

SITREP 12, January 24, 2010

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Written at WAIS Divide

This week highlights include, 120 ash and cloudy bands in the last 150m, a slide show by Charlie Bentley, who has been working on Antarctic glaciology for 50 years, a visit by Julie Palais and Alex Isern, and recovery of our 1,000th meter of ice for the season. We will finish drilling on Monday Jan 25th, at 3pm.

I. DRILLING

- A. The drilling this week has been uneventful. The crown sheave was repaired last Sunday, and we have been able to drill 10 runs a day every day this week. The last set of cutters was installed, and on Saturday, Jan 23th, different types of shoes were tested. From Sunday, Jan 17th to 10am on Sunday Jan 24th, we drilled 61 runs, or 201.09m. The current bottom depth is 2531.91m, with a few more drill runs to go.

II. ICE CORE LOGGING

- A. The ice continues to be of excellent quality. Run breaks can be rough, and created 5cm pucks on several occasions. In once instance, there was a diagonal break inside a run, not associated with the run break.

III. CLOUDY / ASH LAYERS

- A. We have had an incredible series of ash layers over the last couple days. The record is 31 layers in one run of 3.3m. Overall this week, we have had 120 layers in the last 150m. Most of these layers are cloudy. They are a few mm thick (1-15mm). Occasionally, we get a yellow or dark ash layer, with visible particles. We have spotted 2 of these, at 2458.619m and 2487.193m. This intense series of cloudy/ash layers is right about where the "old faithful" radar layer is.

IV. PACKING

- A. We have 16 skids of 8 ISC boxes packed in the basement. (A skid is 8 core boxes containing 32 cores, loaded on a wooden packing skid.) We hope to have one more skid ready at the end of the season. The last skid for Safecore went out on Thursday, Jan 21st, escorted by Ken Taylor.

V. ARCH TEMPERATURE

- A. We had issues with the exhaust fan last week. The AC unit tech, Steve Mikel, and the foreman of the arch, Eric Brown, arrived on Tuesday, and took a close look at it. Wednesday, the fan of cooling unit no 3 died. The temperature was around -21C, with 3 out of 4 cooling units working. The most sensitive part of the day is 10am-1pm, when the door is in the sun. We decided to shut down some lights on the ceiling to reduce the heat load of the arch. This, in combination with decreasing temperature outside, allowed us to keep the temperature under -24C at the end of the week. The only instance when the temperature went above -20 was on Jan 19th, at 4pm. It went up to max -18.6C and was above -20C for 1:20hr.

VI. WEATHER

- A. We have had good weather this week: winds from 9 to 13 knots, temperature between -12 and -26C. We can feel that the temperature is starting to decrease.

VII. HEALTH

- A. No significant issues.

VIII. FLIGHTS

- A. We received 2 LC-130 missions and 1 MKB mission. 3 LC130 were canceled: 1 due to McM weather, and 2 due to WSD forecast. Eric Brown arrived and is getting ready for the camp take-down crew who should arrive on Monday, Jan 25th. On Thursday, Ken Taylor, Matthew Kippenhan and Matthew Lazzaro left.

IX. CAMP ACTIVITIES

- A. Matthew Lazzara (O-283) came for 2 days to raise and service the weather station. For the first time, it has been working all summer. You can follow his activities at <http://amrc.ssec.wisc.edu>

X. FUN

- A. On Monday we had a core handler appreciation day with a beautiful chocolate Raspberry cake that Camille Frost made for us, accompanied with fancy blends of coffee. On Wednesday Lou Albershardt gave a talk on the Norwegian-American Scientific Traverse of East Antarctica. On Saturday we celebrated Charlie Bentley's seventh decade on the ice sheet, followed by a talk, related to his first expedition on the Ice in 1956-58.

XI. ICE CORE RETRO

- A. The three new Safecore redundantly refrigerated shipping containers are on the Tern (the cargo ship) in Littleton, New Zealand. One of the units failed on the journey south. The unit is being checked by refer technicians and we are not sure if the problem is in the unit or the ship power supply. We will not use this unit unless the problem is clearly identified and fixed, and the unit operates properly from New Zealand to McMurdo. If we do not use the unit we will only be able to ship back 950 m of core, not the 1,400 m planned.
- B. Ice Core Retro Update: All three units are on the Tern heading from NZ to MCM and working well. The fix was to increase the amperage of the circuits they are on. We will see how they do on the way from NZ to MCM. Just to be sure Matthew is working on getting a refer tech on board for at least the trip from MCM to NZ. As we learn more we will update you accordingly - WAIS Divide SCO.

XII. PERSONNEL MOVEMENT:

- A. Part of the drilling and core handling crew will leave WAIS on Monday, January 25. Ken and Matthew K left on Thursday and are in McMurdo making preparations for next season. Don Voigt is at WAIS Divide making preparations for his role as the Science Coordination Office Representative for the first half of next season.

Note: the WAIS Divide email server has been taken down so there is no more email communication with the camp this year.