

# ICECAPS-ACE Weekly Report

June 14<sup>th</sup>– June 20<sup>th</sup>, 2022

Nicolette Ratz



Science Technician, Nicolette, set to release a radiosonde balloon 2022-06-17

*Photo taken by: Andrew Chapman*

## General Notes:

This week Science Technicians—Alicia and Nicolette—began launching radiosondes after obtaining a much-needed permit (06-15). The MWR and SoDAR experienced unexpected shutdowns (06-17); both restored with a power cycle (06-17). Continuity testing of the V2 junction box was completed (06-17), leading to plans for its replacement via the V1 junction box—so long as cable length allows. Lastly, Nicolette and John configured the MASC (06-20) and hope to deploy the instrument soon.

**General Weather Observations:**

Date	Time (Z)	Wind (kt)	Weather	Visibility	Sky	Temp (C)	Notes
06-14	1200	26	DRSN; IC	800	SCT060	-10	
06-15	1200	14	BLSN	1500	BKN030	-10	
06-16	1200	17	IC	9999	FEW060 BKN090	-7	
06-17	1200	15		9999	SCT060	-8	
06-18	1200	27	BLSN	500	OVR020	-12	
06-19	1200	29	DRSN	1200	OVR020	-15	
06-20	1200	5	FZFG	750	FEW000	-16	Horizon obscured by FZFG

**Significant Weather Observations:**

- No significant weather observations made

**MSF**

- Unplanned power outage 2022-06-15
  - approx.1840z-1852z for switch to emergency generator
  - 1905z-1906z for switch back to main generator
- Planned power outage 2022-06-18:1530z-1532z for generator maintenance

**ICECAPS-ACE Data Management:**

- ‘To Boulder’ file not empty 2022-06-15 due to continued troubleshooting of Dataman computer—operating normally 2022-06-16
- Data transfer complete 2022-06-14:0402z
- Data transfer *did not* complete 2022-06-15
- Data transfer complete 2022-06-16:0402z
- Data transfer complete 2022-06-17:0344z
- Data transfer complete 2022-06-18:0418z
- Data transfer complete 2022-06-19:0429z
- Data transfer complete 2022-06-20:0459z

**TSI:**

- Anomalous behavior 2022-06-14; restored by disconnecting and reconnecting power cables 2022-06-15
- Operating normally

**Radiosonde:**

- Radiosonde launches started 2022-06-15:2315z; one balloon lost due to falling off the balloon table 2022-06-15
- Operating normally

**MWR:**

- Unexpectedly powered off 2022-06-17; restored with power cycle 2022-06-17:0934z
- R2CH.EXE program experienced window-sizing issue 2022-06-19; restored with computer reboot 2022-06-19:1713z

**SODAR:**

- Instrument unexpectedly powered down 2022-06-16:1401z; restored with power cycle 2022-06-17:1658z
- Amplifier turned off for weekly cleaning 2022-06-20:1139z-1152z

**POSS:**

- Operating normally

**MASC:**

- Instrument configured 2022-06-20; plans to finalize cable connections and power on with John later in the week
- Offline

**MMCR:**

- Operating normally

**MPL:**

- 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:**

- V2 junction box continuity testing conducted 2022-06-17:1300z—found broken solder connection; plans to replace V2 junction box with V1 junction box if cable length allows
- HMP4 Aspirated shield found defective by Heather Guy 2022-06-09; plans to replace with HMP1 Aspirated shield
- V2 not communicating, found with snow accumulation indicating loss of function 2022-02-01

**Radiometers:**

- Albedo Stand operating normally
- Solar Tracker replacement expected in August