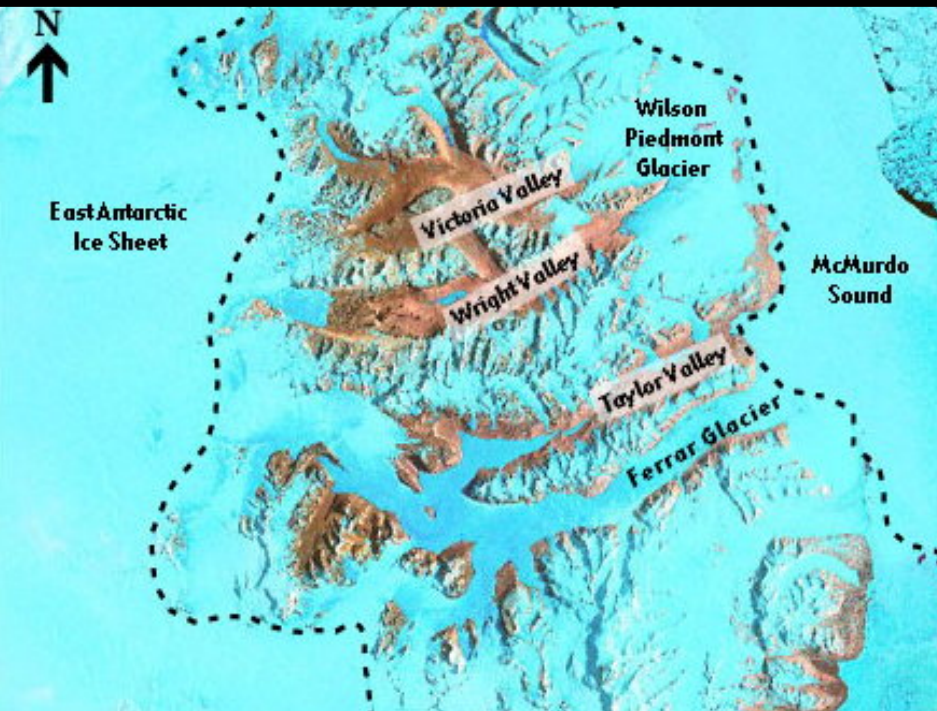


Dry Valleys, Antarctica

77°00' S Latitude
162°52' E Longitude

(31 December 2004 –
3 February 2005)





Christchurch,
New Zealand

Clothing
issue in
Christchurch



C-141 Starlifter Transport to Antarctica



The 5.5 hour
flight to
Antarctica
(not fun)



Landing on the Ice Shelf



Transport to McMurdo Station



McMurdo Station



Mount Erebus



Helicopter ride to the Dry Valleys





Taylor Valley

(Photo courtesy of Mike Prentice;
<http://www.valmap.unh.edu/>)











