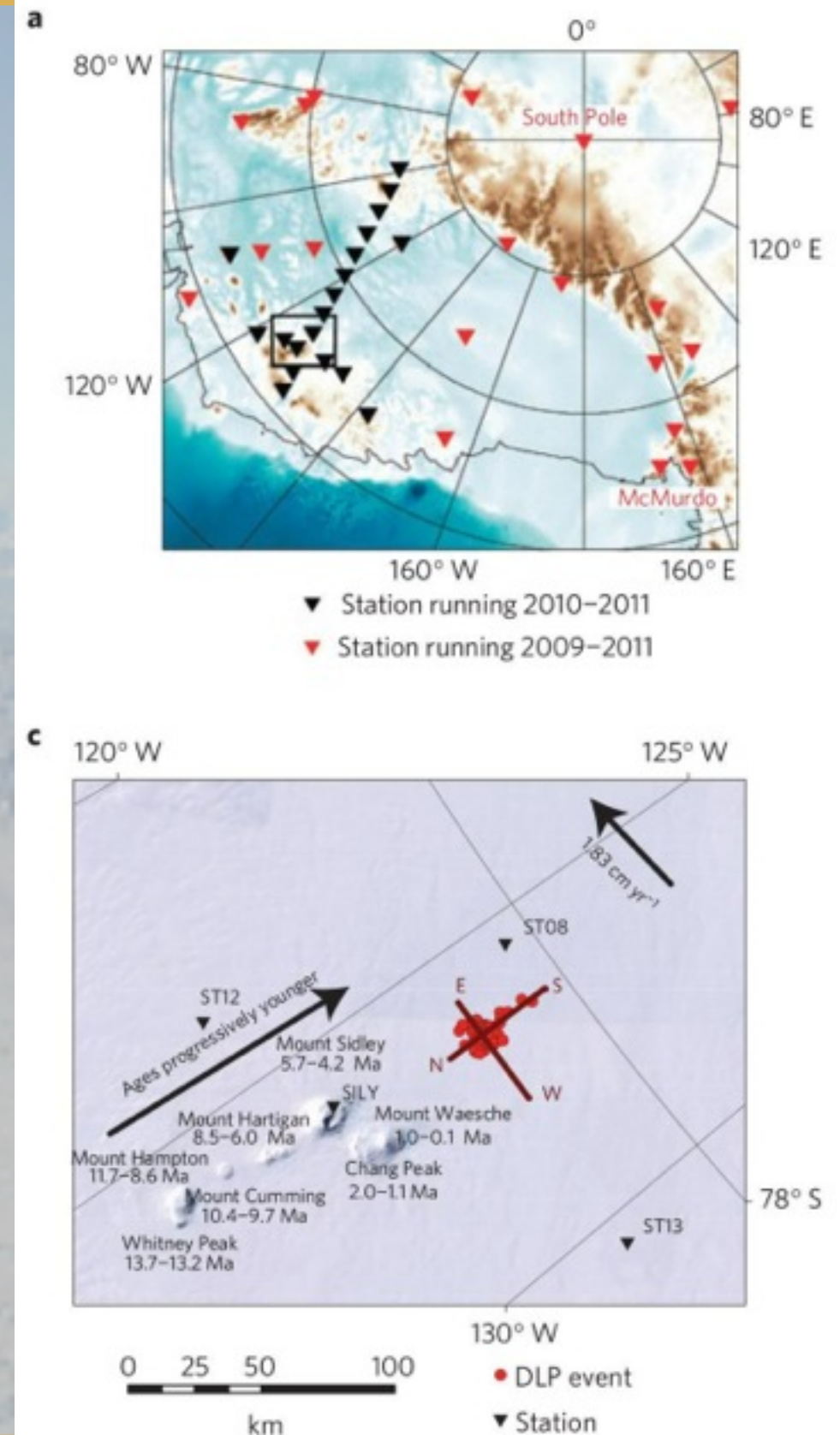


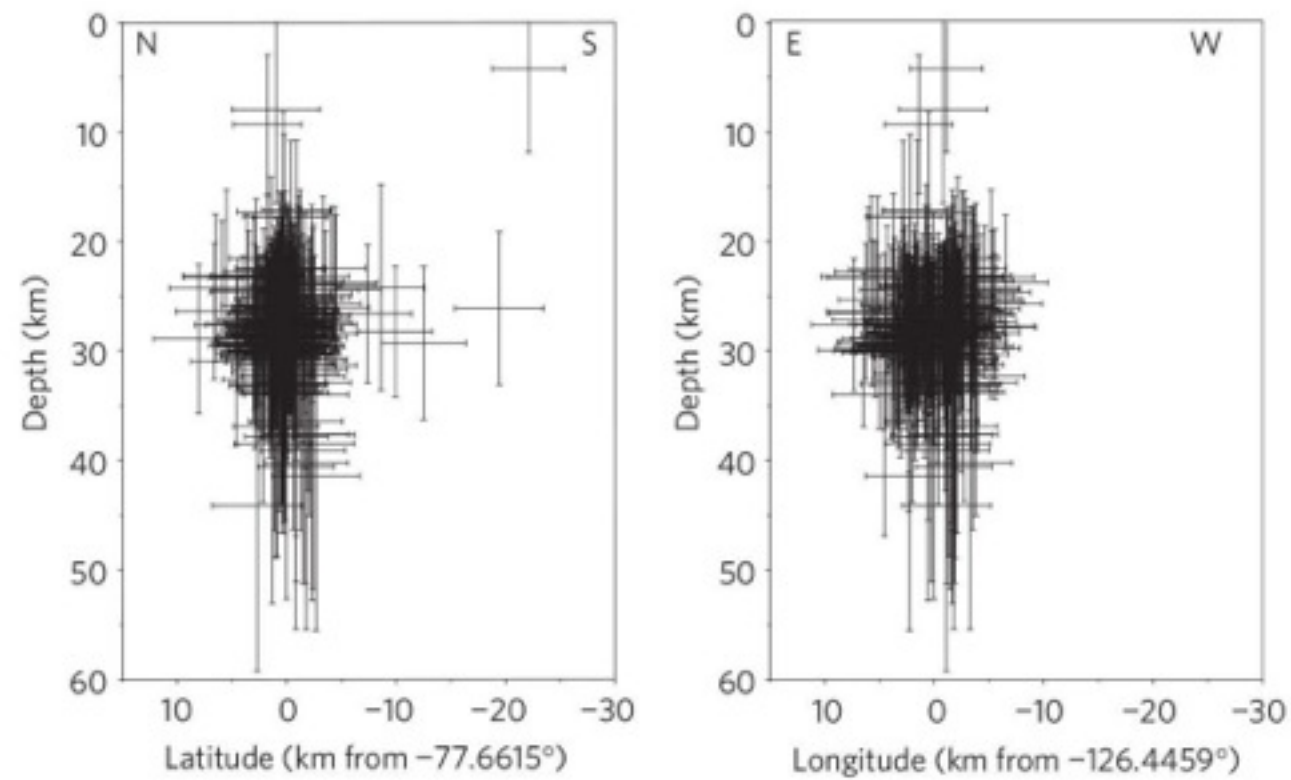
