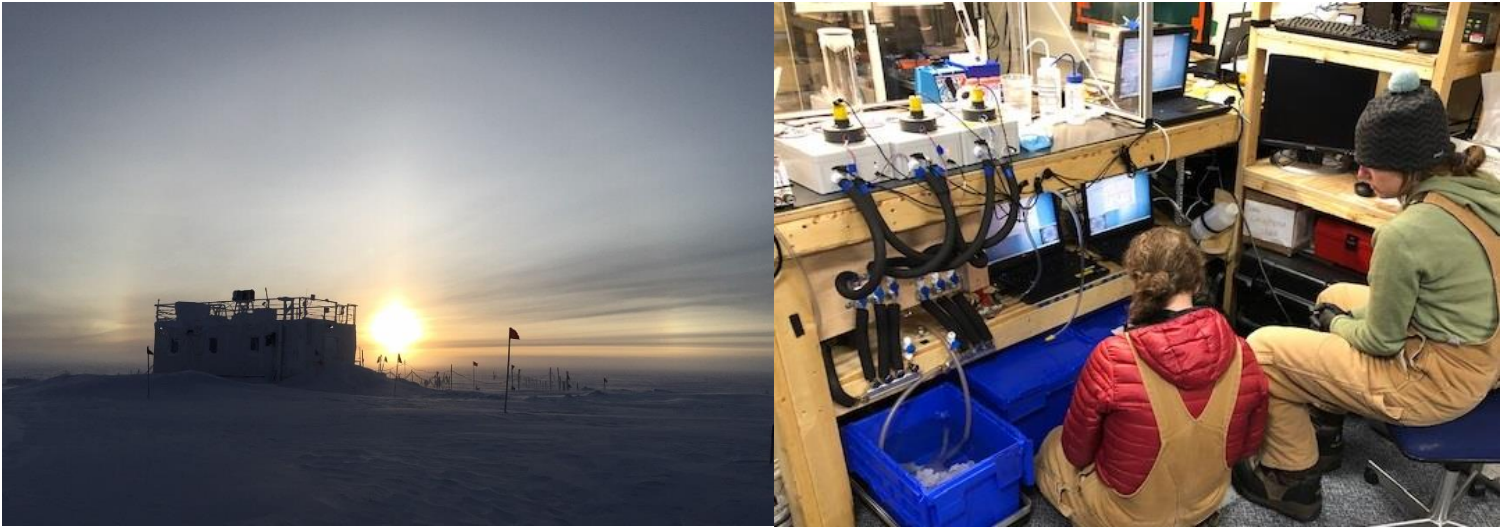


ICECAPS-ACE Weekly Report

February 10-16, 2020

Jess Ackerman



Left: 2020-02-15 1257Z: MSF wrapped in a sundog.

Right: 2020-02-12: ICECAPS Tech Jess teaching incoming TAWO Tech Mara about the INP experiment.

General Notes:

Our first turnover flight arrived 2020-02-11. It was a wonderful reunion and Summit has been in full-on turnover mode ever since. The incoming crew is acclimatizing well, but 2 members were quite ill and stayed behind in Iceland to heal before coming to elevation. One of them being the incoming ICECAPS Tech Nate, so we'll have a "high-five turnover" early this coming week. The ICESat Traverse was successfully completed on 2020-02-10. The MRP111 card was successfully replaced in the Vaisala radiosonde equipment and our first balloon launch occurred 2020-02-13 PM. Fabulous troubleshooting and progress occurred with the CPC this week. Data collection was resumed and spirits were high!

General Weather Observations:

Date	Time (Z)	Wind	Weather	Visibility	Sky	Temp (C)	Notes
02-10	12	96°, 14 kn		1600	BKN016	-36	
02-11	12	Variable°, 1 kn		4000	FEW049	-46	Cirrus
02-12	12	109°, 14 kn		3200	BKN098	-49	Cirrus
02-13	12	253°, 9 kn		1600	SCT164	-47	
02-14	12	97°, 18 kn	FZFG	800	BKN164	-46	
02-15	12	124°, 20 kn	FZFG, DRSN	800	SCT082	-42	
02-16	12	92°, 16 kn	FZFG	800	BKN115	-46	

Significant Weather Observations:

- No significant weather this week.

MSF

- 2020-02-11 1513-1559Z: Flight ops noted in instrument logs.
- 2020-02-14: Sam completed lots of reorganization of tech supplies and improvements at MSF.
- Operating normally.

ICECAPS-ACE Data Management:

