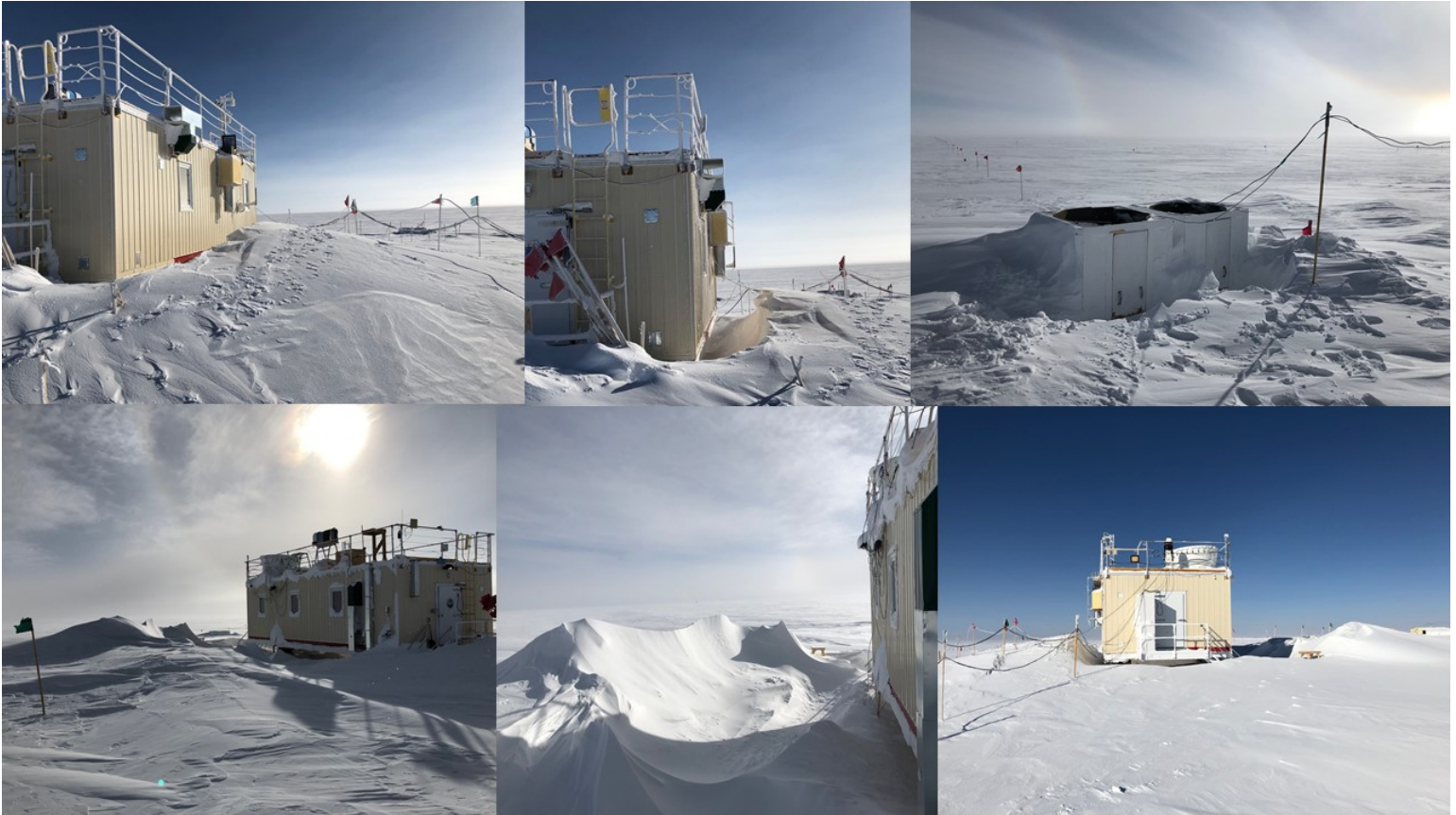


ICECAPS-ACE Weekly Report

April 6 – April 12, 2020

Nate Bowker



Drifting snow around the MSF. Photos Nate Bowker

General Notes:

Internet connection increased to summer bandwidth on 2020-04-10.

