ICECAPS-ACE Weekly Report

November 23rd – November 29th, 2020 Heather Guy



Moon halo alongside the MSF, 2020-11-29. *Photo: Heather Guy*

General Notes:

A quiet week in the MSF with the exception of CAPABL requiring a couple of reboots. The crew worked together on some station-wide upkeep tasks and drift maintenance after an exciting mid-week snow storm. Unfortunately, I still did not get any IcePICs due to the high winds. A team effort Thanksgiving dinner was enjoyed by the whole crew on Friday.

General Weather Observations:

| Date | Time (Z) | Wind | Weather | Visibility | Sky | Temp (C) | Notes |
|-------|----------|---------------|----------|------------|-------------------|----------|----------|
| 11-23 | 12 | 10 kts at 219 | | 3200 | BKN131, BKN032 | -45 | |
| 11-24 | 12 | 17 kts at 070 | BR | 800 | BKN026 | -45 | DRSN pm. |
| 11-25 | 12 | 20 kts at 165 | BLSN, SN | 300 | VV006 | -35 | |
| 11-26 | 12 | 15 kts at 159 | BLSN, SN | 500 | VV043 | -30 | |
| 11-27 | 12 | 15 kts at 315 | DRSN | 800 | VV026 | -45 | |
| 11-28 | 12 | 12 kts at 075 | | 1600 | BKN115 | -50 | |
| 11-29 | 12 | 13 kts at 223 | IC, BR | 1600 | SCT032 | -50 | |

Significant Weather Observations:

- 2020-11-27 0000Z: Moon halo. BR & IC.
- 2020-11-29 1800Z until at least 0000Z: Moon halo and ice fog.

MSF

• Operating normally

ICECAPS-ACE Data Management:

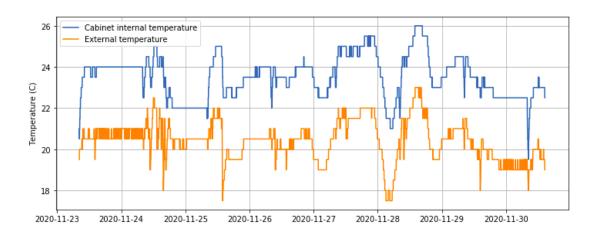
- 11-23: Data transfer completed at 0435Z.
- 11-24: Data transfer completed at 0436Z.
- 11-25: Data transfer completed at 0522Z.
- 11-26: Data transfer completed at 0436Z.
- 11-27: Data transfer completed at 0502Z.
- 11-28: Data transfer completed at 0438Z.
- 11-29: Data transfer completed at 0437Z.

TSI:

• Offline for the winter season.

Radiosonde:

- Once daily launches.
- See chart below for temperatures inside and outside the radiosonde cabinet over the last week:



MWR:

• RPG-150-90 operating normally. HATPro troubleshooting ongoing.

SODAR:

- 2020-11-23 1502-1513Z: Cleaned and leveled the SODAR dishes.
- Operating normally.

POSS:

• Operating normally.

MASC:

• Offline for winter season.

MMCR:

• Operating normally.

CAPABL:

- 2020-11-27 1217Z: Rebooted CAPABL software due to low Licel voltage. Missing data since 1732Z on the 26th.
- 2020-11-28 1422Z: Found CAPABL was not cycling through polarizations channels correctly and carried out the following troubleshooting steps:
 - o Stopped program and power cycled Meadowlark controller. Upon restart 'LabView encountered an error and needed to close'.
 - o Full computer power cycle including Meadowlark, Licel, PC and lasers. Received same LabView error upon restart.
 - o Power cycled motors. Labview came back online but DAQ cycles were not incrementing.
 - Neely logged on and started and stopped an alignment scan. Data collection returned to normal at 1504Z.
- Operating normally.

MPL:

• Operating normally.

CEILOMETER:

Operating normally.

PAERI:

- 2020-11-27 1315Z: Cleaned PAERI scene mirror after blowing snow event.
- 2020-11-29: Periodic short-lived 'MaxSampleStdDev' red flags due to extreme cold (-56C) temperatures. Data quality unaffected.
- Operating normally.

IceCAM:

• Operating normally.

IcePIC:

• No IcePICs this week.

CPC:

• Offsite for repairs.

MSF - OPC:

• Operating normally.

TAWO - OPC:

• Operating normally

SKYOPC:

• Operating normally.

Fluxtower instrument suite:

• Operating normally.

Radiometers:

• Solar tracker misalignment persists, otherwise operating normally.