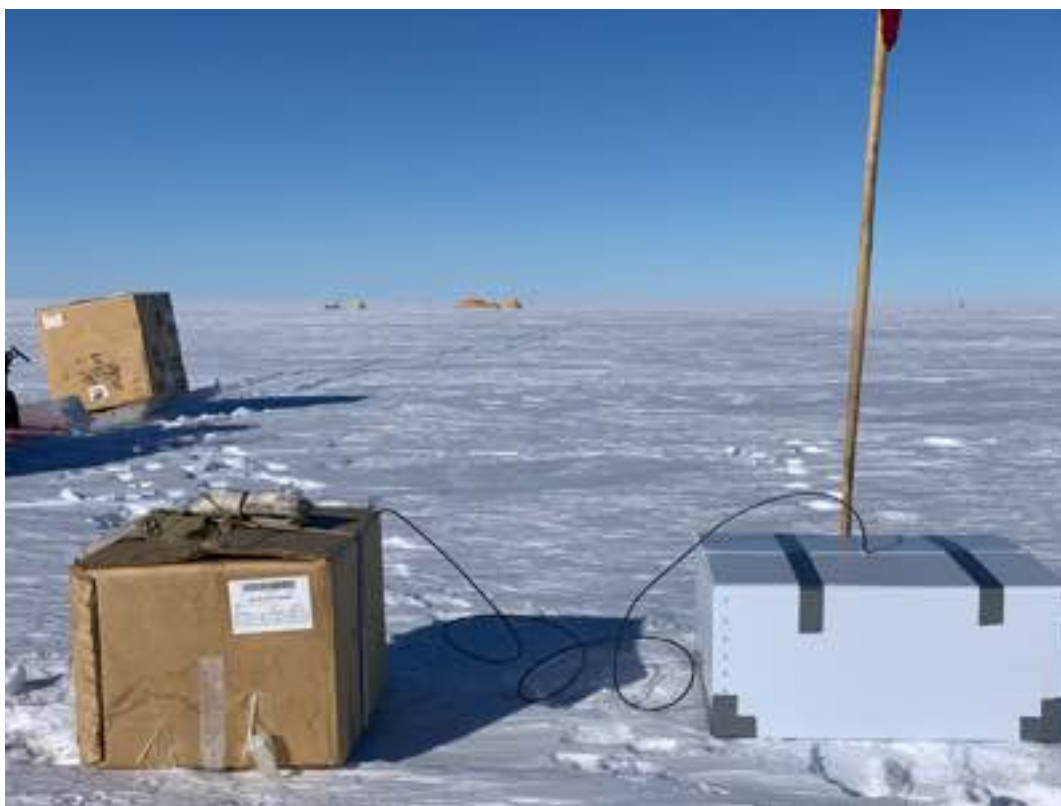


SALSA Field Report: 13 Dec 2018. Compiled by Matt Siegfried.

SALSA Geophysics/SALSA EM, Location: Whillans Subglacial Lake

- Weather at Whillans Subglacial Lake is getting a bit out of hand: we woke up to 25 F and still flags. A thermometer in Kerry's tent indicated it was 82 F in there. We are legitimately into dig-in-a-t-shirt territory. Let's keep this weather system in place as long as possible!
- With great weather again, the three stations we installed yesterday proved to have good enough data from overnight recordings that we could move them all. Our first cross-flow line (5 stations, 10 km) is complete and we are starting in on the second cross-flow line, which will be 7 stations (14 km) long. We have high-quality data from the center station and the grid southwest half is currently deployed and recording.
- We got back to camp after turning three stations early enough to start in on some overdue tasking. We re-deployed Gentoo, the MT equipment set that was giving us anomalously noisy data in the grounding zone, in the late afternoon with a multi day plan to debug the system and identify the underlying issue. After dinner; Kerry and Chloe downloaded the initial few hours of data to begin this process. Matt started a bistatic radar experiment, performing soundings at increasing offsets in an effort to constrain englacial attenuation.



The receiving end of the bistatic radar experiment at a 304 m offset, with camp in the background. Radar electronics (mainly a lightweight software-defined radio) are in the small cardboard box, with the antenna in the white box underneath the drooping flag.