Lake Hoare Camp



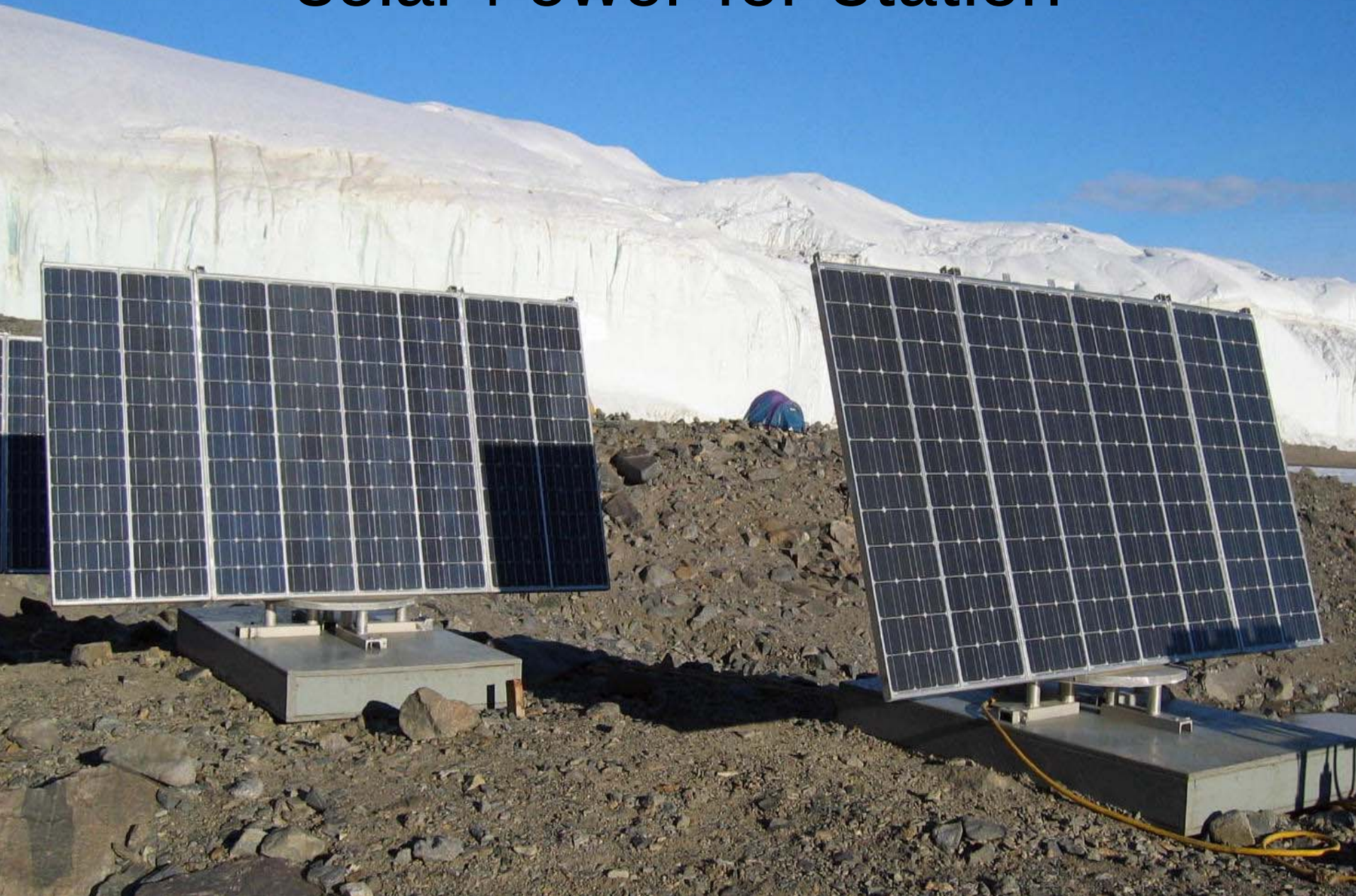




Research Labs



Solar Power for Station



Tents To Sleep In



High-Tech Outhouses



ALL waste is shipped out to the US.





