Location:	FCF	Site:	JPLMET	Date:	20241210
Time:	0900	Observers:	Em, Cris, Kelcie		

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	6.0	4.5	75	N
Sample B	6.0	4.5	75	
Sample C	6.0	4.5	75	
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		
Other	HS MET STAKE: 44 cm				

Additional Comments

Weather: Mod Gusts
Blosnow L-M

Pit:

Hardness:

Misc: RADIOMETER CLEANED @ 1022

Location (Regional Scale)	Date (YYYYMMD)	Observers (first initial & last name):	Comments/Notes:
CO	20241210	Carlos Keloser	
Site (Study Plot)	**Time** (pit opened)		
JPLWET	0902		

Temperature profile times START	END
0909	0922

Pit ID SITEYYYMMDD	Snow Depth (cm)	LWC Device & SN	UTME	UTMN	Zone (two digit)	GPS device & uncertainty:
JPLWST20241210	45	N/o	424541	4417700	13	Garmin 65s ±2m

Density: Height above ground top (cm) - bottom (cm)	Density profile A kg/m3	Density profile B kg/m3	Extra Density kg/m3	LWC: Permittivity profile A (unitless)	Permittivity profile B (unitless)	Temperature: Height above ground (cm)	T oC
-	145	SWE	ρ			45	-10
-	cm	mm	Kg/m			40	-10
[illegible] - [illegible]	6.6	4.5	68			30	-8
[illegible] - [illegible]	19.2	35.5	185			20	-5
[illegible] - [illegible]	3.6	9.0	250			16	-4
[illegible] - [illegible]	9.6	18.0	188			10	-2
4.6 - 0	4.6	10.5	228			4	-1
-						0	0
A -							
44.8 - 21.0	23.8	33.0					
21.0 - 0	21.0	39.5					
-	44.8	72.5	162				
-							
-							
44.8 - 21.8	23.0	32.5					
21.8 - 0	21.8	44.0					
-	44.8	76.5	171				

Stratigraphy: Height above ground top (cm) - bottom (cm)	Grain Size Max (mm)	Min	Avg	Grain Type	Hand Hardness	Manual Wetness	Stratigraphy Comments
45 - 44.5	0.5	0.1	0.3	PPgp	F	D	Some very small plates
44.5 - 39	0.7	0.3	0.5	DFbk	F	D	Stellars, plates
39 - 20	1.5	0.5	1.0	FCso	F	D	
20 - 16	2.5	1.0	2.0	FCso	1F	D	some cups some prisms few striations
16 - 4	2.5	1.0	2.0	DH1a	F	D	cups striations lots of clean prisms
4 - 0	3.0	1.5	2.0	DH1a	1F	D	

Location: CO	Date: 20241210										
Site: JPLWST	Time: 1003						Force	Depth	Depth		
Pit: JPLWST20241210	Observers: Eulick KELLOGG						max	manual	digital	Grnd	
X-Coord	Y-Coord	Time	Data Type	SN	Profile #	Force Gage	N	cm	cm	Y/N	Comments
15	15		Pow Rmm								
30	15		SSD Rmm								
15	30	1004	Scope	234	904	1000 N		46	43	Y	
30	↓	1005	↓	↓	905	↓		46.5	47	↓	
45		1006			906			50	46		
60		1005			907			46	45		
75	↓	1006	↓	↓	908			48	45	↓	
15	45	1007	Force Rmm			1000	5	38		N	
30	↓	1008	↓			↓	6	38		↓	
45		1009					4	35			
60		1010					5	39			
75	↓	1011	↓			↓	4	33		↓	
15	60	1013	Force Scope	234	909		5	38	35	N	
30	↓	1014	↓	↓	910		5	33	30	↓	
45		1014			911		4	37	36		
60		1015			912		3	36.5	25		
75	↓	1015	↓	↓	913		3	41	40	↓	
		FINISHED 1016									

Ram Penetrometer Field Data Sheet

Location: CO

Site: JPLWST

Associated pit/transect/point: JPLWST20241210

Date: 20241210 | Time:

