

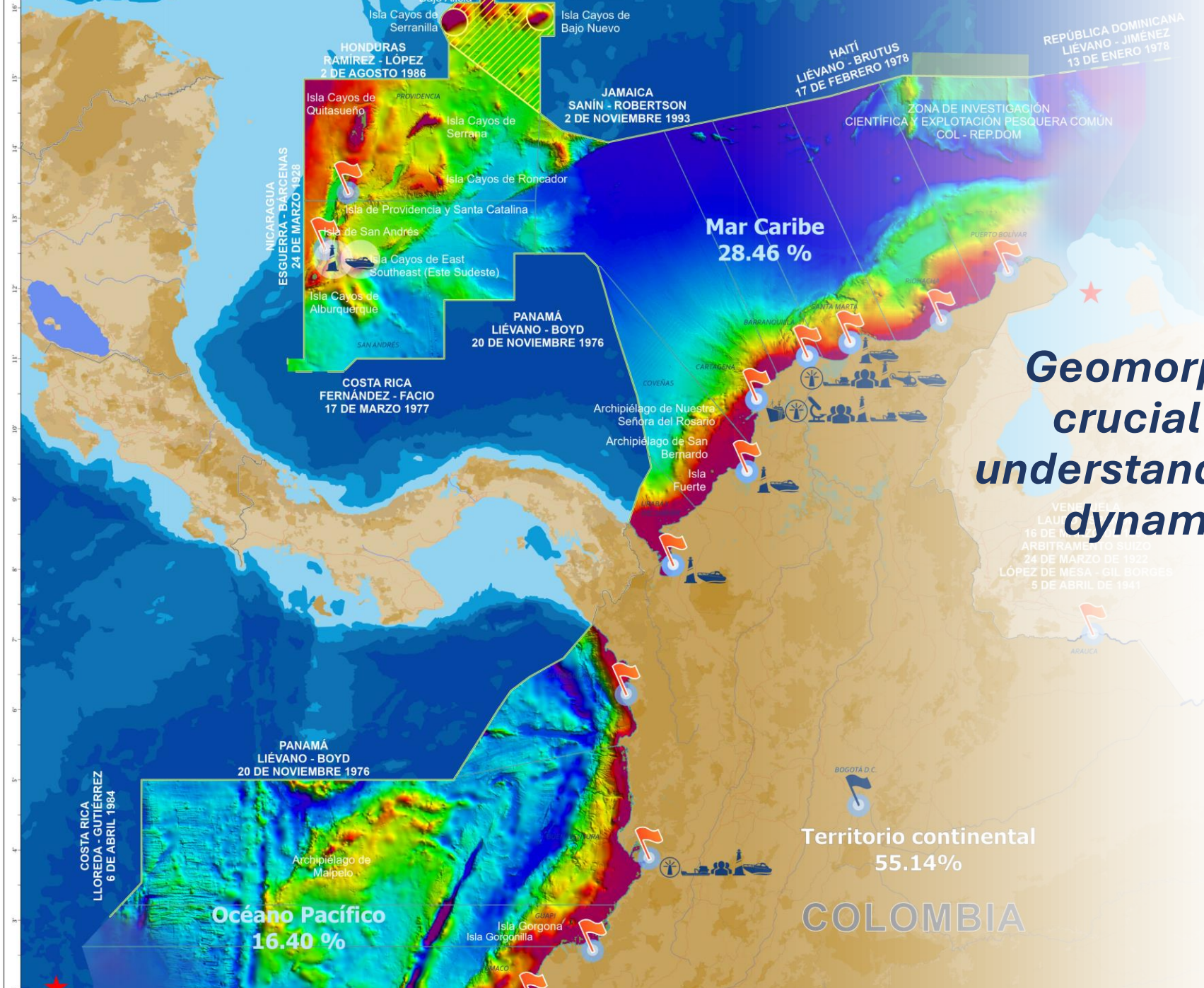
Ministerio de Defensa Nacional



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# *Geomorphological maps: understanding the relief of the Colombian seabed*

