



SISTEMA OCEANO

Gênese e Evolução dos Fundos Marinhos

Parte I

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5 de outubro de 2023
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Livros sugeridos:

Decifrando a terra

W. Teixeira, M.C. Motta de Toledo, T.R. Fairchild, F. Taioli
(Oficina de textos, 2001).

The Ocean Basins: Their Structure and Evolution

(The Open University, 1998).

WORLD OCEAN FLOOR

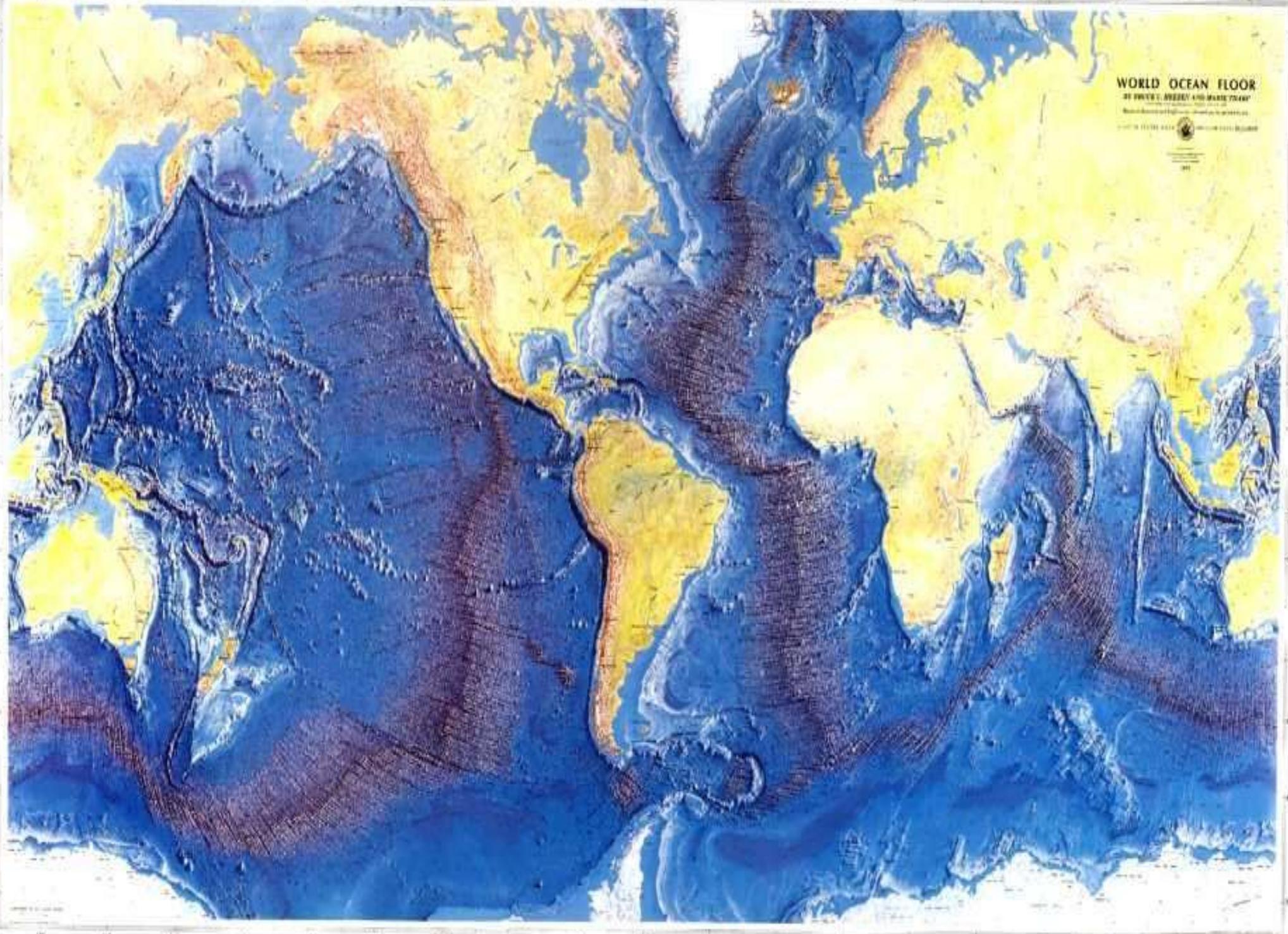
BY PHILIP H. ABNEY AND MARIE THOMPSON

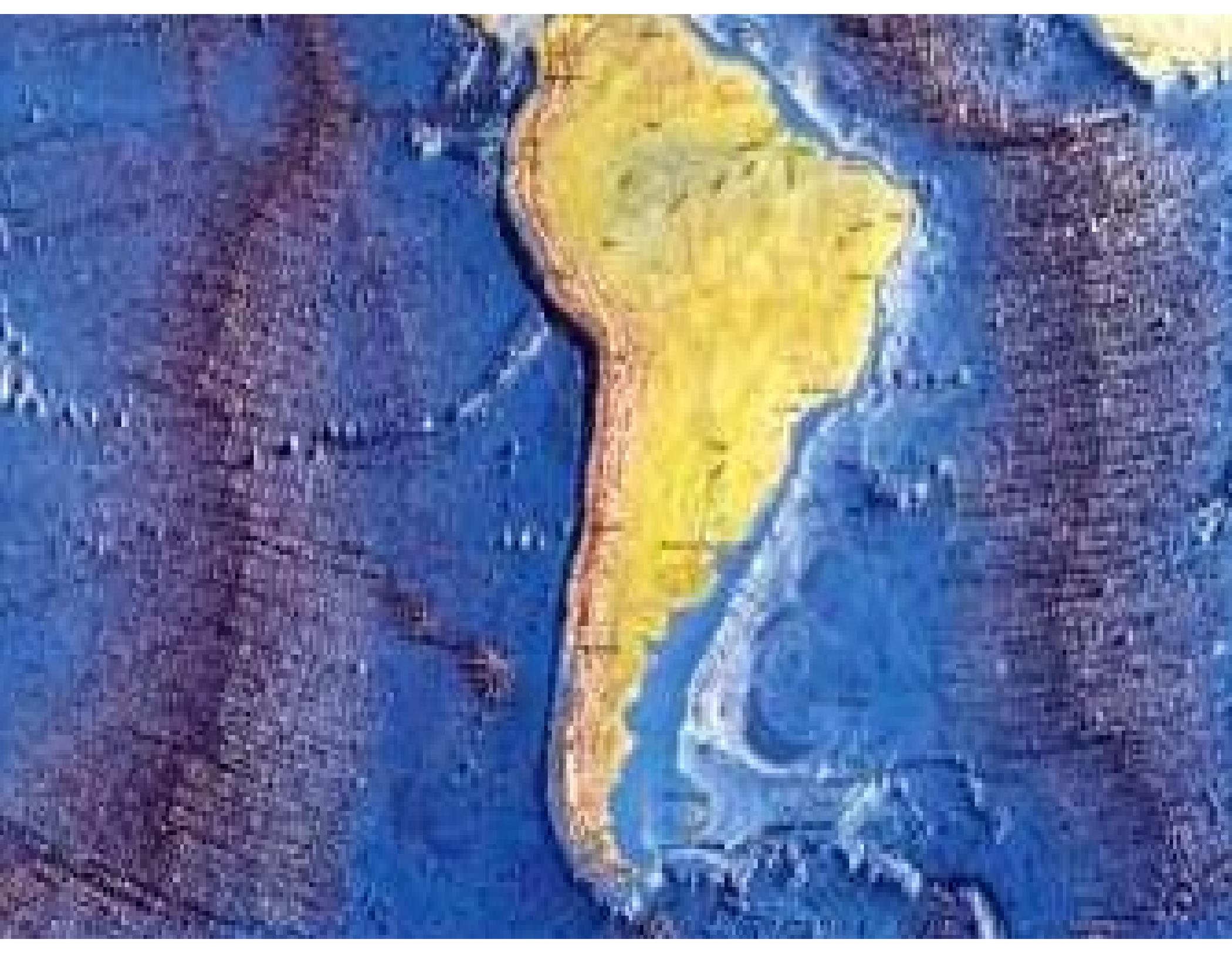
Map of the World Ocean Floor

United States Geological Survey



