

Location:		EC		Site:		FAS 14		Date:		20250124	
Time:		0912		Observers:		Cm, Ls, Kelle		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)	Sample A	Depth (cm)	SWE (mm)	Density (kg/m <sup>3</sup> )	Evidence of melt resulting in SWE loss? (Y/N)	
Precip Type	Rain	Snow	Graupel	Hail	Rain/Snow	Sample B					
Sky	Clear	Few ( $< 1/4$ of sky)	Scattered ( $1/4 - 1/2$ of sky)	Broken ( $> 1/2$ of sky)	Overcast (complete cover)	Sample C					
Wind	Calm (0 mph)	Light (1 - 16 mph)	Moderate (17 - 25 mph)	Strong (26 - 38 mph)	Extreme ( $> 38$ mph)	Ground roughness	Frozen	Moist	Saturated		
Tree Canopy	No trees	Sparse (5 - 20%)	Open (20 - 70%)	Closed ( $> 70\%$ )		Ground Vegetation	Bare	Grass	Shrub	Deadfall	
Instrument	Y/N	SN	Instrument	Y/N	SN	Additional Comments		Height of Ground Vegetation (cm)			
Digital LWC	N		Snow Scope	Y		Weather		SWE			
Stratigraphy pictures	Y		Lyte Probe	N							
Standard ram	Y		SMP	N							
Powder Ram	Y		Force Ram	Y							
Slush Ram	N		Force Snow Scope	Y		Pit					
HS Transects	N		Snow Scope Transects	N							
Pit Pictures	Y		SSA / NIR Box	N		Hardness					
Other											
Misc											

Location (Regional Scale)			Date (YYYYMMDD)		Observers (first initial & last name):		Temperature profile times			Comments/Notes:				
Site (Study Plot)			Time (pit opened)		UTME			UTMN						
Pit ID			Snow Depth (cm)		UTME			UTMN						
FAS014			0700		Cincin			0915 0945		GPS device & uncertainty: Garmin 655 ~2m				
SITYYYYMMDD			LWC Device & SN		Zone (two digit)									
FAS01420250124			146		0926734			4411287						
Density			LWC			Temperature			Stratigraphy					
Height above ground	Density profile A	Density profile B	Extra Density	Permittivity profile A	Permittivity profile B	Height above ground	T	top (cm)	bottom (cm)	Grain Size (mm)	Grain Type	Hand Hardness	Manual Wetness	Stratigraphy Comments
top - bottom (cm)	kg/m <sup>3</sup>	kg/m <sup>3</sup>	kg/m <sup>3</sup>	(unitless)	(unitless)	(cm)	°C			Max	Min	Avg		
-	2.6	10.5				143	-11	143	141	0.5	0.1	0.3	Rcup	K
-	13.8	99				140	-15.5	141	127	0.8	0.3	0.5	Rcup	P
-	23.4	84				130	-17.5	141	127	0.8	0.3	0.5	Rcup	P
-	13.2	39.5				120	-18	127	103	1	0.3	0.5	Rcup	K
-	20.6	67				110	-17.5	127	103	1	0.3	0.5	Rcup	K
-	8.4	34				100	-16	127	103	1	0.3	0.5	Rcup	K
-	16.6	63				90	-14	103	89	1	0.3	0.5	Rcup	K
-	10	30.5				80	-12.5	103	89	1	0.3	0.5	Rcup	K
-	26.8	80.5				70	-10.5	89	68	1.5	0.5	1	Rcup	P
-	3.8	10.5				60	-9.5	89	68	1.5	0.5	1	Rcup	P
145 - 135	445	439				50	-8.5	68	61	1	0.5	0.8	Rcup	K
- 125	411	400				40	-7	68	61	1	0.5	0.8	Rcup	K
- 115	387	385				30	-5.5	61	41	1.5	0.5	1	Rcup	K
- 105	311	356	319			20	-5.5	61	41	1.5	0.5	1	Rcup	K
- 95	322	315				10	-3.5	41	38	4	1	2	Rcup	P
- 85	329	326				0	-2.5	41	38	4	1	2	Rcup	P
- 75	312	326						38	33	2	0.5	1	Rcup	K
- 65	398	384						33	33	2	0.5	1	Rcup	K
- 55	390	388						33	33	2	0.5	1	Rcup	K
- 45	357	359						33	33	2	0.5	1	Rcup	K
- 35	265	267						33	33	2	0.5	1	Rcup	K
- 25	362	363						33	33	2	0.5	1	Rcup	K
- 15	292	294						33	33	2	0.5	1	Rcup	K
- 5	236	276	260					33	33	2	0.5	1	Rcup	K

Location:			Date:		Force		Depth		Depth		Grnd		Comments
Site:			Time:		max		manual		digital		Y/N		
Pit:			Observers:		N		cm		cm				
X-Coord	Y-Coord	Time	Data Type	SN	Profile #	Force Gage							
0	30		210 Run										
30	60	1119		308	104			143	140				
		1170			106			125	130				
		1122			109			131	131				
		1123			110			139	142				
		1124			111			136	139				
		1126				1666N	284	106					
		1126					232	106					
		1127					228	100					
		1127					246	106					
		1128					203	100					
		1131					135	67					
				151	816		102	75					
					817		108	75					
					818		79	75					
					820		105	75					

# Ram Penetrometer Field Data Sheet

Location

Site:

Associated pit/transect/point:

Date:

Time: 1040

Observer:

UTME:

UTMN:

Zone:

Ram type:

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

2 0 0 0 4

2 15 47

2 20 87

2 0.5 1 1 4

18

1 20 88

5 5 5

49

89

5 15 6

1 15 50

2 20 90

15 15 7

51

91

2 1 5 15 8

1 10 52

92

5 15 9

53

93

5 15 10

54

94

1 15 11

2 5 55

3 20 95

12

1 10 56

96

13

58

2 20 97

14

79

1 20 98

15

60

99

16

2 10 61

2 20 100

17

62

101

18

63

1 20 102

19

64

103

20

65

104

21

2 15 66

105

22

1 15 67

106

23

68

107

24

69

108

2 15 25

71

1 20 110

26

1 10 72

1 15 170

1 15 27

73

1 15 121

28

74

122

29

75

123

30

2 10 76

124

33

77

125

35

7 15 78

1 3 126

38

5 20 79

127

40

4 20 80

128

5 1 41

5 20 81

129

5 10 42

82

2 3 130

4 15 43

83

1 5 131

44

84

132

45

1 20 85

133

2 15 46

86

134

Notes: