

# ICECAPS-ACE Weekly Report

October 19<sup>th</sup> – October 25<sup>th</sup>, 2020

Heather Guy



Full sky aurora show on 2020-10-23.

*Photo: Heather Guy*

## General Notes:

This week saw temperatures drop back down to more seasonable low -30's, and a noticeable reduction in daylight hours with our transition to "Daylight saving" time. There was a planned station power outage on 2020-10-20 to allow the mechanics to do some maintenance on the generator, the outage lasted 10 minutes and all instruments on UPS were unaffected. Otherwise it was a quiet week, featuring some drift and cable maintenance around the MSF and a successful MMCR reboot. The 'lost connection' issues with data transfer to Boulder have resolved.

### General Weather Observations:

Date	Time (Z)	Wind	Weather	Visibility	Sky	Temp (C)	Notes
10-19	12	11 kts at 212	SN	800	OVC007	-21	BLSN pm.
10-20	12	6 kts at 203	FZFG	500	BKN033	-35	
10-21	12	6 kts at 252	FZFG	500	VV002	-28	
10-22	12	13 kts at 132	BR	3600	FEW164	-40	
10-23	12	10 kts at 167		4800	BKN019, FEW098	-31	
10-24	12	10 kts at 163		3600	FEW	-39	FZFG bank on horizon
10-25	12	11 kts at 200	BR	3600	FEW	-41	FZFG bank on horizon

### Significant Weather Observations:

- 2020-10-20 1445Z: Upper tangent arc and light snow.
- 2020-10-21 1705Z: Brief parahelia.
- 2020-10-21 1815Z: very low level FZFG, the top half of the TAWO met tower is out the top of the fog.
- 2020-10-25 1200-1300Z: Fog bow.

### MSF

- 2020-10-20 1227 -1237Z: Planned power outage to support generator maintenance. Instruments on UPS were unaffected.
- 2020-10-22 1200-1215Z: Drift maintenance around the MSF with the D953.
- Operating normally

### ICECAPS-ACE Data Management:

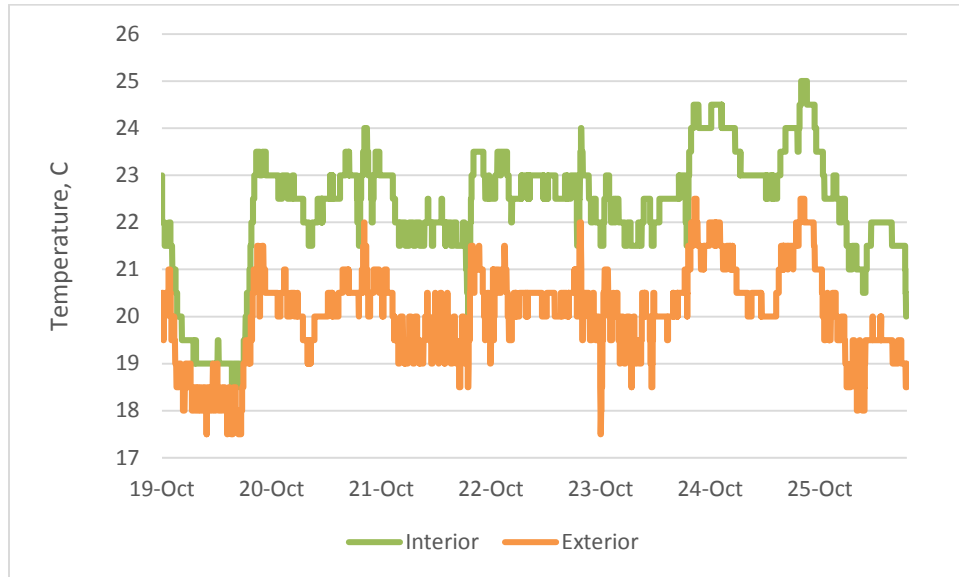
- 10-19: Data transfer completed at 0515Z, 10 files did not transfer due to 'lost connection'.
- 10-20: Data transfer completed at 0504Z, 9 files did not transfer due to 'lost connection'.
- 10-21: Data transfer completed at 0445Z.
- 10-22: Data transfer completed at 0527Z.
- 10-23: Data transfer completed at 0415Z.
- 10-24: Data transfer completed at 0515Z.
- 10-25: Data transfer completed at 0412Z.

### TSI:

- Offline for the winter season.

**Radiosonde:**

- 2020-10-21: SPS signal lost after launch termination, profile was unaffected.
- Once daily launches.
- See chart below for temperatures inside and outside the radiosonde cabinet over the last week:



**MWR:**

- Operating normally

**SODAR:**

- 2020-10-20 1319-1334Z: Cleaned and leveled the SODAR dishes.
- Operating normally.

**POSS:**

- Operating normally.

**MASC:**

- Offline for winter season.

**MMCR:**

- 2020-10-22 1640-1755Z: Performed MMCR reboot after persistent 'NetCDF not found' errors.
- Operating normally.

**CAPABL:**

- Operating normally.

**MPL:**

- Operating normally.

**CEILOMETER:**

- Operating normally.

**PAERI:**

- Operating normally.

**IceCAM:**

- Operating normally.

**IcePIC:**

- 2020-10-19 1100-1200Z: Plates, stellar plates, bullets and bullet rosettes. 59 photos collected.
- 2020-10-21 1245-1306Z: Columns and irregulars, 25 photos.

**CPC:**

- Offsite for repairs.

**MSF - OPC:**

- Operating normally.

**TAWO - OPC:**

- Operating normally

**SKYOPC:**

- 2020-10-20 1220-1238Z: Pump offline for planned power outage.
- Operating normally.

**Fluxtower instrument suite:**

- Operating normally

**Radiometers:**

- Solar tracker misalignment troubleshooting ongoing, otherwise operating normally.