Yerinelys Santos-Barrera  
María F. Calderón  
Johanna P. Vargas  
DIMAR-CIOH-SHN, Colombia



**Geomorphological maps play a crucial role in deepening our understanding of the geography and dynamics of the Colombian seafloor**



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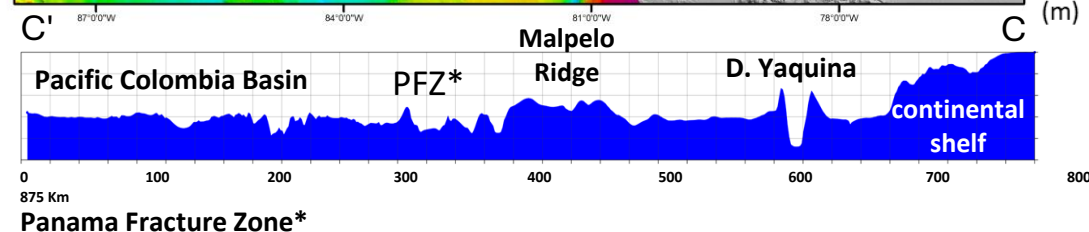
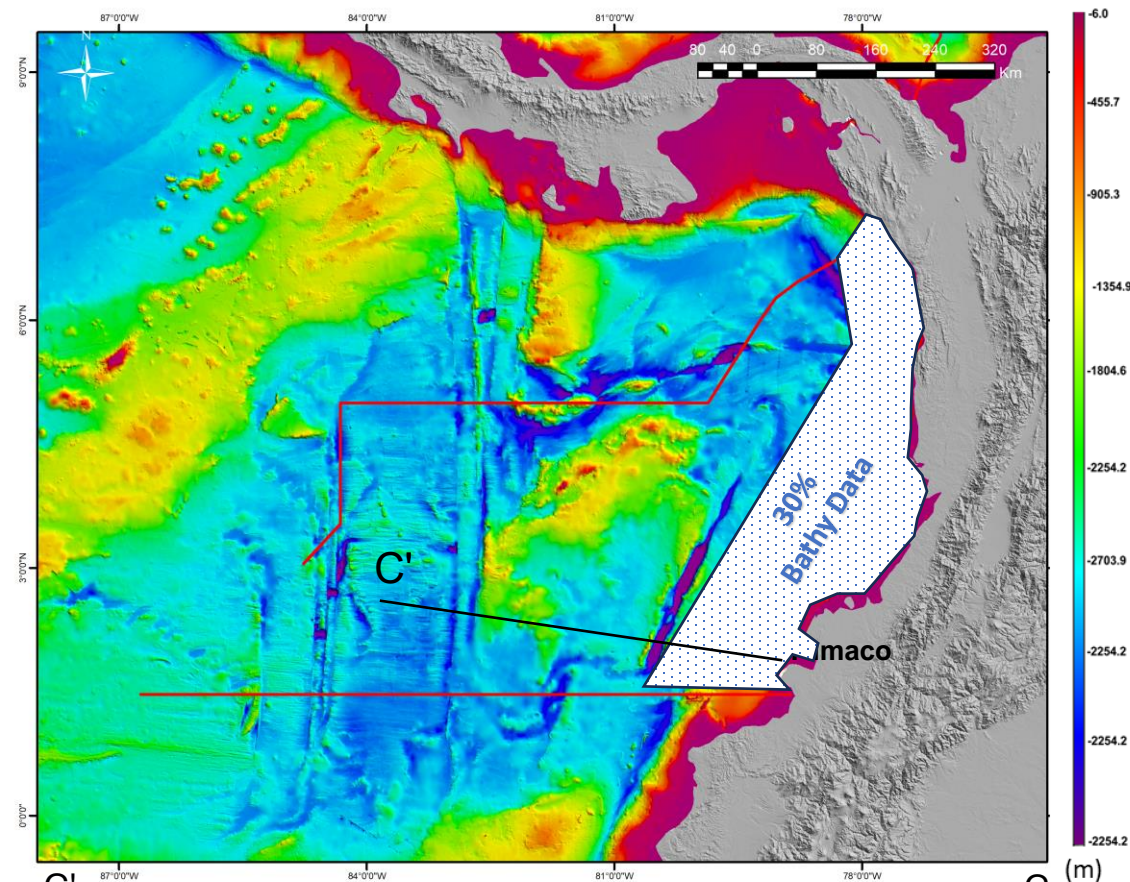
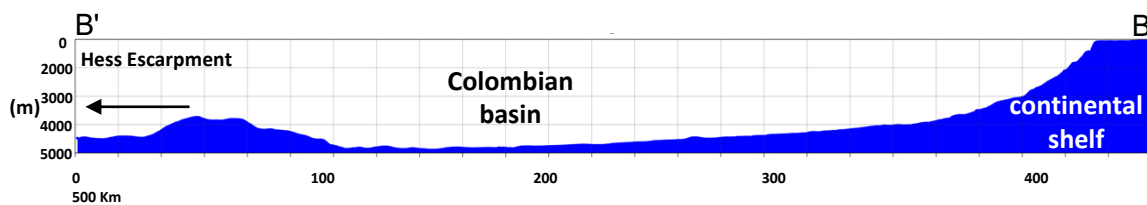
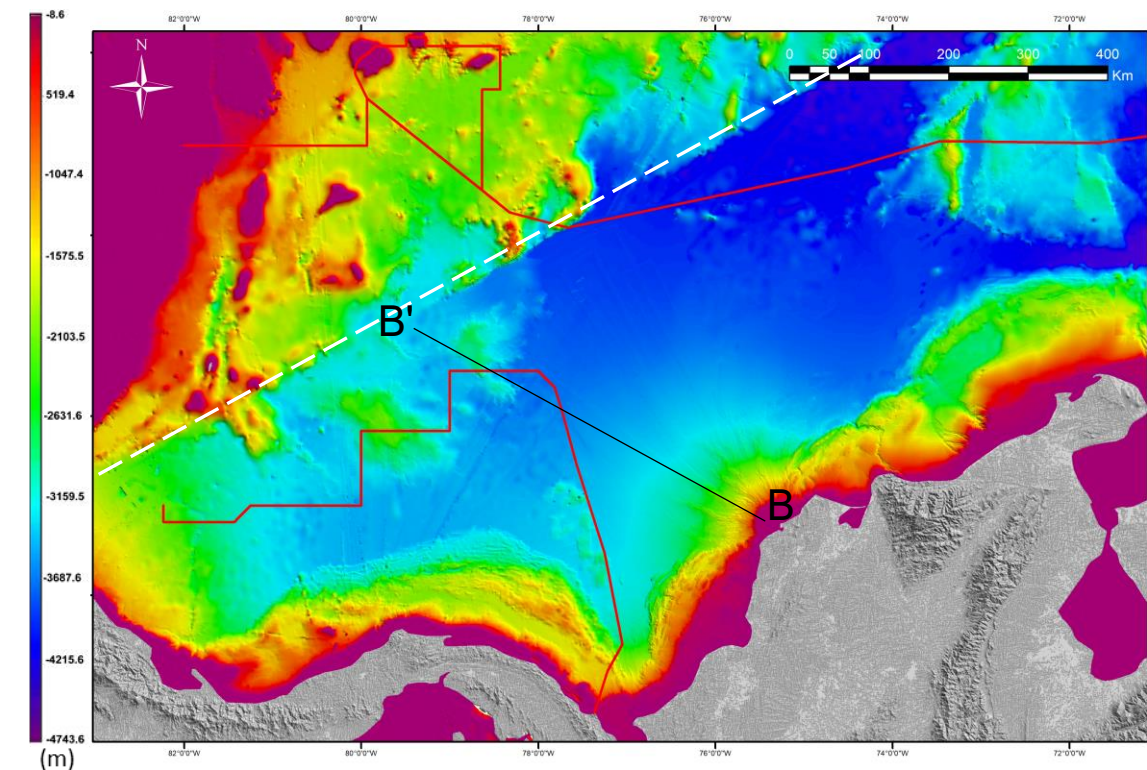