The Team



Andrew Fountain



Glen Liston



Thomas Nylén

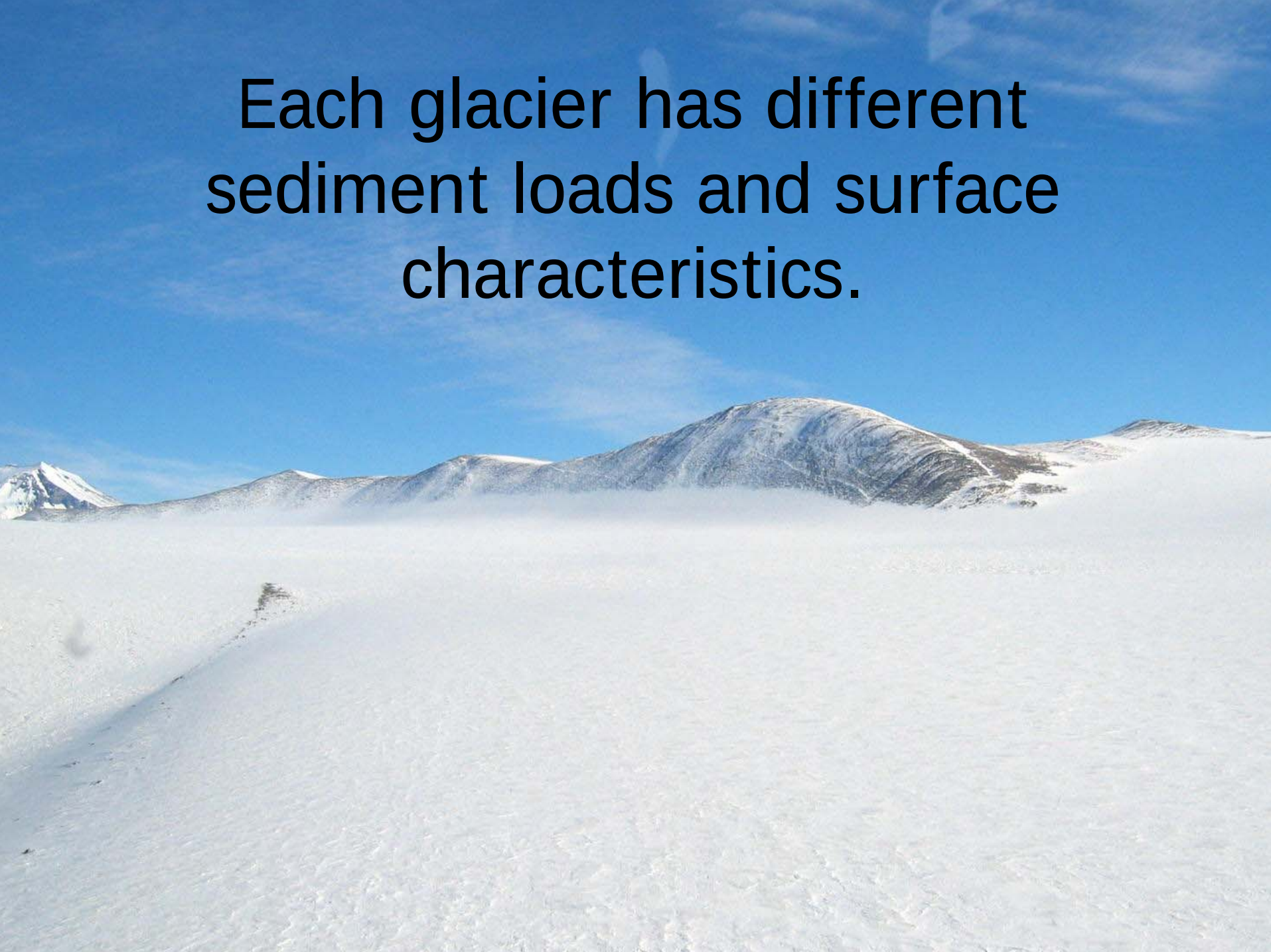


Jon Ebnet

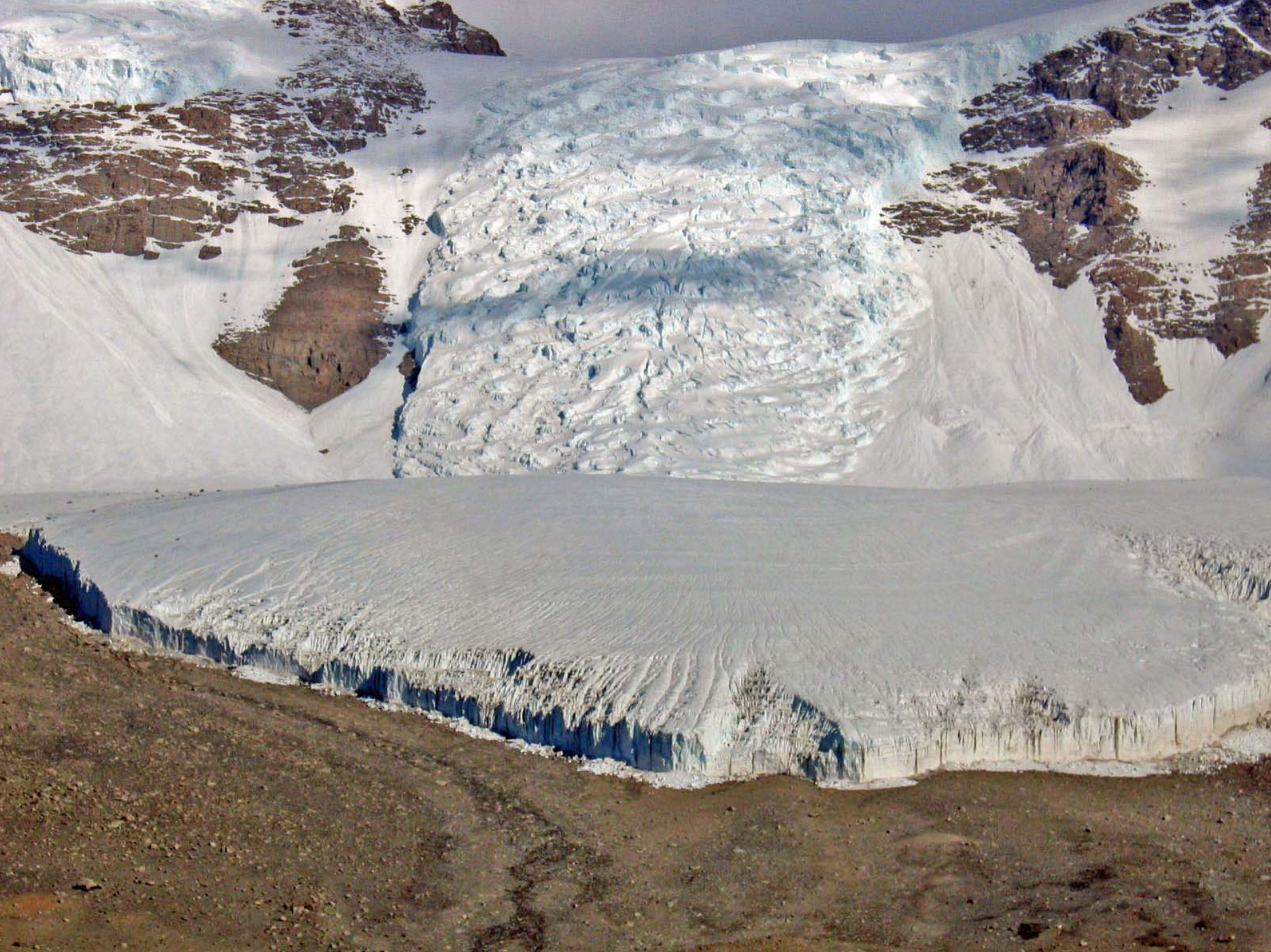


Our goal is to understand how sediment on the glacier influences glacier melt.

Each glacier has different
sediment loads and surface
characteristics.

















Glacier

Ice Bergs

Sea Ice

Lake Ice

Snow







We either flew or
walked to our
research
sites/glaciers.