1955



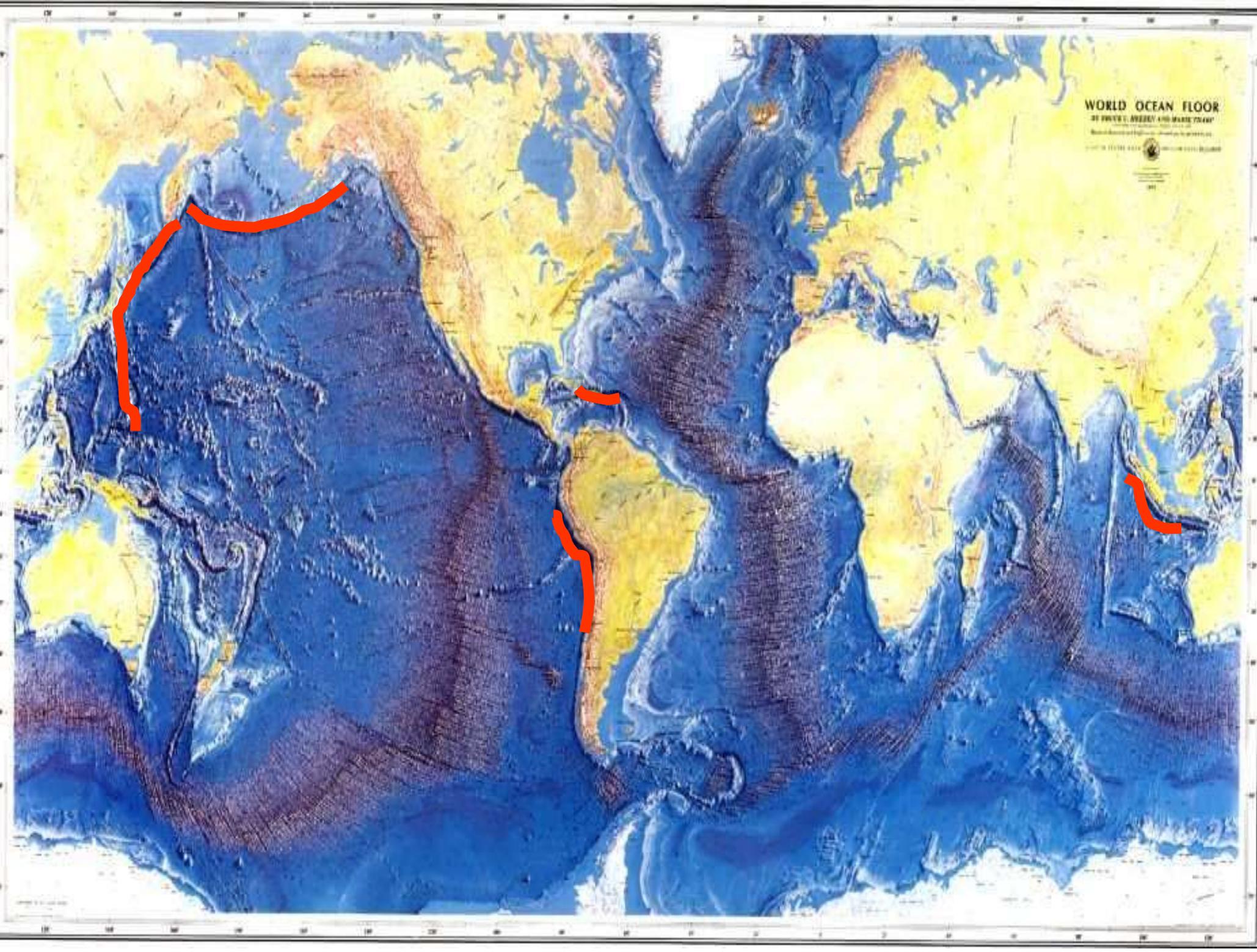


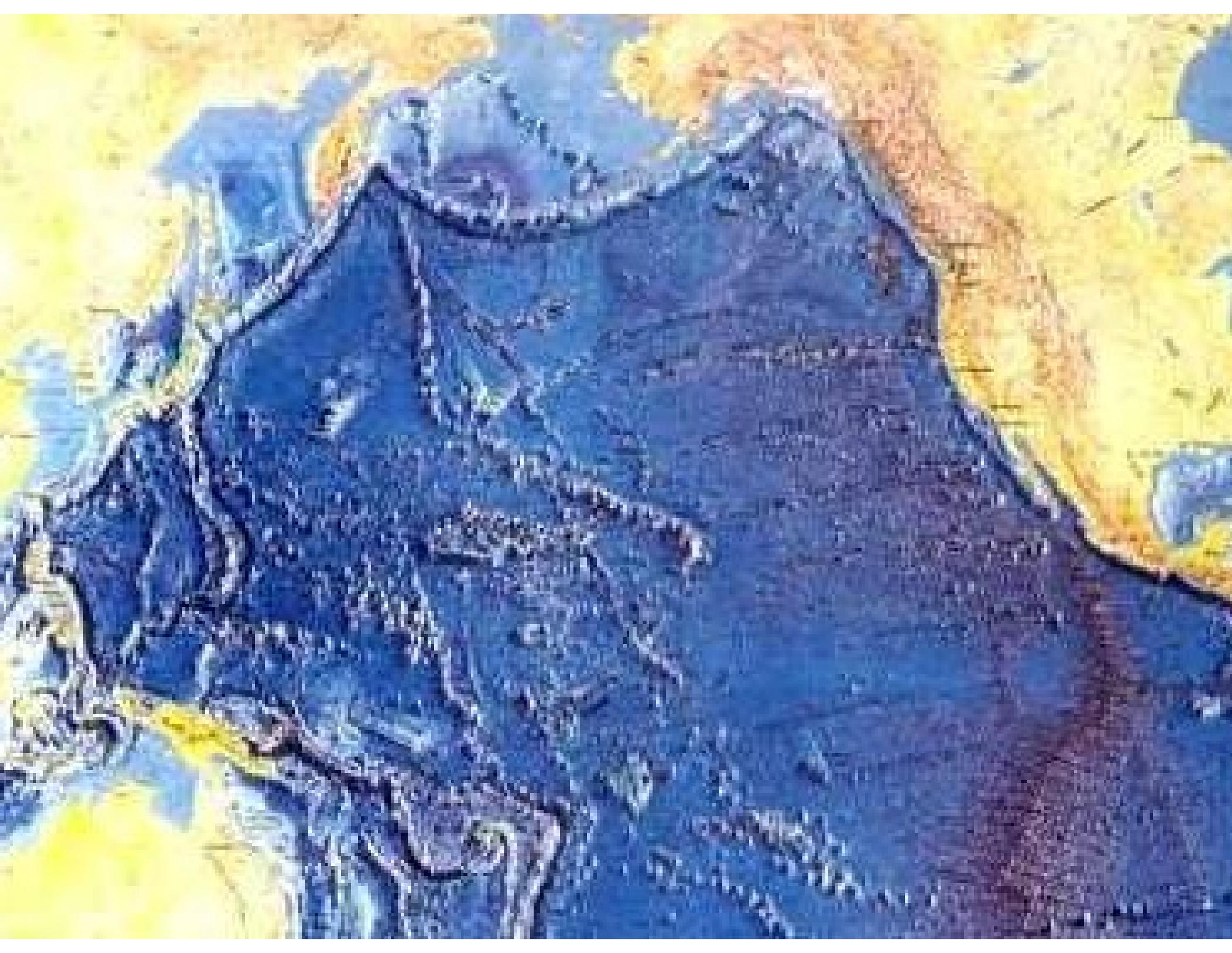
WORLD OCEAN FLOOR

BY PHILIP H. ABNEY AND MARIE THOMPSON

United States Geological Survey, Washington, D. C.

1953





SUMARIO DA AULA:

Principais feições dos fundos oceânicos:

- Plataformas Continentais
- Fossas Oceânicas
- Dorsais Oceânicas
- Planícies Abissais
- Montes Submarinos

- Plataformas Continentais
- Fossas Oceânicas
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TECTÔNICA DE PLACAS

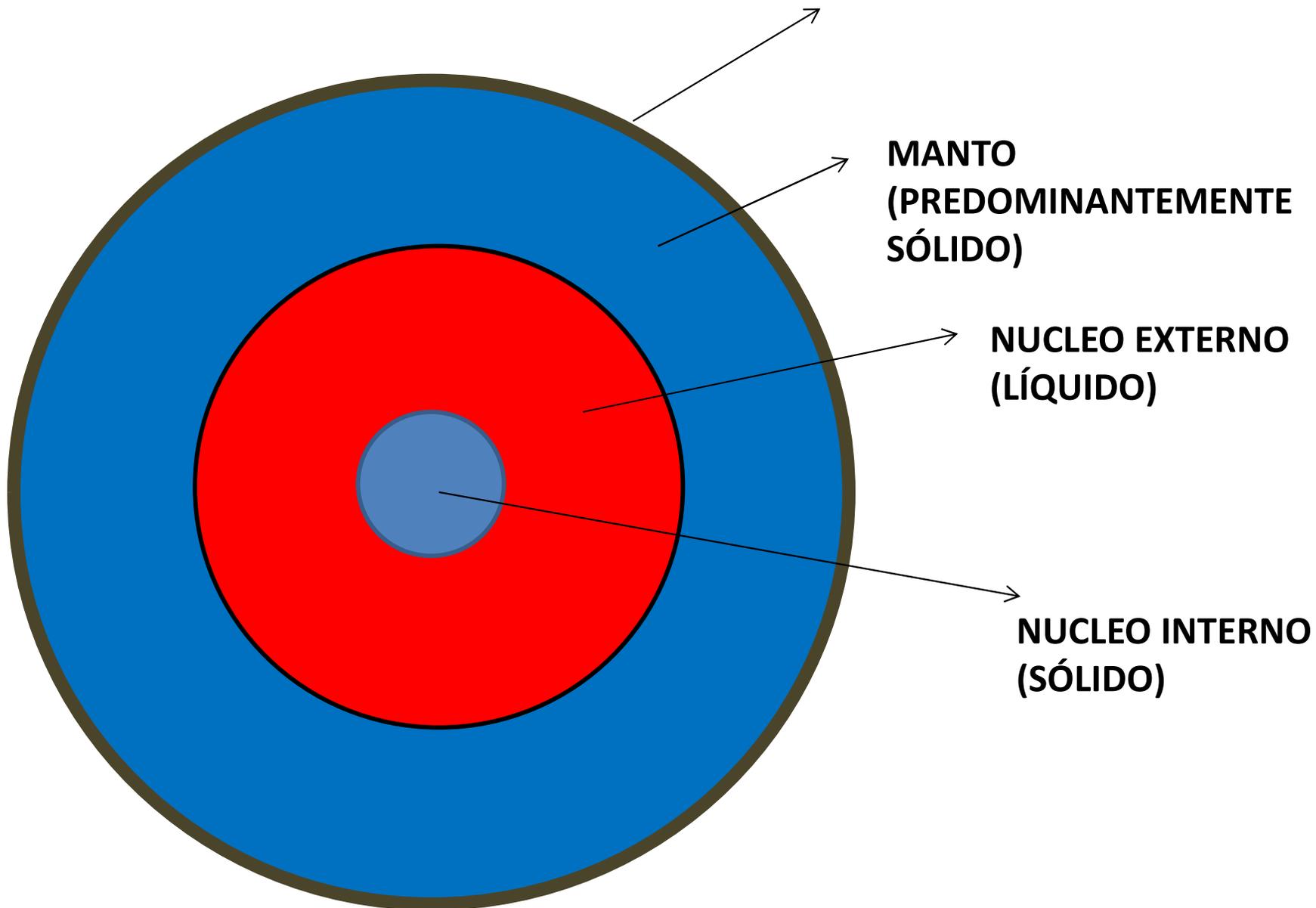
Estrutura interna da Terra

CROSTA (SÓLIDA)

**MANTO
(PREDOMINANTEMENTE
SÓLIDO)**

**NUCLEO EXTERNO
(LÍQUIDO)**

**NUCLEO INTERNO
(SÓLIDO)**



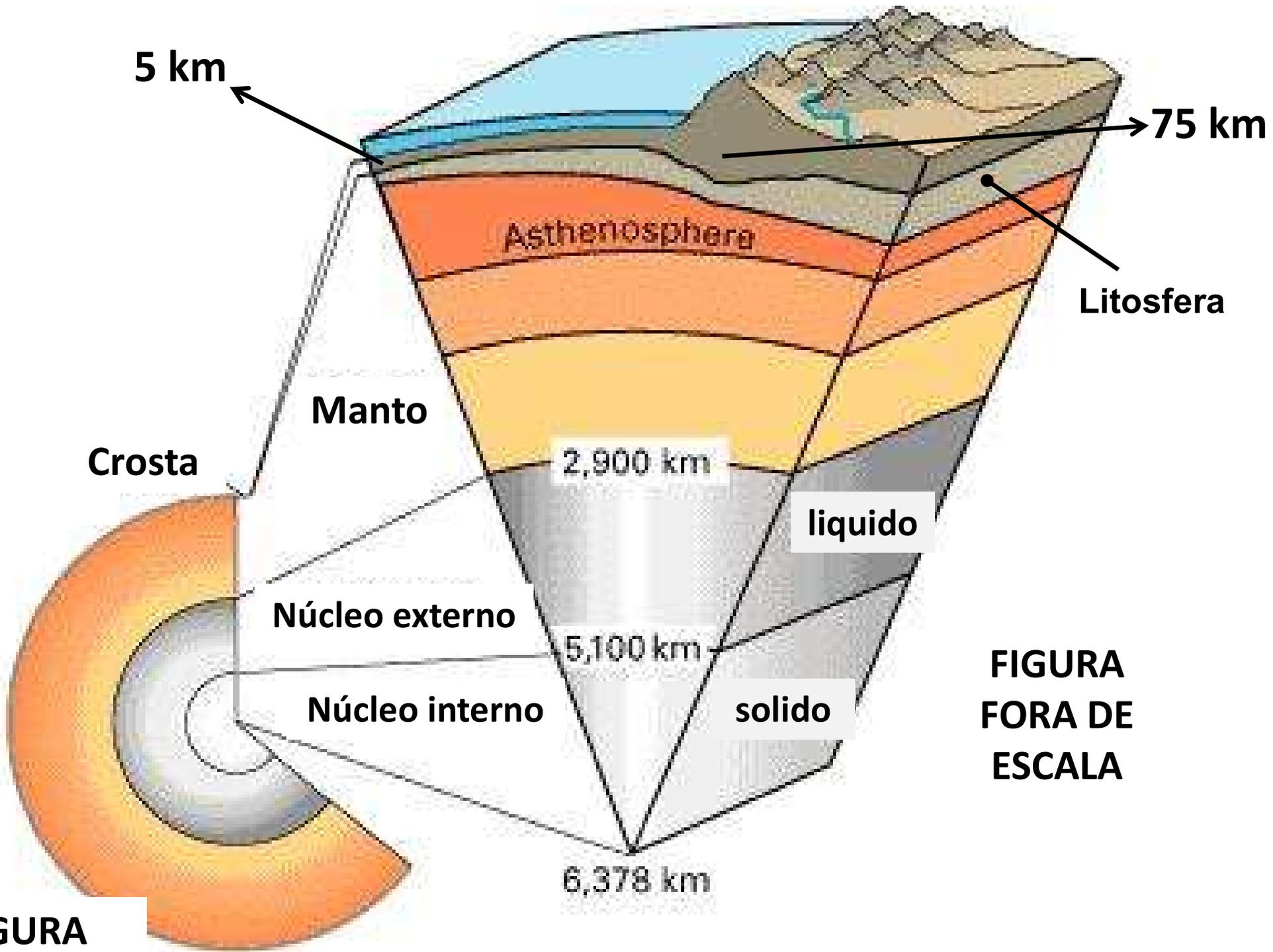
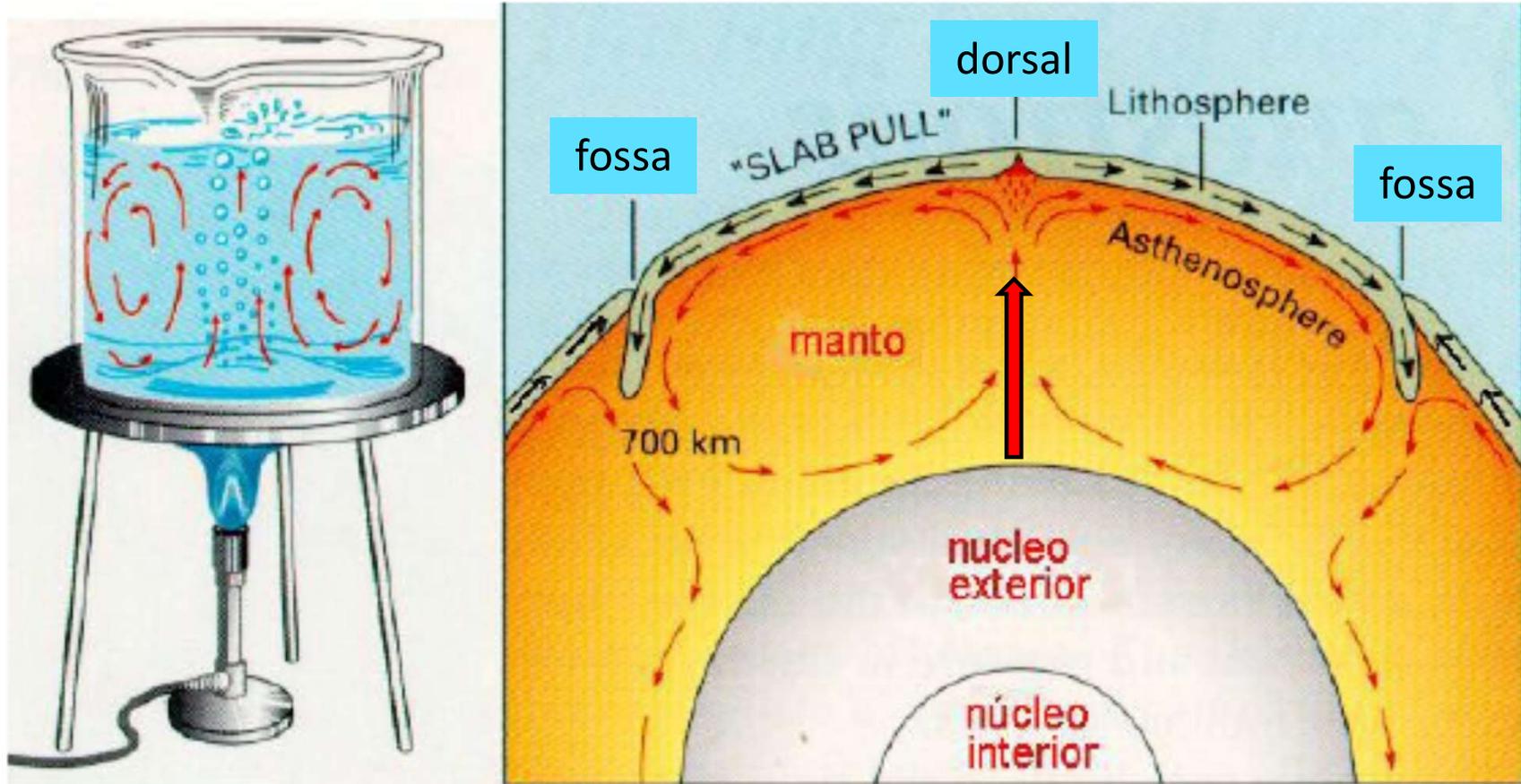


FIGURA EM ESCALA

FIGURA FORA DE ESCALA

Células de convecção no Manto



- **Correntes convectivas no manto**

WORLD OCEAN FLOOR

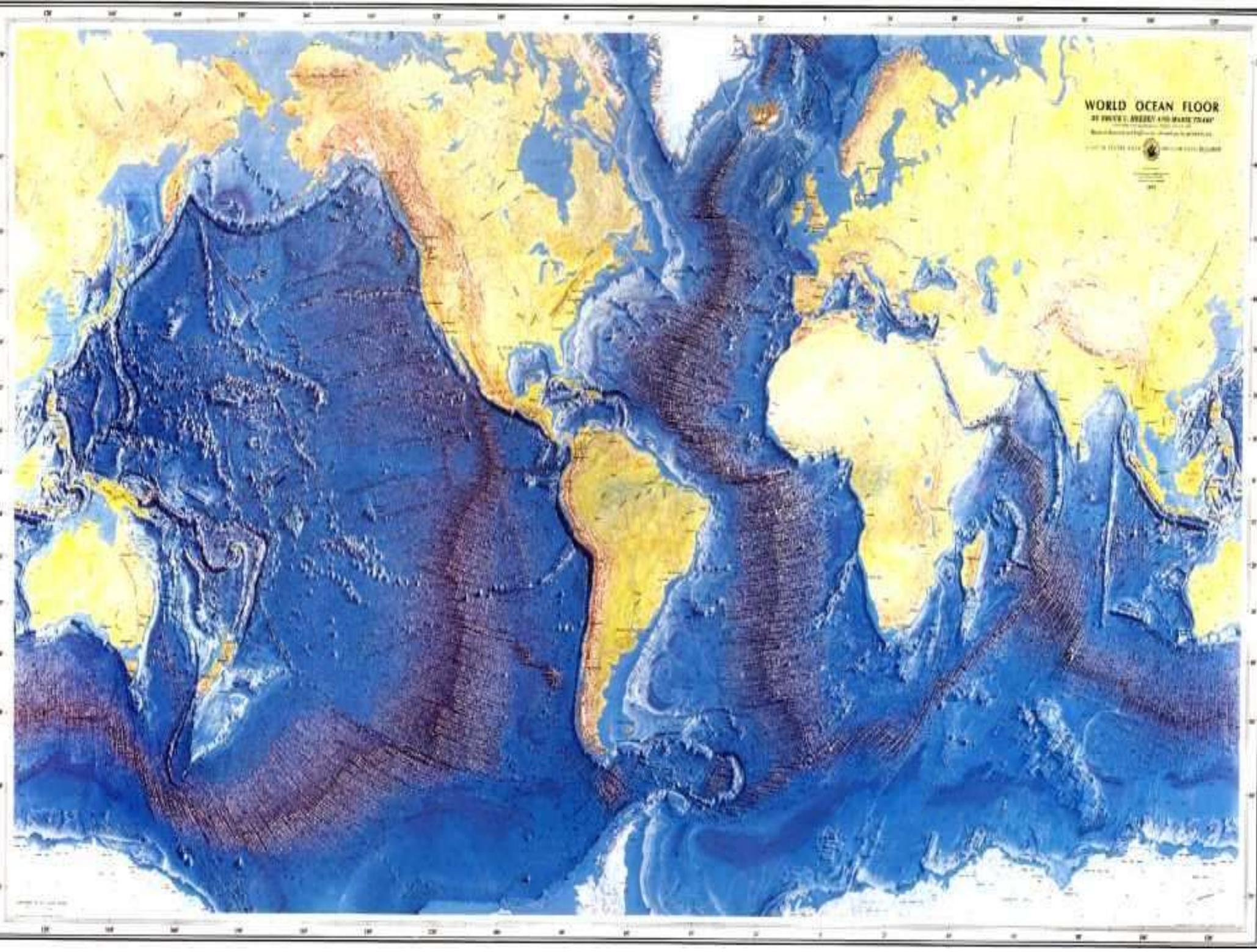
BY PHILIP H. ABNEY AND MARIE THOMPSON

Map of the World Ocean Floor, showing the bathymetry of the world's oceans and seas. The map is color-coded to show depth, with yellow representing shallow waters and blue representing deep waters. The map is framed by a grid of latitude and longitude lines.

Map of the World Ocean Floor, showing the bathymetry of the world's oceans and seas. The map is color-coded to show depth, with yellow representing shallow waters and blue representing deep waters. The map is framed by a grid of latitude and longitude lines.