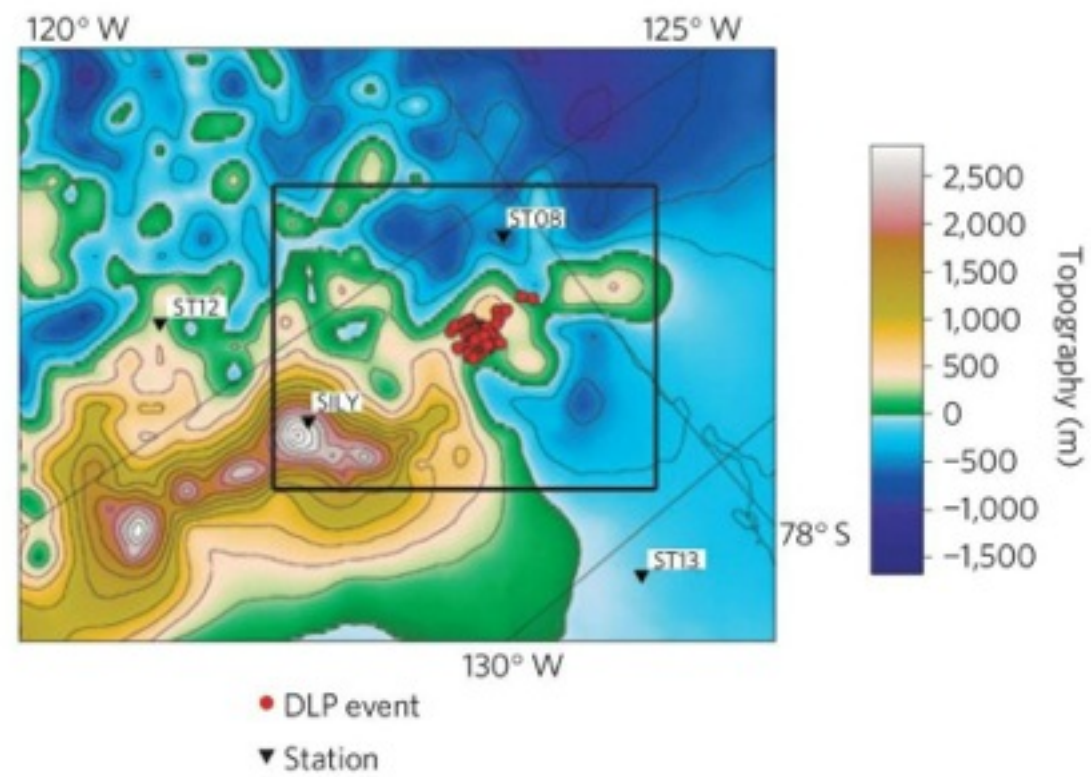
WAIS Active Volcano (VICE vice VOICE)

- Subglacial volcano.
 - indications from distant seismic
 - support from aerogeophysics
 - work done by Amanda Lough at Wash U St Louis
 - (mt. amanda)
- More work needed.

- a**
-
- 0°
80° W
120° W
160° W
160° E
80° E
120° E
South Pole
McMurdo
- ▼ Station running 2010–2011
▼ Station running 2009–2011
- c**
-
- 120° W
125° W
78° S
130° W
- ST12
Ages progressively younger
ST08
1.83 cm yr⁻¹
ST13
- Mount Sidley 5.7–4.2 Ma
Mount Hartigan 8.5–6.0 Ma
Mount Waesche 1.0–0.1 Ma
Mount Hampton 11.7–8.6 Ma
Chang Peak 2.0–1.1 Ma
Mount Cumming 10.4–9.7 Ma
Whitney Peak 13.7–13.2 Ma
SILY
- E
N
S
W
- 0 25 50 100
km
- DLP event
▼ Station

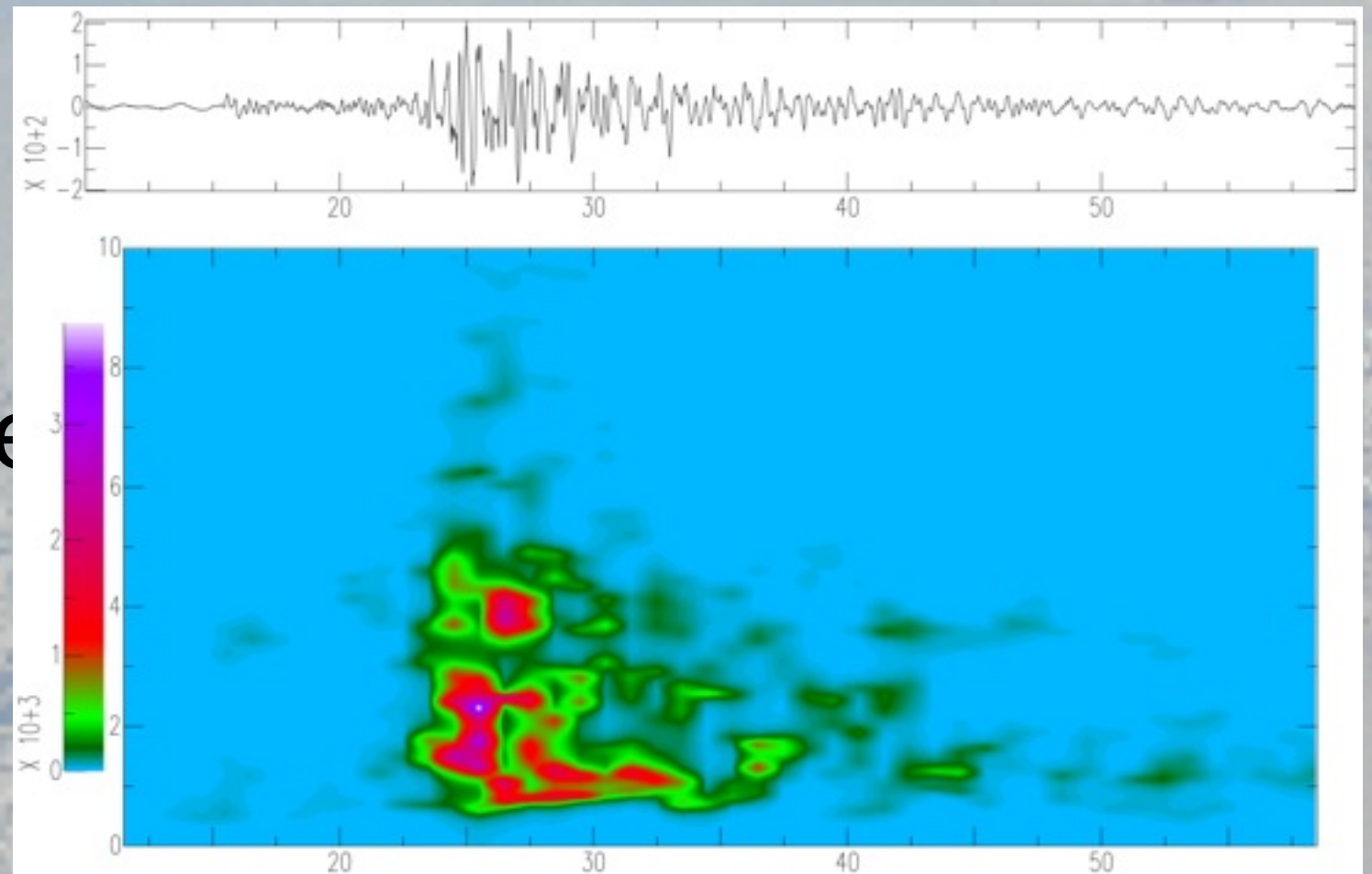
- Seismicity detected
 - Depth determination poor, 20-35 km depth
 - Location accuracy and scatter of 15km
 - Nearest station 60 km
 - Unlikely glacial seismicity



