AWS Field Season 2024-25

Field Team: Lee Welhouse, Forbes Fillip, Carolyn Lipke, Tyler Plekan

1. 11 November 2024 and 19 January 2025 Phoenix (99615) Pressure sensor replacement
2. 5 December 2024 Marble Point I (8906) replace wind sensor
3. 5 December 2024 Marble Point II (89608) Site checkup
4. 11 December 2024 Emilia (8939) Power system replacement
5. 13 December 2024 White Island (99610) Temperature sensor replacement
6. 15 December 2024 Elijah Tall Tower (99616) station install
7. 18 December 2024 Minna Bluff (99606) Temperature sensor replacement
8. 19 December 2024 Laurie II (21360) Removal
9. 20 December 2024 Schwerdtfeger (8913) site raise
10. 20 December 2024 Skomik (99614) Data logger install
11. 3 January 2025 Alexander Tall Tower! (99601) Wind sensor replacement po wer system raise
12. 4 January 2025 Windless Bight (99611) Lower sensor raise and site inspection
13. 8 January 2025 Ferrell (8947) Station raise and wind sensor replacement
14. 15 January 2025 Linda (99603) Station raise
15. 16 January 2025 Lorne (99612) Station raise
16. 17 January 2025 Siple Dome Station replace and raise
17. 19 January 2025 Willie Field (99607) and Sarah (99613) Site installs

Station Name: Phoenix

Date: 2024-11-26

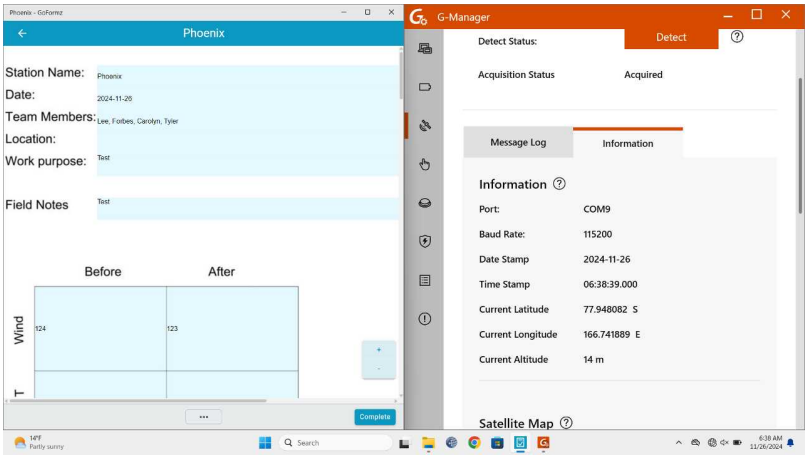
Team Members: Lee, Forbes, Carolyn, Tyler

Location: -77.94808616666667, 166.74181533333334

Work purpose: Removing enclosure to replace barometer

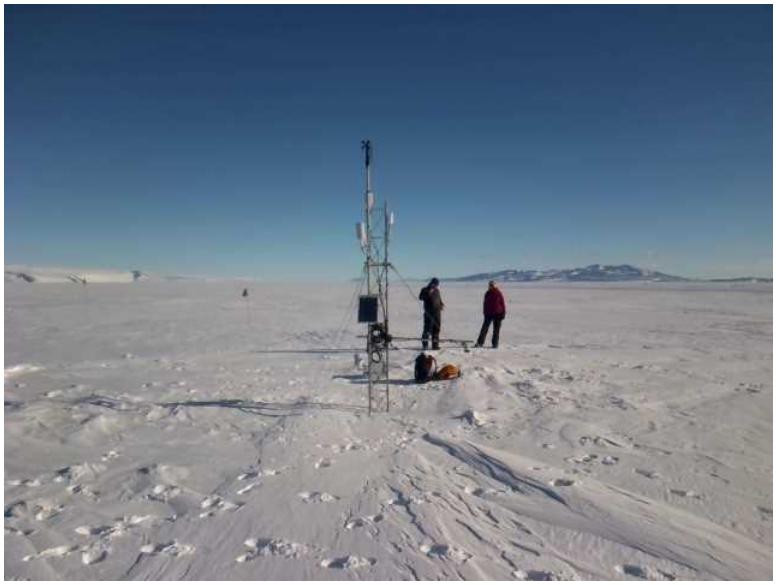
Field Notes: Unable to detect geo-location in GoFormz app, used G-Manager for GNSS/GPS acquisition

	Before	After
Wind	na	144
Upper T	na	115
Lower T	na	25
RH	na	93
ADG Boom	na	39
Enclosure	na	55
AWS2B	na	na

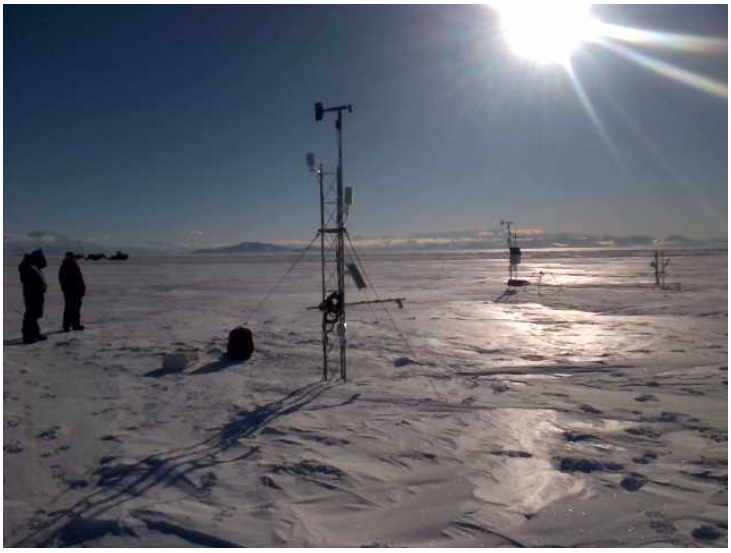

Phoenix - GoFormz
Phoenix
Station Name:
Phoenix
Date:
2024-11-26
Team Members:
Lee, Forbes, Carolyn, Tyler
Location:
Work purpose:
Test
Field Notes
Test
Before
After
Wind
124
123
Complete
G-Manager
Detect Status:
Detect
Acquisition Status
Acquired
Message Log
Information
Information
Port:
COM9
Baud Rate:
115200
Date Stamp
2024-11-26
Time Stamp
06:38:39.000
Current Latitude
77.948082 S
Current Longitude
166.741889 E
Current Altitude
14 m
Satellite Map
Search
6:38 AM
11/26/2024

After Photos (north, east, South, and West)

South

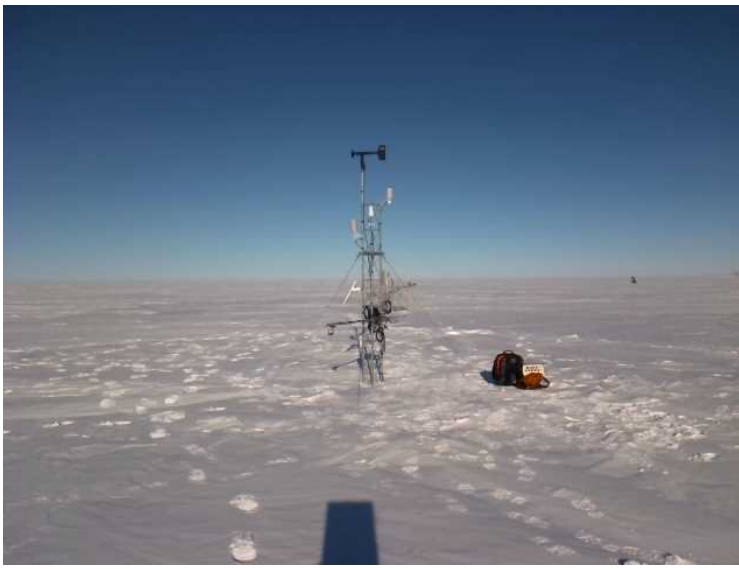


West



North

East



Station Name: Marble Point I

Date: 2024-12-05

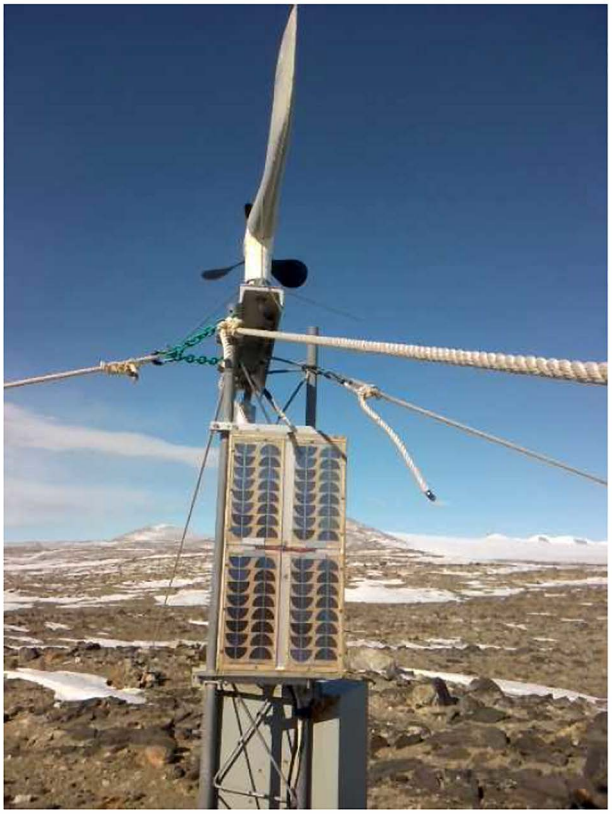
Team Members: Forbes Filip, Carolyn Lipke, Tyler Plekan, Pilot: Eric Ridington

Location: 77 deg 26.34199'S, 163 deg 45.19535'E, altitude 113.9 (per Getac GPS)