1961

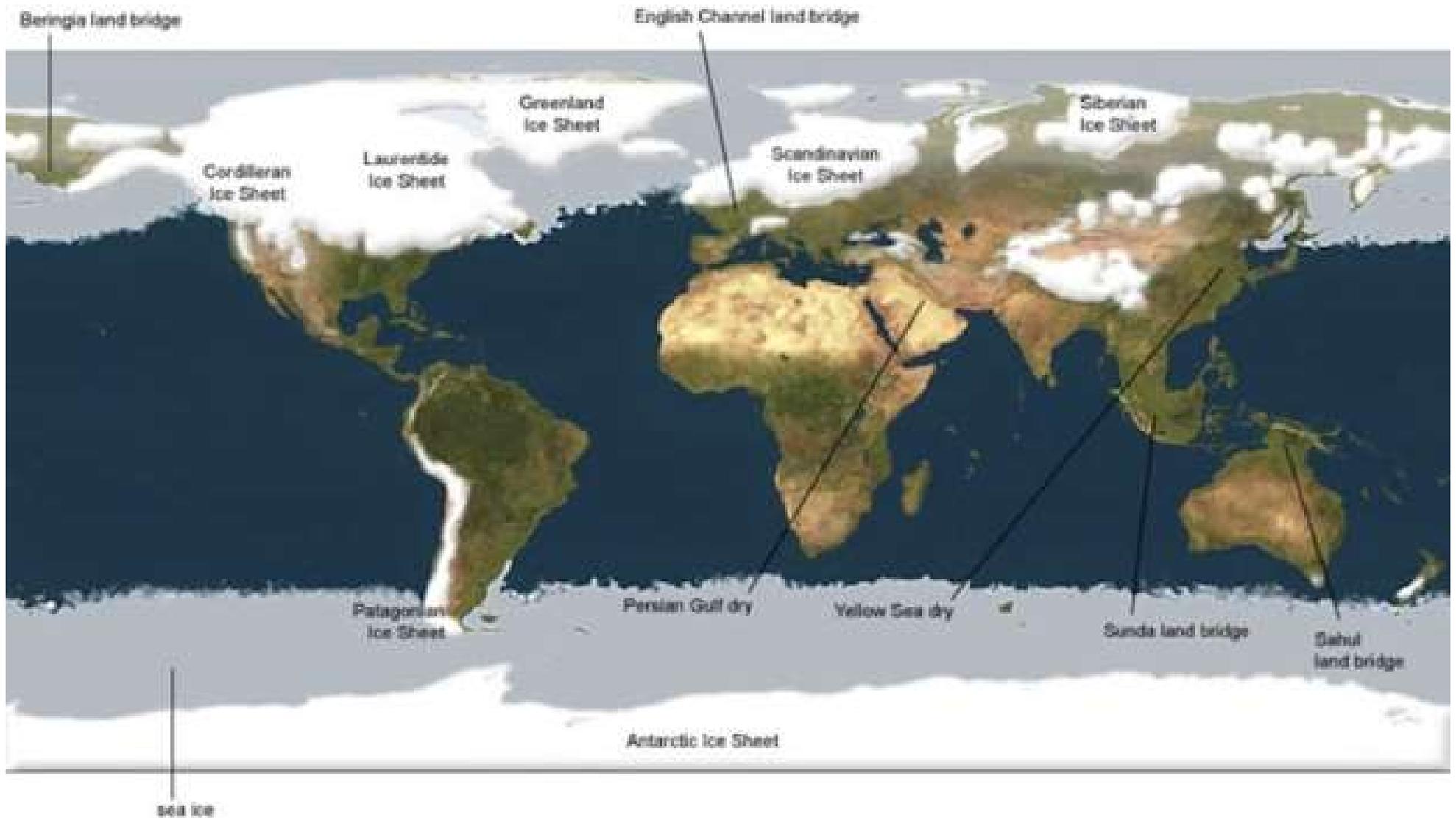


- **Plataformas Continentais**
- Fossas Oceânicas
- Dorsais Oceânicas
- Planícies Abissais
- Montes Submarinos

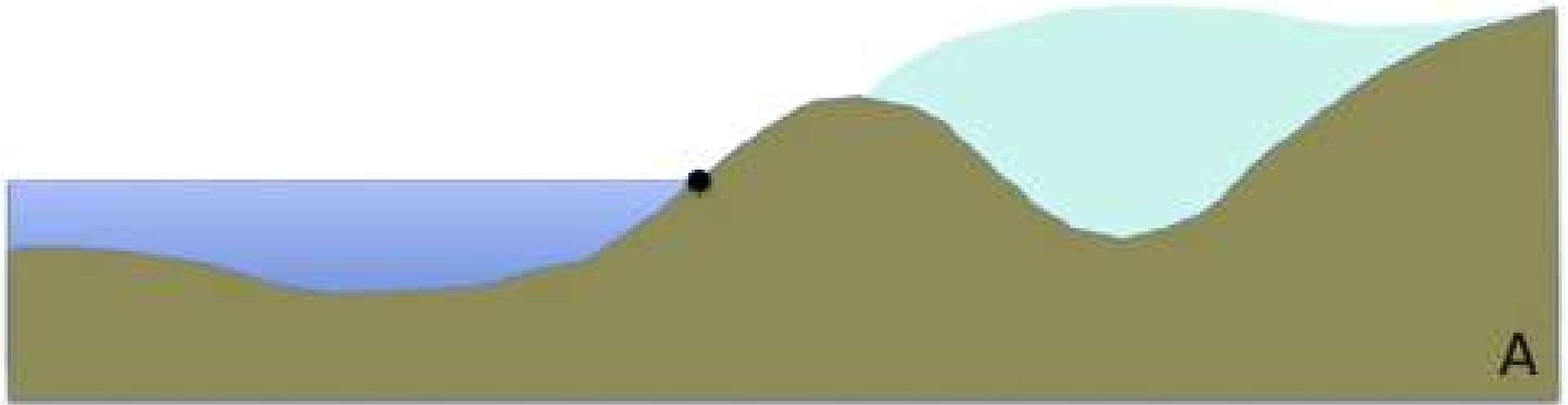
TECTÔNICA DE PLACAS



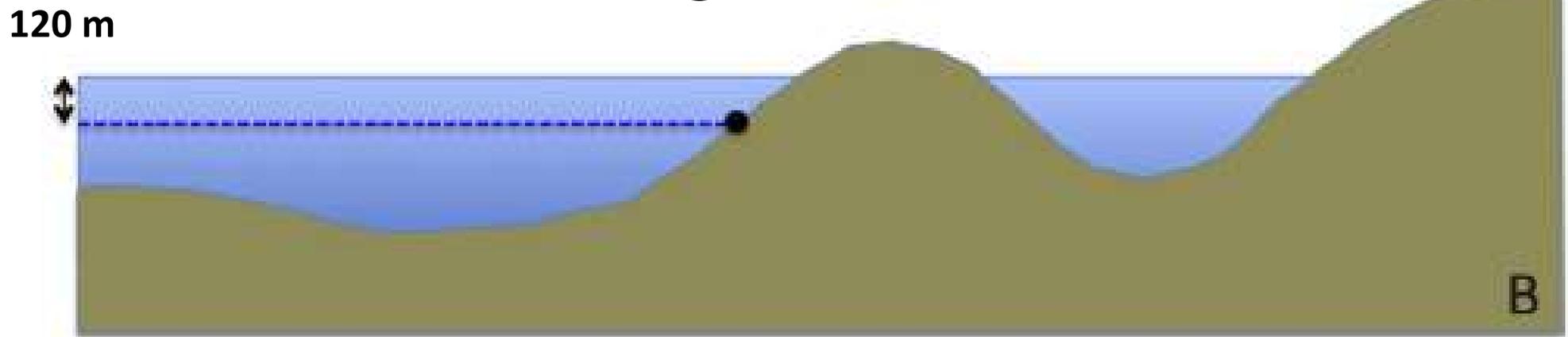
Glaciações



Período Glacial



Período Interglacial



- Plataformas Continentais
- **Fossas Oceânicas**
- Dorsais Oceânicas
- Planícies Abissais
- Montes submarinos

TECTÔNICA DE PLACAS

WORLD OCEAN FLOOR

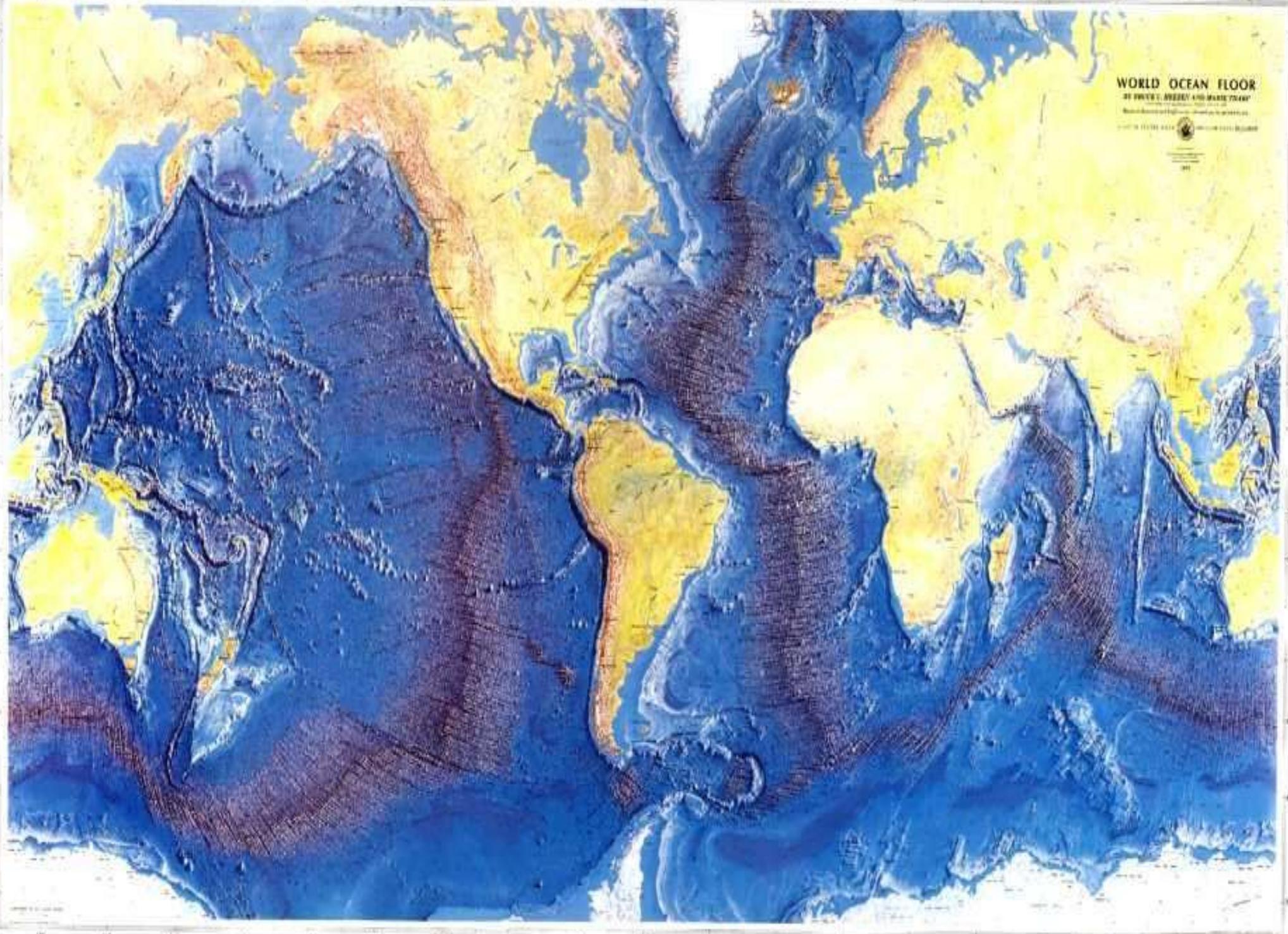
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Map of the World Ocean Floor

