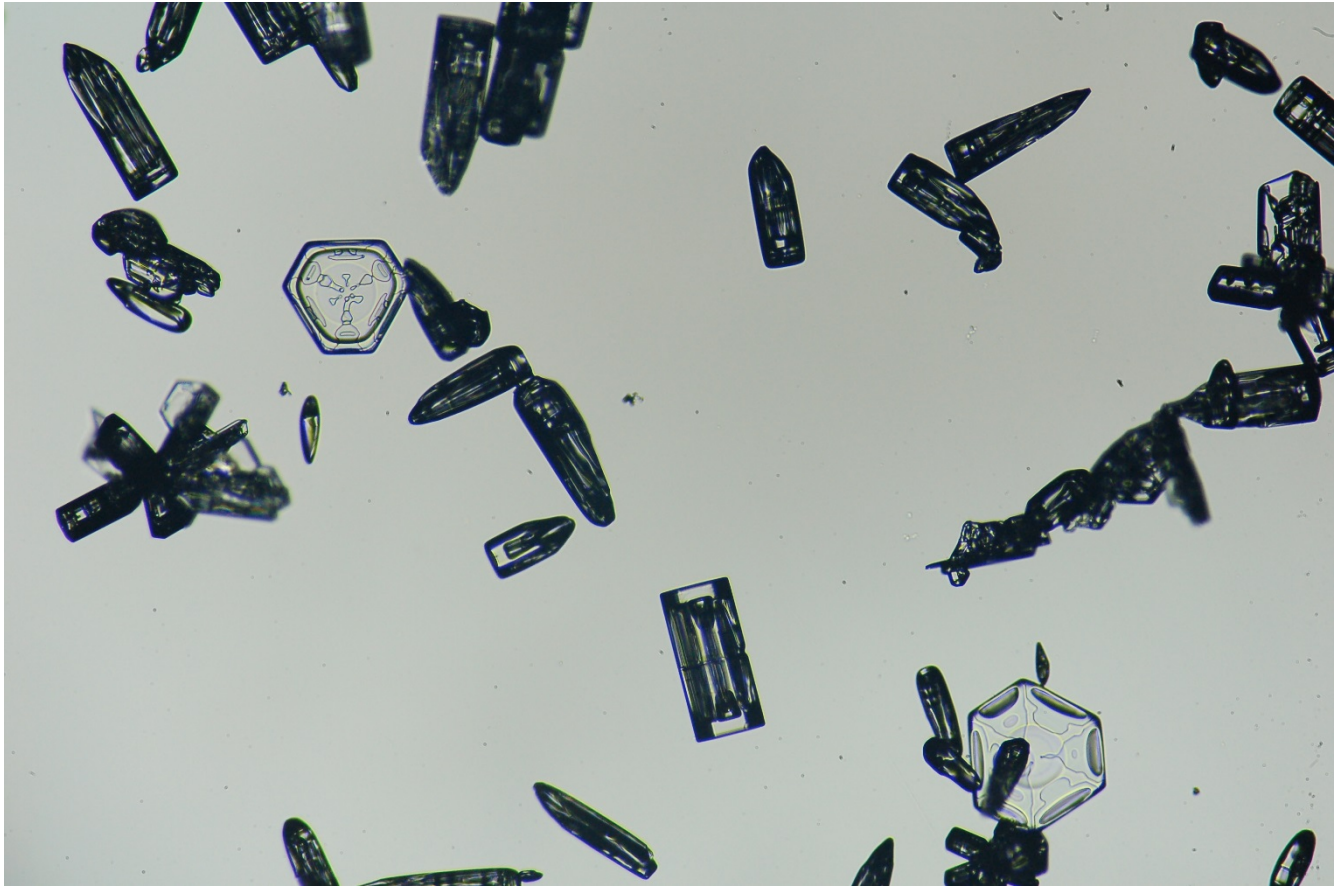


ICECAPS-ACE Weekly Report

April 15 – April 21, 2019

Nate Bowker



Plates and bullets juxtaposed.

General Notes: Station opening activities are in full swing with the first LC-130 scheduled to arrive on Friday, 4-26. Heavy equipment operation is occurring around station on a daily basis.

General Weather Observations:

Date	Time (Z)	Wind	Weather	Visibility	Sky	Temp	Notes
4-15	12	21kt from 150	DRSN FZFG	800	SCT100	-19	
4-16	12	18kt from 180	DRSN FZFG	800	FEW030	-23	
4-17	12	30kt from 130	BLSN	100	VV003	-18	
4-18	12	21kt from 180	DRSN FZFG	200	VV006	-23	
4-19	12	20kt from 190	FZFG	600	SCT100	-23	
4-20	12	12kt from 120	BR	1800	BKN060	-22	
4-21	12	7kt from 197		9999	FEW030	-35	

Significant Weather Observations:

- 4-16 ~0900 – 1330Z: 22-degree halo with infralateral arcs observed.
- 4-18 ~0700 – 1000Z: 22-degree halo observed.
- 4-18 ~1230 – 1400Z: 22-degree halo with infralateral arcs and a circumzenithal arc observed.
- 4-19 ~1600 – 1630Z: 22-degree halo observed.
- 4-20 ~1020 – 1200Z: 22-degree halo observed.