Work purpose: Inspection & replace anemometer

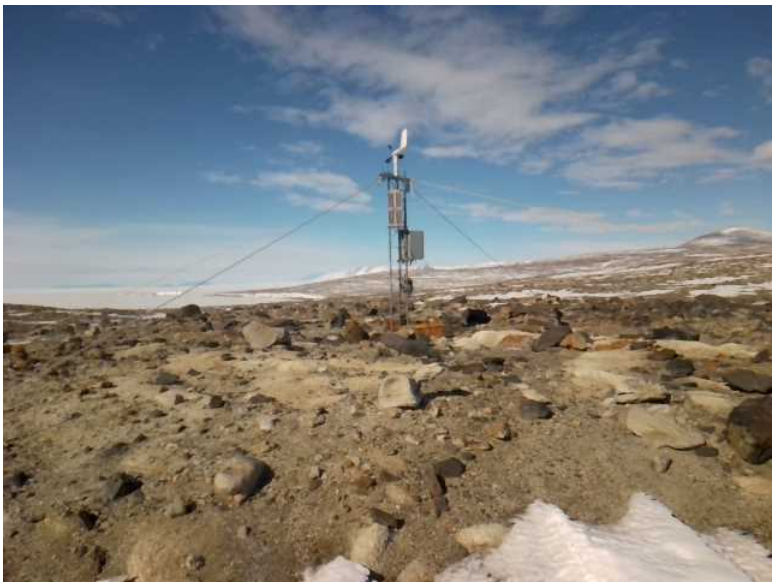
Field Notes: No snow accumulation at site, tower on bare rock. Did not move any instruments so instrument heights same as last visit. Began aerovane disassembly at 0955 local time. All guylines and tower secure and enclosure connections tight. Spider crack in solar panel plexi (same as previous visit, no need for immediate replacement). Old aerovane sn not visible. Installed new aerovane model 123, sn 91-2047. Finished work at 1030 local time. Confirmed transmission with

	Before	After
Wind	Not taken, no change in any instrument heig	NA
Upper T	NA	NA
Lower T	NA	NA
RH	NA	NA
ADG Boom	NA	NA
Enclosure	NA	NA
AWS2B	NA	NA

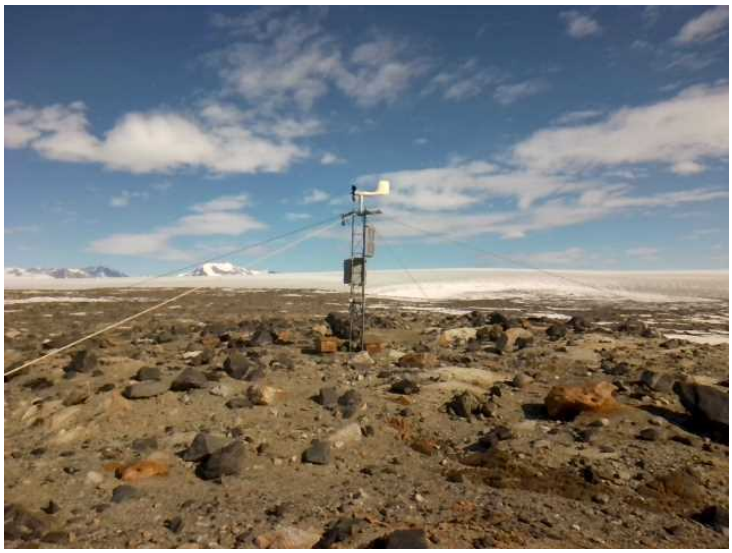


After Photos (north, east, South, and West)

South



West



North

East

Station Name: Marble Point II

Date: 2024-12-05

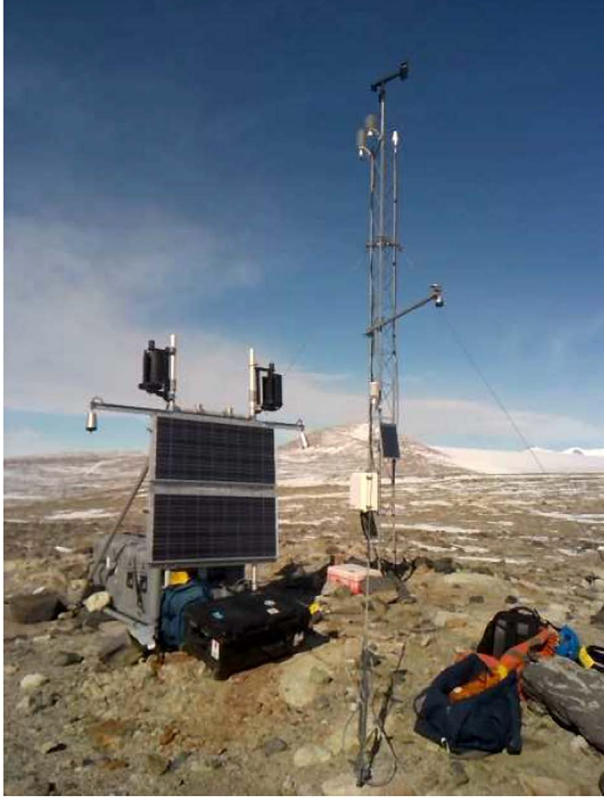
Team Members: Forbes, Carolyn, Tyler

Location:

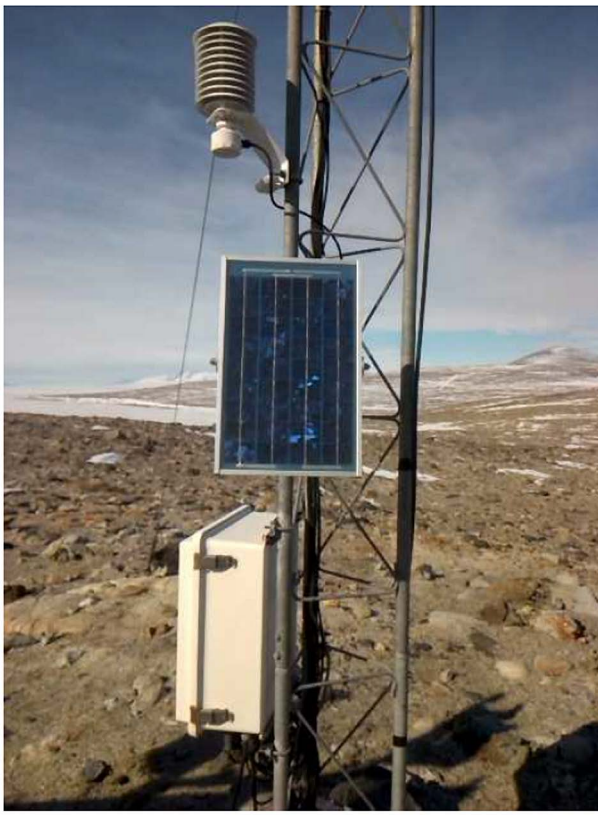
Work purpose: Inspection

Field Notes

	Before	After
Wind		
Upper T		
Lower T		
RH		
ADG Boom		
Enclosure		
AWS2B		



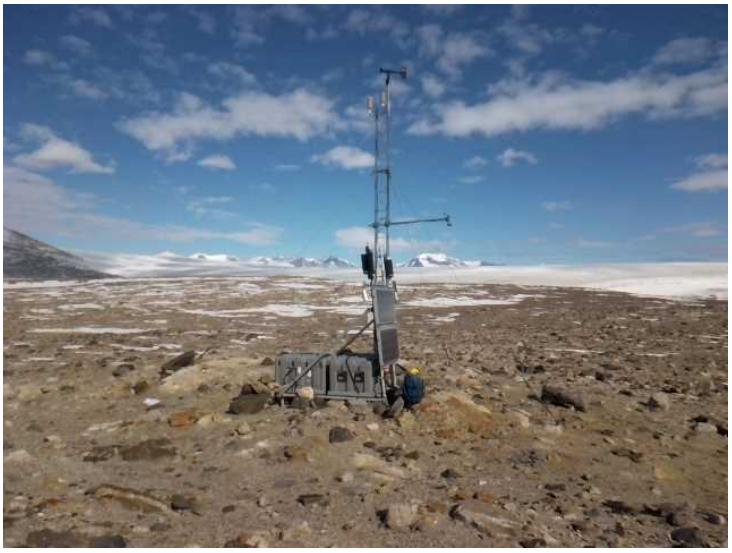

CAMPBELL
SCIENTIFIC



After Photos (north, east, South, and West)

South

West



North

East

Station Name: Emilia

Date: 2024-12-11

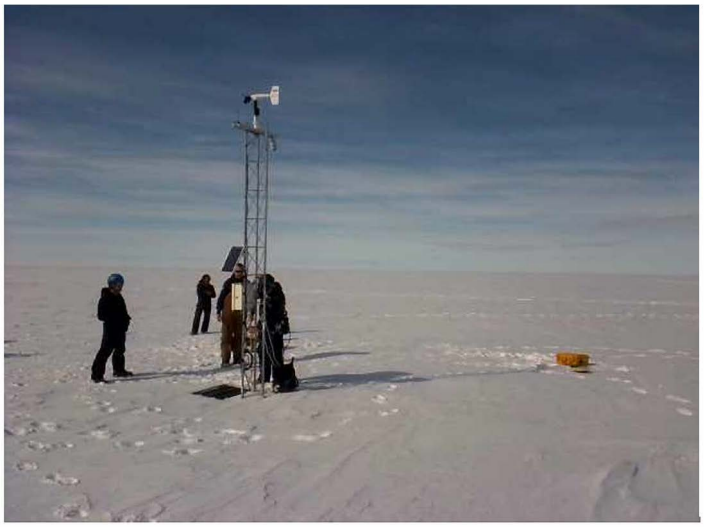
Team Members: Lee Welhouse, Forbes Fillip, Carolyn Lipke, Tyler Plekan, Hannah Miner, and Erik Snyder, Pilots: Paul Christian and Addison Gilpin-Payne