United States Geological Survey



1957

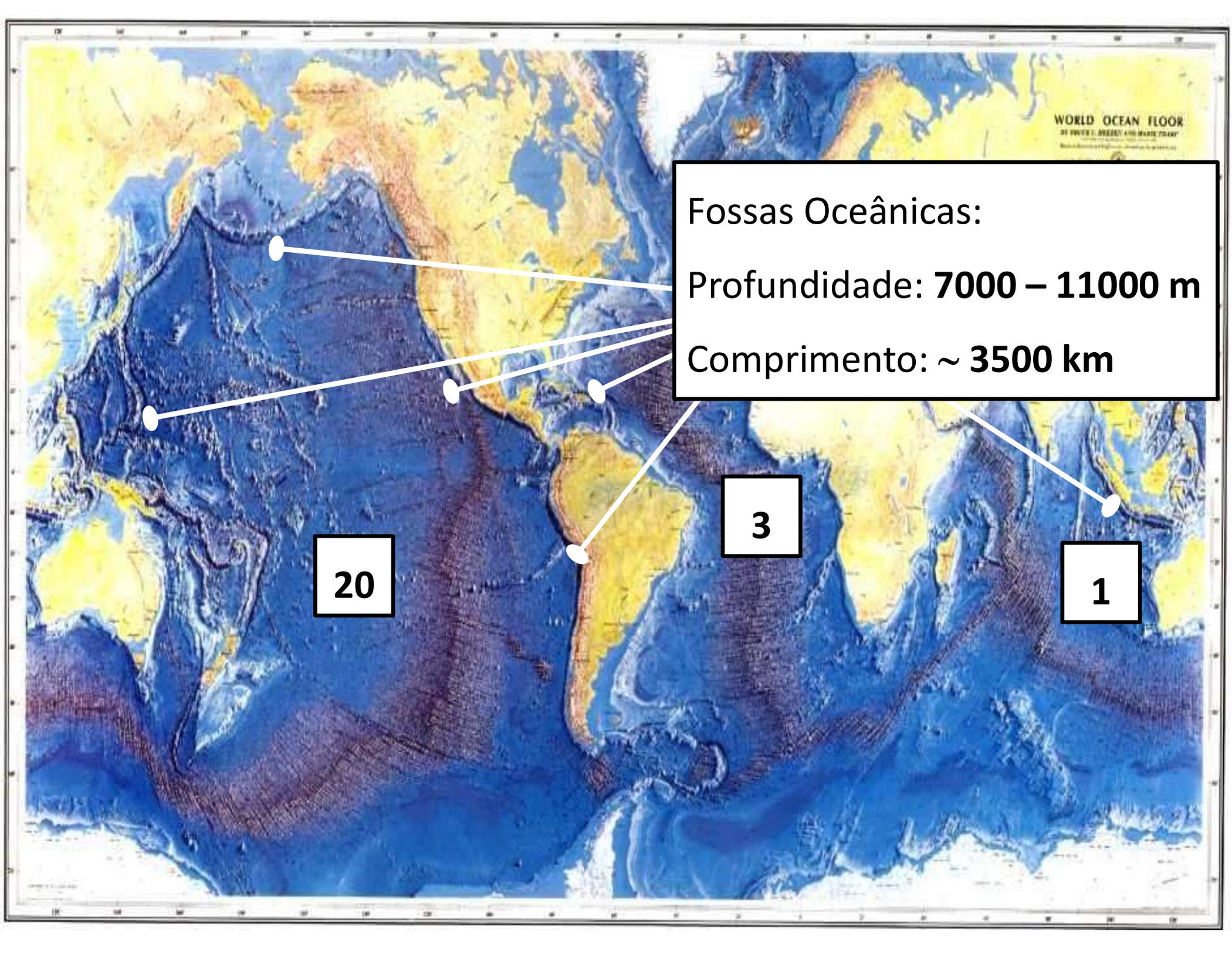


Fossas Oceânicas:
Profundidade: **7000 – 11000 m**
Comprimento: ~ **3500 km**

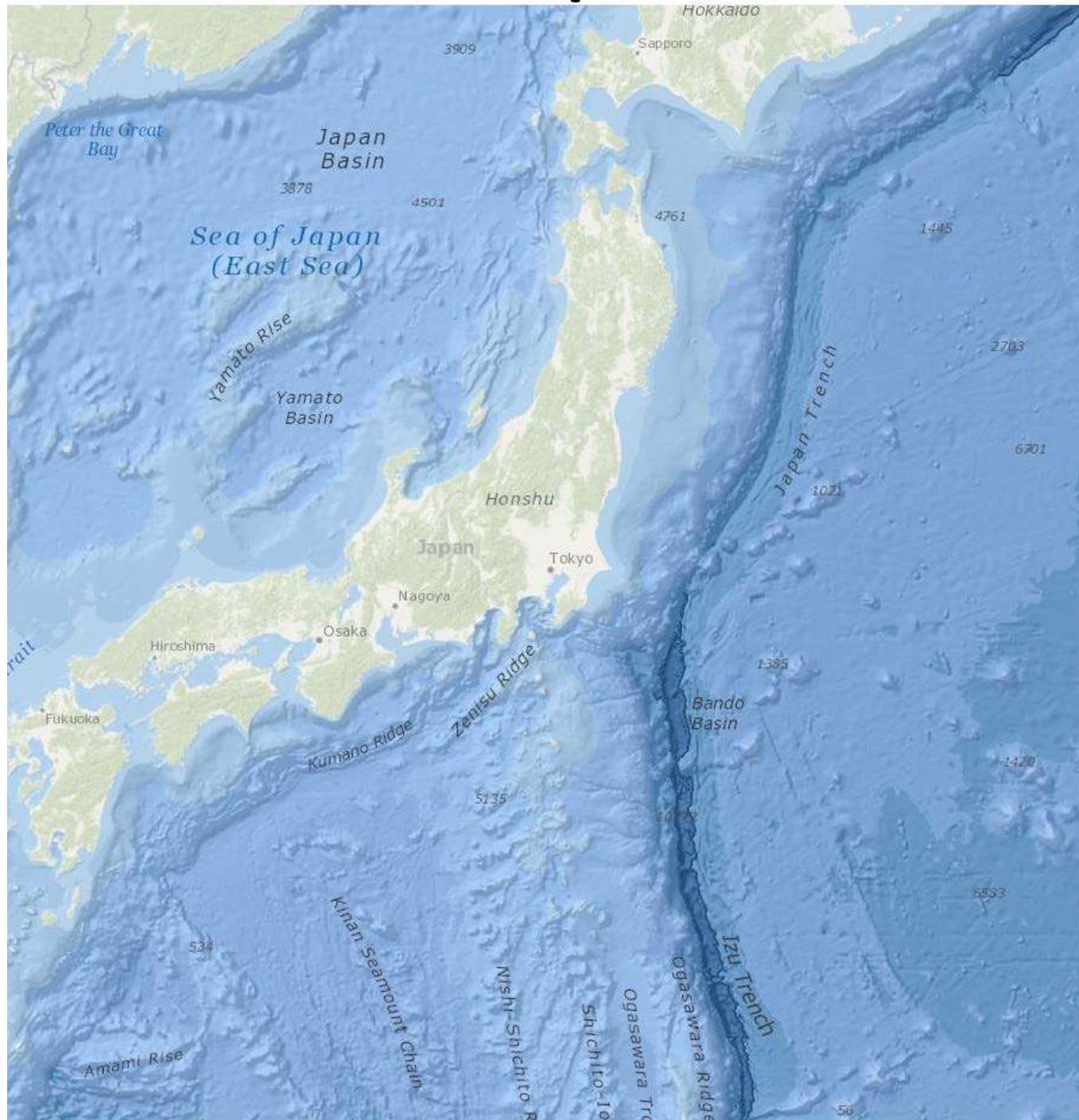
20

3

1



FOSSA DO JAPÃO (Oceano Pacífico)



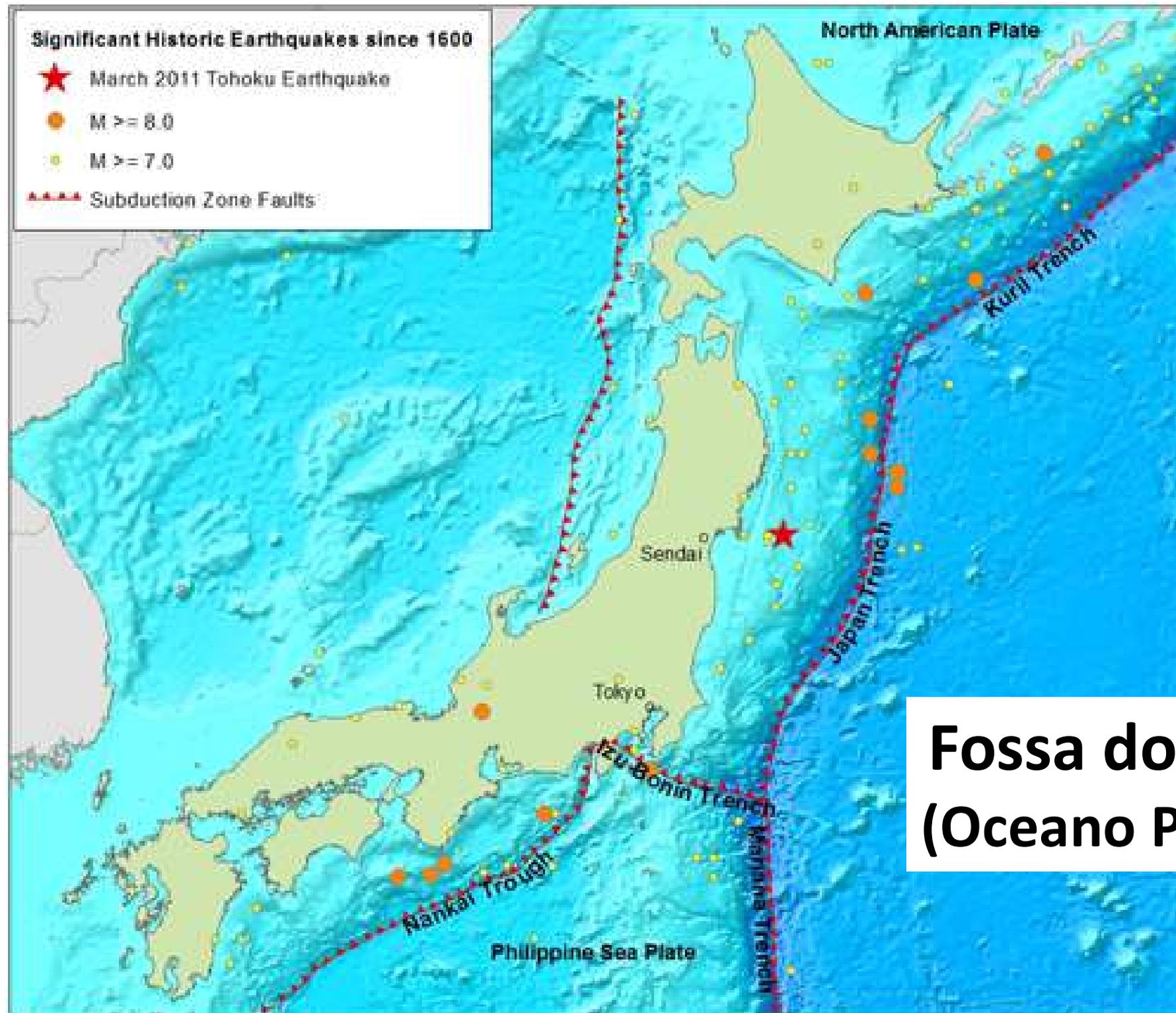
Significant Historic Earthquakes since 1600

