

ICECAPS-ACE Weekly Report

April 13 – April 19, 2020

Nate Bowker



Stratus clouds moving over station. Photos Nate Bowker

General Notes:

Preparations are currently underway for a crew turnover and station resupply in mid-May. This turnover will be supported by a KBA Basler via Thule.

General Weather Observations:

| Date | Time (Z) | Wind | Weather | Visibility | Sky | Temp (C) | Notes |
|-------|----------|---------------|-----------|------------|----------------------------|----------|-------|
| 04-13 | 12 | 13kt from 243 | SN DRSN | 800 | OVC016 | -23 | |
| 04-14 | 12 | 16kt from 343 | FZFG DRSN | 600 | SCT020 | -28 | |
| 04-15 | 12 | 11kt from 099 | | 9999 | FEW032 FEW098 SCT130 | -33 | |
| 04-16 | 12 | 13kt from 162 | BR | 1600 | OVC032 | -23 | |
| 04-17 | 12 | 26kt from 164 | BLSN | 200 | VV007 | -22 | |
| 04-18 | 12 | 42kt from 153 | BLSN | 50 | VV002 | -17 | |
| 04-19 | 12 | 20kt from 192 | FZFG DRSN | 500 | BKN060 | -28 | |

Significant Weather Observations:

- 2020-04-13 ~1230-1930Z: 22 degree halo, parhelia, 46 degree halo, sun pillar.

MSF

- Operating normally

ICECAPS-ACE Data Management:

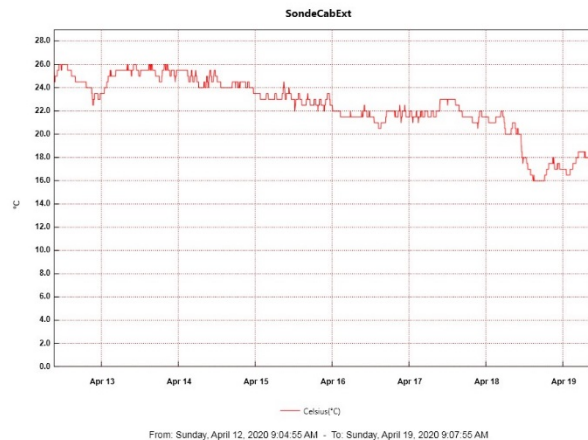
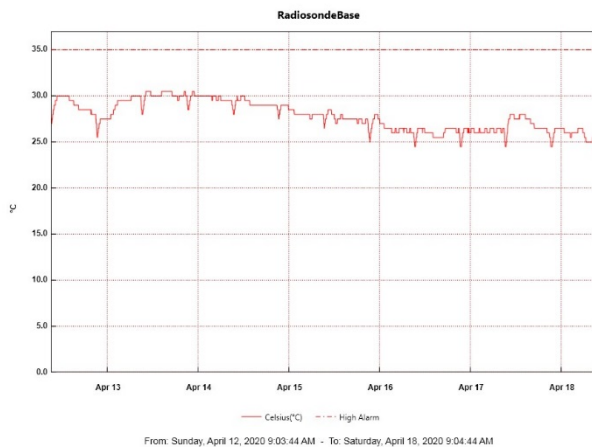
- 04-13: Data transfer completed at 0442Z.
- 04-14: Data transfer completed at 0509Z.
- 04-15: Data transfer completed at 0442Z.
- 04-16: Data transfer completed at 0459Z.
- 04-17: Data transfer completed at 0443Z.
- 04-18: Data transfer completed at 0444Z.
- 04-19: Data transfer completed at 0432Z.

TSI:

- Offline for winter season.

Radiosonde:

- 2020-04-10*: Replaced radiosonde cabinet air filter. *Forgot to include on last week's report.
- 2020-04-18: 0000Z and 1200Z sonde launches failed due to winds > 40kt.
- 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:

- 2020-04-13 1315-1336Z: Cleaned SODAR dishes.
- 2020-04-13: Raised cable supports.
- Operating normally.

POSS:

- Operating normally.

MASC:

- Offline for winter season.

MMCR:

- 2020-04-13: Observed transmitter power fluctuation at around 0000Z, lasting for ~3 hours.
- Operating normally.

CAPABL:

- 2020-04-19 1147-1200: Shut down to remove snow from window. Had to reboot meadowlark.
- Operating normally.

MPL:

- 2020-04-17 1302-1321Z: Performed monthly afterpulse calibration.
- Operating normally.

CEILOMETER:

- Operating normally.

PAERI:

- Operating normally

IceCAM:

- Operating normally.

IcePIC:

- No photos taken this week.

CLASP:

- Offline

CPC:

- 2020-04-14: Liquid level alarm persistent but instrument still collecting data.
- 2020-04-16: Topped up butanol reservoir and emptied condensate reservoir.
- 2020-04-17 1130-1202Z: Status error 3 caused a short interruption in data collection. Cleared error and normal operation resumed.
- 2020-04-19: Data collection stopped due to persistent status error 3 and liquid level alarms. Unable to clear alarms so powered down instrument at ~1230Z.
- Operating normally.

MSF - OPC:

- 2020-04-18 1832Z: Restarted after high winds caused the instrument to go offline.
- Operating normally.

TAWO - OPC:

- Operating normally.

SKYOPC:

- Operating normally.

INP Freezing Assay:

- 2020-04-14: Auto-calibrated cold stages.
- 2020-04-15: Weekly assays completed.

Fluxtower instrument suite:

- Instruments with power operating normally.

Solar Instruments:

- 2020-04-14: Completed weekly data download
- 2020-04-19: Solar tracker got off-track during stormy conditions while in “sun mode”.
- Operating normally.