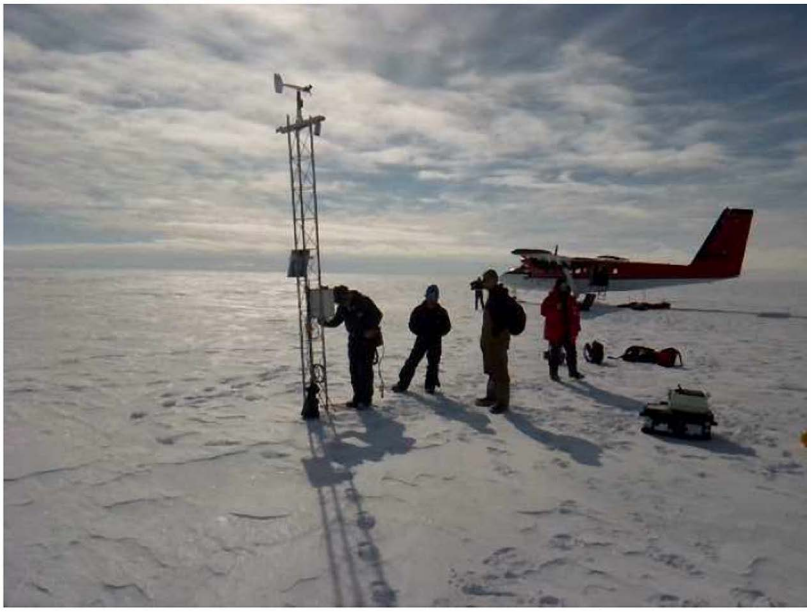
Location: 78° 21.72894' S ; 173° 14.09986' E

Work purpose: Replace system with new system

Field Notes: Landed 1045 local, GPS on and 10 satellites acquired at 1105. Power system box lid just at surface level. Tower slightly tilted. When raising tower on next visit will re-install so it is level. Began replacing enclosure and sensors at 1110 local. Windbird mount attached with mousing wire instead of bolt, bring V style U bolt next time to replace. Replace windbird mount in future year. (pipe wouldn't fit over the top tower section (inner diameter of pipe too small, so instead bolted and lashed

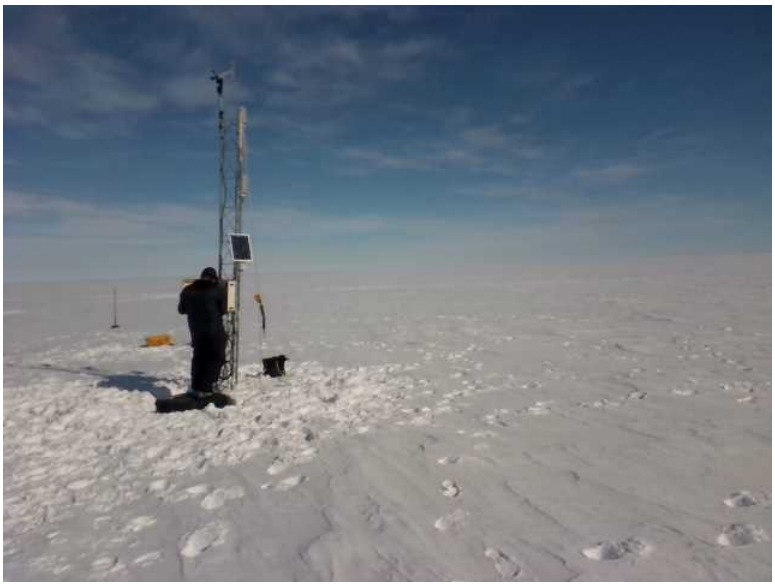
	Before	After
Wind	151	174
Upper T	on 2B boom	151
Lower T	not present	69
RH	on 2B boom	109
ADG Boom	Not present	Not installed
Enclosure	50.0	45
AWS2B	151	not present



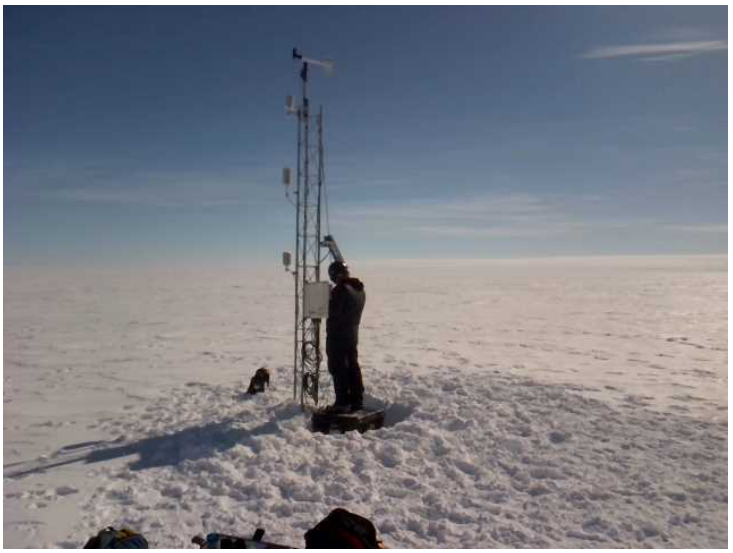


After Photos (north, east, South, and West)

South

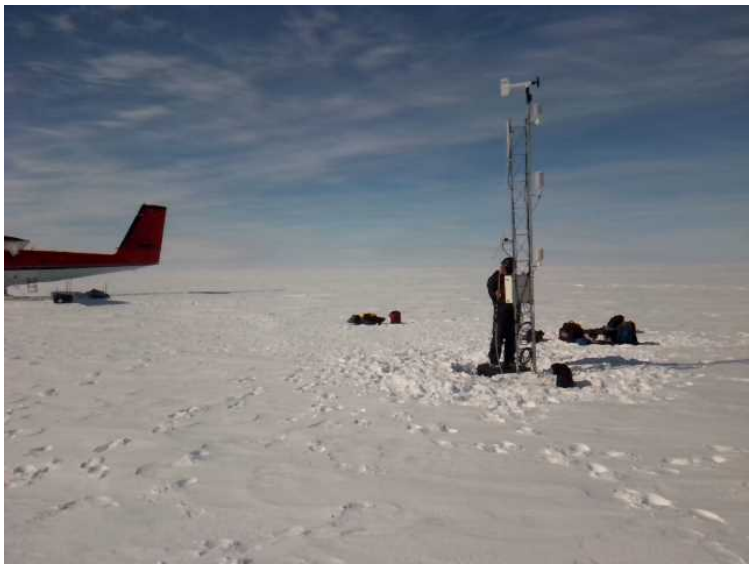


West



North

East



Station Name: White Island

Date: 2024-12-13

Team Members: Lee, Tyler, George

Location: -78.0759875*; 167.4507432*

Work purpose: Weather station instrument repair

Field Notes: Humidity sensor unplugged, lower temperature sensor fell our of radiation shielding.

	Before	After
Wind		
Upper T		
Lower T		
RH		
ADG Boom		
Enclosure		
AWS2B		

After Photos (north, east, South, and West)

South

West

North

East

Station Name: Minna Bluff

Date: 2024-12-18

Team Members: Lee Welhouse, Tyler Plekan, George

Location: -78.5547273° ; 166.6906085°

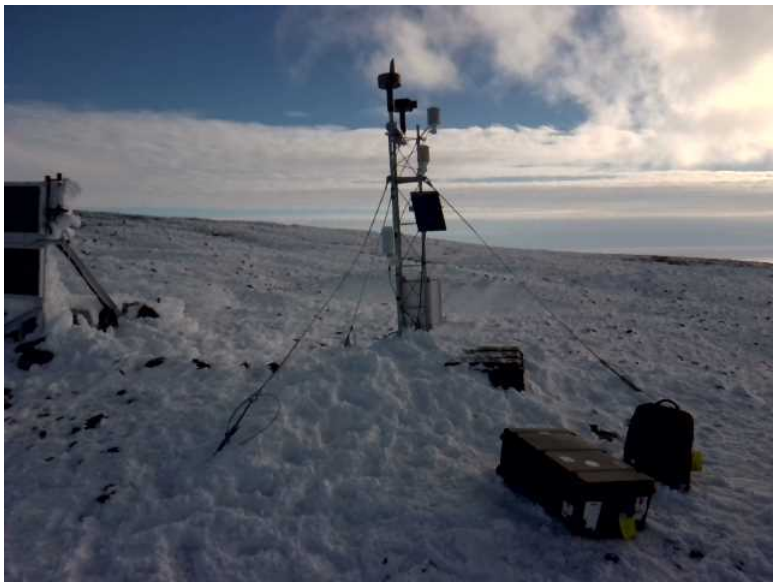
Work purpose: Inspection and replacement of temperature sensors.

Field Notes Covered in snow.