★ March 2011 Tohoku Earthquake

● M ≥ 8.0

● M ≥ 7.0

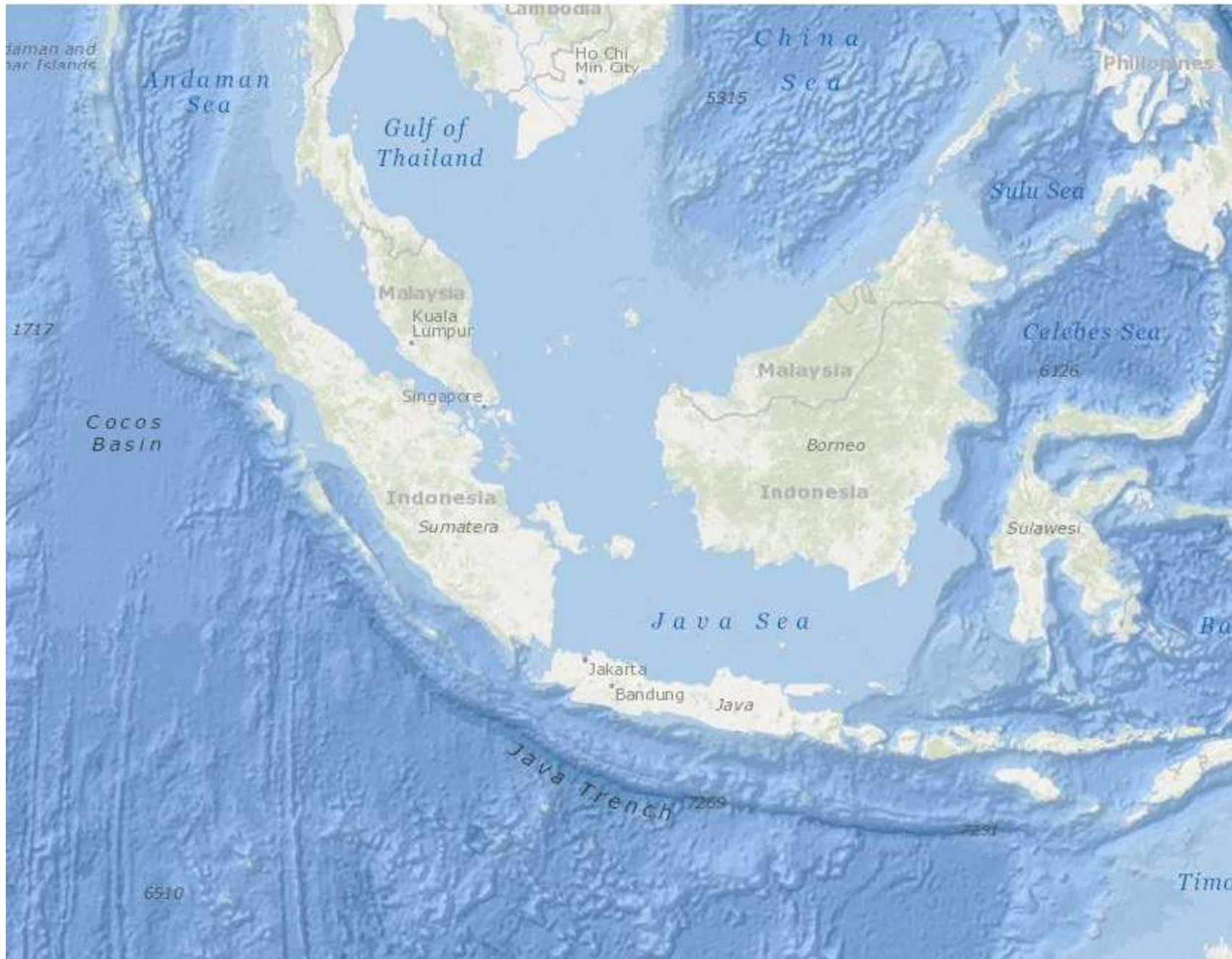
▲▲▲▲ Subduction Zone Faults



Fossa do Japão (Oceano Pacífico)

Fonte:
AIR Worldwide

FOSSA DE JAVA (Oceano Indico)



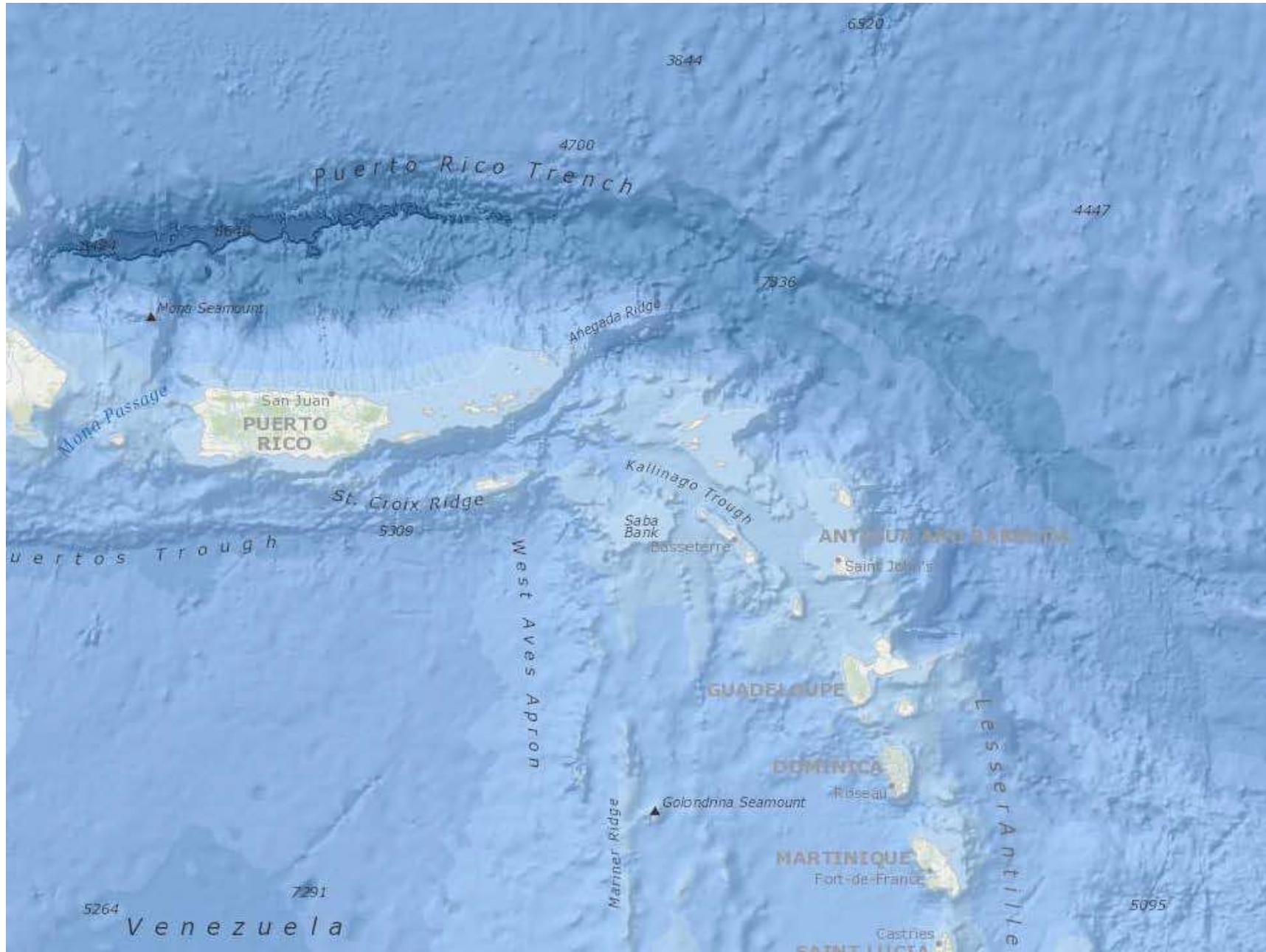
FOSSA DE JAVA (Oceano Indico)



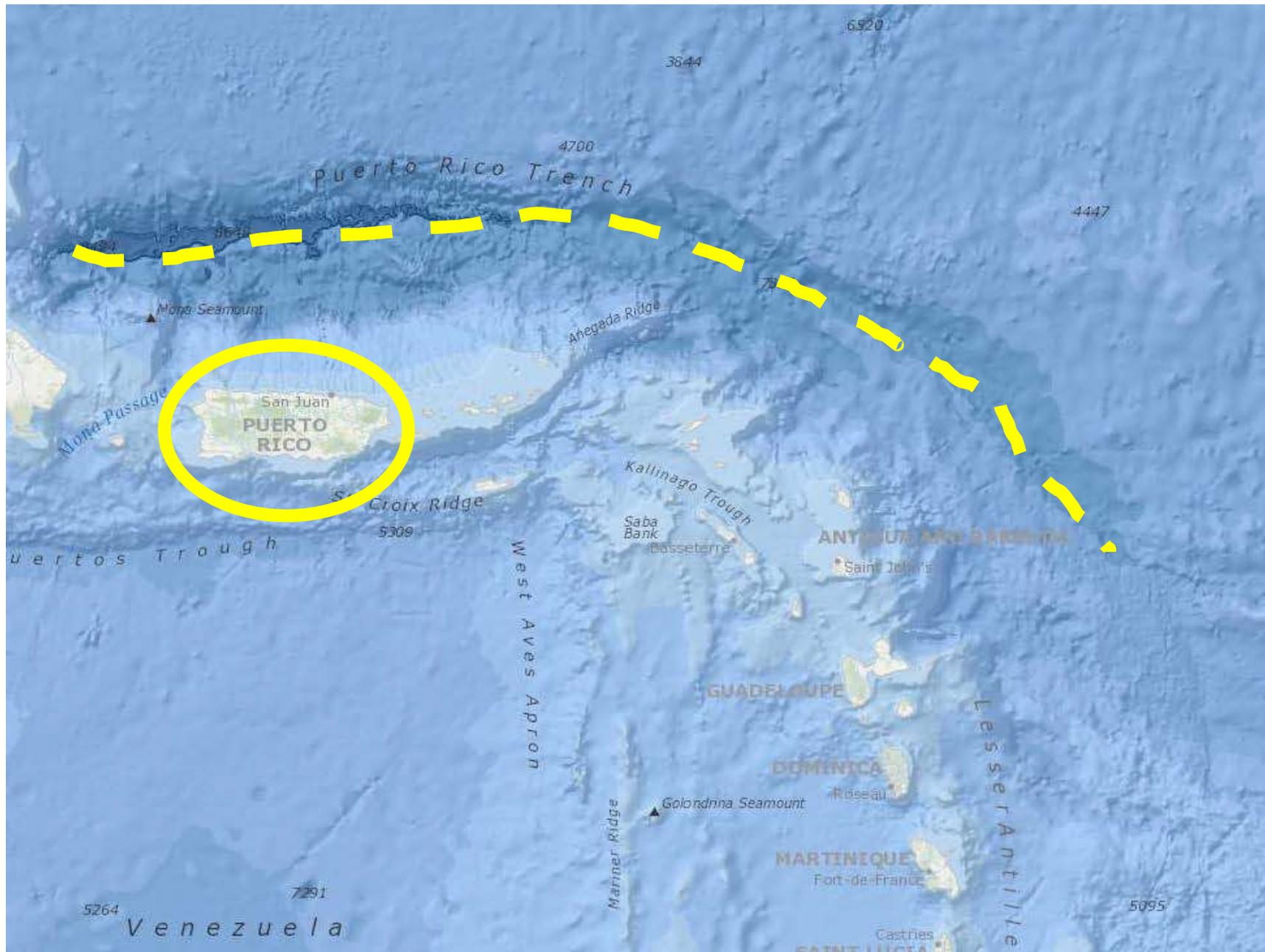
Fossa de Java (Oceano Indico)

