ICECAPS-ACE Weekly Report

Week 21, May 20- May 26, 2019 Jonathon Miller



 $Heather\ Guy\ and\ Bethany\ Wyld\ installing\ an\ Instrument\ Boom\ on\ the\ TAWO\ Met\ tower.$

General Notes:

General Weather Observations

Date	Time	Wind	Weather	Visibility	Sky	Temp	Notes
	(UTC)	(kt / dir)				(°C)	
May 20	12:35	6 / 155°		9999	SCT	-15	
May 21	12:37	8 / 137°		9999	FEW	-17	
May 22	~12:00	8 / 220°		4800	OVC016	-15	
May 23	13:10	9 / 318°		9999	SCT080	-16	
May 24	12:27	5 / 158°		9999	FEW180	-17	
May 25	12:07	8 / 206°		9999	FEW	-14	
May 26	12:00	5 / 221°		9999	FEW	-16	

Significant Weather Observations: Normal

ICECAPS-ACE Data Management Transfer

Date	Time (UTC)
May 20	04:49:30
May 21	04:47:50
May 22	04:19:56
May 23	04:52:10
May 24	04:18:47
May 25	04:25:21
May 26	04:20:04

Mobile Science Facility (MSF)

• No issues to report

Data Management

May 24:

• On the ICECAPS Linux server in the Icecaps20190524.log file generated by the spot_check_archive.sh script, under the section "Getting data for clasp/cpc", the following files are processed daily:

```
processing CPC_Summit_2019-05-24.csv
processing OPC_2019-05-24.png
processing OPC_2019-05-24.txt
```

However, inside the "/samba/Ace_To_Boulder/" folder on the ACE laptop (192.168.1.196), the file "Ncounts_2019-05-24.png" is not being processed. Currently the Ncounts_2019-mm-dd.png files in the folder date from February 10th to May 25th.

Microwave Radiometers (MWR)

Daily:

- The system time on the Windows XP computer running the MWR software loses about five seconds every day and requires a re-sync with the GPS time server.
- Instrument and software operating normally.

SOnic Detection And Ranging (SODAR)

• Operating normally.

Precipitation Occurrence Sensor System (POSS)

• Operating normally.

Millimeter Cloud Radar (MMCR)

- Operating normally.
- Temp (outside) value continues out of tolerance (at 30)

Cloud Aerosol Polarization and Backscatter Lidar (CAPABL)

• Instrument offline.

Micro-Pulse Lidar (MPL)

• Operating normally.

Laser Ceilometer

• Operating normally.

IceCAM

• Operating normally

Polar Atmospheric Emitted Radiance Interferometer (PAERI)

• Operating normally.

Total Sky Imager (TSI)

• Offline for winter season.

Ice Particle Image Camera (ICEPic)

• No images.

Radiosonde

May 21:

- A "missing USGL03" email message was sent at 12:00 UTC. The radiosonde (Windows 7) computer had been running very slowly lately and required frequent restarts. It's possible that the ICECAPS Linux Computer (dataman) was unable to mount or lost connection to the shared folder.
- Sonde# P3140591 launched at 11:18 UTC prematurely burst at 8063m.

Multi-Angle Snowflake Camera (MASC)

• Instrument offsite for repair, will not return until summer 2019.

Optical Particle Counter (OPC)

• Operation normally

Condensation Particle Counter (CPC)

- Refilled Butanol and emptied condensate bottles.
- Operating normally.

Compact Lightweight Aerosol Spectrometer Probe (CLASP)

• Instrument off site.

Meteorology and upGPR (Swiss Tower)

• Operation normally

Ice Nucleating Particles (INP) Freezing Assay

- Undergoing testing
- Forty-eight hours of air sampling was collected from the new TAWO building air sampler and was successfully tested for ice nucleating particles (INP) in the Mobile Science Facility's air testing clean hood.
- The three laptops being used for image collection are not reducing the image sizes consistently.