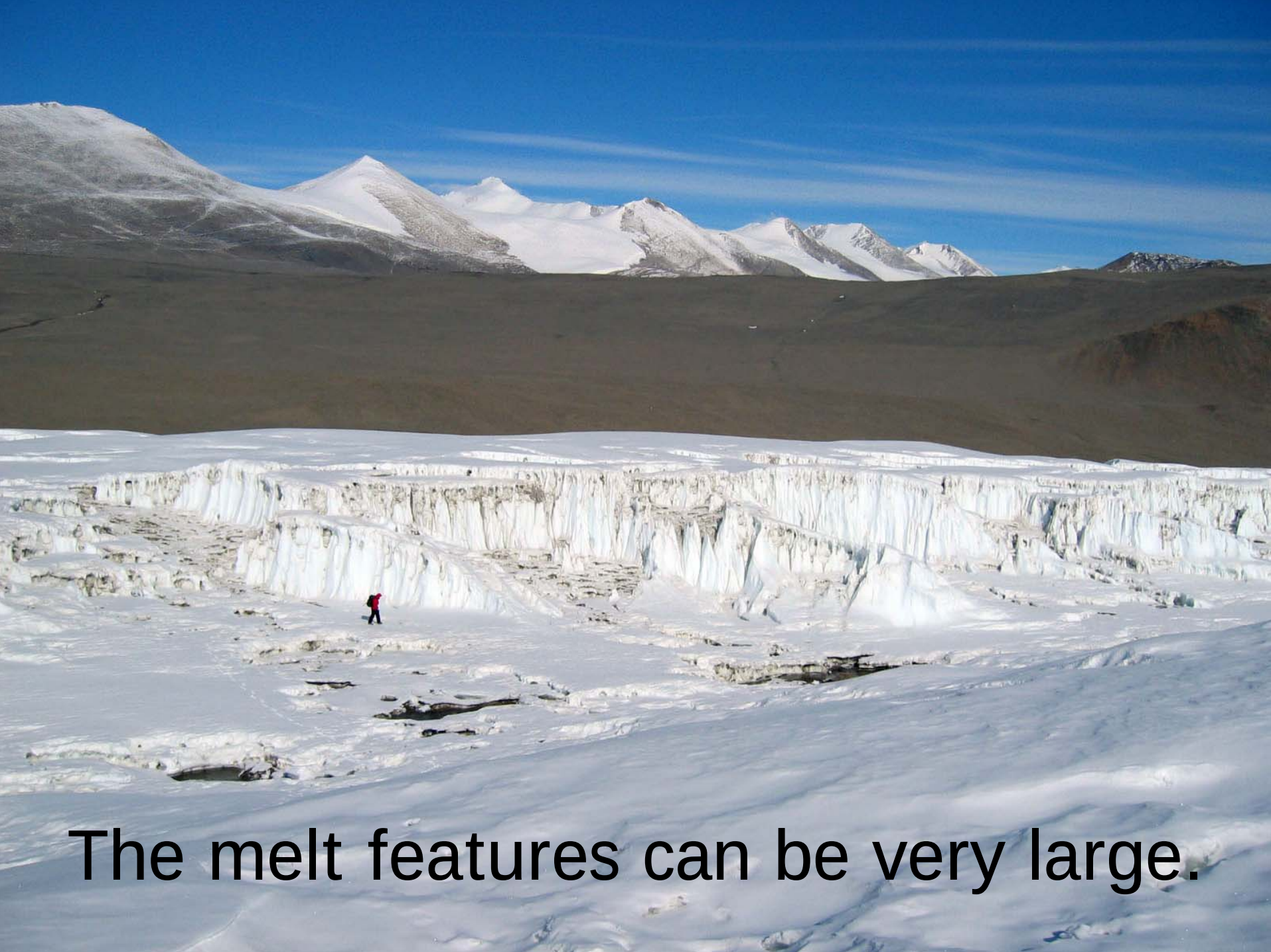


The presence of sediment has a huge influence on melt rates.



Dirt melting
into the ice.





The melt features can be very large.



Melt walls 10 m (30 ft) tall.

The melt finds its way into valley streams.





The stream discharge is measured throughout the Dry Valleys.



The
present
glacier
over-riding
an old
lateral
moraine.

A glacier calving study.



These glacier walls are very impressive.





Helicopter Operations



Mass balance measurements on the Taylor Glacier.



Interesting Geology













More
Helicopter
Operations





Mummified seals, up
to 3500 years old.



