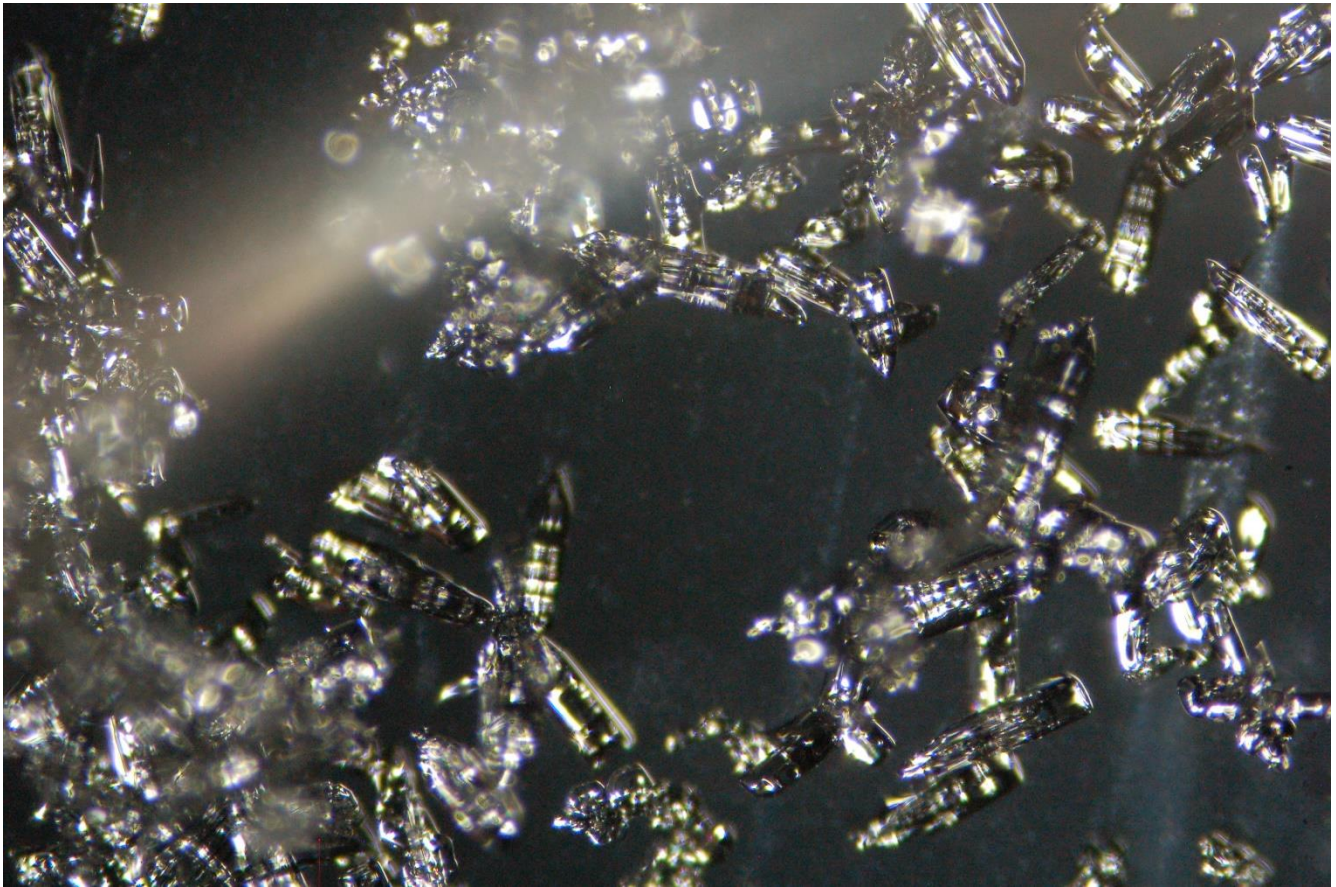


ICECAPS-ACE Weekly Report

July 12th– July 18th, 2022

Nicolette Ratz



Ice PIC image captured during snowfall 2022-07-17

Photo taken by: Nicolette Ratz

General Notes:

This week packages for Ryan Neely and Heather Guy arrived: GS-neelyr-0080 through GS-neelyr-0085 (07/16); more information can be found in CTS. The POSS restored function (07/14); however as of writing this report the instrument is experiencing similar faults; Matt Shupe has been informed (07/19). Ice PIC images were taken (07/14 and 07/17). Lastly, a MPL Afterpulse Calibration was conducted (07/14).