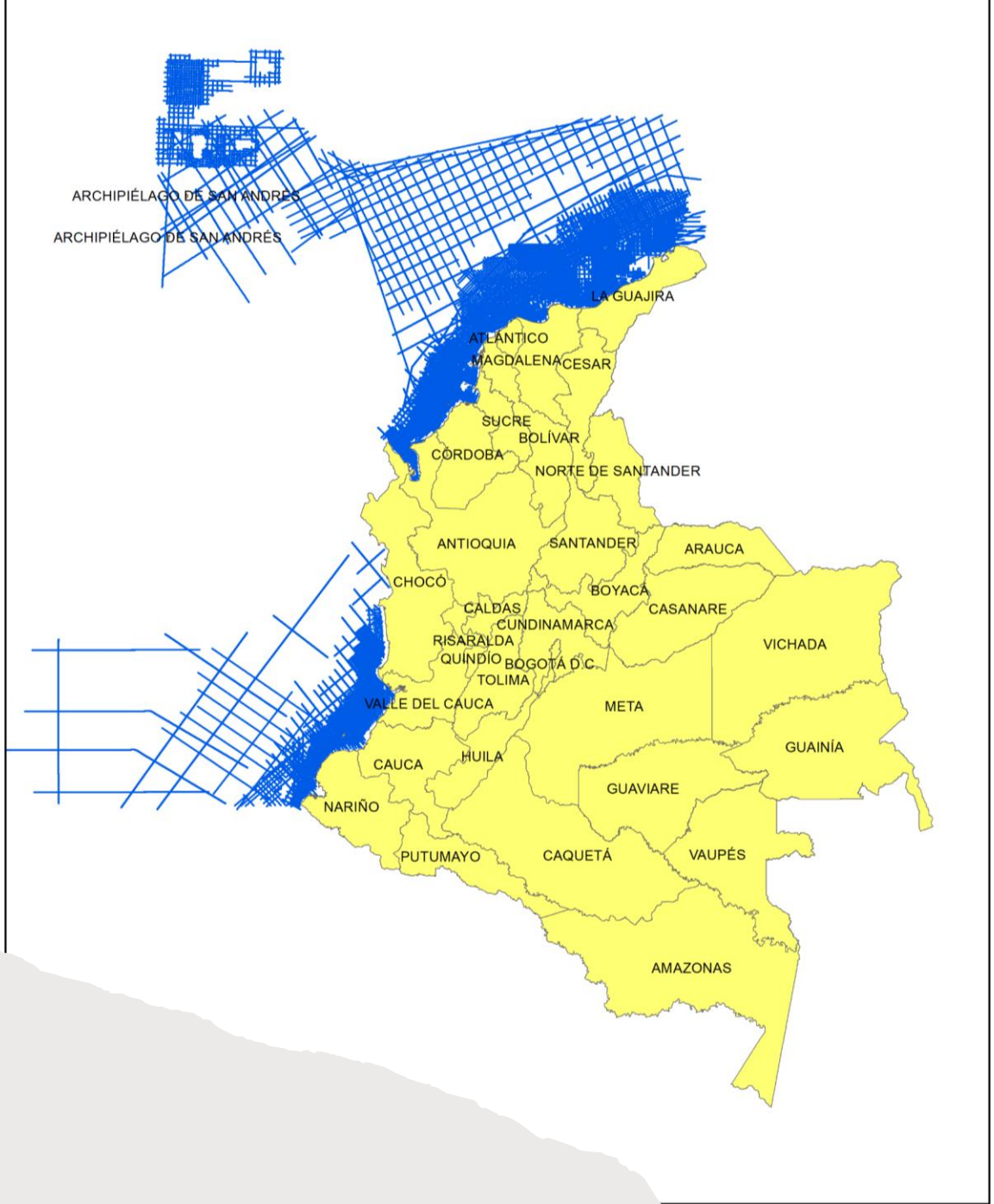
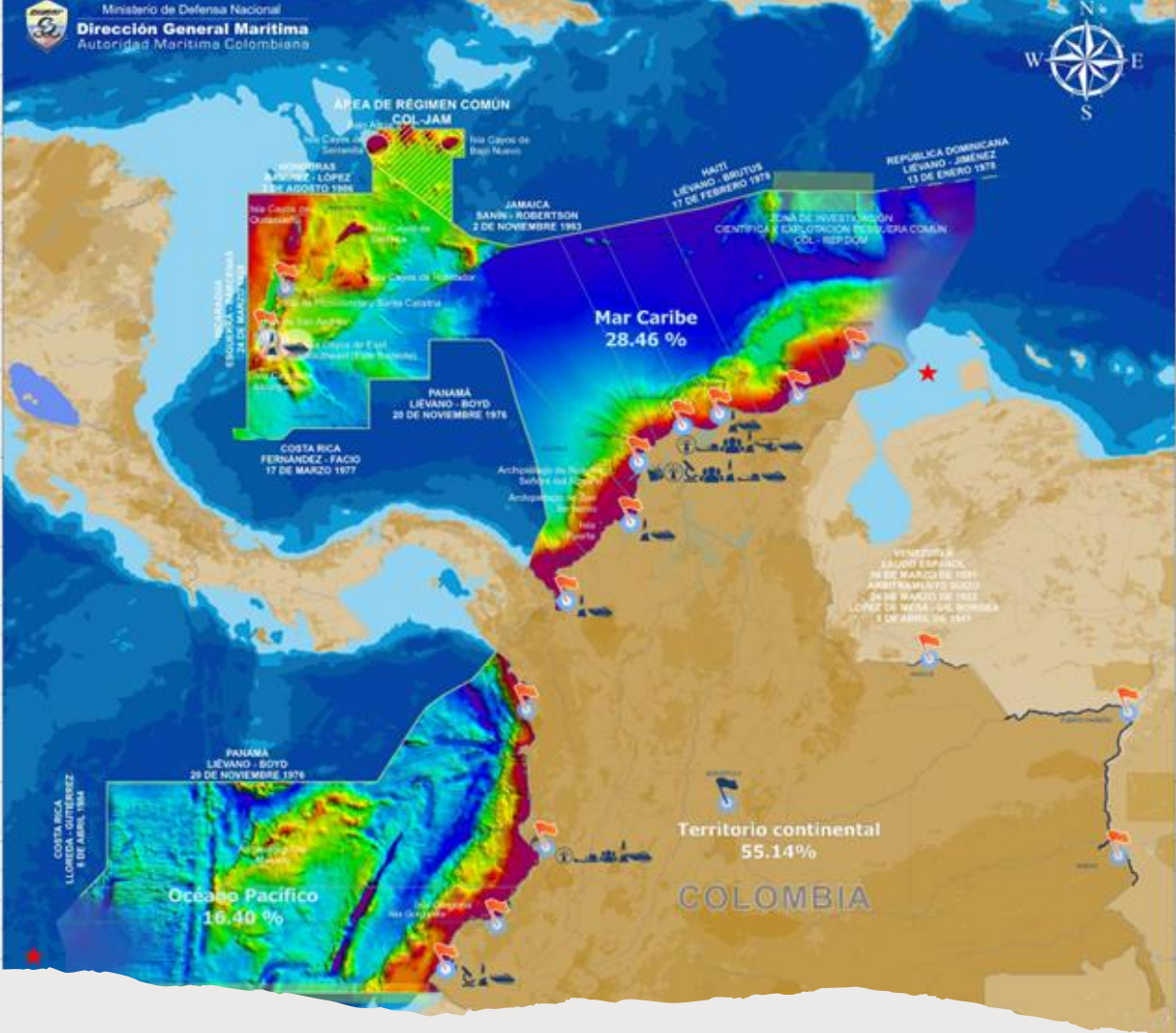
# Bathymetric models of the Caribbean and Pacific, Colombia



