

ICECAPS-ACE Weekly Report

December 21st – December 27th, 2020

Heather Guy



*Happy Holidays from
Summit Station, Greenland*

Happy Holidays from all of us at Summit!

We finally got some good auroras again in time for the winter solstice, 2020-12-21.

Photo: Heather Guy

General Notes:

A few snowy days and a Christmas northerly wind storm put down a fair amount of drift and snow accumulation around camp, and resulted in the PAERI requiring several scene mirror cleanings this week. Station-wide intermittent internet connectivity issues starting around 2020-12-22 slowed down data transfer and led to me resetting the internet connection on a couple of ICECAPS computers, we're working with PFS-IT to diagnose the ongoing issue. I was able to remove the HATPro flash storage card, but as of yet have not been able to find a computer with a suitable IDE port on which to test it.

General Weather Observations:

Date	Time (Z)	Wind	Weather	Visibility	Sky	Temp (C)	Notes
12-21	12	10 kts at 207	-SN	800	OVC011	-31	
12-22	12	10 kts at 225	FZFG	800	VV002	-45	
12-23	12	12 kts at 172	-SN DRSN	800	OVC098	-31	BLSN pm.
12-24	12	18 kts at 163	SN, BLSN	300	VV017	-23	
12-25	12	10 kts at 035	DRSN	500	VV018	-34	BLSN pm
12-26	12	30 kts at 059	BLSN	200	VV004	-32	Max wind, 37 knots at 0826.
12-27	12	5 kts at 077		1600	SKC	-37	

Significant Weather Observations:

- 2020-12-21 1240Z: Rave ice. (see associated IcePICs)
- 2020-12-25 1245Z: Christmas rave ice (see associated IcePICs)

MSF

- 2020-12-21st, 22nd and 26th: Manual drift maintenance on south side of MSF and around door.
- Operating normally

ICECAPS-ACE Data Management:

Station-wide intermittent internet connectivity this week is responsible for the slower than usual data transfers. Diagnostics are ongoing.

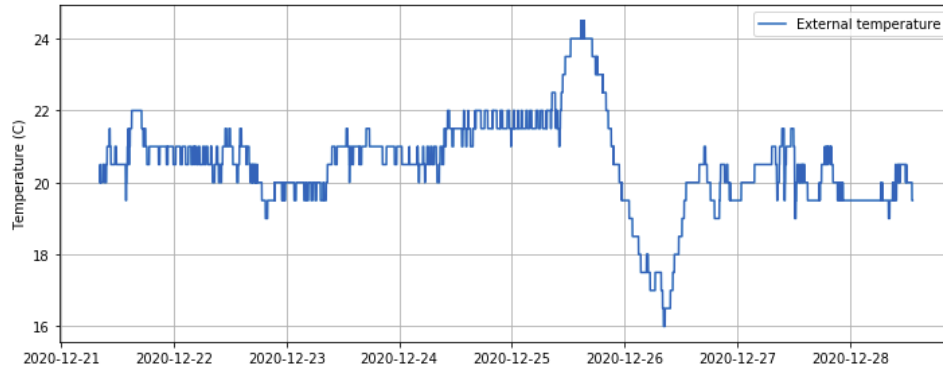
- 12-21: Data transfer completed at 0440Z.
- 12-22: Data transfer completed at 0736Z.
- 12-23: Data transfer completed at 0829Z.
- 12-24: Data transfer completed at 0604Z.
- 12-25: Data transfer completed at 0848Z. 12 files not transferred due to 'lost connection'.
- 12-26: Data transfer completed at 0855Z. All files caught up.
- 12-27: Data transfer completed at 0903Z. 16 files not transferred due to 'lost connection'.

TSI:

- Offline for the winter season.

Radioonde:

- Once daily launches.
- See chart below for temperatures outside radiosonde cabinet over the last week. There is a problem with the temperature logger inside the cabinet that meant I couldn't download the data, I will replace it this week.



MWR:

- RPG-150-90 operating normally.
- HATPro troubleshooting ongoing: I identified and removed the flash storage drive from the internal computer, but have so far been unsuccessful in locating a computer with a 40-pin IDE port to test it.

SODAR:

- 2020-12-21 1352-1410Z: Cleaned and leveled the SODAR dishes.
- Operating normally.

POSS:

- Operating normally.

MASC:

- Offline for winter season.

MMCR:

- 2020-12-26: Power cycled router after internet connection was lost.
- Operating normally.

CAPABL:

- 2020-12-26 1602-1618Z: Powered down laser to clear snow from window.
- Operating normally.

MPL:

- 2020-12-26: Disconnected / reconnected ethernet cable after internet connection was lost.
- 2020-12-27: Identified cracked MPL window – photos sent to Dave. Cause unknown.
- Operating normally.

CEILOMETER:

- Operating normally.

PAERI:

- 2020-12-23 1939Z: Replaced the external PAERI fan after the bearings failed in the original.
- 2020-12-23 1941Z: Cleaned scene mirror after blowing snow.
- 2020-12-24 1349Z, 1428Z: Cleaned scene mirror after blowing snow.
- 2020-12-26 1611Z: Cleaned scene mirror after blowing snow.
- Operating normally.

IceCAM:

- Operating normally.

IcePIC:

- 2020-12-21 1240-1330Z: Plates, needles and columns, 14 photos collected.
- 2020-12-25 1250-1310Z: Needles, columns, plates and bullets, 21 photos collected.

CPC:

- Offsite for repairs.

MSF - OPC:

- 2020-12-26 0400-1600Z: Offline during high winds.
- Operating normally.

TAWO - OPC:

- Operating normally

SKYOPC:

- Operating normally.

Fluxtower instrument suite:

- Operating normally.

Radiometers:

- Solar tracker misalignment persists, otherwise operating normally.