ICECAPS-ACE Weekly Report

July 13 – July 19, 2020 Ian Geraghty



A very scenic trash pallet during diamond dust event on 2020-07-15.

General Notes:

With only a couple weeks left until flights start arriving, Mara and I are looking to tackle some big, remaining tasks like raising the POSS and albedo stand this week.

General Weather Observations:

Date	Time (Z)	Wind	Weather	Visibility	Sky	Temp (C)	Notes
07-13	12	18kts at 137	FZFG DRSN	1600	SCT032	-14	Clouds distant;
					SCT064		height estimated
07-14	12	7kts at 211	FZFG IC	1600	SCT000	-14	22° halo, parhelia,
					BKN075		and parhelic circle
07-15	12	11kts at 032		9999	BKN013	-14	
07-16	12	16kts at 052	BR	4800	FEW016	-14	
07-17	12	12kts at 009	BR DRSN	4800	FEW032	-15	Clouds distant;
					SCT064		height estimated
07-18	12	8kts at 048	DRSN	9999	FEW032	-18	
07-19	12	6kts at 345		9999	FEW016	-13	
					FEW032		

Significant Weather Observations:

• 2020-07-14 1230Z: 22° halo with parhelia and faint parhelic circle.

MSF

• UPS testing planned for 2020-07-20.

ICECAPS-ACE Data Management:

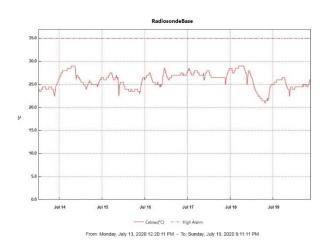
- 07-13: Data transfer completed at 0520Z.
- 07-14: Data transfer completed at 0547Z.
- 07-15: Data transfer completed at 0457Z.
- 07-16: Data transfer completed at 0525Z.
- 07-17: Data transfer completed at 0455Z.
- 07-18: Data transfer completed at 0454Z.
- 07-19: Data transfer completed at 0447Z.

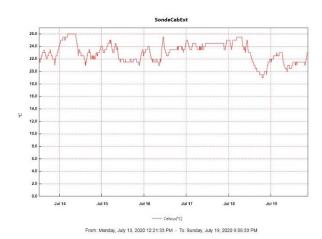
TSI:

- 2020-07-16: Software rebooted to reinitialize image processing.
- Operational.

Radiosonde:

- 2020-07-14 1200Z: SPS lost connection and radiosonde signal was lost multiple times during the flight. Sounding terminated at ~20km due to "weak or fading signal".
- 2020-07-15 0000Z: SPS status lights were red upon arrival at SMG. After power cycling, SPS was ok for the sounding. After the sounding was complete, the SPS lost connection multiple times.
- See charts below for temperatures inside and outside the radiosonde cabinet over the last week.





MWR:

- 2020-07-14: Anomaly caused change in computer date. Data between 0000Z and 1234Z is unaccounted for. Computer date and filenames were corrected on 2020-07-15.
- HATPRO offsite for repairs. 150-90 online and operating normally.

SODAR:

- 2020-07-13 1734 1747Z: Dishes cleaned and leveled.
- Operating normally.

POSS:

• Offline. Troubleshooting with manufacturer ongoing.

MASC:

• Operating normally.

MMCR:

- 2020-07-16: Received LabView Error 7 "file not found".
- 2020-07-18: Received LabView Error 7 "file not found".
- 2020-07-19: LapXM DwellControl_Calibration errors at 1230Z daily calibration due to Labview error on 2020-07-18 not being cleared yet. Daily calibration was skipped.
- Operating normally. Monitoring transmitter power fluctuations.

CAPABL:

• Operating normally.

MPL:

- 2020-07-15 1301 1329Z: Monthly afterpulse calibration.
- Operating normally. Monitoring laser energy fluctuations.

CEILOMETER:

• Operating normally.

PAERI:

• Operating normally.

IceCAM:

• Operating normally.

IcePIC:

• No IcePICs taken this week.

CLASP:

• Offline. Staged for retro.

CPC:

• Offline. Staged for retro.

MSF - OPC:

Operating normally.

TAWO - OPC:

• Operating normally.

SKYOPC:

- 2020-07-15 ~0000Z: Pump failure. Instrument was powered off at 1041Z.
- Operating normally.

INP Freezing Assay:

• 2020-07-15: Weekly experiments completed. Assay data and internal instrument data were sent to PI.

Fluxtower instrument suite:

Operating normally.

Radiometers:

- 2020-07-13: Completed weekly data download.
- Operating normally.