

ICECAPS-ACE Weekly Report

March 30 – April 05, 2020

Nate Bowker



Left: Nate continues inspection of fluxtower systems. Photo Mara Menahan. Right: Solar optics on 2020-03-30. Photo Nate Bowker

General Notes:

Last call for consumable resupply items needed at Summit for the summer season. Please contact Jessy Jenkins regarding any last minute shipments.

Summit Science PM Sam Dorsi welcomed a healthy baby boy, Joseph Winchester Dorsi, into the world this week and will be on paternity leave until 2020-04-15. Congratulations Sam!

General Weather Observations:

Date	Time (Z)	Wind	Weather	Visibility	Sky	Temp (C)	Notes
03-30	12	18kt from 225	BLSN	0100	VV003	-25	
03-31	12	15kt from 221	DRSN BR	1600	OVC006	-34	
04-01	12	22kt from 008	BLSN	0300	VV009	-43	
04-02	12	20kt from 326	DRSN FZFG	800	SCT190	-32	
04-03	12	17kt from 035	BR	4800	BKN160	-44	
04-04	12	21kt from 034	DRSN FZFG	800	SCT064 BKN165	-41	
04-05	12	15kt from 060	BR	4800	FEW060	-43	

Significant Weather Observations:

- 2020-03-30 ~1700Z: 22 degree halo, 46 degree halo, and upper tangent arc observed.
- 2020-04-03: Yukimarimo observed.

MSF

- Operating normally

ICECAPS-ACE Data Management:

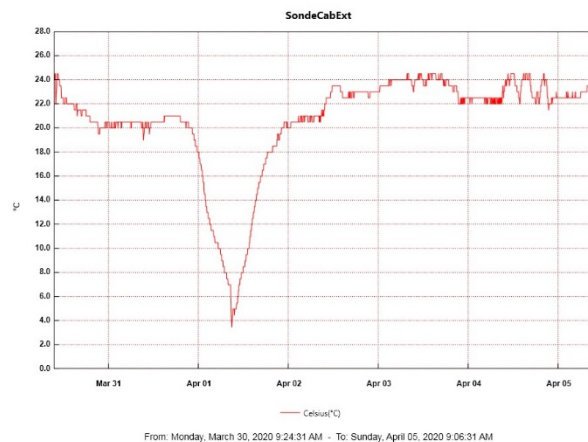
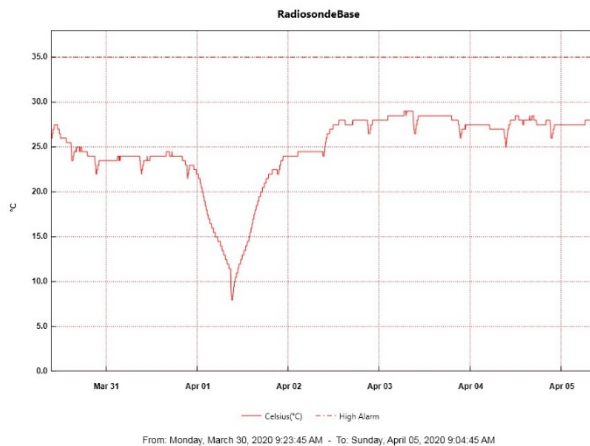
- 03-30: Data transfer completed at 1335Z.
- 03-31: Data transfer completed at 1256Z.
- 04-01: Data transfer completed at 1401Z.
- 04-02: Data transfer completed at 1740Z.
- 04-03: Data transfer completed at 1302Z.
- 04-04: Data transfer completed at 1538Z.
- 04-05: Data transfer completed at 1308Z.

TSI:

- Offline for winter season.

Radiosonde:

- 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:

- 2020-04-05 1146 – 1157Z: Cleaned SODAR dishes and checked level.
- Operating normally.

POSS:

- Operating normally.

MASC:

- Offline for winter season.

MMCR:

- Transmitter power fluctuation have not been present this week. The last fluctuation observed was on 2020-03-29.
- Operating normally.

CAPABL:

- 2020-03-28 1326-1336Z: Shut down in order to remove snow from the window.
- 2020-04-01 1202-1218Z: Performed full system reboot in order to correct depol measurement.
- Operating normally.

MPL:

- Operating normally.

CEILOMETER:

- Operating normally.

PAERI:

- 2020-03-30: Exterior power connection for the enclosure fan came unplugged in high winds. Fashioned a new retainer clip for this connection.
- 2020-04-01: Scene mirror rotated out of alignment 30 degrees when cleaning. Performed reboot to correct this.
- Operating normally

IceCAM:

- Operating normally.

IcePIC:

- 2020-03-30 1718-1759Z: Photographed diamond dust coinciding with solar optics including a 22 degree halo, 46 degree halo, and upper tangent arc. Transferred on 2020-03-31.

CLASP:

- Offline

CPC:

- 2020-04-02, 4-03, 04-04, and 04-05: Butanol pooling in outlet line during northwinds.
- 2020-04-02: Emptied condensate reservoir.
- 2020-04-03: Filled butanol reservoir.
- Operating normally.

MSF - OPC:

- Operating normally.

TAWO - OPC:

- Operating normally.

SKYOPC:

- Operating normally.

INP Freezing Assay:

- 2020-04-01: Weekly assays completed.

Fluxtower instrument suite:

- 2020-03-31: Performed tower climb to inspect instruments, junction boxes, and cabling for damage that could cause a power supply failure.
- Still trying to track down materials to provide protection for the AC power input to the new power supplies.
- Instruments with power operating normally.

Solar Instruments:

- 2020-03-30: Completed weekly data download
- 2020-03-30: Solar tracker is off track on both azimuth and elevation. Troubleshooting ongoing.