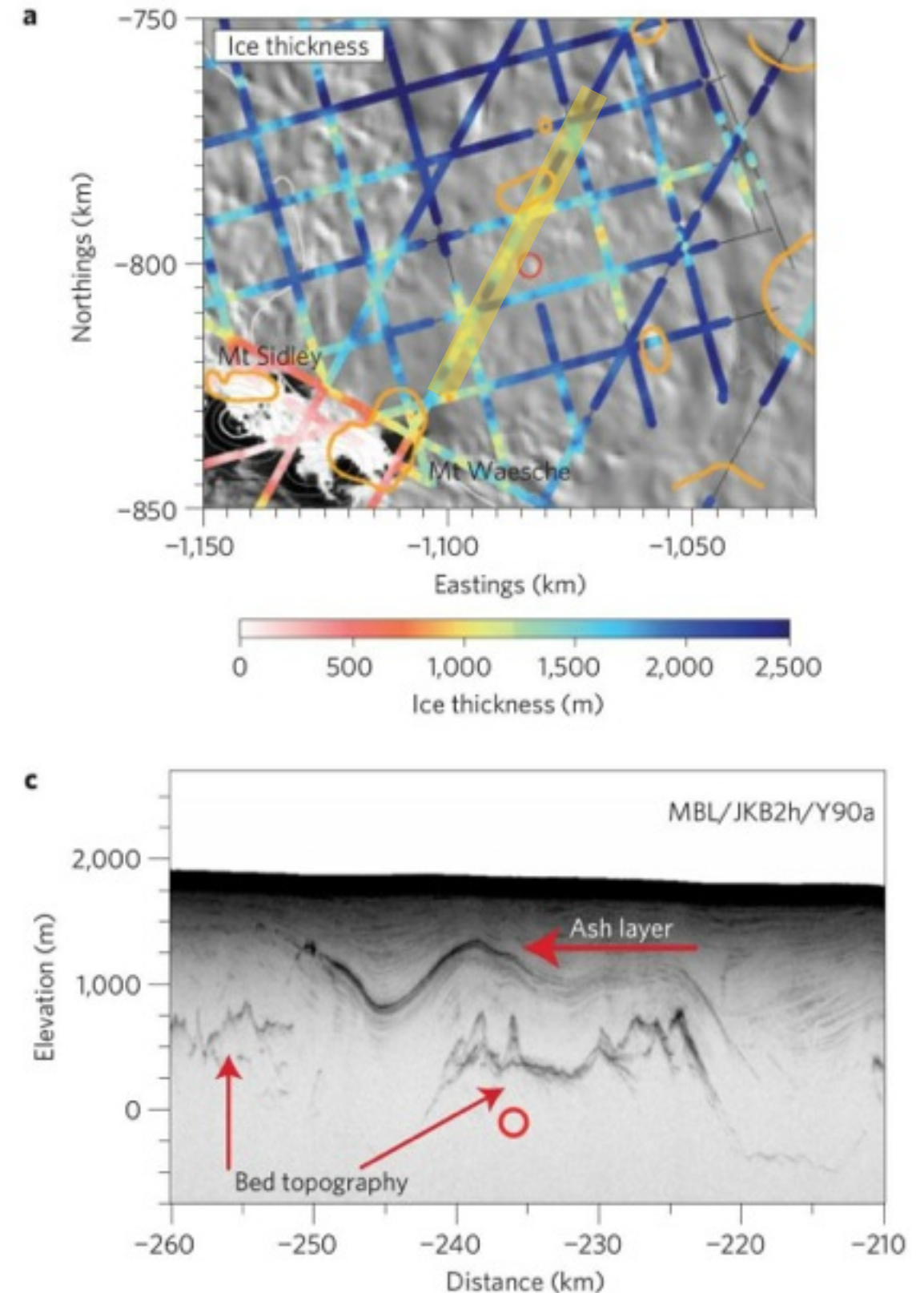


DLP - Deep Long Period

- Lower frequencies than typical of tectonic events of same size
- Fluid movement
- Below brittle/ductile transition

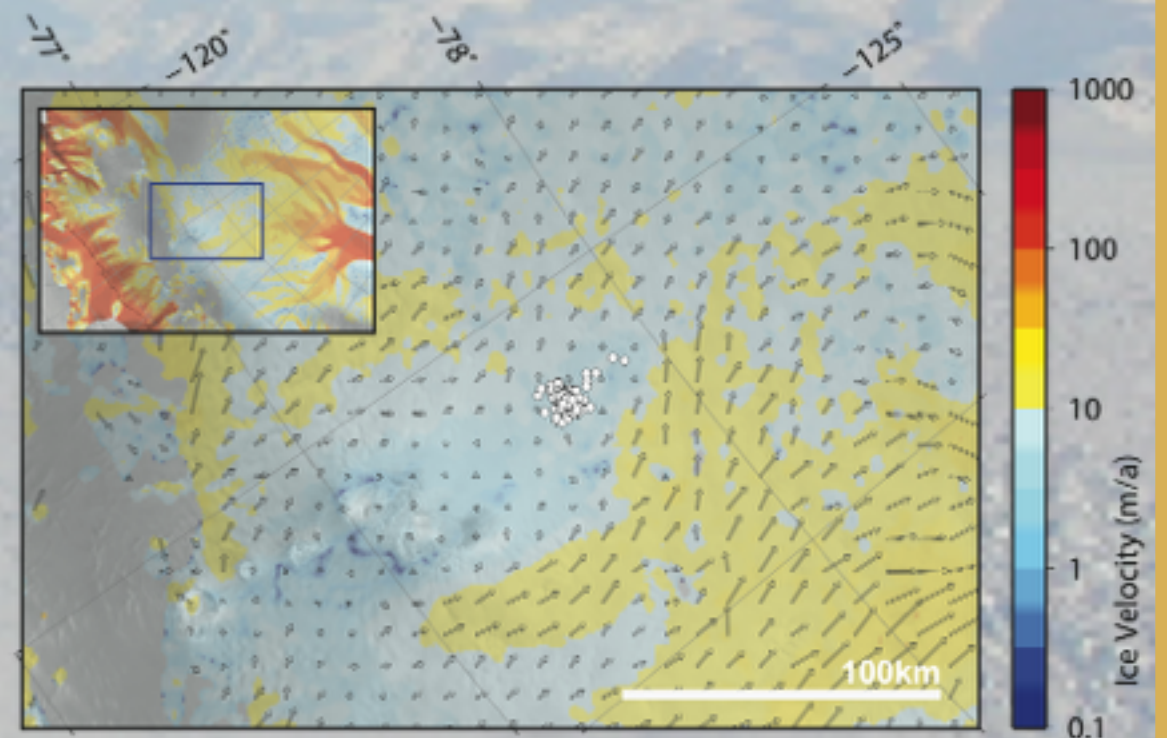


- Radar data from Blankenship (UT)
- Magnetic anomalies present
- Ash layer (recent, Mt. Waesche)
- Topographic high near DLP



Ice properties

- Slow-flowing ice
- Catchment of ice stream E/Siple Coast
- Radar internal layers could indicate melt



Proposed work*

- Amanda Lough, Diana Roman, Doug Wiens, myself.
- Seismic stations
 - Depth, location,
- Radar, Active seismics
 - internals; topography
- * second attempt next year

