ICECAPS Weekly Report

December 30, 2013 – January 5, 2014 John Lyons



1/4 aurora, from north end of skiway

General:

• MSF facility operating normally.

Significant Weather Observations:

- 12/30: Winds 158 vrb 0 3kn, -54C, 56%, SKC, surface hoar present, 2-3m thick patchy ground FZFG moving through camp
- 12/31: Winds 125 at 20kn, -46C, 64%, FEW-DRSN, transition to OVC-SN (low layer) at ~1345
- 1/1/14: Winds 180 at 6kn, -33C, 76%, OVC-SN, similar low cloud layer as 12/31 PM
- 1/2: Winds 75 at 7kn, -42C, 67%, SKC
- 1/3: Winds 126 at 14kn, -41C, 67%, BKN-OVC
- 1/4: Winds 153 at 10kn, -35C, 74%, OVC
- 1/5: Winds 154 at 12kn, -41C, 68%, FEW

Dataman Account:

• Operating normally

MWR:

• Operating normally

SODAR:

Operating normally

POSS:

• Operating normally

MMCR:

• 1/1/14 Between 12 – 13Z: Transmitted RF power spiked to 260W briefly, RF power in Health file was out of tolerance for 238 seconds of the hour

CAPABL:

• No longer operating

MPL:

• 12/31: Afterpulse calibration

VCEIL:

• 12/23 1420: Insulation and mylar jacket installed around instrument body

Time	NOAA Ambient Temp	VCeil Outside Temp	Tdiff
Before Insul	-40C	-35C	+5
(12/22)			
12/30 1245	-54C (winds light)	-26C	+28
12/31 1305	-46C (SE winds)	-27C	+19
1/1/14 1315	-33C	-14C*	+19
1/2 1245	-42C (E winds)	-37C	+5
1/3 1305	-41C (SE winds)	-18C	+23
1/4 1440	-35C (SE winds)	-17C	+18
1/5 1345	-41C (SE winds)	-19C	+22

^{*} Inside heater off, blower heater still on

IceCAM:

• Operating normally

PAERI:

- 12/30 1058 1115: PAERI lost data acquisition (blue flags)
- 12/30 1500 1800: PAERI lost data acquisition; manually restarted PC at 1800

Time	Outside Air Temp	Mirror Motor Temp	Tdiff
Before Insul (12/27)	225.5	244.1	+18.6
12/30 1315	220.2	240.4	+20.2
12/31 1312	227.1	246.7	+19.6
1/1/14 1318	240.8	259.2	+18.4
1/2 1250	229.9	251.1	+21.2
1/3 1305	232.5	250.9	+18.4
1/4 1442	238.4	259.3	+20.9
1/5 1350	231.9	250.3	+18.4

ASIA-A:

• 1/5 1330: Communications error requiring reboot of radiometer and PC

TSI:

• Offline for winter

IcePIC:

- 12/31 1430: Very small rime pellets, clumps, columns, needles, few prisms, precip associated with <1km cloud layer that moved over at 1345
- 1/1/14 1330: rime clumps, rimed sectored plates, columns, ill-formed crystals, all generally larger than normal

Radiosonde:

- 1/1 24Z Launched Polarsonde #33
- Twice daily sondes