

ICECAPS-ACE Weekly Report

May 10th – May 16th, 2021

Dane Hansen



A lower tangent arc seen from outside the MSF entrance.

Photo: Dane Hansen

General Notes:

The weather is holding steady with clear skies and temperatures around -25C during the day. Efforts from equipment operators focus on digging out buried infrastructure and maintaining the skiway for a week of heavy activity. Carpenters continue to make improvements around station and prepare for incoming science groups.

The PAERI software stopped displaying new data early on Monday morning. After a reboot, the problem was not fixed, and the instrument stopped collecting data Monday at midnight. The problem is still under investigation.

General Weather Observations:

Date	Time (Z)	Wind	Weather	Visibility	Sky	Temp (C)	Notes
05-10	12	14 kts at 235	BR	9999	BKN007 BKN033	- 24	
05-11	12	5 kts at 262		9999	SKC	- 31	tangent arc
05-12	12	3 kts at 181		9999	FEW	- 28	sundog
05-13	12	10 kts at 164		9999	SKC	- 28	
05-14	12	10 kts at 221		9999	OVC066	- 27	
05-15	12	8 kts at 133		9999	FEW	- 26	
05-16	12	4 kts at 181		9999	SKC	- 25	

Significant Weather Observations:

- 2021-05-10: tangent arc
- 2021-05-11: sundog

MSF

- 2021-05-10 and 11: Equipment operators removed snow from north and west sides of building in preparation for relocation.
- Operating normally.

ICECAPS-ACE Data Management:

- 05-10: Data transfer completed at 0453Z.
- 05-11: Data transfer completed at 0512Z.
- 05-12: Data transfer completed at 0458Z.
- 05-13: Data transfer completed at 0450Z.
- 05-14: Data transfer completed at 0501Z.
- 05-15: Data transfer completed at 0506Z.
- 05-16: Data transfer completed at 0507Z.

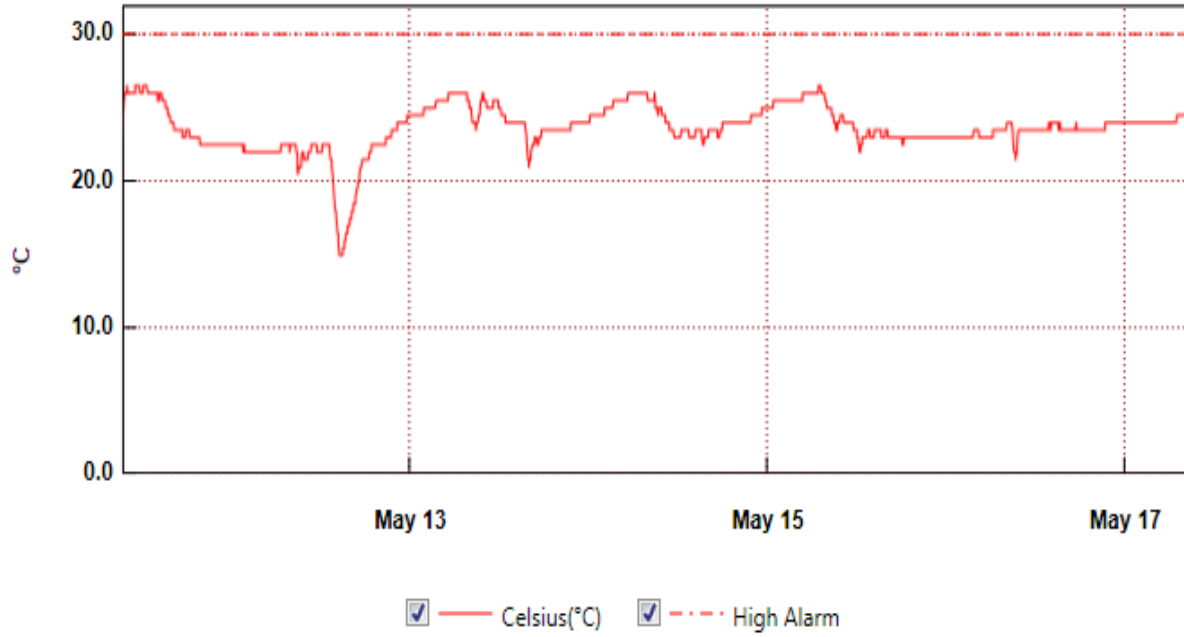
TSI:

- Operating normally.