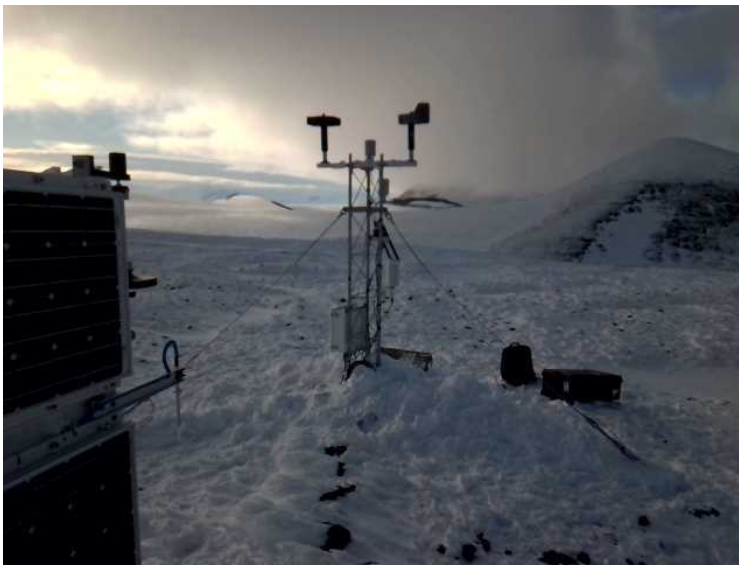
	Before	After
Wind		
Upper T		
Lower T	TBD (NEW):65 inches	
RH		
ADG Boom		
Enclosure		
AWS2B		

After Photos (north, east, South, and West)

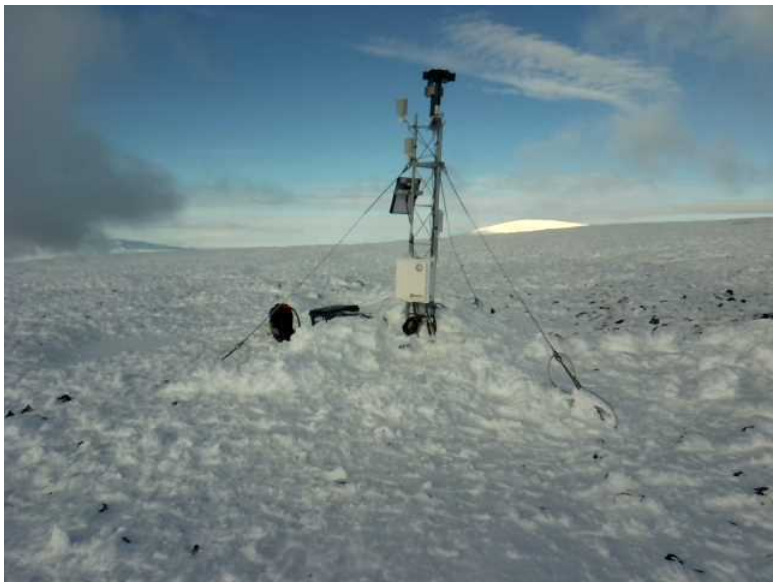
South



West



North



East

Station Name: Laurie II

Date: 2024-12-19

Team Members: Forbes Filip, Carolyn Lipke, Helo Tech Cameron Hassman, Pilot Bryan Minnear

Location: 77.3879 S 170.7073 E

Work purpose: Remove tower, all instruments, and battery box from location

Field Notes: 0.5 miles N of Dec 2023 location. 3.3 miles from ice shelf edge. No visible damage. Tower solid. GPS started 1325 local. Started removing instruments 1335 local. Done at 1505 local, removed two 7 foot tower sections. Remaining tower sections 25" below surface. GPS stopped at 1515 local. Nothing except subsurface tower sections remain on site.

	Before	After
Wind	156"	NA
Upper T	on boom	NA
Lower T	not present	NA
RH	on boom	NA
ADG Boom	not present	NA
Enclosure	52"	NA
AWS2B	145", solar panel 112"	NA

After Photos (north, east, South, and West)

South

West

North

East

Station Name: Elijah Tall Tower

Date: 2024-12-19

Team Members: Rigger Crew, Lee, Carolyn, Forbes, Tyler

Location: 77° 50.94180' S ; 166° 46.02120' E

Work purpose: Install Tower

Field Notes Instruments installed at nominal heights

	Before	After
Wind		
Upper T		
Lower T		
RH		
ADG Boom		
Enclosure		
AWS2B		

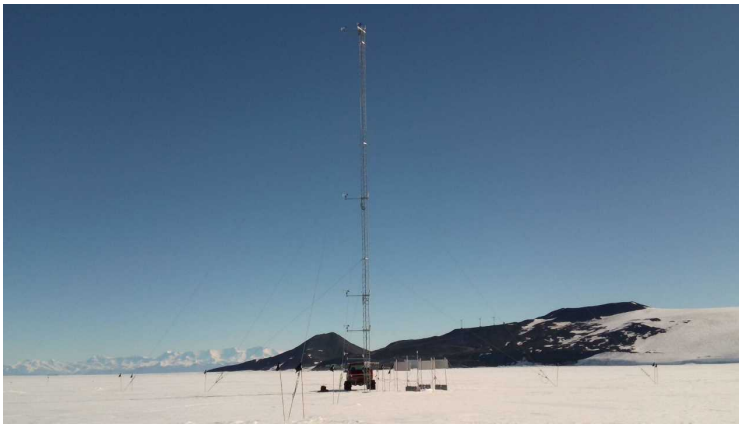
After Photos (north, east, South, and West)

South

West

North

East



Station Name: Schwerdtfeger

Date: 2024-12-20

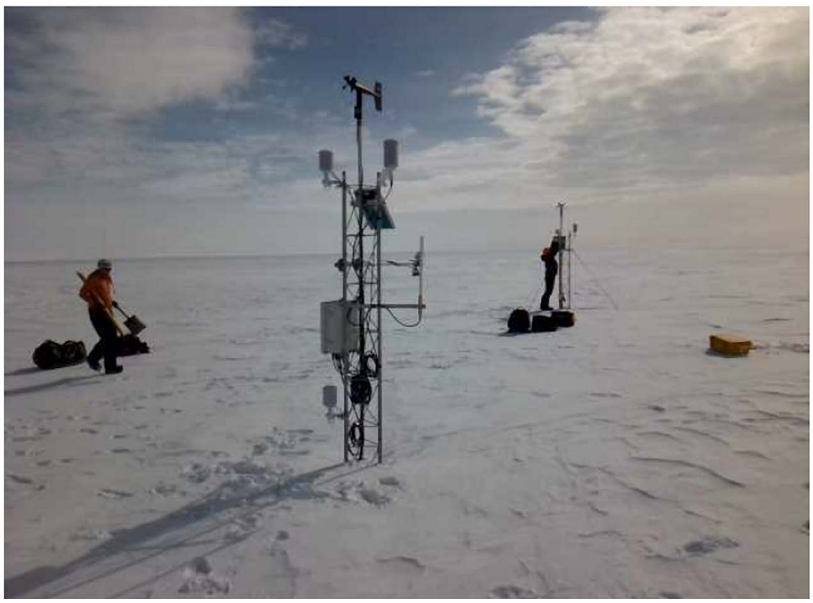
Team Members:

Location: -79.7809362° ; 170.5047663°

Work purpose: Raise tower and re-attach instruments

Field Notes gps@ 12:33pm local

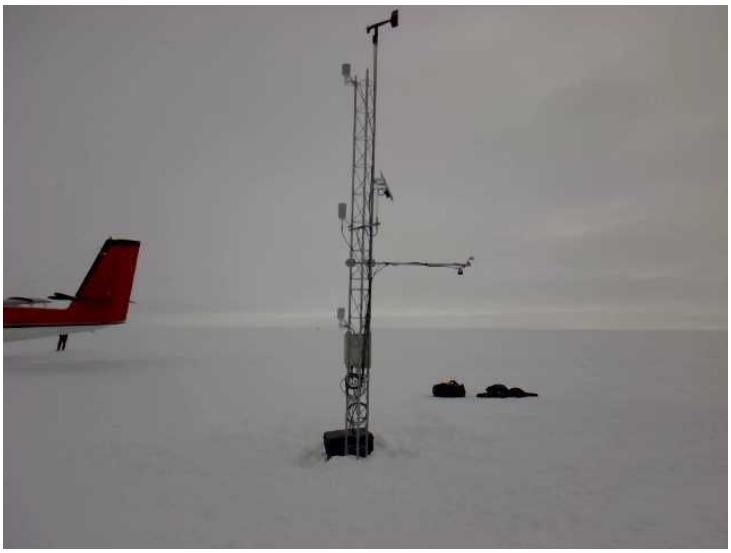
	Before	After
Wind	132	242
Upper T	100	213
Lower T	25	74
RH	100	131
ADG Boom	70	106
Enclosure	42	49
AWS2B	n/a	73



After Photos (north, east, South, and West)

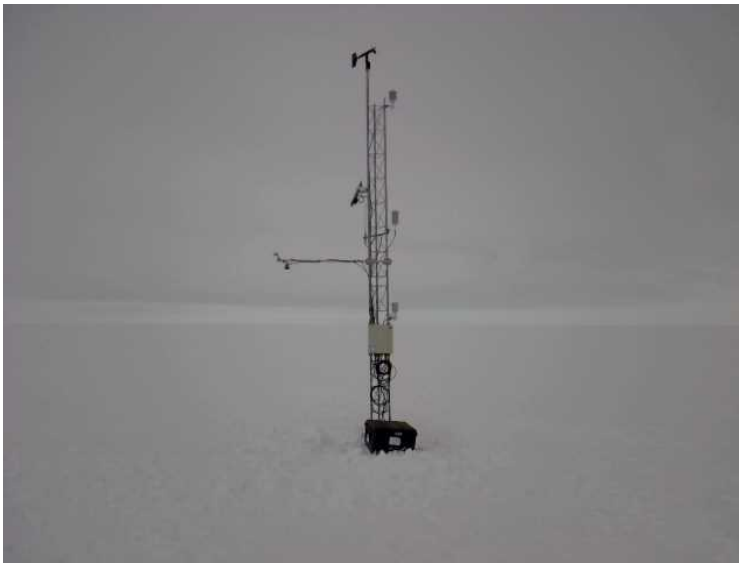
South

West



North

East



Station Name: Skomik

Date: 2024-12-20

Team Members: Lee Welhouse, Forbes Filip, Carolyn Lipke, Tyler Plekan Pilots: Addison

Location:

Work purpose: Install enclosure and raise tower

Field Notes

	Before	After
Wind		231
Upper T		203
Lower T		74
RH		126
ADG Boom		
Enclosure		44
AWS2B		

Station Name: Alexander Tall Tower!

