

ICECAPS-ACE Weekly Report

October 29 – November 4, 2018

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CAPABL and MPL lasers adding color to a late evening at the MSF, with a little rave ice visible

General:

Troubleshooting CAPABL occupied the most tech time this week. It was a quiet week for ICECAPS aside from a little snow on the PAERI scene mirror.

Significant Weather Observations:

Date	Time (Z)	Wind	Weather	Sky	Temp(C)	Notes
10-29	1200	13 from 087	BR	SCT CIRROCU	-33	
10-30	1210	13 from 102	DRSN BR	BKN CIRRUS	-45	
10-31	1311	11 from 092	DRSN FZFG	BKN CIRRUS	-35	
11-01	12	14 from 098	FZFG SN	OVC	-33	Low vis SN
11-02	1225	10 from 168	BR	BKN CIRROCU	-40	
11-03	1700	17 from 089	BR	SCT CIRRUS	-37	Late ob
11-04	1205	14 from 095	BR	SCT CIRROCU	-42	

ICECAPS-ACE Data Management:

- 10-29: Data transfer complete at 0855Z.
- 10-30: Data transfer complete at 0852Z.
- 10-31: Data transfer complete at 0934Z
- 11-1: Data transfer complete at 0910Z
- 11-2: Data transfer complete at 0943Z
- 11-3: Data transfer complete at 0910Z
- 11-4: Data transfer complete at 1010Z.

MWR:

- Operating normally.

SODAR:

- Operating normally.

POSS:

- Operating normally.

MMCR:

- Operating normally.

CAPABL:

- Instrument taken offline remotely on the evening of 10-23-2018.
- 10-30 1800Z: Attempted manual alignment with laser 1 with marginal success.
- 10-31: I spent several hours troubleshooting with Dr. Neely via Skype. The conclusion appears to be that recently-reinstalled laser 1 is producing a distorted beam. CAPABL was left active and recording data using laser 2, which Neely reports is reasonably well-aligned.
- 11-1: CAPABL operating normally using Laser 2
- 11-2: With Neely's guidance, I removed cover of combiner box to diagnose laser 1 beam shape. We concluded that it 1 is misshapen coming out of the head. Instrument was then returned to normal operation using laser 2.
- Instrument currently operating normally using laser 2

MPL:

- Operating normally.

VCEIL:

- Operating normally.

IceCAM:

- 10-31: Lens covered in snow until 1300Z
- 11-2: Moon transits between 0315 and 0445Z
- Operating normally.

PAERI:

- 10-29: At approximately 2100Z the PAERI threw red flags for LW_Responsivity and SW_responsivity, associated with increased wind with blowing snow deposited on the scene mirror. I was able to clean the mirror from the roof around 1230Z, and the flags returned to green shortly after.
- 11-3: Around 22Z, the PAERI threw the same for LW_Responsivity and SW_responsivity flags. I cleared snow from the mirror at approximately 11-4 0005Z, and the flags returned to green right after.
- Operating normally.

TSI:

- Offline for winter season.

IcePIC:

- No images captured this week.

Radiosonde:

- Twice daily launches.

MASC:

- Instrument offsite for repair, will not return until summer 2019.

OPC:

- Operating normally.

CLASP:

- Instrument offline and being shipped offsite for repair.

CPC:

- Instrument offline and being shipped offsite for repair.