Radiosonde:

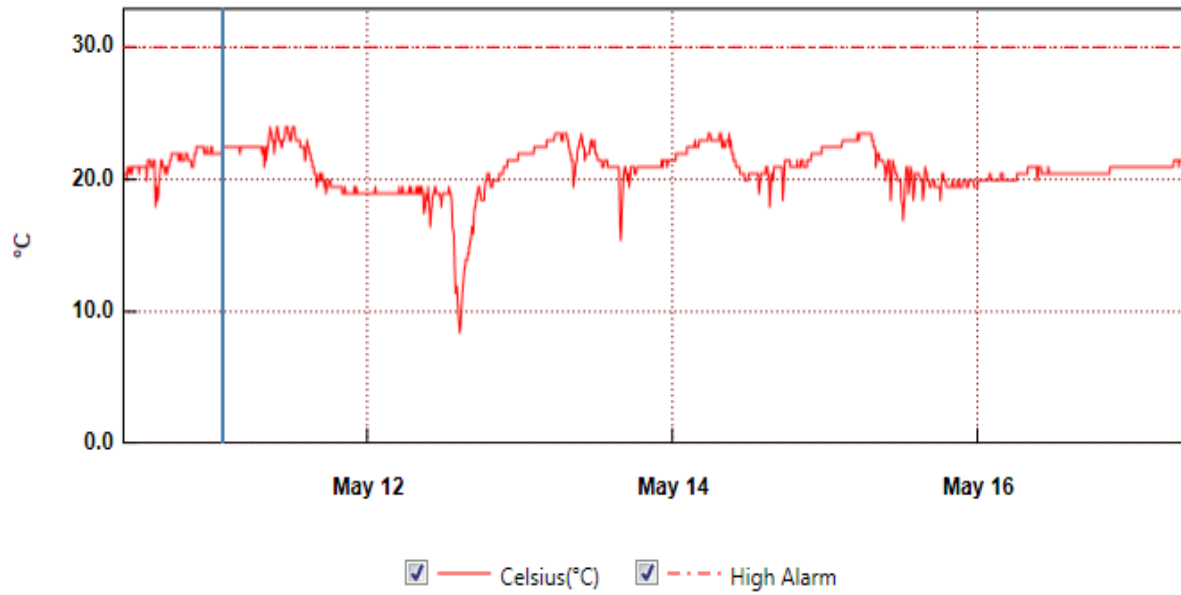
- Once daily launches.
- Intermittent SPS connection lost errors.
- See chart below for radiosonde cabinet temperatures over the last week.

RadiosondeBase



From: Tuesday, May 11, 2021 9:26:10 AM - To: Monday, May 17, 2021 9:07:10 AM

SondeCabExt



Tuesday, May 11, 2021 1:16:30 AM [22.5]

From: Monday, May 10, 2021 9:29:04 AM - To: Monday, May 17, 2021 9:05:04 AM

MWR:

- HatPro boots and connects to software but shows 'Master stepper error' message. Troubleshooting in progress.
- RPG-150-90 operating normally.

SODAR:

- 2021-05-11 1700Z: Cleaned and levelled.
- Operating normally.

POSS:

- Operating normally.

MASC:

- Operating normally.

MMCR:

- 2021-05-10 to 2021-05-13: Cleared error messages.
- 2021-05-13 1202 to 1335Z: Rebooted system.
- Operating normally.

CAPABL:

- Operating normally.

MPL:

- 2021-05-15 1426 to 1447Z: Performed afterpulse calibration.
- Operating normally.

CEILOMETER:

- Operating normally.

PAERI:

- 2021-05-10 0230Z: Software froze.
- 2021-05-10 1710Z: System rebooted.
- 2021-05-11 0000Z: System stopped acquiring data.
- Operating normally.

IceCAM:

- Operating normally.

IcePIC:

- No IcePICs this week.

CPC:

- 2021-05-11 1352Z: Refilled with butanol.
- Operating normally.

MSF - OPC:

- Operating normally.

TAWO - OPC:

- Operating normally.

SKYOPC:

- 2021-05-13: Pump failed and was replaced with new diaphragm pump.
- 2021-05-13 1244Z: Returned to service.
- Operating normally.

Fluxtower instrument suite:

- Operating normally.

Radiometers:

- 2021-04-07: Ongoing troubleshooting. Suspected faulty DC power supply to logger box.