Date: 2025-01-03

Team Members: Lee Welhouse, Forbes Filip, Joe Petit, riggers: Pilots: Addison

Location: 78° 57.99752' S ; 170° 48.97388' E

Work purpose: Raise power system, replace top wind bird, replace gps

Field Notes

Second lowest anemometer damaged and recovered, next year plan replacement Wiring.
Lowest levels raise in a year or two. Replace solar panel mount on tower
Tower add in 4 or 5 years

	Before	After
Wind		
Upper T		
Lower T		
RH		
ADG Boom		
Enclosure		
AWS2B		

After Photos (north, east, South, and West)

South

West

North

East

Station Name: Windless Bight

Date: 2025-01-04

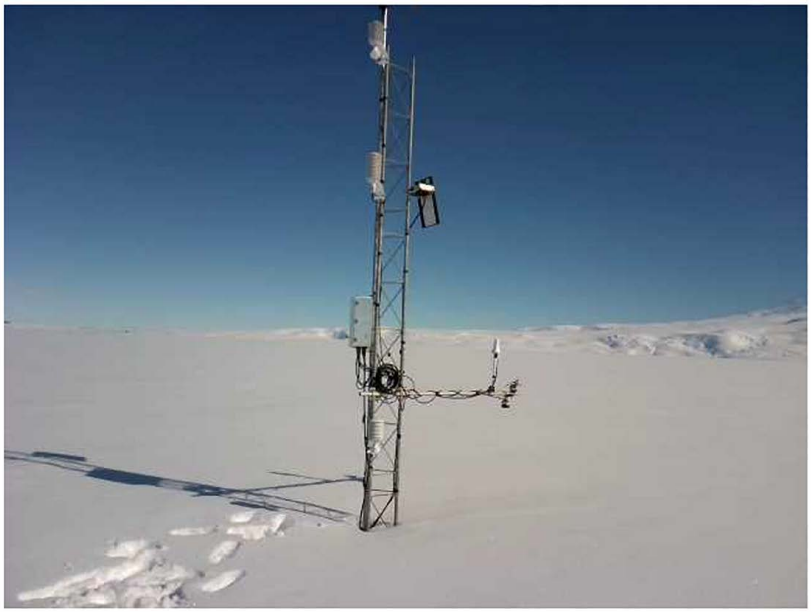
Team Members: Lee Welhouse, Forbes Filip, Pilot: Ryan Scareci

Location: 77° 43.92953' S ; 167° 39.68812' E

Work purpose: Raise lower instruments and battery box

Field Notes: Card module not working, recommend next year replace with CR1000x system, with same sensors

	Before	After
Wind	185	185
Upper T	155	155
Lower T	28	48
RH	110	110
ADG Boom	41	87
Enclosure	56	56
AWS2B		

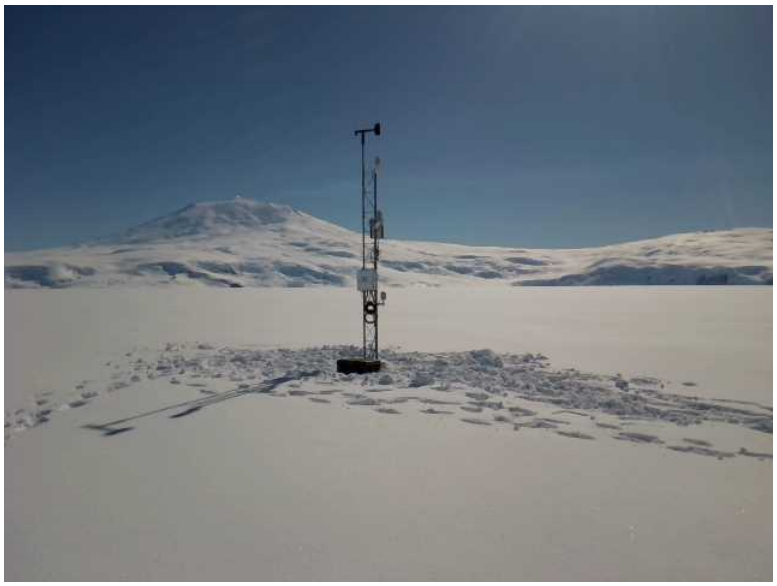


After Photos (north, east, South, and West)

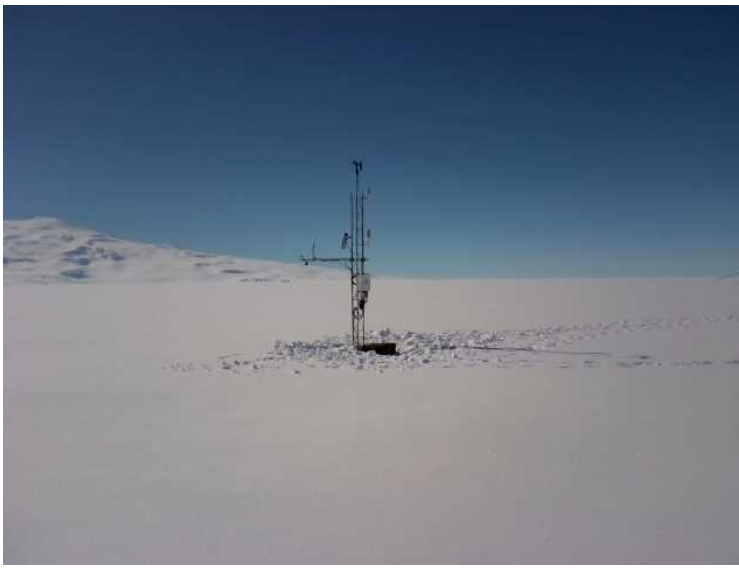
South

West

North



East



Station Name: Ferrell

Date: 2025-01-08

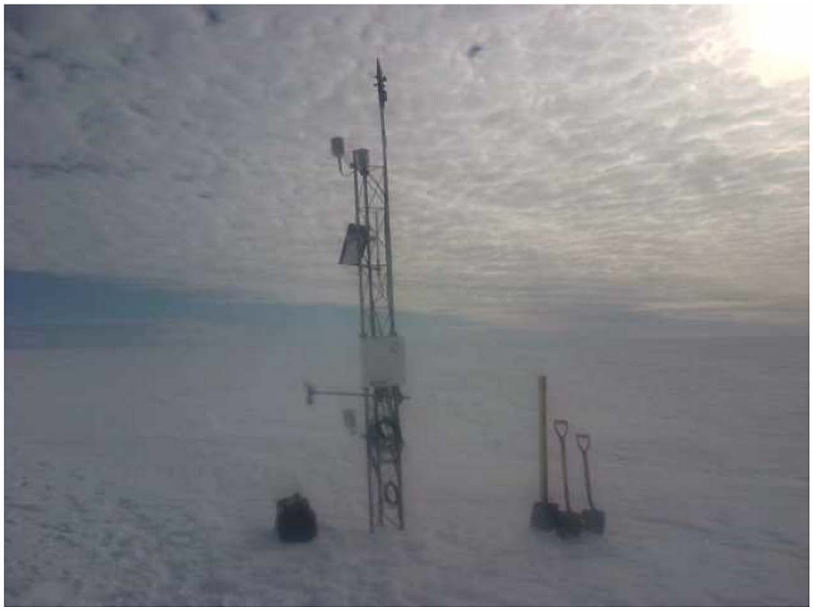
Team Members: Lee Welhouse, Forbes Filip

Location: 77° 44.78658' S ; 170° 48.57827' E

Work purpose:

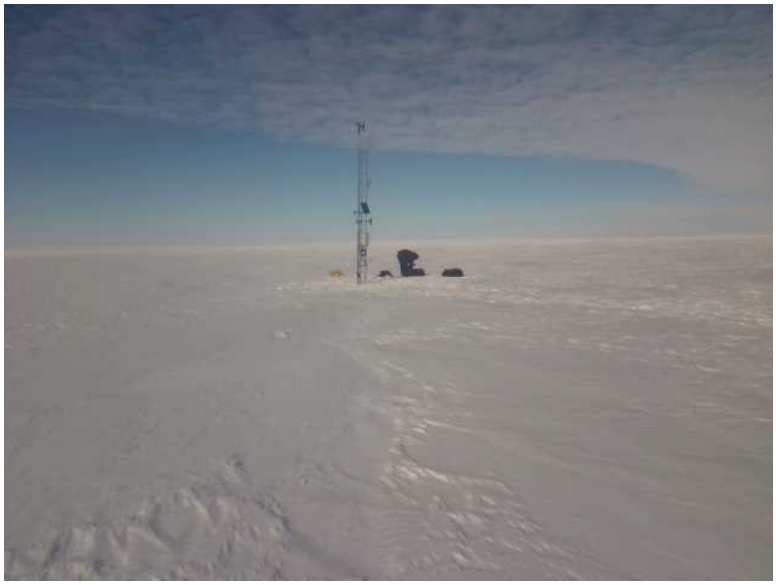
Field Notes Raise system, second visit on 1/16 to replace nose cone

	Before	After
Wind	166	214
Upper T	137	184
Lower T	37	29
RH	137	136
ADG Boom	46	84
Enclosure	52	52
AWS2B		