General Weather Observations:

Date	Time (Z)	Wind (kt)	Weather	Visibility	Sky	Temp (C)	Notes
07/12	1200	3		9999	FEW010	-12	
07/13	1200	17	BLSN	9999	SCT040 BKN120	-10	
07/14	1200	10		9999	BKN070	-9	
07/15	1200	16		9999	BKN050	-8	
07/16	1200	7	IC	9999	FEW090 FEW160 SCT190	-10	
07/18	1200	12	IC	9999	BKN060	-9	
07/19	1200		-SN	9999	FEW010 SCT100		Wind and temperature unavailable due to NOAA calibration

Significant Weather Observations:

- Diamond dust observed 2022-07-16:1000z-1230z and 2022-07-18:1130z-1230z

MSF

- Operating normally

ICECAPS-ACE Data Management:

- Data transfer complete 2022-07-12:0719z
- Data transfer complete 2022-07-13:0531z
- Data transfer did not complete (unknown reason) 2022-07-14
- Data transfer complete 2022-07-15:0655z
- Data transfer complete 2022-07-16:0627z
- Data transfer complete 2022-07-17:0540z
- Data transfer complete 2022-07-18:0606z
- Operating normally

TSI:

- Operating normally

Radiosonde:

- Radiosonde computer and SPS turned off due to mechanic error involving breaker switches 2022-07-05: approx. 1500z-2300z—no effect on radiosonde data or launches
- Discrepancies between NOAA RH data and radiosonde calibration are less after placing sonde in shade to calibrate. Any thoughts moving forward?
- No cabinet temperature data this week; these graphs can be sent upon request, otherwise they will be included in next week's report
- Operating normally

MWR:

- Operating normally

SODAR:

- Amplifier turned off for cleaning 2022-07-12:1509z-1518z and 2022-07-18:1100 to 2022-07-19:1136z (technician error)
- SoDAR powered down due to unplanned power outage last week 2022-07-05:1311z-1345z; was restored through power cycle 2022-07-05:0423z—including in this week's report because it was omitted from previous reports
- Operating normally

POSS:

- Instrument exhibiting 'no good packets' faults 2022-07-18
- Power cable disconnected; data cable and tele-byte wiring resecured 2022-07-14:1300z; POSS rebooted and successfully collecting data 2022-07-14:1400z—errors likely related to tele-byte sensitivity to movement
- Operating normally

MASC:

- MASC sending data 'to Boulder' 2022-07-18
- Operating normally

MMCR:

- Radar Monitor window malfunctioning 2022-07-13:1100z; Radar Monitor window closed and restarted, restoring function 2022-07-13:1730z

MPL:

- MPL Afterpulse Calibration conducted 2022-07-14:1652z-1716z
- Operating normally

CEILOMETER:

- Operating normally

PAERI:

- Expected to return in August

IceCAM:

- Operating normally.

IcePIC:

- Images taken for precipitation 2022-07-14:1125-1245z and 2022-07-17:1420z-1451z

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:

- SnD data file created, not logging data for a few hours on 2022-07-14, back on later that day—Heather Guy is aware of this issue
- Tower instruments did not log data after data download 2022-06-23 and 2022-06-28; function to flux laptop was restored after reboot 2022-07-04:1120z-1132z; Technician is in communication with Heather Guy regarding this issue
- KT15 awaiting Heather's arrival; not currently responding post rebuilt cable
- 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

Radiometers:

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