

# ICECAPS-ACE Weekly Report

Week 27, July 1 -- July 7, 2019

Jonathon Miller



Station Manager Shannon Wilson launching weather balloon.

## General Weather Observations

Date	Time (UTC)	Temp (°C)	Wind (kt / dir)	Weather	Visibility	Sky	Notes
July 1	16:50	-9	13 / 071°		4800	FEW131	
July 2	18:20	-7	16 / 111°		4800	SCT040	
July 3	17:26	-8	11 / 118°	FZFG	1600	OVC013	
July 4	18:00	-8	4 / 302°		4800	BKN013	
July 5	13:05	-8	7 / 019°	-SN FZFG	1600	OVC015	
July 6	12:19	-10	17 / 043°		9999	BKN008	
July 7	12:27	-10	11 / 097°		9999	FEW	

## ICECAPS-ACE Data Management Transfer

Date	Transfer Complete (UTC)
July 1	05:06:32
July 2	05:04:44
July 3	05:05:34
July 4	05:03:18
July 5	05:01:58
July 6	05:07:03
July 7	05:03:56

## Mobile Science Facility (MSF)

### July 06:

- At 15:00 UTC, work was performed on the external support frame at the MSF. Some of the outer beams were shimmed to maintain building stability.
- It was observed that the South West jack holding the MSF has started to lean slightly resulting in a partial contact with the jack head and build support beam. The building remains stable and is not experiencing any noticeable change in pitch or roll.

## Data Manager Computer (Dataman)

- Operating normally.

## Microwave Radiometers (MWR)

- Operating normally.

## SONIC Detection And Ranging (SODAR)

- Operating normally.

## **Precipitation Occurrence Sensor System (POSS)**

- Operating normally.

## **Millimeter Cloud Radar (MMCR)**

- Operating normally.

## **Cloud Aerosol Polarization and Backscatter Lidar (CAPABL)**

- Operating normally.

## **Micro-Pulse Lidar (MPL)**

- Operating normally.

## **Laser Ceilometer**

- Operating normally.

## **IceCAM**

- Operating normally

## **Polar Atmospheric Emitted Radiance Interferometer (PAERI)**

- Operating normally.

## **Total Sky Imager (TSI)**

- System is currently offline.
- We are exploring the option of getting updated software to install on a newer computer system.

## **Ice Particle Image Camera (ICEPic)**

- No images.

## **Radiosonde**

- Launched twice daily.
- Radiosonde and balloon inventory moved to SMG.

## **Multi-Angle Snowflake Camera (MASC)**

- The dataman computer data transfer log reported that the MASC mount was down when trying to pull data from the MASC computer. Investigation of the dataman computer revealed that there was a mount to the MASC computer.

## MSF - Optical Particle Counter (OPC)

- Operating normally

## TAWO - Optical Particle Counter (OPC)

- Operating normally

## Sky Optical Particle Counter (SKYOPC)

- Quicklooks graph not updating.

## Condensation Particle Counter (CPC)

- Operating normally

## Compact Lightweight Aerosol Spectrometer Probe (CLASP)

- Quicklooks graph not updating.

## Fluxtower Instrument Suite

- The fluxtower Quicklooks display indicates all instruments are operating normally.

## Ice Nucleating Particles (INP) Freezing Assay

### Weekly filter runs:

Magazine changed	Filter 1 start time/date	Filter 2 start time/date	Filter 3 start time/date
YYMMDD	YYMMDD hh:mm	YYMMDD hh:mm	YYMMDD hh:mm
190627	190627 17:00	190630 01:00	190702 09:00
190704	190704 16:00	190707 00:00	190709 08:00

## Aerosol Vertical Profiler (AVP)

### July 7:

- AVP flight operated normally with the exception of
- Switching to the “ICECAPS-ACE\_Profile\_2” mission still displays “ICECAPS-ACE\_Profile\_1” in the software however, the drone still performed two profiles.