

ICECAPS Weekly Report

Sept. 5 – 11, 2012

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Interesting weather events:

- 09/06, throughout most of day thick ice crystals near surface w/occasional periods of precipitation. Sky above appeared mostly clear, with some high cirrus. 22-degree halo around sun most of day. ICEPic: columns, bullet rosettes, and bullet rosette fragments.
- 09/08, significant bullet rosette precipitation from 1030 – 1200 UTC (see IcePIC attachment). High thin cirrus dominant, and 22-degree halo. Cleared to blue-sky conditions in afternoon, producing beautiful surface halo on deposited bullet rosette layer.
- 09/11, temps warmed w/SW winds, resulting in heavy precipitation of large stellar dendrites and sector plates, some rimed, 1600-1700 UTC. (See IcePIC attachment)

General Items

- MSF interior temps are getting low (mid 50s F). Air handler appears to not be functioning properly (vents stay open). Contacted Dave Denny, but have not heard back. Morning of 09/10, opened the functioning solar heater, and turned two electric heaters up to 65 F.
- Shoveled roof on 09/10.

Dataman Account:

- Normal (Continued Drive ECC Errors)

PAERI:

- At 09/06 daily check (1330 UTC), LW and SW Responsivity flags were red, and LW and SW HBB NEN were yellow. Brightness temp. plots had dropped off to zero around 1000 UTC. Inspection down the PAERI hatch showed snow partially covering the scene mirror. Waited most of day for sublimation or any change in the snow on the mirror. At 2200 UTC, lightly brushed the snow off with a paintbrush. All flags went back to green.
- Red Flag sometime during night of 09/09-10, Interferometer Second Port Temp. Resolved at 0930 UTC on 09/10 by adjusting J16 plug.
- Removed screen entirely from fan chimney at 1730 UTC on 09/07.
- 09/10, experimented w/replacing just one of the two screens.....slight riming on fan itself when no screens in place.
- Continued HBB Max Temp Diff yellow flag.

MPL:

- Normal

CAPABL:

- 09/08, stopped operation of new software code, rolled back to old version. "feedback not being seeded properly."

MMCR:

- 09/07, TWTA failure after daily cal. Reboot at 1233 UTC. Measurements resumed at 1247 UTC.
- 09/08, TWTA failure after daily cal. Reboot at 1236 UTC. Measurements resumed at 1250 UTC.

MWR:

- Normal.

ASIA-A:

- Break in radiometer communication around 2300 UTC on 09/08. Contacted Pierre. Remote reboot, radiometer back online at 0100 UTC on 09/10.
- 09/10, 1700 UTC, at Pierre's request, shutdown software and computer, rebooted iBootBar, restarted software, resumed measurements.

SODAR:

- Normal.

POSS:

- Normal.

VCEIL:

- Normal.

IceCAM:

- Normal (does this die in the cold?)

IcePIC:

- Photos on 09/06 (bullet rosettes/columns), 09/08 (bullet rosettes/columns), 09/11 (stellar dendrites/sectored plates).
- Doubled over lens cloth is perfect for diffusing light! ...There definitely seems to be something on the objective causing blurry spots.

Radiosonde:

- Dual launch with O3-sonde, 09/07 AM launch.

TSI:

- It is definitely cold now, but TSI still operating well.....discuss.