

# ICECAPS-ACE Weekly Report

October 7 – October 13, 2019

Heather Guy and Jess Ackerman



*Top: The twin otter arriving at Summit with the winter crew, 10-10.*

*Bottom: New Icecaps technician Jess Ackerman launching her first ICECAPS weather balloon. 10-12.*

## General Notes:

On October 10<sup>th</sup> two Twin Otter planes arrived at Summit bringing the replacement winter crew, including new ICECAPS science technician Jess Ackerman. Jess is enthusiastically getting familiar with everything ICECAPS related during a very busy turnover week.

On October 13<sup>th</sup> we changed the CAPABL flash lamp, aside from that, there have been no major events this week.

## General Weather Observations:

| Date  | Time (Z) | Wind        | Weather | Visibility | Sky    | Temp | Notes                     |
|-------|----------|-------------|---------|------------|--------|------|---------------------------|
| 10-7  | 12       | 169°, 14 kn | DRSN    | 1600       | BKN030 | -21  |                           |
| 10-8  | 12       | 121°, 18 kn | FZFG    | 1600       | FEW    | -33  |                           |
| 10-9  | 12       | 186°, 7 kn  | BR      | 3200       | OVC003 | -23  | FZFG and low vis all day. |
| 10-10 | 12       | 48°, 16 kn  | FZFG    | 1600       | SKC    | -41  |                           |
| 10-11 | 12       | 97°, 13 kn  | FZFG    | 1600       | VV001  | -33  |                           |
| 10-12 | 12       | 345°, 14 kn |         | 3200       | SKC    | -41  | FZFG in distance.         |
| 10-13 | 12       | 127°, 17 kn | FZFG    | 1600       | VV001  | -35  |                           |

## Flight operations:

- 10-10 1230-1400z: Twin otter at Summit.
- 10-10 1830-1930z: Twin otter at Summit.

## Significant Weather Observations:

- 10-11 1100-1600z: Fog bow
- 10-12 1222-1600z: Fog bow
- 10-13 1200-1345z: Fog bow

## MSF

- Operating normally.

## ICECAPS-ACE Data Management:

- 10-7: Data transfer completed at 0524z.
- 10-8: Data transfer completed at 0525z.
- 10-9: Data transfer completed OK, time not recorded.
- 10-10: Data transfer completed at 0543z.
- 10-11: Data transfer completed at 0524z.
- 10-12: Data transfer completed at 0520z.
- 10-13: Data transfer completed at 0524z.

## MWR:

- Operating normally.

## SODAR:

- 10-8 1304-1330z: Cleaned and levelled.
- Operating normally.

**POSS:**

- Operating normally.

**MMCR:**

- Operating normally.

**CAPABL:**

- 10-13 1853-2025z: Laser two flashlamp changed successfully.
- Operating normally.

**MPL:**

- Operating normally

**VCEIL:**

- Operating normally.

**IceCAM:**

- Operating normally

**PAERI:**

- 10-11 1245z: Fan found disconnected. The plug on the outside of the building had somehow come out of the socket. Fan brought inside to defrost then reconnected – operating normally.
- Operating normally

**TSI:**

- Offline for winter season,

**IcePIC:**

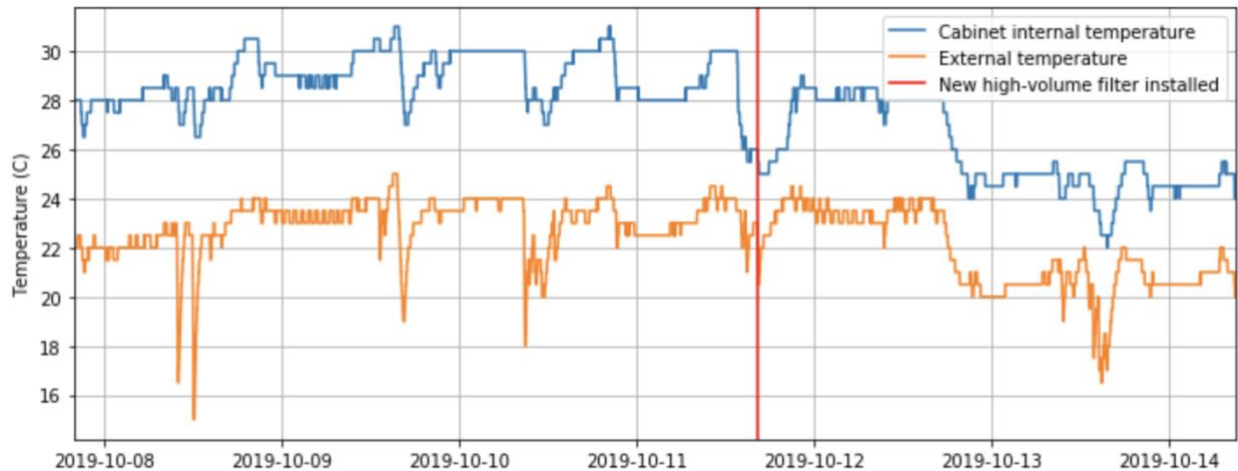
- No IcePics this week.

**Radiosonde:**

- Twice daily launches.
- 10-11 1630z: New high-volume filter installed on the outside of the enclosure (see photo below). Inside of enclosure and ground check station cleaned.



- See plot below for temperature inside the enclosure over the last week.



**MASC:**

- Operating normally.

**MSF - OPC:**

- Operating normally.

**TAWO – OPC:**

- Operating normally.

**SKYOPC:**

- Operating normally.

**CLASP:**

- Operating normally.

**CPC:**

- 10-8 1257z: Emptied butanol condensate.
- Operating normally.

**Fluxtower instrument suite:**

- 10-9: Enclosure temperatures over the last two weeks ranged between -7 to 25C, outside temperatures reached a low of -41C. I am happy that the enclosure does not need heating. Enclosure temperatures will henceforth be checked every 75 days or on instruction from the PI.
- Operating normally.

**INP Freezing assay:**

- 10-8: Three filter samples collected from TAWO.
- 10-9 1700-2000z: Weekly sample assay run; data transferred.