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The images contain GEBCO bathymetric data (2023)



2D Seismic: Complete coverage of the maritime territory. From SGC.







# Geomorphological Map

# DATA AND PROCESSING TOOLS



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Application of the GUCS\*

GIS TOOLS

Bathymetric chart 1:250 000

3D model of the Colombian Seabed

Multibeam bathymetric data (from 50 m)  
Singlebeam bathymetric data (less than 50 m)

Processed seismic reflection and refraction data  
From Colombian Geological Service (SGC)

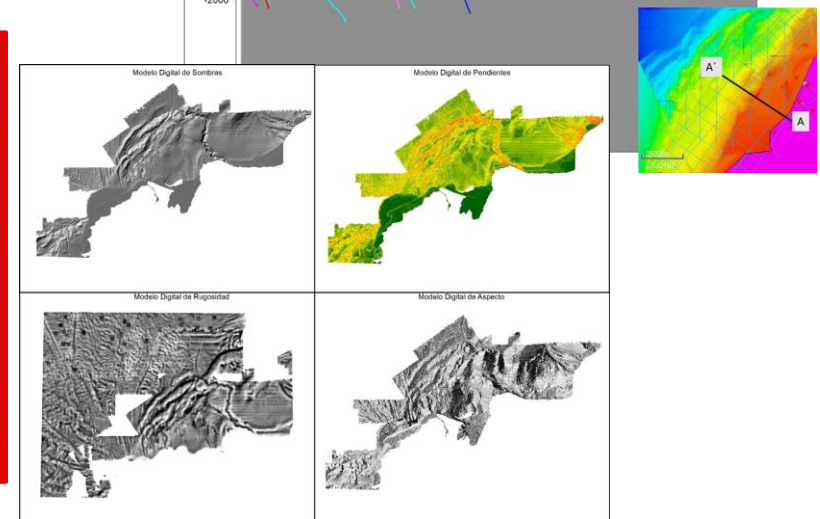
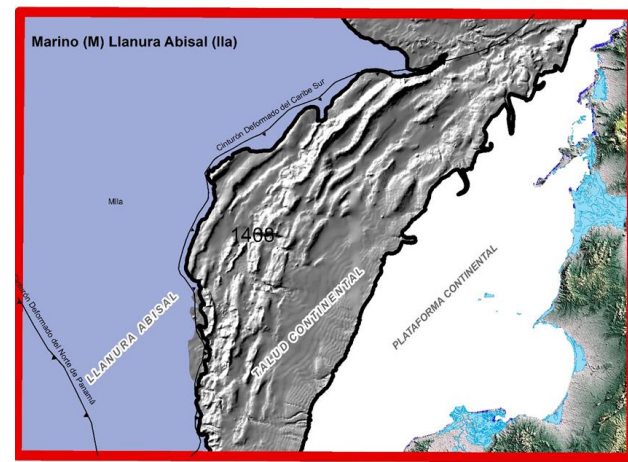
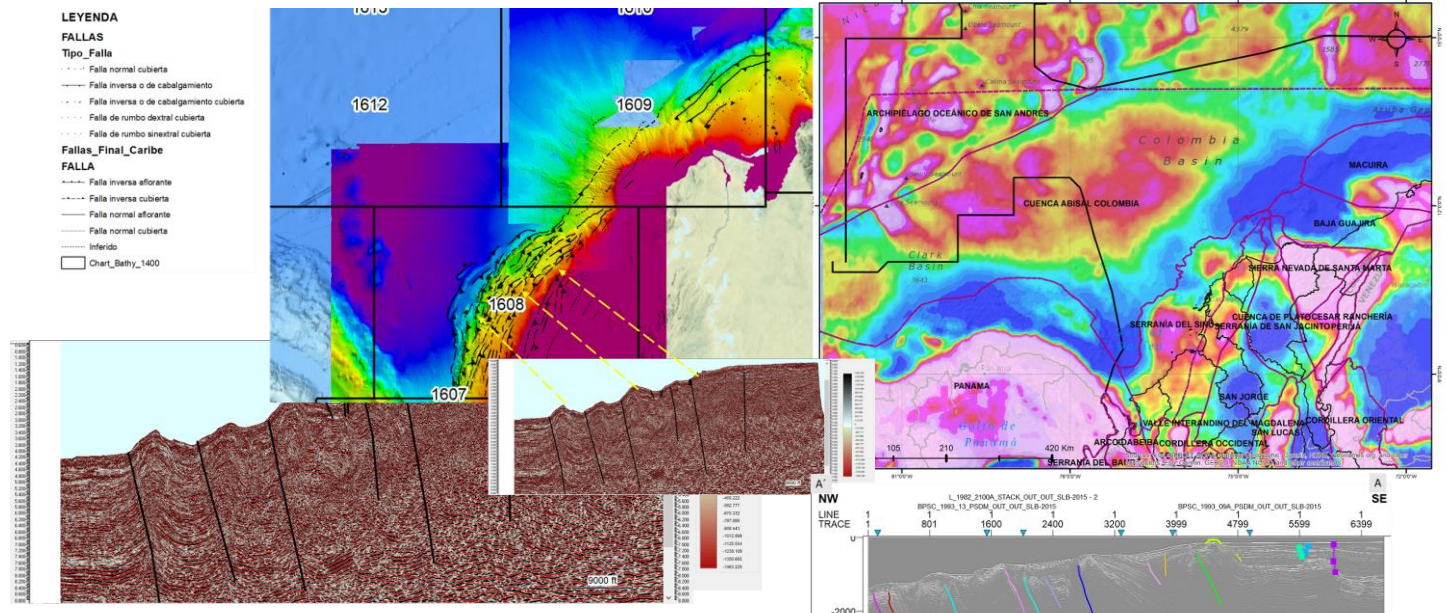
Regional Tectonic Processes  
Morpho-Structures  
Geological Provinces