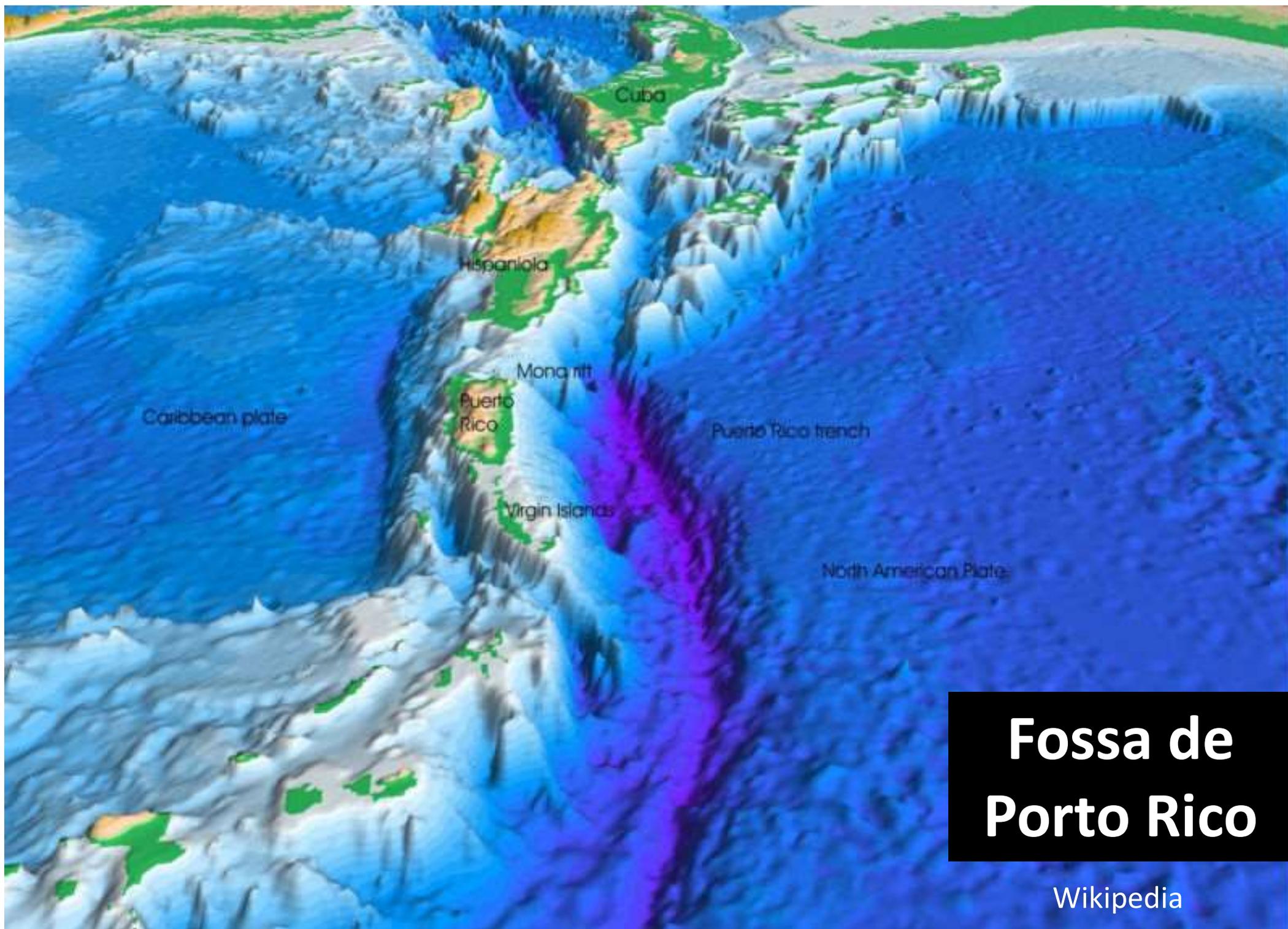


FOSSA DE PORTO RICO (Oceano Atlântico)



FOSSA DE PORTO RICO (Oceano Atlântico)

