study plot)		Transects		Date	Time	
							Start	End
CO		AM		A/B		20250121		
Observer(s)		Wx Description						
A. Lawrence		SCT M(01) W(01)-ATL						
1323 Transect A		1331	1333 Transect B		340			
Point	HS (cm)	Point	HS (cm)	Point	HS (cm)	Point	HS (cm)	
0	106	31	127	0	101	31	103	
1	111	32	117	1	102	32	105	
2	111	33	117	2	105	33	109	
3	110	34	119	3	103	34	110	
4	117	35	121	4	104	35	108	
5	112	36	113	5	105	36	111	
6	115	37	122	6	106	37	112	
7	116	38	132	7	110	38	115	
8	120	39	128	8	107	39	117	
9	125	40	127	9	108	40		
10	118	41	124	10	110	41		
11	124	42		11	104	42		
12	127	43		12	108	43		
13	128	44		13	108	44		
14	124	45		14	106	45		
15	124	46		15	108	46		
16	125	47		16	104	47		
17	126	48		17	105	48		
18	120	49		18	103	49		
19	118	50		19	104	50		
20	123	51		20	101	51		
21	118	52		21	101	52		
22	118	53		22	103	53		
23	115	54		23	102	54		
24	127	55		24	101	55		
25	122	56		25	102	56		
26	123	57		26	102	57		
27	128	58		27	104	58		
28	131	59		28	106	59		
29	133	60		29	102	60		
30	128			30	102			