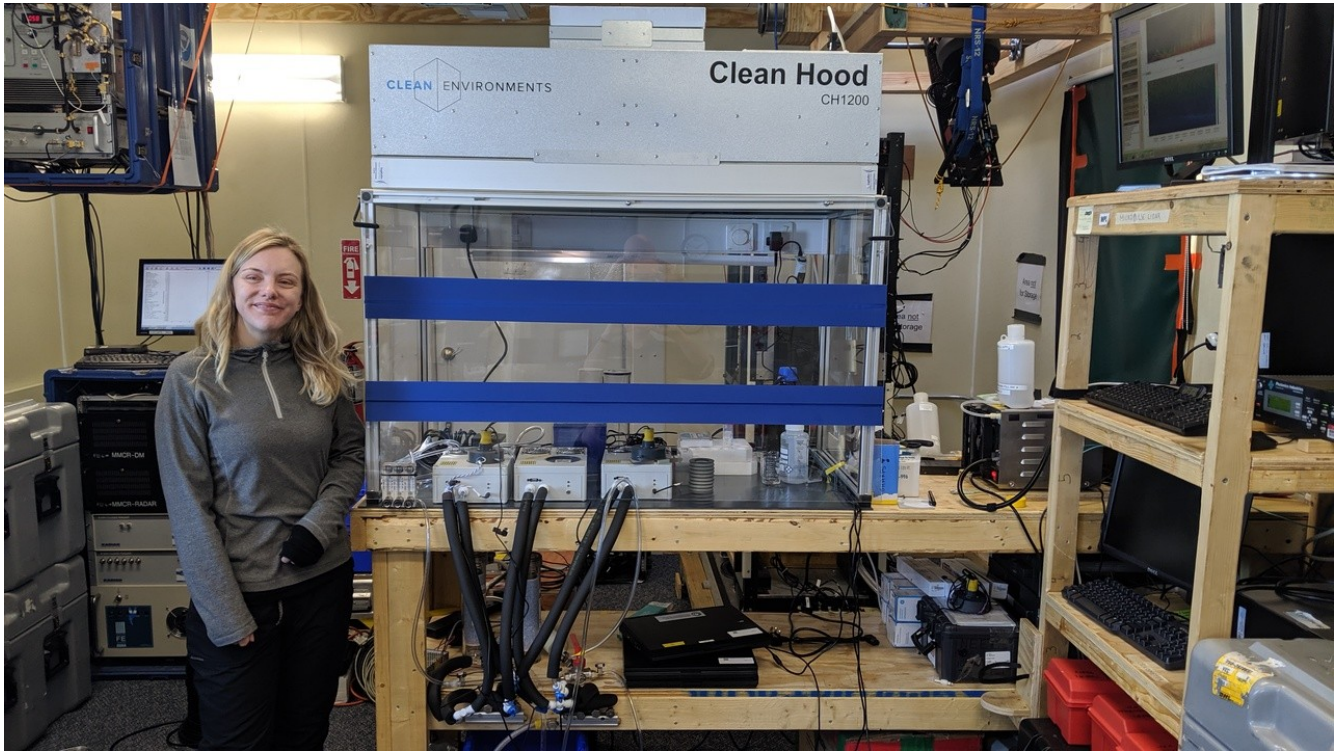


ICECAPS-ACE Weekly Report

May 13- May 19, 2019

Jonathon Miller



Bethany Wyld working on the Clean Hood at MSF.

General Notes:

General Weather Observations

Date	Time (Z)	Wind (kt / dir)	Weather	Visibility	Sky	Temp (°C)	Notes
May 13	11:54	7 / 152°		9999	FEW	-24	
May 14	11:50	14 / 219°		9999	BKN010	-16	
May 15	12:26	12 / 188°	BR	5000	OVC065	-14	
May 16	12:08	5 / 210°		4800	BKN055	-14	
May 17	11:56	10 / 133°		9999	BKN045	-13	
May 18	10:31	10 / 205°	FZFG	5000	OVC020	-14	
May 20	13:13	11 / 180°	FZFG	1600	FEW	-16	

Significant Weather Observations: Normal

ICECAPS-ACE Data Management Transfer

Date	Time (Z)
May 13	04:50:07
May 14	04:57:58
May 15	05:46:34
May 16	04:47:45
May 17	05:12:32
May 18	04:49:20
May 20	04:56:14

Mobile Science Facility (MSF)

May 13:

- SW Pick-a-Watt heater was observed to be set at 55F. The heater was set back to 44F.
- An electrical conduit run was installed at MSF (11:35Z)

May 14:

- Breaker 10 on the electrical panel was shut down from 11:50Z – 16:00Z. Systems on the circuit included the outdoor lights and the LifeBreath heat recovery system.
- The LifeBreath was temporarily plugged into a live electrical receptacle in order to keep functioning.

May 15:

- Breaker 10 was once again turned off from 11:00Z – 12:00Z.

Microwave Radiometers (MWR)

May 16:

- At 12:25Z, while transferring an image of a screen capture to a USB stick, the Windows XP computer briefly flashed an error and then proceeded to shutdown. The computer made several attempts to reboot but continued to fail. After the fourth reboot failure, the computer was manually powered down using the power bar. The system was restarted following the startup instructions in the MWR protocol document.
- At 12:38Z the software appeared to be operating normally. The only issue now is that the “Slave” window cannot be moved and sits over the main window.

May 18:

- System seemed to be operating normally. A system restart was performed with the same results: Data collection was normal but the "Slave housekeeping" Window remained locked in position over the main window.

May 19:

- During the daily check it was observed that the MWR was no longer collection data.
- In the "Status and Config" tab:
 - Software displayed “MEASUREMENT RUNNING”
 - On the “Controllers” subsection of the Master and Slave, the “Main Contr.”, “Elev. Stepper”, and “Cal. Stepper” were responding.
- In the “Brightness temps” tab:
 - There was no real-time spectra on the right side of the screen.
 - There were no time series data on the sixteen channels.

- In the "Housekeeping" tab for both the HATPRO and 150-90:
 - There was no red error indicators.
 - The green status lines were short and not updating.
- The system was shutdown and restarted and it resumed collecting data ("Slave housekeeping" Window remained locked in position).

Sonic Detection And Ranging (SODAR)

May 15:

- Cleaned snow and leveled.
- 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

- Twice daily launches.

Multi-Angle Snowflake Camera (MASC)

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

Optical Particle Counter (OPC)

May 16:

- OPC stopped recording data around 13:45Z

May 17:

- The OPC raspberry pi was restarted following the restart protocol in the OPC documentation. The data was still not updating on the ACE laptop.

May 19:

- It was determined that the ACE laptop was failing to connect (mount) to the appropriate folder on the raspberry pi to pull the data.

Condensation Particle Counter (CPC)

- Operating normally.

Compact Lightweight Aerosol Spectrometer Probe (CLASP)

- Instrument off site.

Meteorology and upGPR

- Clean hood installed and tested.

INP Freezing Assay

- Clean hood installed and tested.