Meteorological Station Maintenance







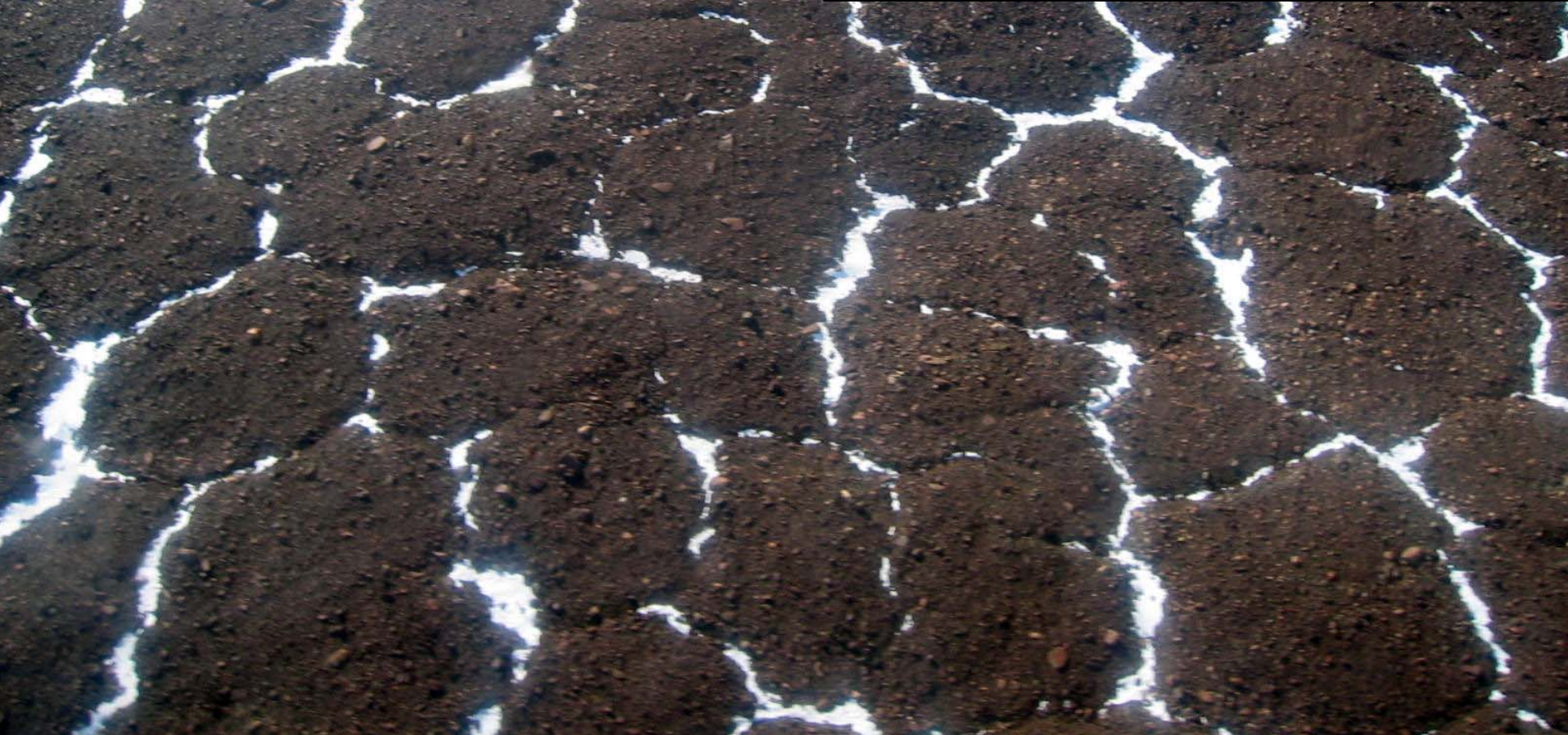


Ventifacts, caused by
abrasion of wind-blown grit.



