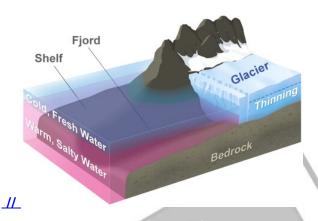


OMG- Ocean's Melting Greenland

- 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

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