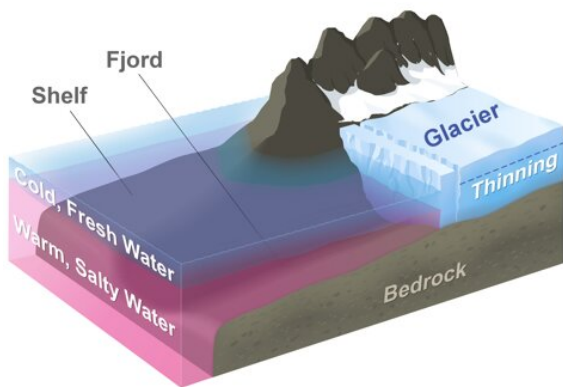




## OMG- Ocean's Melting Greenland

- Over a **five-year campaign**, OMG will observe changing water temperatures on the continental shelf surrounding **Greenland**.
- It will study how marine glaciers react to the presence of warm & salty **Atlantic Water**.
- OMG will pave the way for improved estimates of sea-level rise by addressing the question of to **what extent are the oceans melting Greenland's ice from below**.



- The diagram above represents a typical glacier in Greenland.
  - Below the cold-fresh layer near the surface, a layer of warm & salty water reaches into the **fjords** (a long, narrow, deep inlet of the sea between high cliffs, typically formed by submergence of a glaciated valley) to melt the glacier's edge.
  - OMG will measure the volume and extent of this warm layer each year and relate it to thinning and retreat of the glaciers.
- OMG will use **NASA's G-III** to fly the *Glacier and Ice Surface Topography Interferometer* (GLISTIN-A).
  - GLISTIN-A is a Ka-band single-pass interferometer. It generates high resolution, high precision elevation measurements which can be used for the study of Greenland's coastal glaciers.

[Source: HT](#)