General Weather Observations:

Date	Time (Z)	Wind	Weather	Visibility	Sky	Temp (C)	Notes
04-06	12	23kt from 72	BLSN	200	BKN144	-34	
04-07	12	13kt from 134	BR DRSN	4800	BKN032	-28	
04-08	12	10kt from 353	BR	4800	FEW030	-38	Clouds distant, height estimated
04-09	12	6kt from 320	BR	3200	FEW065	-36	
04-10	12	14kt from 228	BR	4800	SCT192	-35	Clouds distant, height estimated
04-11	12	9kt from 216	BR	3200	FEW092	-40	Clouds distant, height estimated
04-12	12	19kt from 211	SN DRSN	800	OVC015	-20	

Significant Weather Observations:

- None

MSF

- Operating normally

ICECAPS-ACE Data Management:

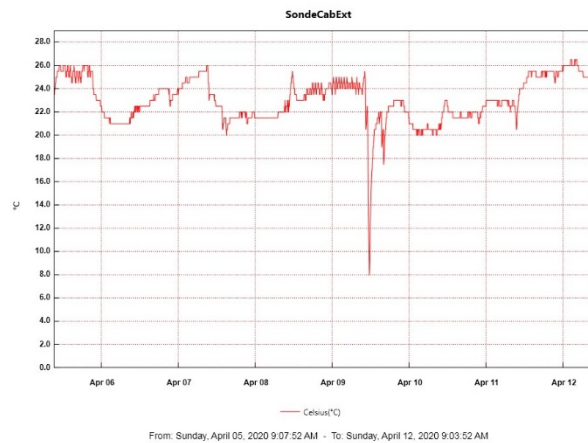
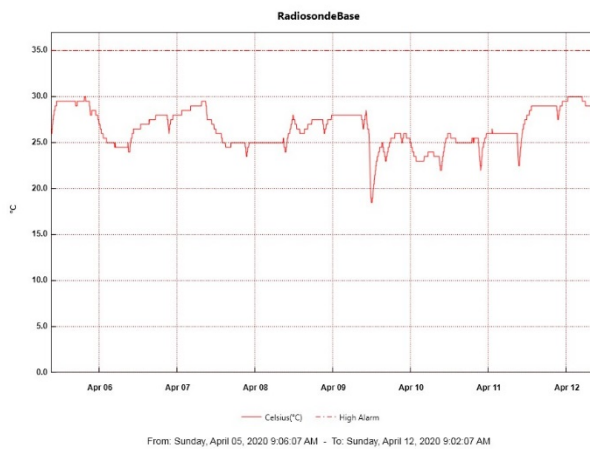
- 04-06: Data transfer completed at 1713Z.
- 04-07: Data transfer completed at 1338Z.
- 04-08: Data transfer completed at 1429Z.
- 04-09: Data transfer completed at 1814Z.
- 04-10: Data transfer completed at 1331Z.
- 04-11: Data transfer completed at 0532Z.
- 04-12: Data transfer completed at 0442Z.

TSI:

- Offline for winter season.

Radiosonde:

- See charts below for temperatures inside and outside the radiosonde cabinet over the last week.



MWR:

- HATPRO offsite for repairs. 150-90 online and operating normally.

SODAR:

- 2020-04-07 1201-1226: Cleaned SODAR dishes. Tx dish fully packed with snow.
- Operating normally.

POSS:

- Operating normally.

MASC:

- Offline for winter season.

MMCR:

- Transmitter power fluctuations have not been present this week. The last fluctuation observed was on 2020-03-29.
- 2020-04-07: Changed TWTA dry air desiccant.
- Operating normally.

CAPABL:

- Operating normally.

MPL:

- Operating normally.

CEILOMETER:

- Operating normally.

PAERI:

- 2020-04-07 1058Z: Cleaned scene mirror.
- Operating normally

IceCAM:

- Operating normally.

IcePIC:

- No photos taken this week.

CLASP:

- Offline

CPC:

- 2020-04-09 1205Z: Changed outlet line filter.
- 2020-04-09 1210Z: Emptied condensate reservoir.
- 2020-04-10 ~1110 – 1330Z: Received liquid level alarm despite external reservoir being full and properly vented. Inspected internal reservoir but found no issues. Power cycling corrected this problem and also seems to have improved the issue where the saturator and/or condenser temperature would cycle out of tolerance intermittently.
- Operating normally.

MSF - OPC:

- Operating normally.

TAWO - OPC:

- Operating normally.

SKYOPC:

- Operating normally.

INP Freezing Assay:

- 2020-04-08: Weekly assays completed.

Fluxtower instrument suite:

- 2020-04-09: Inspected the last of the power cables and junction boxes on the tower. Found all of the infrastructure components on the tower to be in good working order.
- 2020-04-09: Prepared the main enclosure at the base of the tower for installation of new power supplies. Found damage to the M2 and V2 power cables which could be responsible for a short circuit that would have damaged the previous power supplies.
- 2020-04-10: Prefabricated cables for the new power supplies with fused protection on both line and load sides.
- Instruments with power operating normally.

Solar Instruments:

- 2020-04-06: Completed weekly data download
- 2020-04-07: Corrected issue where tracker was not pointing at the sun by manually driving the tracker into approximate position and setting it to “sun mode” instead of “clock mode”.