ICECAPS-ACE Data Management:

- 4-15: Data transfer completed at 0415Z.
- 4-16: Data transfer completed at 0415Z.
- 4-17: Data transfer completed at 0412Z.
- 4-18: Data transfer completed at 0415Z.
- 4-19: Data transfer completed at 0421Z.
- 4-20: Data transfer completed at 0415Z.
- 4-21: Data transfer completed at 0429Z.

MWR:

- Operating normally.

SODAR:

- 4-16 1000Z – 4-17 1300Z: No sodar JPGs due to my failure to leave software display maximized.
- 4-19 1640 – 1652Z: Powered down amp and cleaned sodar dishes.
- Operating normally.

POSS:

- Operating normally

MMCR:

- 4-19 and 4-20: Experienced radar calibration errors NetCDF_Mom and NetCDF_Spec.
- 4-21 1103 – 1321Z: Performed full system reboot. Required 5 attempts to achieve a successful startup.
- Temp (outside) value continues out of tolerance (at 30)
- Operating normally.

CAPABL:

- Instrument currently offline.

MPL:

- 4-15 1223-1246Z: Monthly afterpulse calibration performed.
- Operating normally.

VCEIL:

- Operating normally.

IceCAM:

- Operating normally

PAERI:

- Operating normally.

TSI:

- Offline for winter season.

IcePIC:

- 4-19: One sampling session photographed. Uploaded on 4-20.
- 4-20: One sampling session photographed and uploaded.
- 4-20: Microscope brought inside to thaw out. Cleaned the interior of the photo booth of frost and snow.
- 4-21: Fabricated a simple mount for the microscope light source allowing for consistent low oblique transmitted illumination with incremental adjustability.

Radiosonde:

- 4-16 1200Z: Sounding terminated prematurely (at ~12km) due to temperature sensor failure.
- 4-20 0000Z: Sounding burst altitude was just over 14km.
- 4-20 1200Z: Sonde damaged by snow removal activities when staged for launch outside of SMG. Second sonde prepped and launched at 1135Z.
- Twice daily launches.

MASC:

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

OPC:

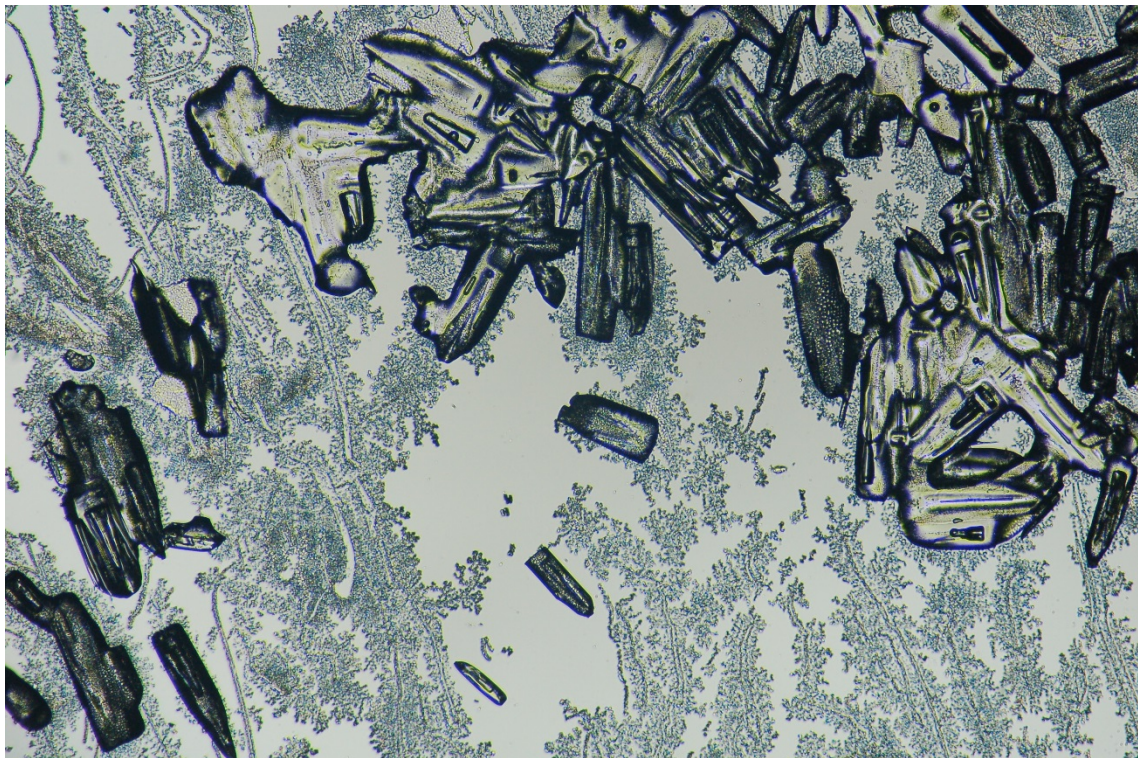
- Operating normally.

CLASP:

- Instrument off site.

CPC:

- 4-17 1229Z: Emptied condensate reservoir.
- 4-18 1232Z: Changed outlet filter per 21-day replacement interval.
- Operating normally



Fractal frost and melting crystals.