

ICECAPS-ACE Weekly Report

June 28th– July 4th, 2022

Nicolette Ratz



A bullet cluster captured during light snow 2022-06-30

Photo taken by: Nicolette Ratz

General Notes:

This week the Multi-angle Snow Camera (MASC) was powered on by Nicolette and John Rausch (06/28), a series of Ice PIC photos were taken (06/30), and the Summit community gleefully assisted in radiosonde balloon launches. The KT15 cable was rebuilt (06/28) and will remain inside AWO until Heather Guy arrives during Flight Period Four. AWO operations remain stable, weekly albedo stand downloads were successful, and no rime accumulated on the albedo glass domes for the duration of the week.

General Weather Observations:

Date	Time (Z)	Wind (kt)	Weather	Visibility	Sky	Temp (C)	Notes
06/28	1200	16	BLSN	9999	BKN010 OVR060	-5	
06/29	1200	15	-SN	9999	OVR020	-8	
06/30	1200	8	-SN	9999	SCT030 BKN080	-7	
07/01	1200	9	-SN	9999	OVR060	-8	
07/02	1200	11		9999	OVR060	-8	
07/03	1200	8	-SN	9999	OVR040	-9	
07/04	1200	7	-SN	9999	OVR030	-11	

Significant Weather Observations:

- No significant weather observations made

MSF

- Temperatures nearing 70F in MSF building 2022-07-02; awaiting direction on HVAC manipulation to restore preferred temperatures

ICECAPS-ACE Data Management:

- Data transfer complete 2022-06-28:0421z
- Data transfer complete 2022-06-29:0410z
- Data transfer complete 2022-06-30:0514z
- Data transfer complete 2022-07-01:0120z
- Data transfer complete 2022-07-02:0405z
- Data transfer complete 2022-07-03:0406z
- Data transfer complete 2022-07-04:0523z
- Operating normally

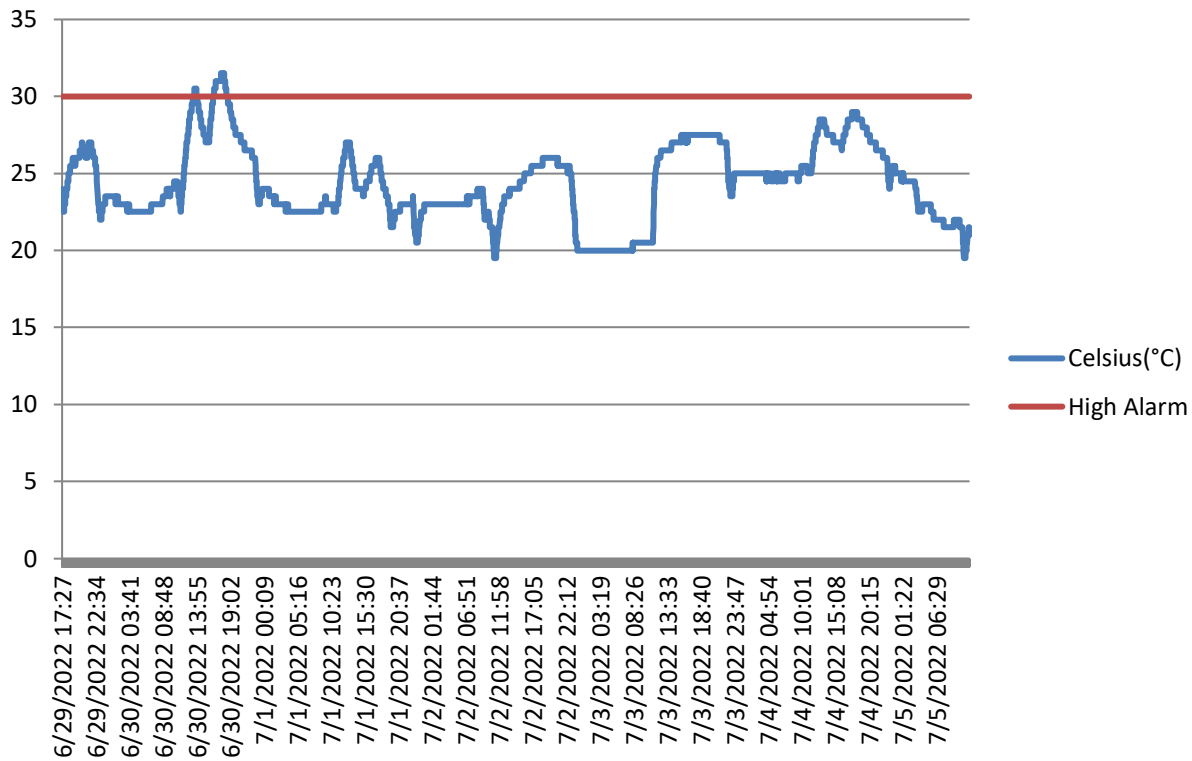
TSI:

- Operating normally

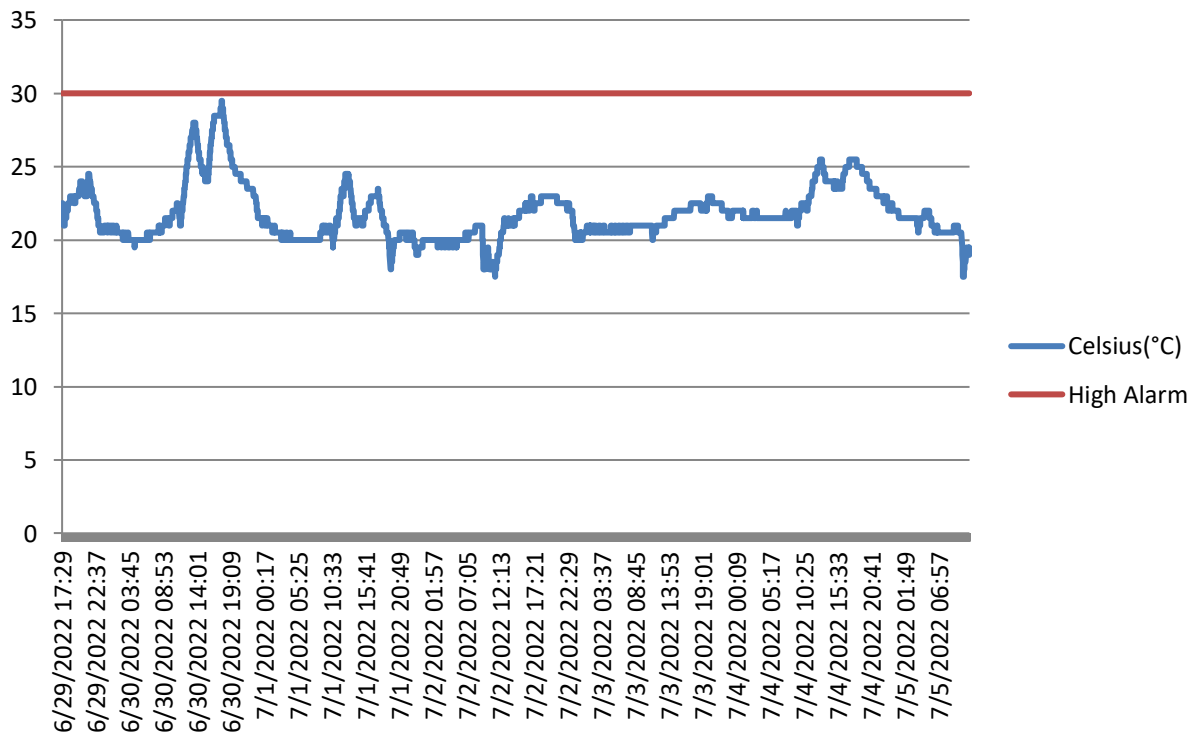
Radiosonde:

- Failed radiosonde launch 2022-06-28:1100z due to power outage and safety concerns
- Consistent discrepancies in RH between NOAA data and radiosonde calibration; investigation of potential causes ongoing
- Operating normally

Inside Radiosonde Cabinet



Outside Radiosonde Cabinet



MWR:

- Operating normally

SODAR:

- Amplifier turned off for weekly cleaning 2022-07-04:1554z-1602z
- Operating normally

POSS:

- Operating normally

MASC:

- Instrument powered on 2022-06-28:1530z
- Computer pad unresponsive 2022-07-01; Run MASC stopped 2022-07-01:1039z; computer rebooted 2022-07-01:1041z; Run MASC restarted 2022-07-01:1043z
- Offline

MMCR:

- Operating normally

MPL:

- Operating normally

CEILOMETER:

- Operating normally

PAERI:

- Expected to return in August

IceCAM:

- Operating normally.

IcePIC:

- Images captured 2022-06-03:1200z-1330z

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:

- KT15 awaiting Heather's arrival; not currently responding post rebuilt cable
- 2022-06-30 KT15 cable rebuilt; unable to conduct continuity test (opposite end hardwired in)
- 2022-06-28 located replacement connectors for KT15 and standing by to solder
- 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