

### Auxiliar N°4: Morfologías glaciares

Geomorfología GL3402

Primavera 2020

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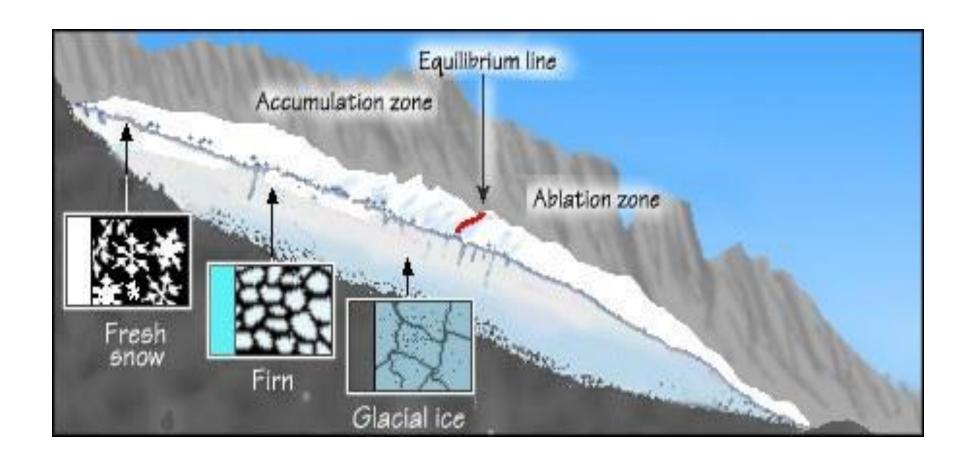
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### Glaciares

• A body of ice that moves downhill under its own mass.