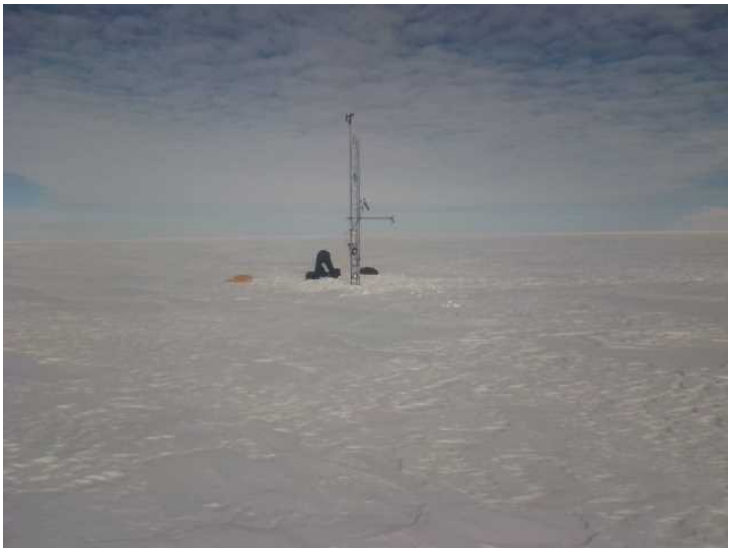


After Photos (north, east, South, and West)

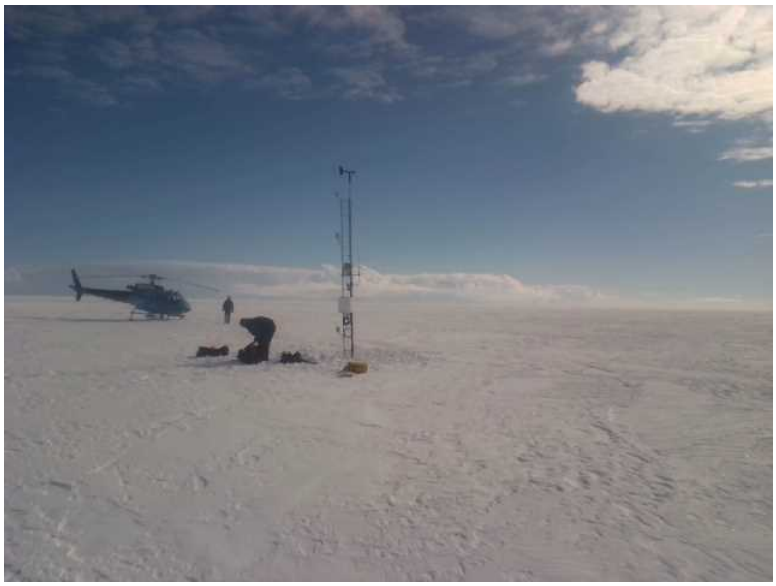
South



West



North



East

Station Name: Linda

Date: 2025-01-15

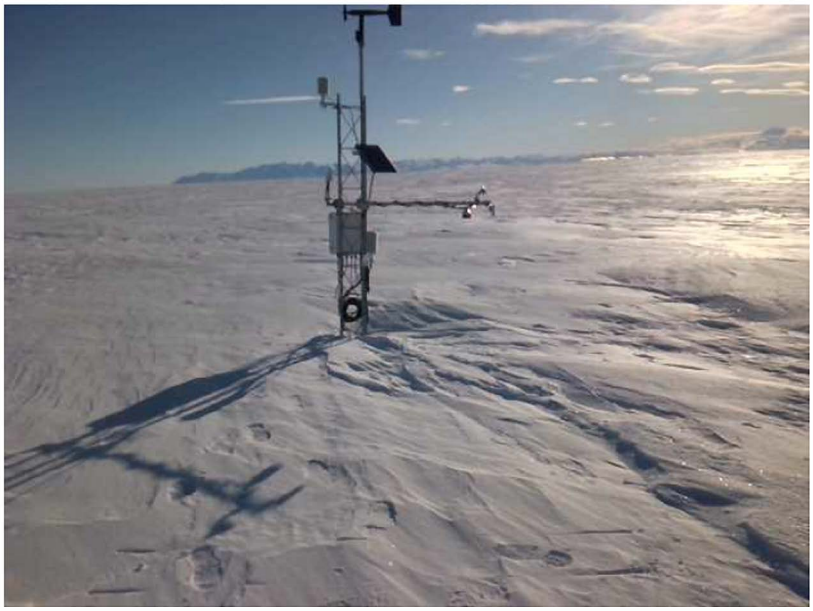
Team Members: Lee and Forbes

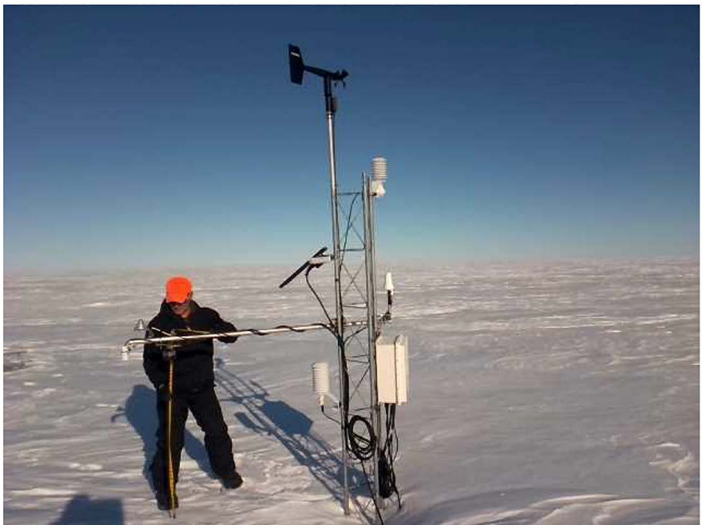
Location: 78° 21.69746' S ; 168° 28.44981' E

Work purpose: Raise

Field Notes

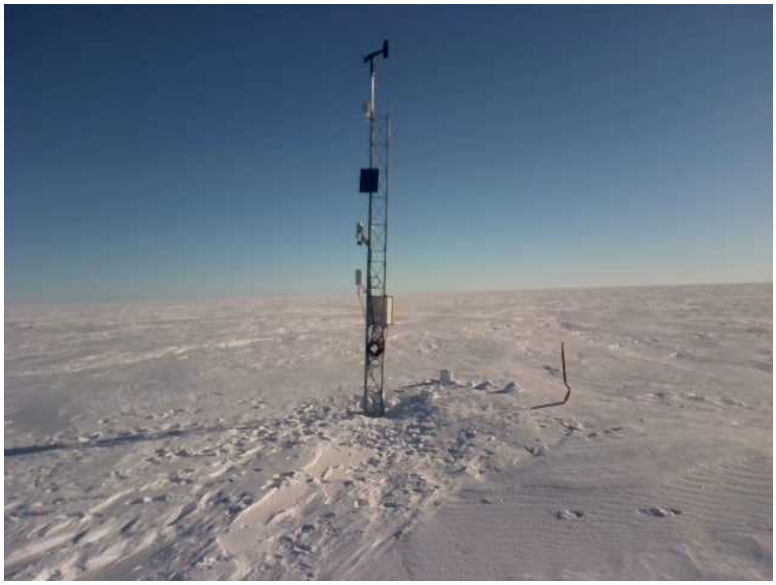
	Before	After
Wind	125	209
Upper T	96	180
Lower T		
RH	32	76
ADG Boom	51	100
Enclosure	32	53
AWS2B		



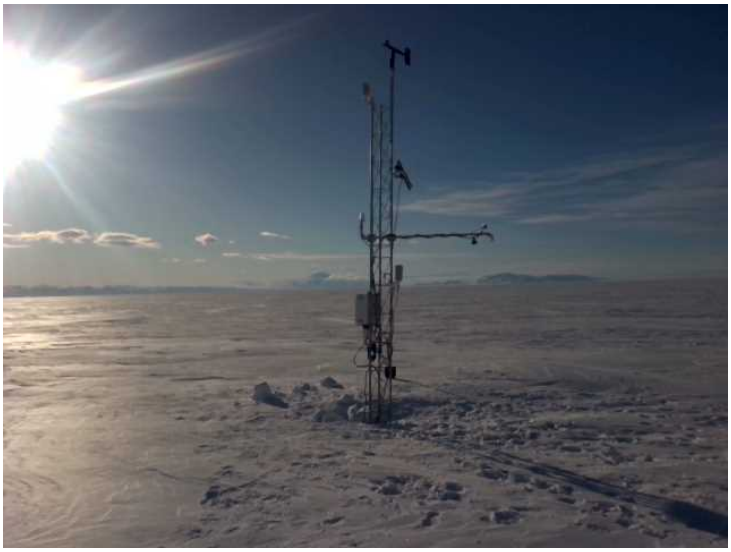


After Photos (north, east, South, and West)

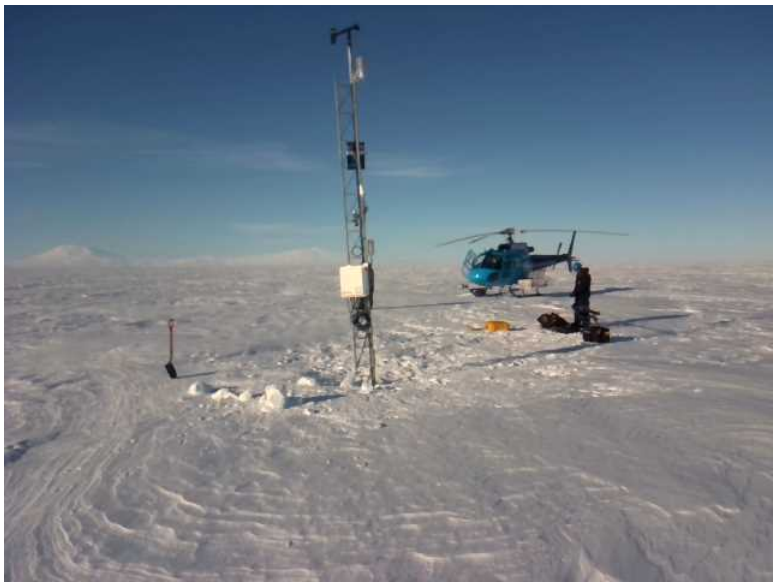
South



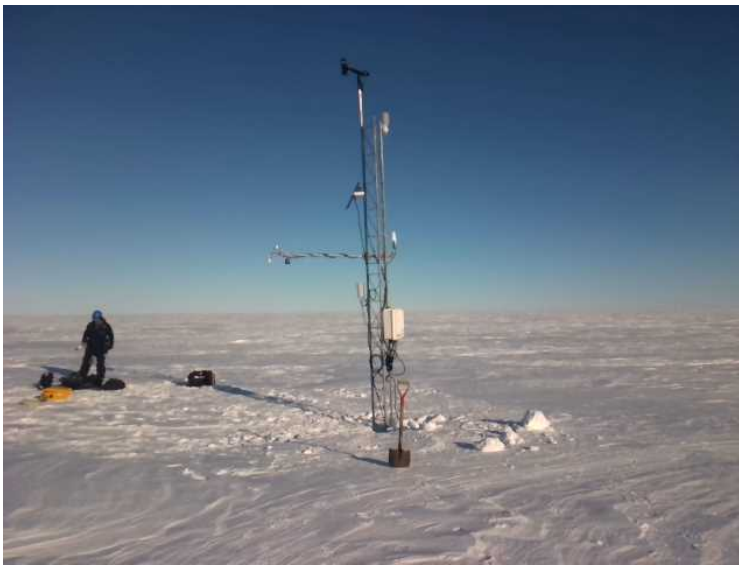
West



North



East



Station Name: Siple Dome

Date: 2025-01-17

Team Members:

