

ICECAPS-ACE Weekly Report

May 25 – May 31, 2020

Ian Geraghty



Fog bow observed on May 31, 2020. Photo Ian Geraghty

General Notes:

Troubleshooting of offline instruments such as the TSI and POSS were the major tasks for this week.

General Weather Observations:

Date	Time (Z)	Wind	Weather	Visibility	Sky	Temp (C)	Notes
05-25	12	10kt from 124	IC	9999	BKN032	-22	
05-26	12	4kt from 159	IC	9999	BKN032	-24	
05-27	12	4kt from 212	IC	9999	FEW032 SCT080	-22	
05-28	12	8kt from 153	-SN BR	3200	SCT015 BKN080	-20	
05-29	12	17kt from 137	IC BR	4800	BKN015 BKN080	-16	22° halo
05-30	12	15kt from 155	IC BR BLSN	1600	SCT000 SCT015 BKN032	-14	Faint 22° halo
05-31	12	6kt from 280	IC BR	4800	SCT050 SCT164	-14	22° halo

Significant Weather Observations:

- 2020-05-31: Fog bow observed from 2315 – 0100Z

MSF

- 2020-05-28: Greenheck fan speed increased from 80% to 95% to combat rising temperatures.
- Operating normally.

ICECAPS-ACE Data Management:

- 05-25: Data transfer completed at 0440Z.
- 05-26: Data transfer completed at 0440Z.
- 05-27: Data transfer completed at 0439Z.
- 05-28: Data transfer completed at 0440Z.

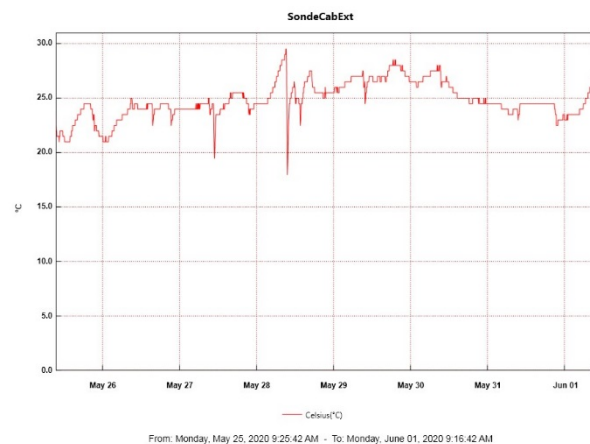
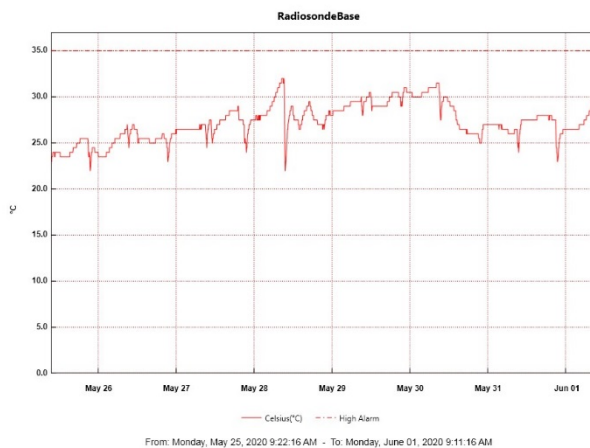
- 05-29: Data transfer completed at 0729Z.
 - Unexpected network outage between 0357 and 0546Z.
- 05-30: Data transfer completed at 0448Z.
- 05-31: Data transfer completed at 0446Z.

TSI:

- 2020-05-29 1325Z: Data acquisition started on ceilometer computer.
- 2020-05-31: Remounted to dataman computer.
- Operational. Monitoring issues with image processing.

Radiosonde:

- 2020-05-29: SPS lost communications multiple times during the 1000Z hour. Temperature in the radiosonde cabinet was 31°C. Mara was able to quickly cool down SMG which resolved SPS errors for the 1200Z launch.
- 2020-05-30: 0000Z radiosonde terminated at 13404m due to temperature sensor failure.
- 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:

- 2020-05-29 1814 – 1848Z: Cleaned SODAR dishes.
- Operating normally.

POSS:

- 2020-05-30 1720 – 1731Z: Power cycled the POSS and Telebyte.
- Offline. Troubleshooting with manufacturer ongoing.

MASC:

- Operating normally.

MMCR:

- 2020-05-25 1257Z: Received LabView file not found error.
- 2020-05-26 2353Z: Received LabView error that resulted in the MMCR Radar Monitor program being restarted.
- 2020-05-28 2340Z: Received LabView file not found error.
- Operational. Monitoring transmitter power fluctuations between 175 and 178.5 W.

CAPABL:

- Operating normally.

MPL:

- Operating normally.

CEILOMETER:

- Operating normally.

PAERI:

- Operating normally.

IceCAM:

- Operating normally.

IcePIC:

- No IcePICs taken this week.

CLASP:

- Offline.

CPC:

- Offline.

MSF - OPC:

- Operating normally.

TAWO - OPC:

- Operating normally.

SKYOPC:

- Operating normally.

INP Freezing Assay:

- 2020-05-28: Weekly experiments completed

Fluxtower instrument suite:

- Troubleshooting of snow depth sensor is ongoing.
- Operating normally.

Radiometers:

- 2020-05-25: Completed weekly data download.
- Operating normally.