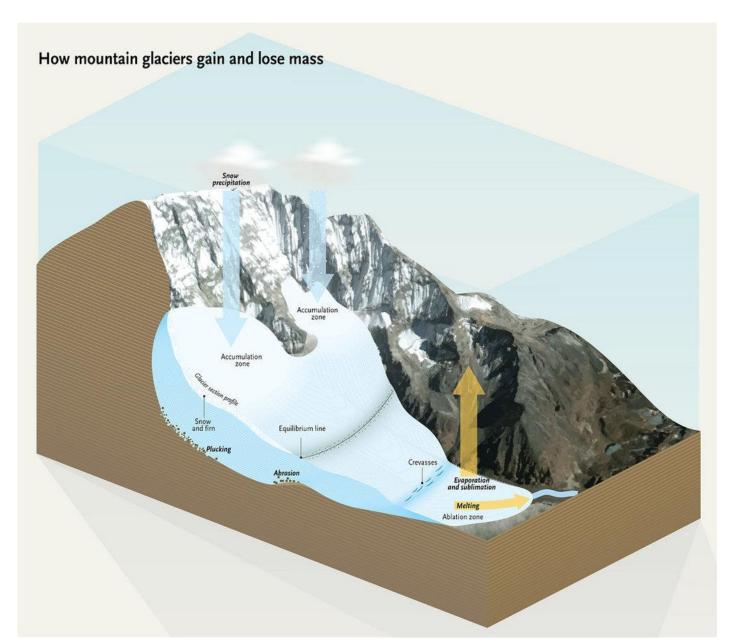


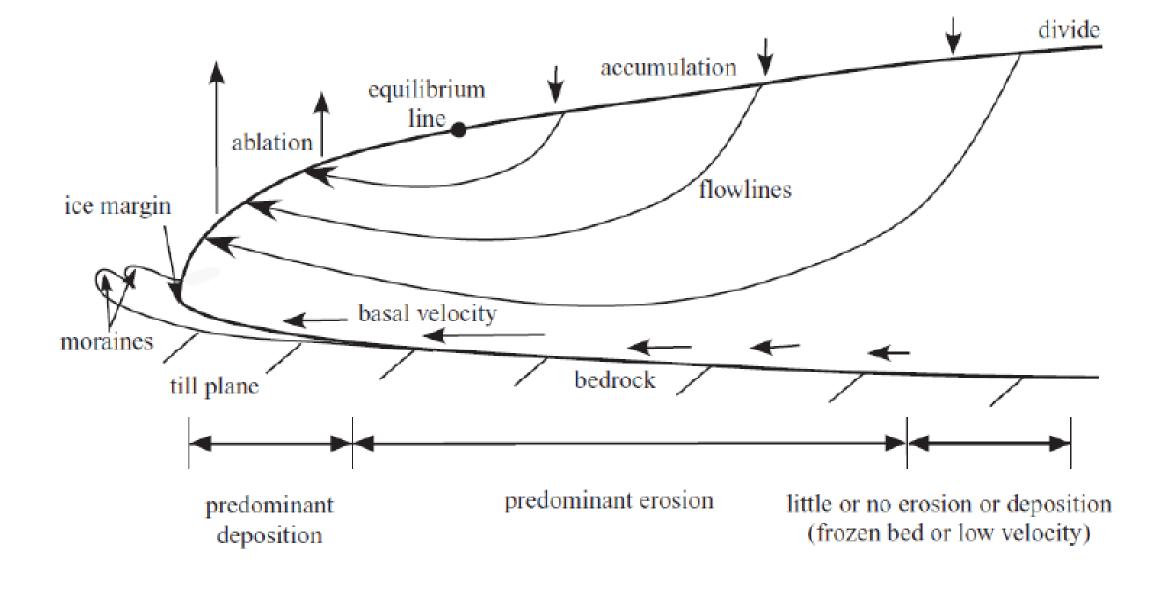
### Proceso de formación



#### Balance de masa

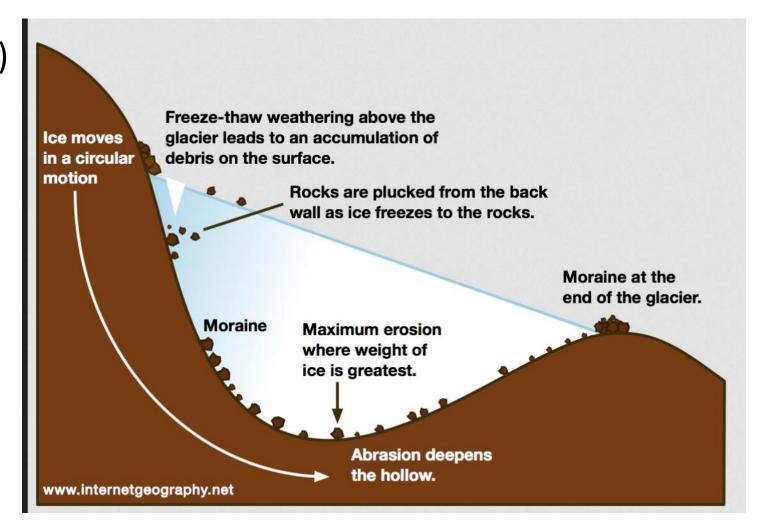
- Acumulación por precipitación
- Evaporización
- Fusión del hielo