Permafrost, Ice-Wedge Polygon Study



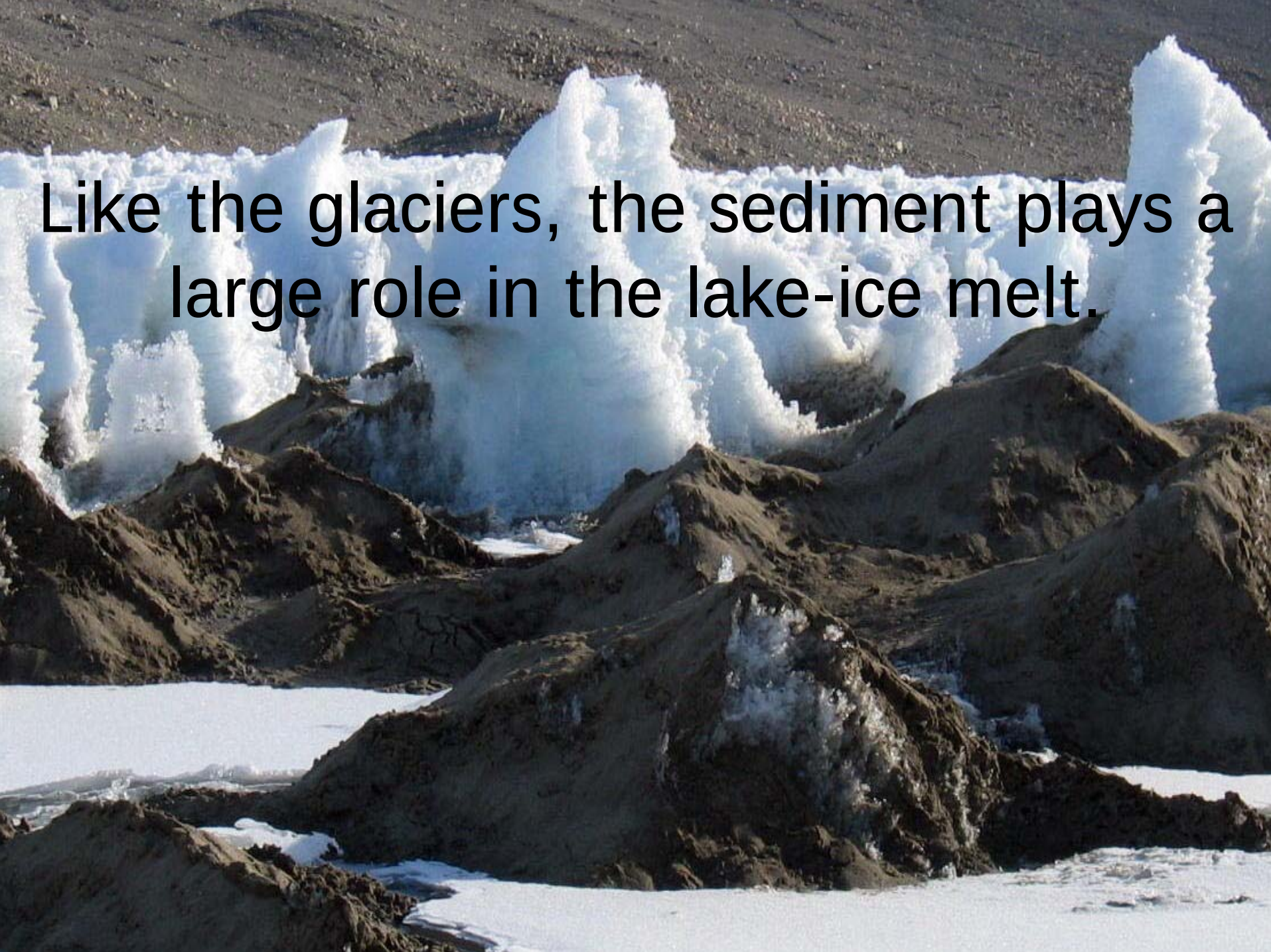


The lakes in the Taylor Valley are generally covered by very dirty ice that is a few meters thick.



A dirty, ice-covered lake, with a
research hut.



A photograph showing a glacier melting. Large, jagged chunks of white ice are visible, some partially submerged in dark, sediment-laden water. The foreground shows a rocky, brownish shore with patches of snow and ice. The background is a dark, rocky slope. The text is overlaid on the upper part of the image.

Like the glaciers, the sediment plays a large role in the lake-ice melt.

A photograph of a rocky shoreline where a thin, translucent layer of ice is forming in the water. The ice has a wavy, rippled texture and is partially submerged, with some rocks visible beneath it. The water is a deep blue, and the shore is composed of various sized rocks and pebbles in shades of grey, brown, and tan. The text "Re-freezing of the lake moat." is overlaid in the upper right corner in a black, sans-serif font.

Re-freezing
of the lake
moat.



A close-up photograph of a metal grate, likely part of a bridge or walkway, heavily encrusted with ice. Numerous long, clear icicles hang from the top and bottom edges of the grate. The background shows a vast, flat expanse of frozen water, possibly a lake, under a bright sky. The overall scene conveys a sense of winter and the process of ice melting.

Lake Ice Melt



Algal mats (under
water), showing
sand underneath,
and oxygen
bubble
production.



Orange-colored algal mats, with ice above that contains bubbles from algal productivity.



Otherwise, a visibly dry, and unvegetated landscape.



The glaciers are truly amazing!



We head back to McMurdo.





CROSS, OBSERVATION HILL
THIS CROSS IS AN HISTORIC MONUMENT
AND PRESERVED IN ACCORDANCE WITH THE
PROVISIONS OF THE ANTARCTIC TREATY.
IT WAS ERECTED IN JANUARY 1913 TO
COMMEMORATE CAPTAIN SCOTT AND HIS
PARTY WHO LOST THEIR LIVES ON THE
RETURN JOURNEY FROM THE SOUTH POLE
IN MARCH 1912





COMMANDER SCOTT'S 'DISCOVERY' HUT, HUT POINT





Time to head back to Christchurch.







Dreaming of vegetation.



The End