Public satellite data  
Global Marine Gravity  
GEOmagnetic data

Normal Fault  
Thrust fault  
Deformation process of the Earth's crust

Panama Arc  
Guajira Falcón  
Malpelo Ridge  
Tumaco  
...and others

- LEYENDA
- FALLAS
- Tipo\_Falla
  - Falla normal cubierta
  - Falla inversa o de cabalgamiento
  - Falla inversa cubierta
  - Falla de rumbo dextral cubierta
  - Falla de rumbo sinistral cubierta
- Fallas\_Final\_Caribe
- FALLA
- Falla inversa aflorante
  - Falla inversa cubierta
  - Falla normal aflorante
  - Falla normal cubierta
  - Inferido
- Chart\_Bathy\_1400



Geomorphological Units Classification Standard\*

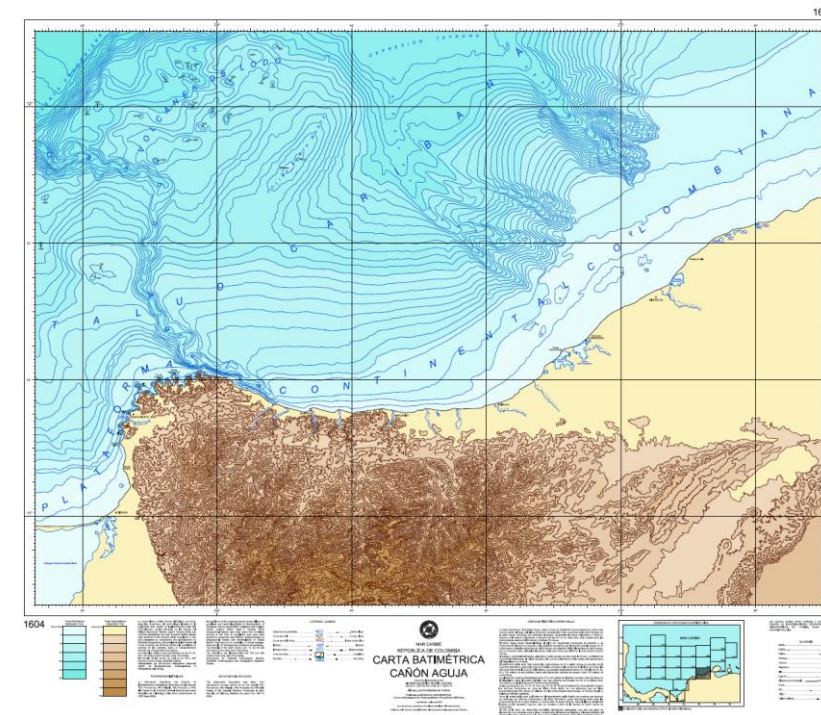
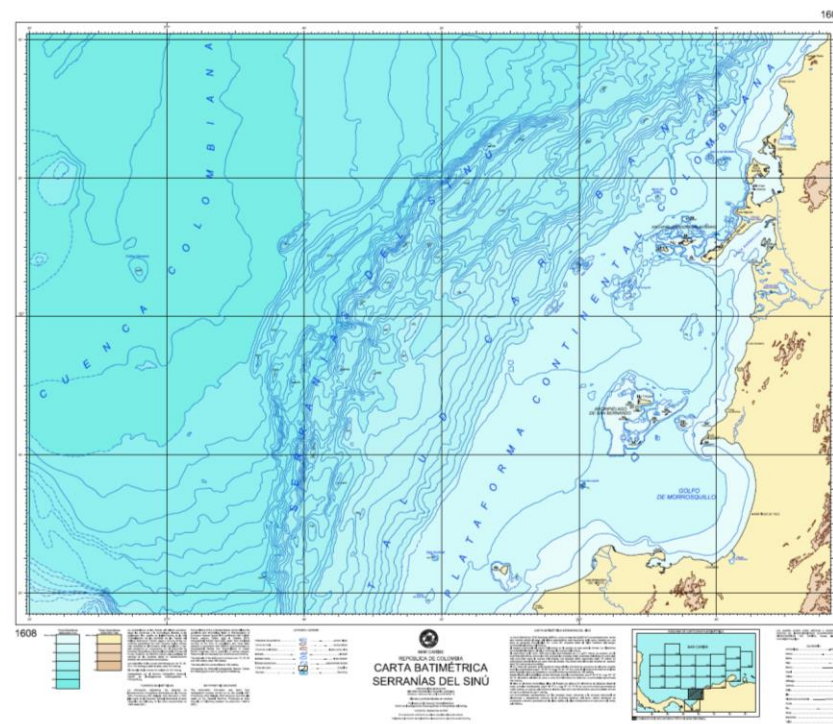
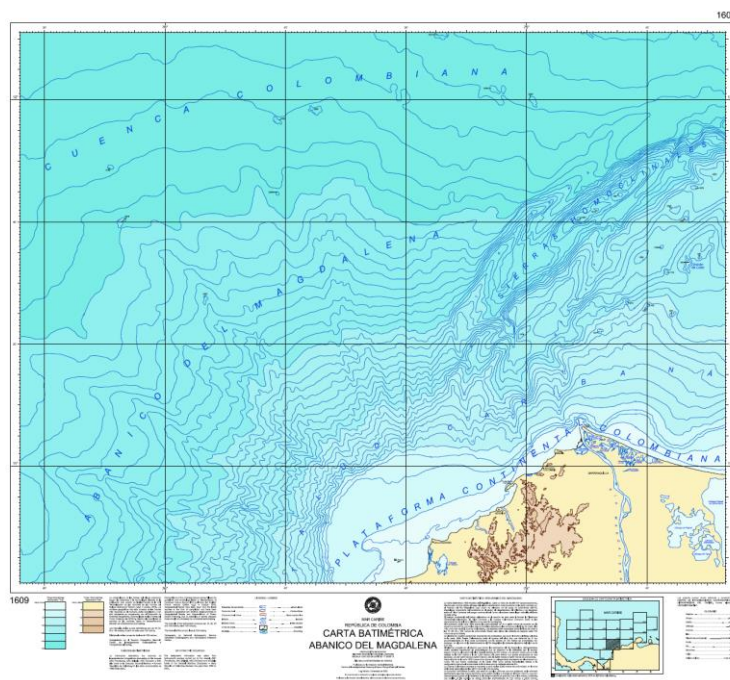




# BATHYMETRIC CHARTS



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***New bathymetric charts for the IBCCA project. Scale 250 000***

*“Consolidamos nuestro país marítimo”*



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*¡Gracias por su atención!*

*“Consolidamos nuestro país marítimo”*