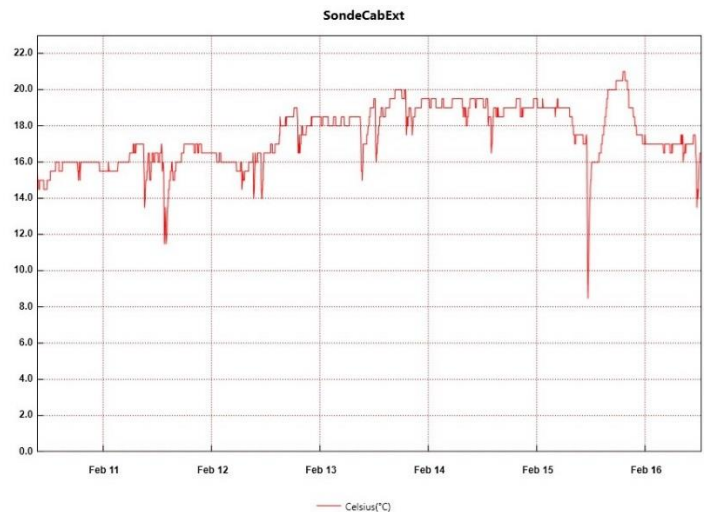
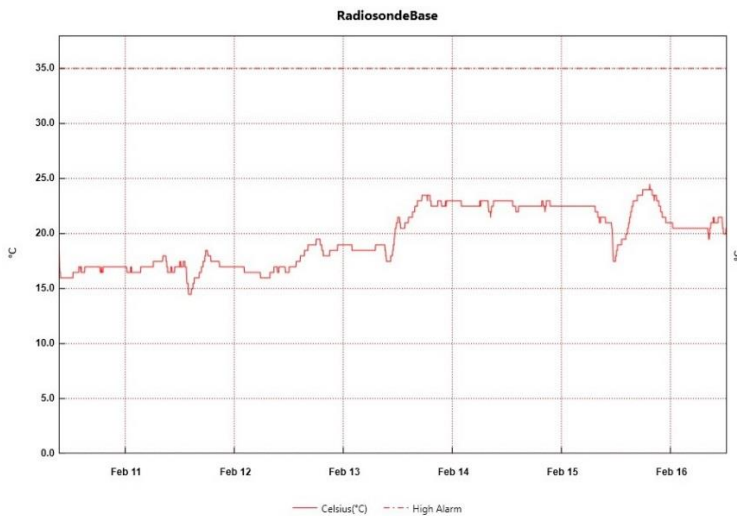
- 02-10: Stop ArchieveToBoulder at 1156Z.
- 02-11: Stop ArchieveToBoulder at 1142Z.
- 02-12: Stop ArchieveToBoulder at 1426Z.
- 02-13: Stop ArchieveToBoulder at 1704Z.
- 02-14: Stop ArchieveToBoulder at 1443Z
- 02-15: Stop ArchieveToBoulder at 1243Z.
- 02-16: Stop ArchieveToBoulder: still not completed by 1615Z when report sent.

TSI:

- Offline for winter season.

Radiosonde:

- 2020-02-13 2315Z: Successful replacement of MRP111 card and software reconfiguration resulted in our first balloon launch. Twice daily launches are back on schedule.
- See charts below for temperatures inside and outside the radiosonde cabinet over the last week.



MWR:

- 2020-02-11: The HATPRO MWR was successfully sent out for repairs. The 150-90 is online.

SODAR:

- 2020-02-13 1732-1808Z: SODAR cleaned and drift maintenance completed.
- Operating normally.

POSS:

- Operating normally.

MASC:

- Offline for winter season.

MMCR:

- Operating normally.

CAPABL:

- 2020-02-11 1254-1303Z: Offline briefly for laser window cleaning.
- Operating normally.

MPL:

- 2020-02-14 1514-1536Z: Monthly calibration completed.
- Operating normally.

CEILOMETER:

- Operating normally.

PAERI:

- 2020-02-13 1245Z: Red responsivity and HBB flags noted since 0100Z. Mirror and shoot all clear. Mirror cover rotating abnormally and not lining up properly. PI notified. Self-reboot ~1900Z. All was well.

IceCAM:

- Operating normally.

IcePIC:

- No IcePICs this week.

CLASP:

- 2020-02-14: Offline and removed.

CPC:

- 2020-02-13: Cleaning of sensor head and felt tube; reassembly unsuccessful due to broken connector.
- 2020-02-14: Connector bypassed and hole patched. Reassembled and warm-up started at 1347Z. Inlet filter test and Velcro test completed, outside air reconnected to sample inlet, external butanol reservoir reconnected, and data collection started at 1538Z. Huge success!

MSF - OPC:

- Operating normally.

TAWO - OPC:

- Operating normally.

SKYOPC:

- Operating normally.

INP Freezing Assay:

- 2020-02-11 1320-1415Z: Cold stage calibrations completed and data sent to PI.
- 2020-02-12 1341Z: Weekly experiment was successfully completed and taught to incoming TAWO tech. Assay data and internal instrument data were sent to PI. P/T sensor still in by-passed mode.

Fluxtower instrument suite:

- 2019-12-08: Loss of power to replaced power supply connecting instruments KT15, HMP3 (9m temperature sensor), HMP4 (15m temperature sensor), Ventus2 (9m 2D sonic), Metek2 (15m 2D sonic).
- 2020-02-15: LiCOR instrument not logging data as of 02-14; PI contacted and troubleshooting ongoing.

Thanks everyone for a great winter season at Summit! I really enjoyed working with you all and learned so much. I super appreciate everyone's responsiveness and support. It's been an honor to be apart of the ICECAPS program and something I will never forget. Sorry the timing didn't work out to say a proper farewell on an ICECAPS conference call. No doubt Nate will transition with ease into this role. Please keep up your awesomeness and strength as a team contributing to invaluable science!

*Best wishes,
Jess Ackerman
ICECAPS Technician
Winter 2019-2020*