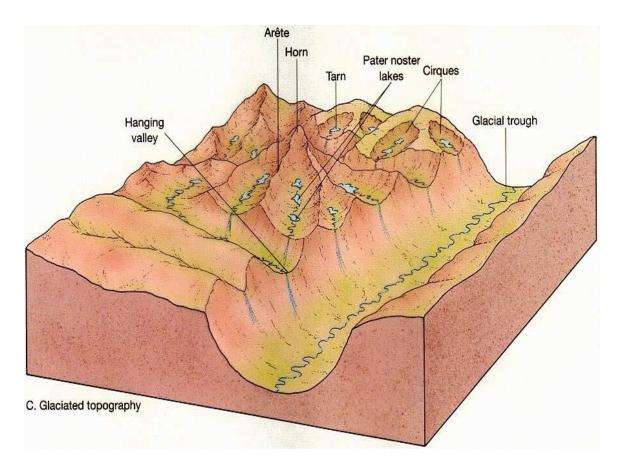


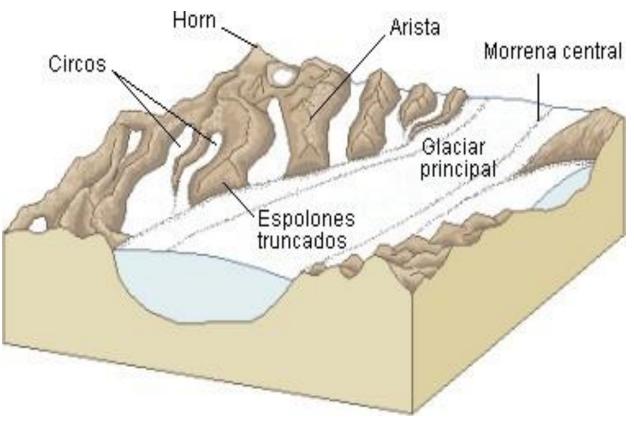
#### Erosión Glacial

- Arranque (plucking)
- Abrasión



## Morfologías Glaciales





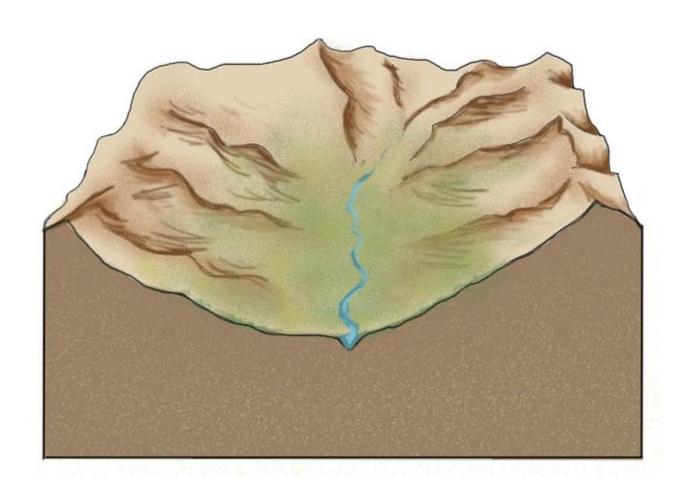
## Valles glaciares







## Formación de un valle glaciar

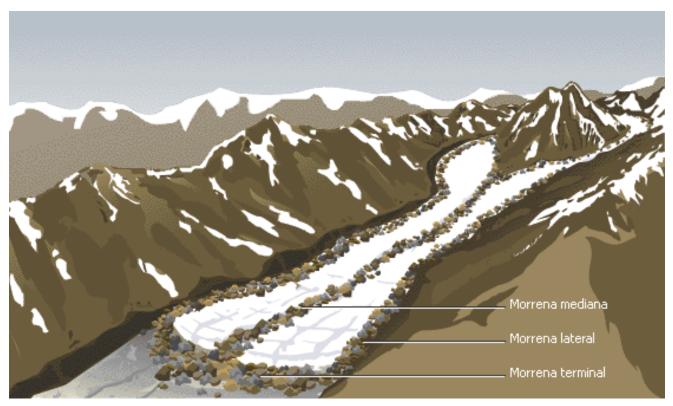


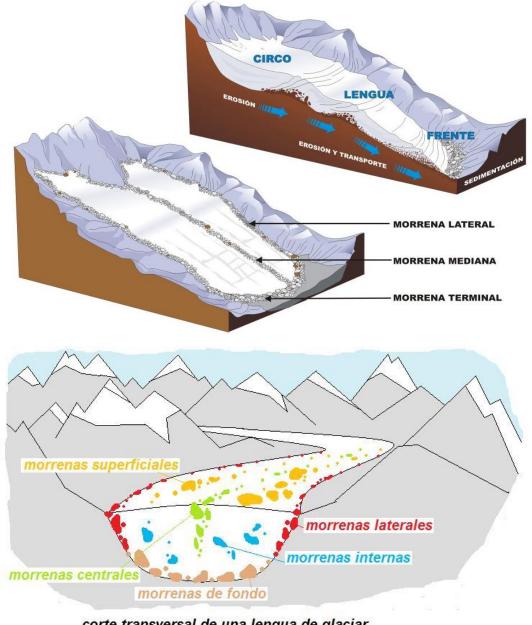
# Ejemplos Valle Glaciar





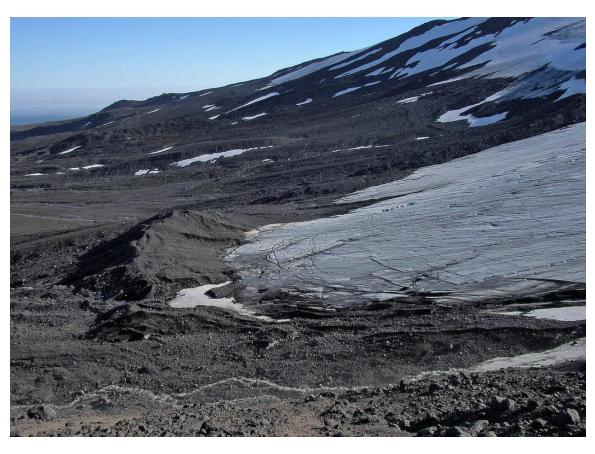
#### Morrenas





corte transversal de una lengua de glaciar

### Morrenas





Morrena Terminal

Morrenas Central y Lateral

## Circos glaciares

Relatively small glaciers which occur at higher elevations in mountainous regions. These
occupy hollows or bowl-shaped depressions on sides of mountains





## Glaciar de piedemonte

 a valley glacier extends down a valley and then covers a gentle slope beyond the mountain range





# Glaciar colgante





**GLACIAR EL MORADO** 

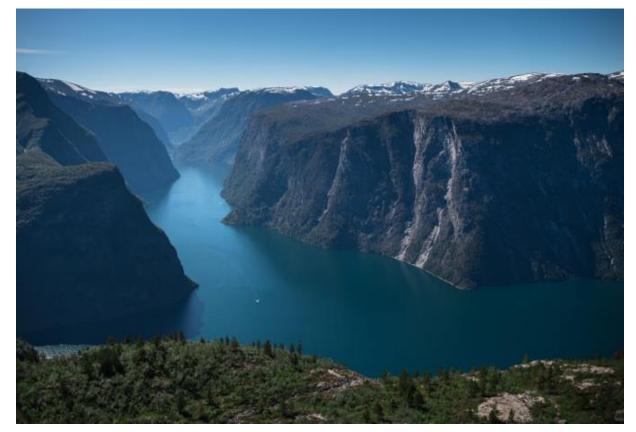
## Glaciar de valle





#### Fiordos

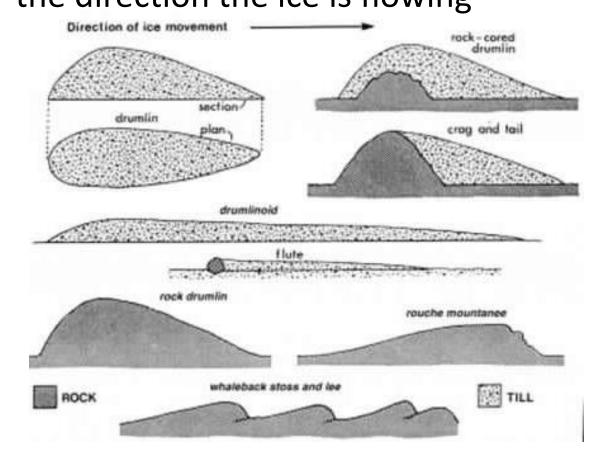
• If a valley glacier extends down to sea level, it may carve a narrow valley into the coastline. These are called *fjord glaciers*, and the narrow valleys they carve and later become filled with seawater after the ice has melted are *fjords*.





#### Drumlins

 elongated asymmetrical drop-shaped hill with its steepest side pointing upstream to the flow of ice and streamlined side (low angle side) pointing in the direction the ice is flowing





## Horn





### Kettle

• large blocks of ice can be left behind to melt within the impermeable till and can create a depression.





## Estrías





## Bloques erráticos

• large sediment (e.g. boulder) carried and then dropped by a glacier.



#### Extras

- https://youtu.be/hC3VTgIPoGU
- https://www.youtube.com/watch?v=ghC-Ut0fW4o
- https://www.youtube.com/watch?v=loI584OFVpE

#### Referencias

- Chapter 10. Glacial and glaciofluvial landscapes. Fundamentals of
- Geomorphology.
- https://www.tulane.edu/~sanelson/eens1110/glaciers.htm

## Actividad!