Location: 81° 39.12724' S ; 148° 59.53855' W

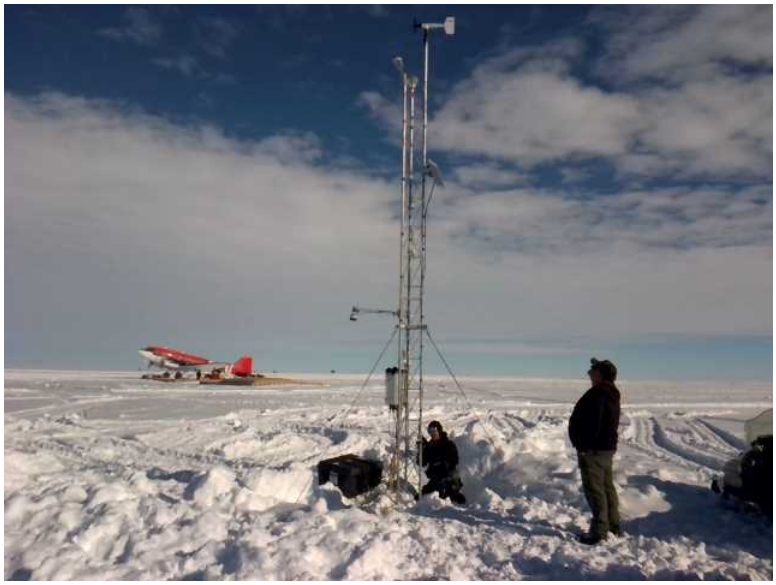
Work purpose: replace

Field Notes Middle temp 79

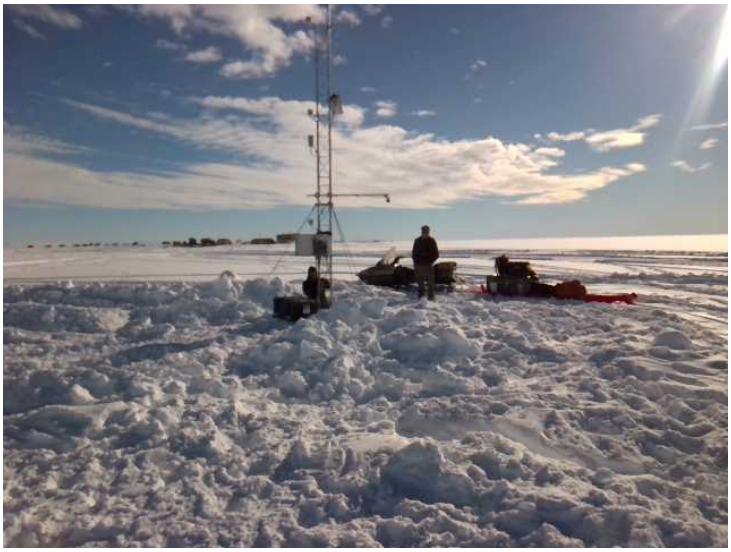
	Before	After
Wind		250
Upper T		223
Lower T		68
RH		130
ADG Boom		92
Enclosure		44
AWS2B		

After Photos (north, east, South, and West)

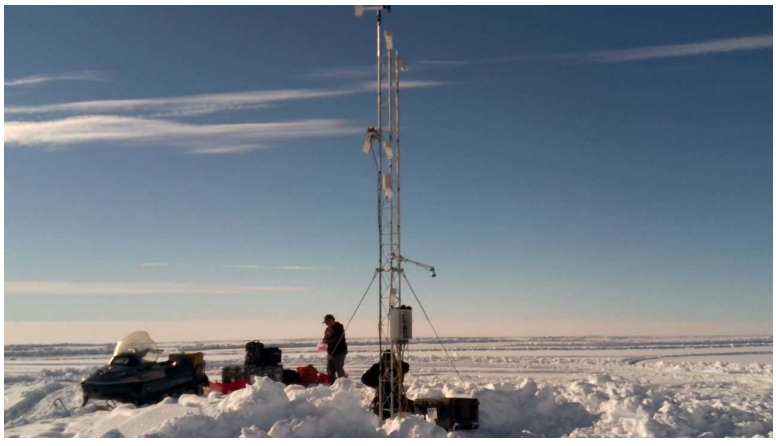
South



West



North



East

Station Name: Lorne

Date: 2025-01-16

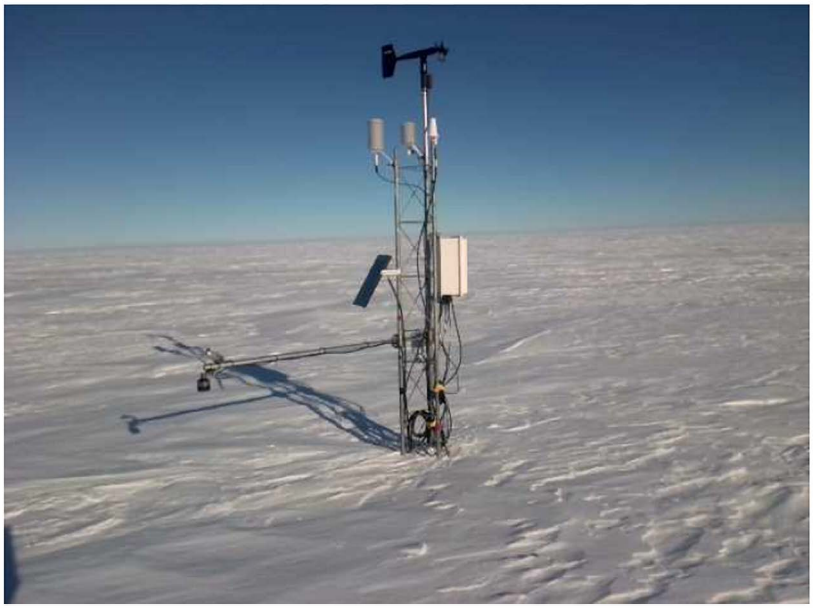
Team Members: Lee and Forbes

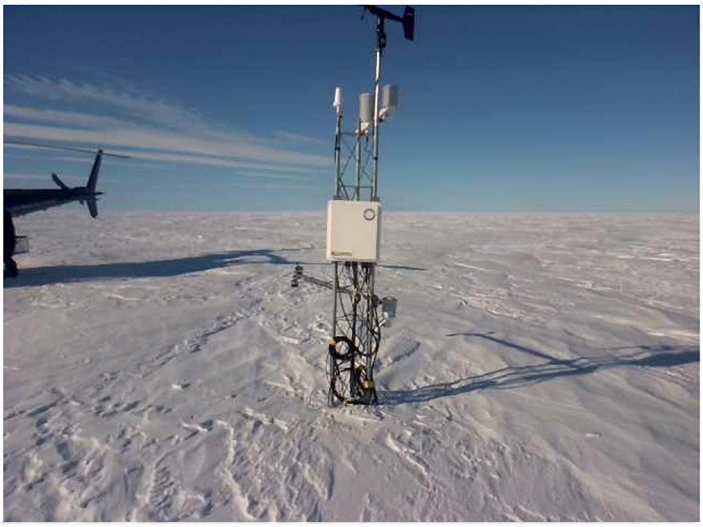
Location: 78° 8.98672' S ; 170° 2.79504' E

Work purpose: raise

Field Notes

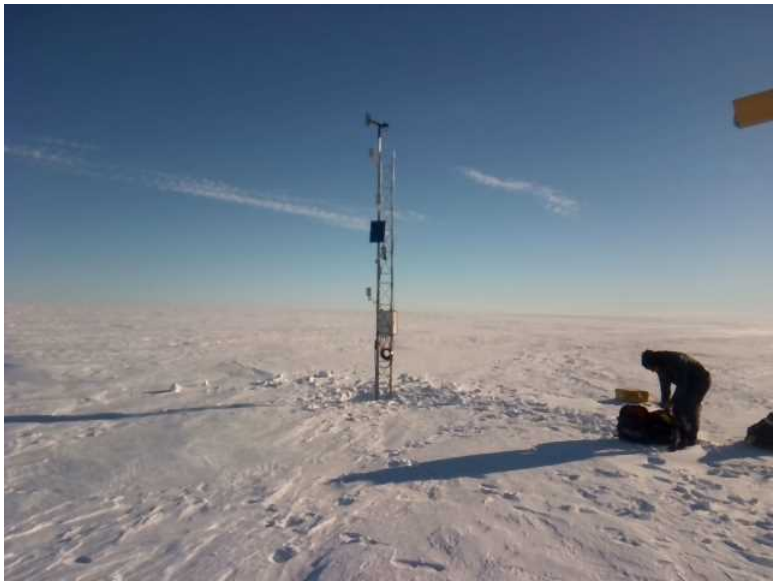
	Before	After
Wind	117	205
Upper T	92	179
Lower T	28	74
RH	92	139
ADG Boom	34	99
Enclosure	47	
AWS2B		





