

# ICECAPS-ACE Weekly Report

June 8<sup>th</sup>– June 14<sup>th</sup>, 2022

Nicolette Ratz



Left: Michael Gallagher working on the Dataman computer swap

Right: Matt Shupe untangling SoDAR cables on the MSF roof

*Photos: Nicolette Ratz*

## General Notes:

This week was an exciting week for ICECAPS! Matt Shupe and Michael Gallagher arrived Wednesday (06-08) and got right to work on improvements. In the seven-day timespan they managed—with some science technician assistance—to exchange the Dataman computer (06-09); connect and turn on the SoDAR and POSS (06-10); raise the albedo stand (06-10); decommission and package the solar tracker (06-10); plumb Fluxtower data in the Dataman computer (06-11); and replace the MMCR UPS batteries (06-13). In addition to their hard work, Libre Office was successfully installed on the radiosonde computer (06-08) and a MPL Afterpulse Calibration was conducted 2022-06-14:1336z. Lastly, Nicolette and Alicia climbed the tower to finalize Met Tower Raise measurements, remove the V2 junction box, and assess the defective HMP4 aspirated shield (06-09).

**General Weather Observations:**

Date	Time (Z)	Wind (kt)	Weather	Visibility	Sky	Temp (C)	Notes
06-08	12	2.0		9999	FEW090 SCT160	-17	
06-09	12	9.0		9999	FEW090 SCT160	-14	
06-10	12	9.0	-SN	9999	FEW009 SCT030	-13	
06-11	12	2.0		9999	FEW060 FEW130	-12	
06-12	12	12.0		9999	OVR020	-14	
06-13	12	10.0	IC	9999	FEW010 FEW160 FEW100	-14	
06-14	12		DRSN; IC	800	SCT060		

**Significant Weather Observations:**

- No significant weather observations made

**MSF**

- Selway workstation cleared and available for use

**ICECAPS-ACE Data Management:**

- Dataman computers exchanged 2022-06-12; operations for daily checks remain the same
- Data transfer complete 2022-06-08:0346z
- Data transfer complete 2022-06-09:0353z
- Data transfer complete 2022-06-10:0118z
- Data transfer complete 2022-06-11:0414z
- Data transfer completion unknown due to computer exchange 2022-06-12
- Data transfer complete 2022-06-13:0621z
- Data transfer complete 2022-06-14:0458z
- Operating normally

**TSI:**

- Atypical photo found in TSI Manager 2022-06-03:0122z; photos taken at 0121z and 0123z were typical and with little cloud cover in the processed images, whereas the 0122z photo was entirely green and 100% cloud cover in the processed image.
- Operating normally

**Radiosonde:**

- Libre Office (34-bit version) successfully downloaded to radiosonde computer 2022-06-08; plans to transfer Excel radiosonde data log
- Not currently launching radiosondes—permits pending

**MWR:**

- Operating normally

**SODAR:**

- Placed in new location (approx. 50m east of MSF) and leveled 2022-06-10
- Cables replaced and run to instrument 2022-06-10
- Turned on and collecting data 2022-06-10:1615z
- Amplifier turned off for weekly cleaning 2022-06-13:1103z-1107z

**POSS:**

- New cables run to instrument 2022-06-14
- Powered on and collecting data 2022-06-14

**MASC:**

- Remote access granted 2022-06-13; plans to configure instrument 2022-06-17
- Offline

**MMCR:**

- Roll parameter restored by Matt Shupe through cable management 2022-06-09; Pitch:0.12
- UPS batteries replaced 2022-06-13
- Powered down for battery replacement 2022-06-13:1103z-1107z
- Powered on 2022-06-13:1204z-approx.1245z; required three attempts to reboot due to helix cathode fault

**MPL:**

- Stopped data collection for MPL Afterpulse Calibration 2022-06-14:1336z; restored data collection 2022-06-14:1400z
- Operating normally

**CEILOMETER:**

- Operating normally

**PAERI:**

- Expected to return in August

**IceCAM:**

- Operating normally.

**IcePIC:**

- No images captured this week

**MAGIC CPC:**

- Operating normally

**MSF - OPC:**

- Offline
- Expected installation in August

**AWO - OPC:**

- Offline
- Expected installation in August

**SKYOPC:**

- Offline
- Expected installation in August (AWO)

**Flux Tower instrument suite:**

- HMP4 Aspirated shield found defective by Heather Guy 2022-06-09; plans to replace with HMP1 Aspirated shield
- Removal of V2 junction box (bagged and secured to tower) 2022-06-09; plans to conduct continuity testing and check soldering connections
- Measurements of Met Tower Raise 2022-06-09; plans to finish measurements of KT15 to lowest boom
- Fluxtower data plumbed through Dataman computer 2022-06-11
- V2 not communicating, found with snow accumulation indicating loss of function 2022-02-01

**Radiometers:**

- Albedo Stand Raise completed 2022-06-11:1400z
- Adjustments and leveling for the Albedo Stand made by Matt Shupe and Michael Gallagher 2022-06-11:1700z-2000z
- Solar tracker dismantled, removed, and packaged for retro shipment 2022-06-11
- Solar tracker replacement expected to arrive in August