Observer: EmiClie Kelder

UTME: | UTMN: | Zone: 13

Ram type: POWDER | Ram mass: 0.1 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	7.5					STD	1	0	0	0	49
0.1	0.1	0	0	13						1	0.5	0	0	49
		1	1	14.5										
				16.0										
				17.0										
				18.0										
		2	1	19.5										
				20.5										
				21.5										
		3	1	22.5										
				23.5										
		5	1	24.5										
		1	5	25.5										
		2	5	26.5										
				27.5										
				28.5										
		1	5	29.5										
				30.5										
		2	5	31.5										
		3	5	32.5										
		2	5	33.5										
		1	5	34.5										
				36										
		1	3	37										
				38										
		3	3	39										
		1	3	40										
		2	3	41										
		2	3	42										
		3	3	43										
		3	3	44										
		3	3	45										
		2	3	45.5										
		4	5	46										

Notes:

Location (regional scale)	Site (study plot)	Transects	Date	Time	
				Start	End
Co	JPLMET	JPL 1, 2	20241210	0828	0832
Observer(s)	**Wx Description**				
EmcCas KGinder	OVC Light S-1 L				

Transect A				Transect B			
Point	HS (cm)	Point	HS (cm)	Point	HS (cm)	Point	HS (cm)
0	41	31		0	5	31 A	33
1	48	32		1	26	32 B	32
2	51	33		2	38	33 C	33
3	50	34		3	46	34 D	22
4	49.5	35		4	49	35 E	39
5	45	36		5	50	36 F	42
6	47	37		6	43	37 G	37
7	50	38		7	45	38 H	44
8	45	39		8	41	39 I	38
9	48	40		9		40 J	40
10	43	41		10		41	
11	42	42		11		42	
12	48	43		12		43	
13	48	44		13		44	
14	48	45		14		45	
15	52	46		15		46	
16	46	47		16		47	
17	48	48		17		48	
18	49	49		18		49	
19	50	50		19		50	
20	47	51		20		51	
21	46	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	Time End
Co	JPLMET	RADAR 1, 2	20241210	0818	0821

Observer(s)	Wx Description
E McCue Kelder	OVC LIGHT S-1

Transect A 1				0814 Transect B 2			
Point	HS (cm)	Point	HS (cm)	Point	HS (cm)	Point	HS (cm)
0	45	31		0	385	31	
1	41	32		1	37	32	
2	47.5	33		2	44	33	
3	46	34		3	46	34	
4	49	35		4	45	35	
5	46	36		5	45	36	
6	43	37		6	46	37	
7	46	38		7	47.5	38	
8	48	39		8	46.5	39	
9	47.5	40		9	48.5	40	
10	46	41		10	48	41	
11	46	42		11	45	42	
12	52	43		12	48	43	
13	52	44		13	49	44	
14	46	45		14	49	45	
15	44	46		15	44	46	
16		47		16	50	47	
17		48		17	48	48	
18		49		18	44	49	
19		50		19		50	
20		51		20	0817	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	Time End
CO	JPLWET	JPLA	20241210	0839	0857

Observer(s)	Wx Description
E McCue K Glodee	OVC MOD S-1 L

Transect A				Transect B			
Point	HS (cm)	Point	HS (cm)	Point	HS (cm)	Point	HS (cm)
0	56	31	54	0	48	31	
1	54	32	49	1	49.5	32	
2	55	33	48	2	53	33	
3	47	34	53	3	54	34	
4	55	35	50	4	48	35	
5	53	36	54	5	9	36	
6	55	37	58	6	52	37	
7	50	38	44	7	49	38	
8	50	39	30	8	53	39	
9	57	40	49.5	9	54.5	40	
10	41	41	54.5	10	54	41	
11	50	42	55	11	46.5	42	
12	45	43	56	12	38	43	
13	53	44	51	13	31	44	
14	47	45	52	14	48.5	45	
15	36	46	54	15	53	46	
16	44	47	53	16	55	47	
17	53	48	49	17	57.5	48	
18	55	49	55	18	40	49	
19	46	50	54	19		50	
20	37	51	51	20		51	
21	52	52	47	21		52	
22	49	53	41	22		53	
23	35	54	23	23		54	
24	51	55	56	24		55	
25	38	56	59	25		56	
26	45	57	57.5	26		57	
27	57	58	58	27		58	
28	56	59	48	28		59	
29	47	60	25	29		60	
30	50		49.5	30			