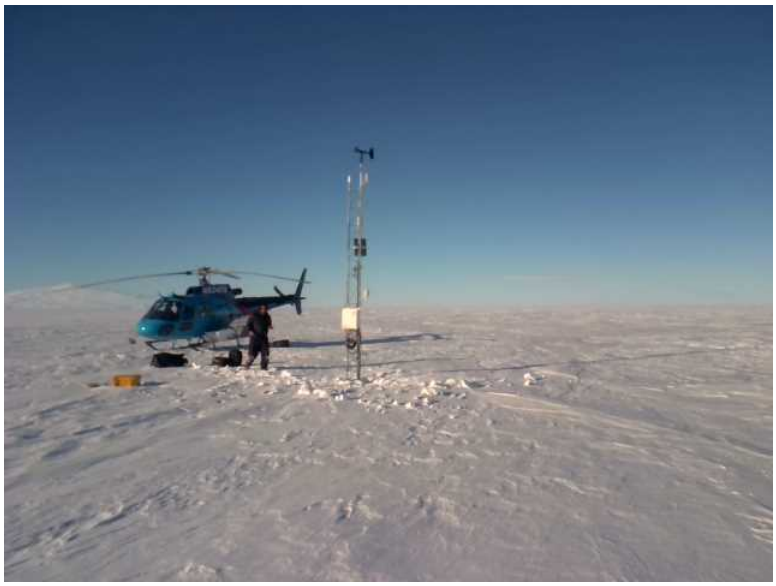
After Photos (north, east, South, and West)

South

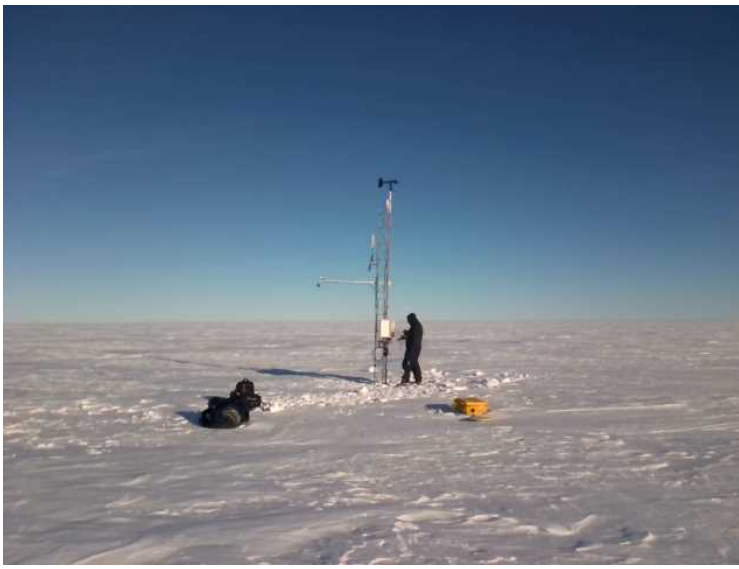


West

North



East



Station Name: Sarah

Date: 2025-01-19

Team Members: Lee Welhouse, Forbes Filip, Carolyn Lipke, Tyler Plekan

Location: 77° 50.94352' S ; 166° 46.01883' E

Work purpose: Install at new location

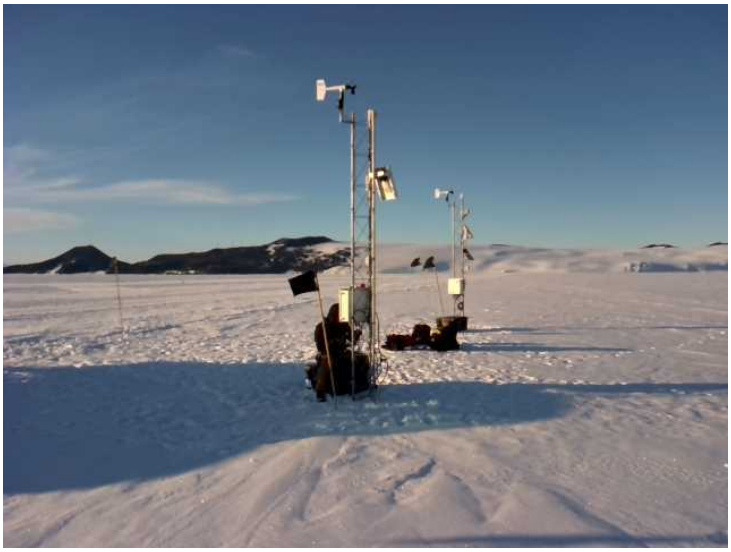
Field Notes: Install, so no before images

	Before	After
Wind		159
Upper T		146
Lower T		68
RH		107
ADG Boom		
Enclosure		39
AWS2B		

After Photos (north, east, South, and West)

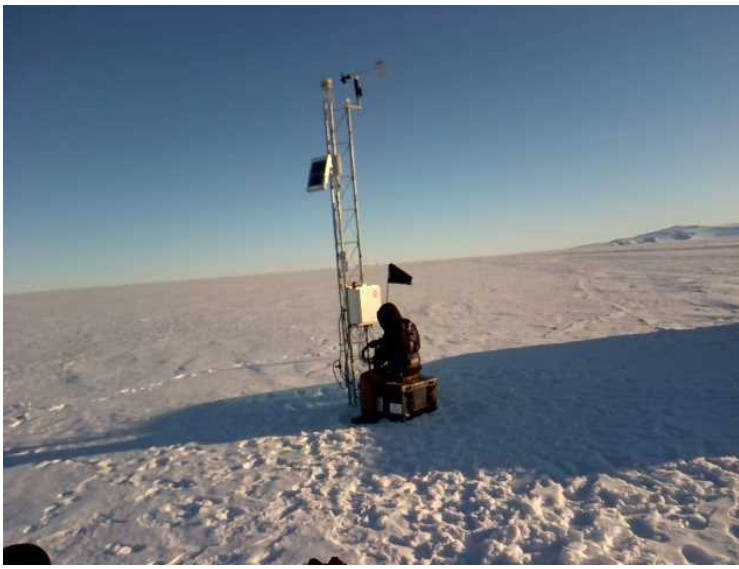
South

West



North

East



Station Name: Willie Field

Date: 2025-01-19

Team Members: Lee Welhouse, Forbes Filip, Carolyn Lipke, Tyler Plekan

Location: 77° 50.94352' S ; 166° 46.01883' E

Work purpose: reinstall

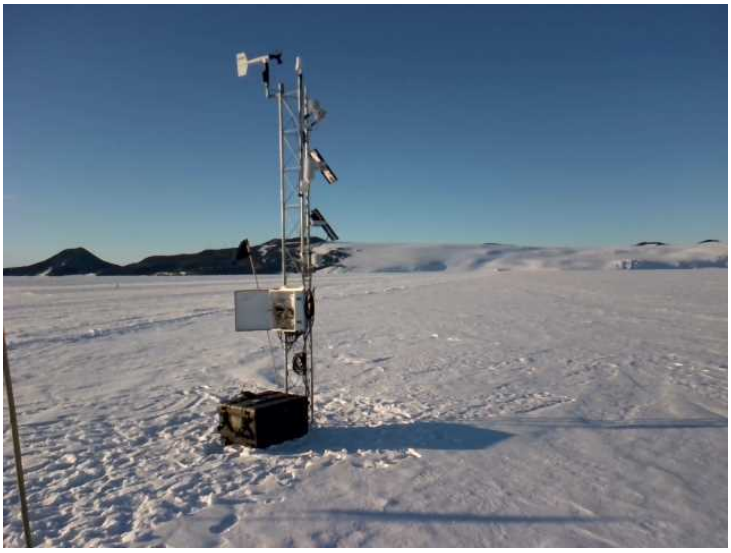
Field Notes Install, so no before images

	Before	After
Wind		156
Upper T		131
Lower T		67
RH		101
ADG Boom		
Enclosure		42
AWS2B		

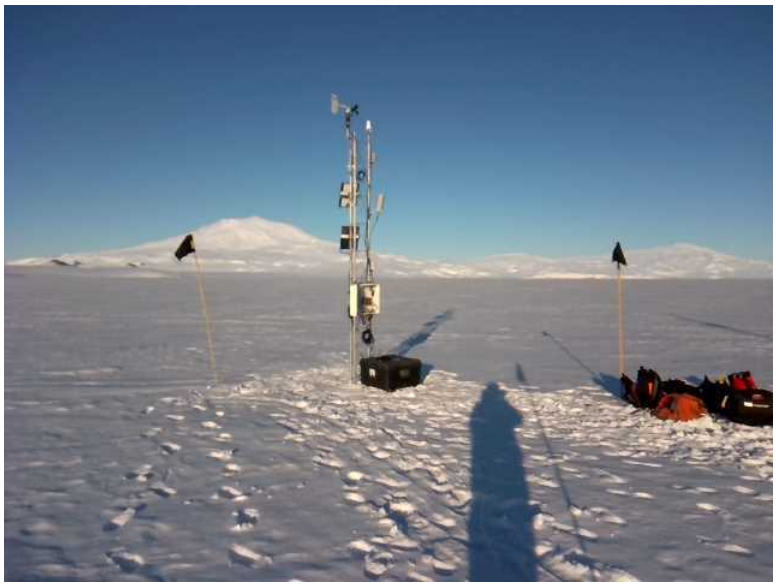
After Photos (north, east, South, and West)

South

West



North



East