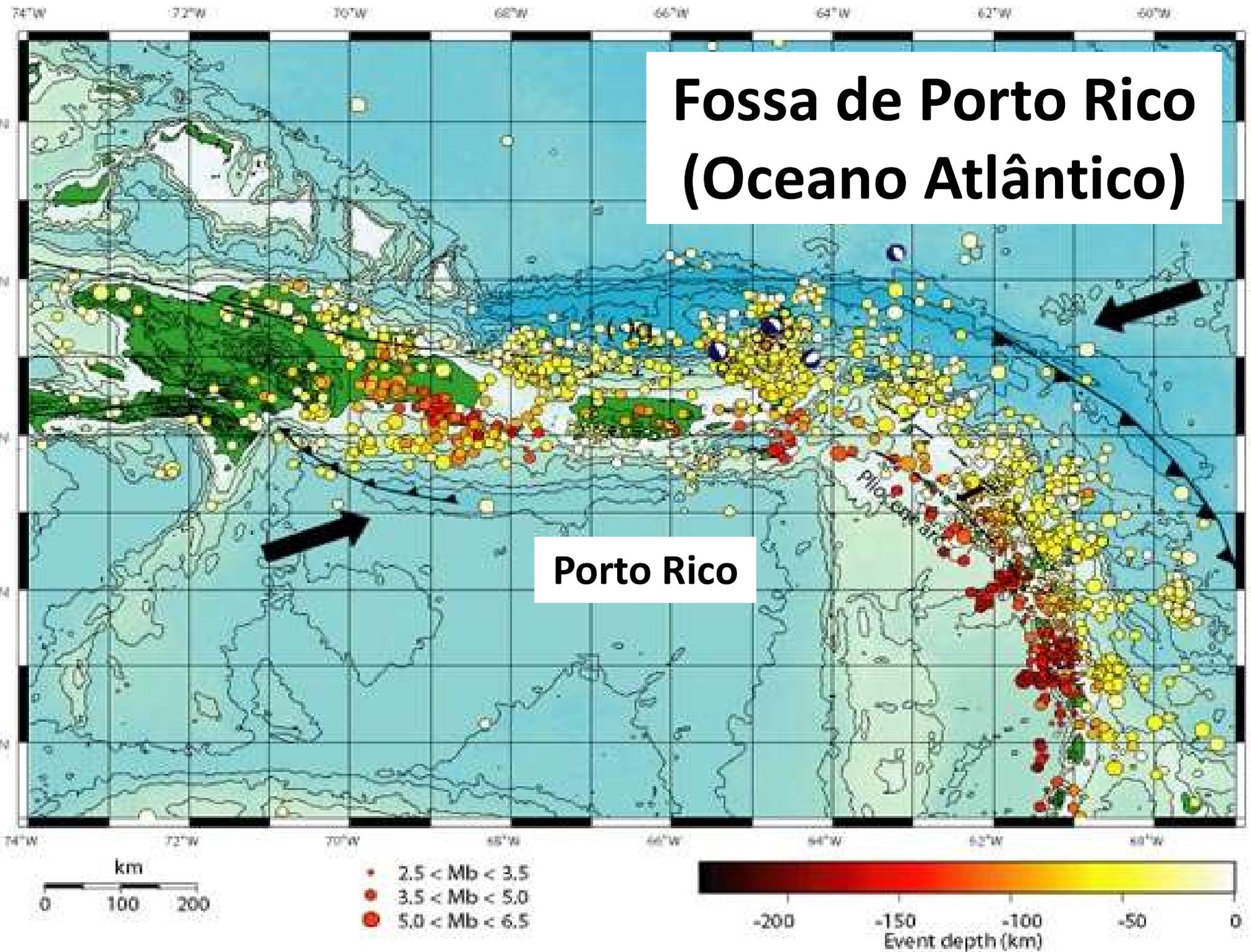




Fossa de Porto Rico

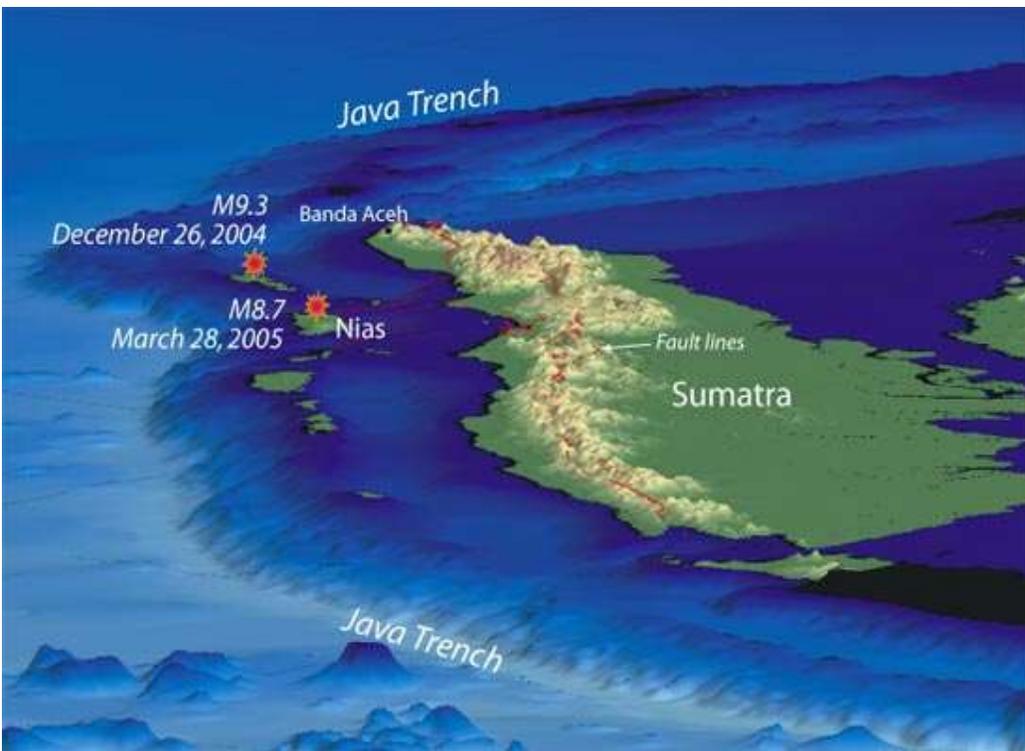
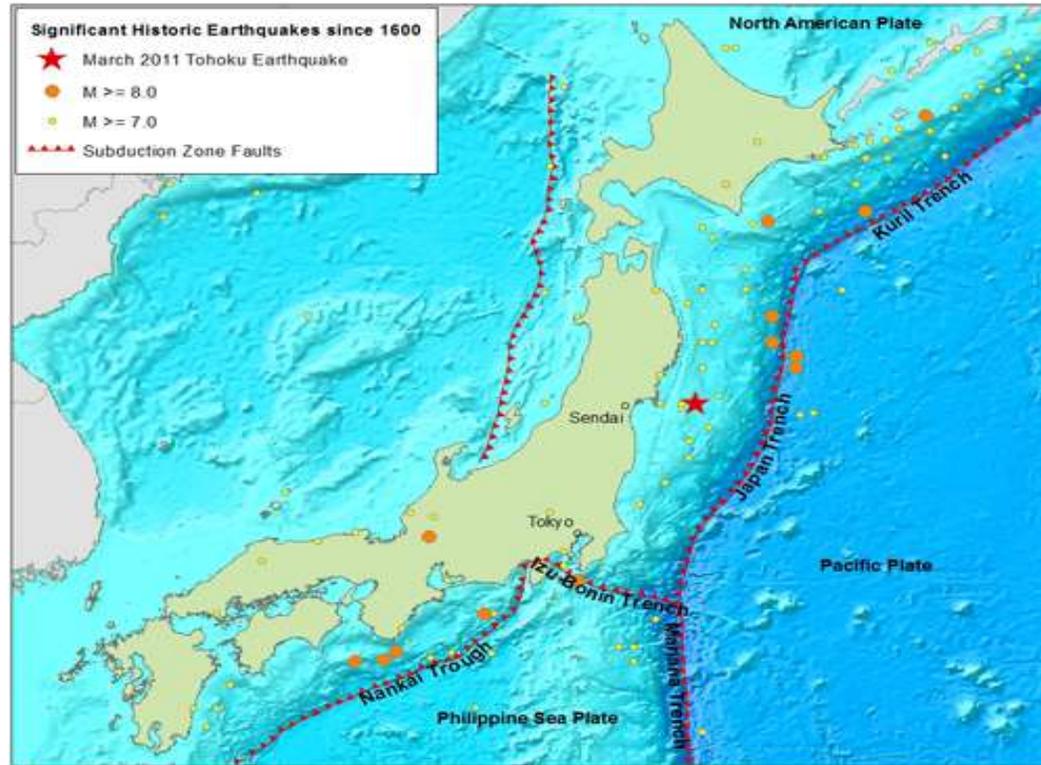
Wikipedia

Fossa de Porto Rico (Oceano Atlântico)



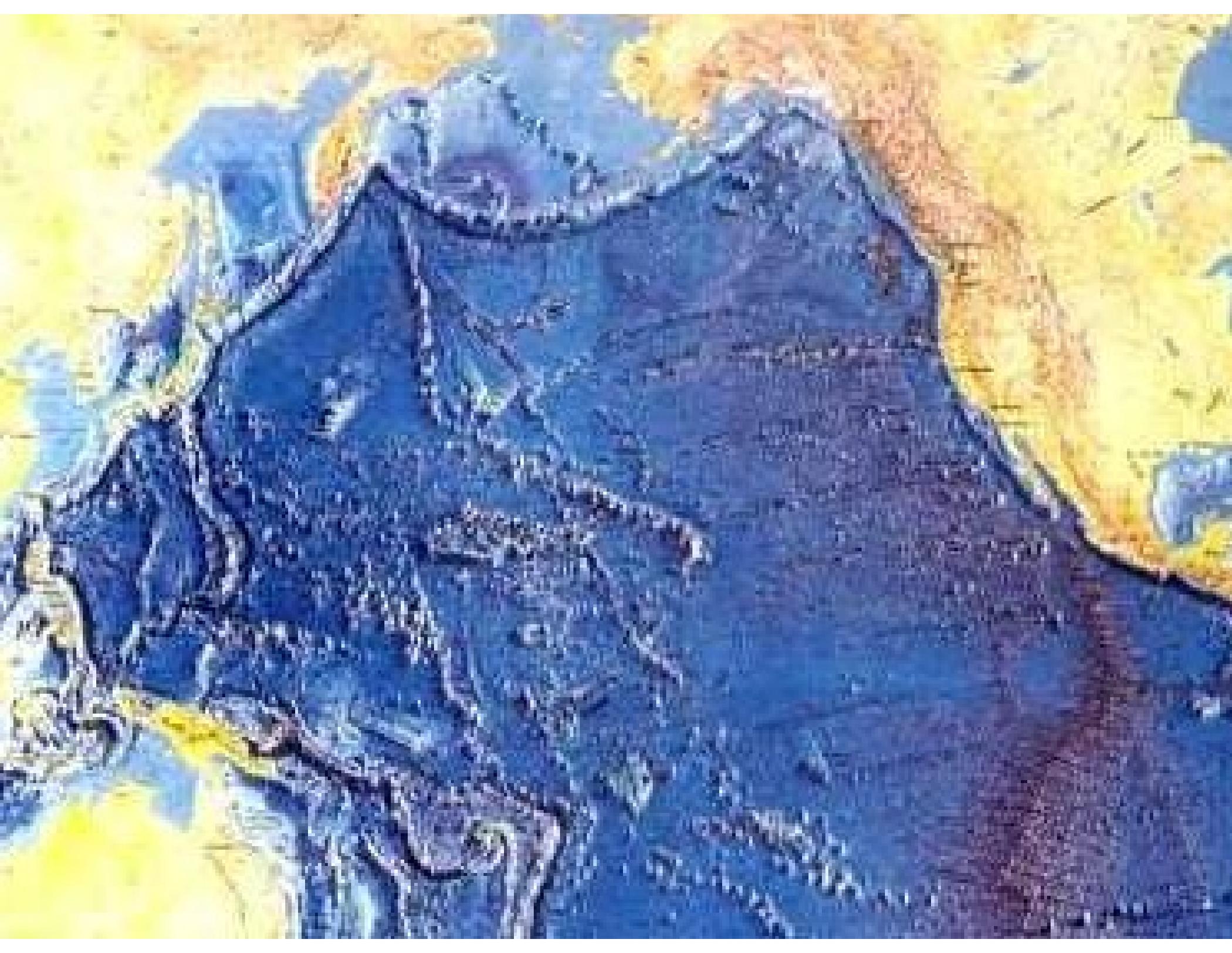


Fossa de Porto Rico

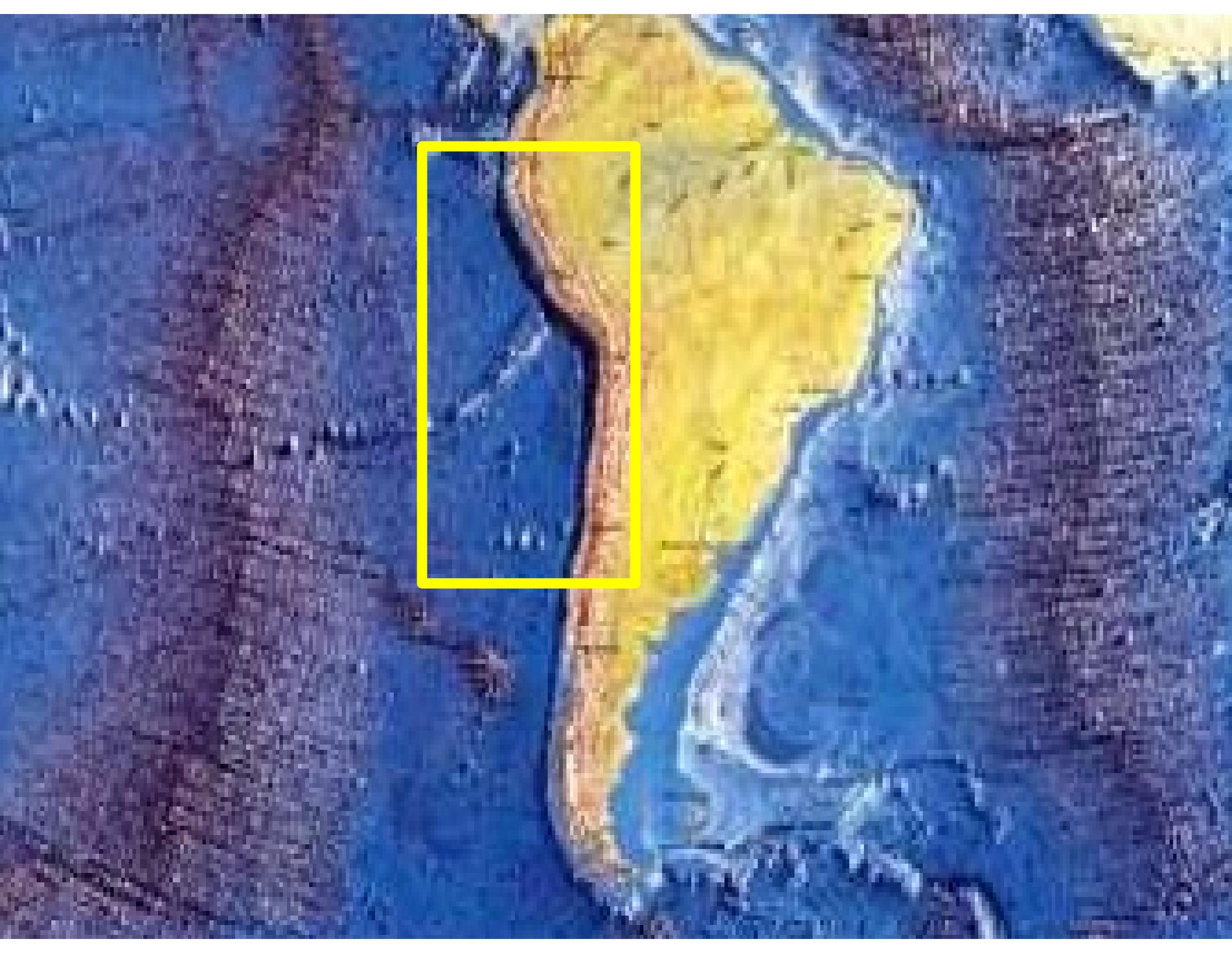


Fossas Oceânicas: associadas á

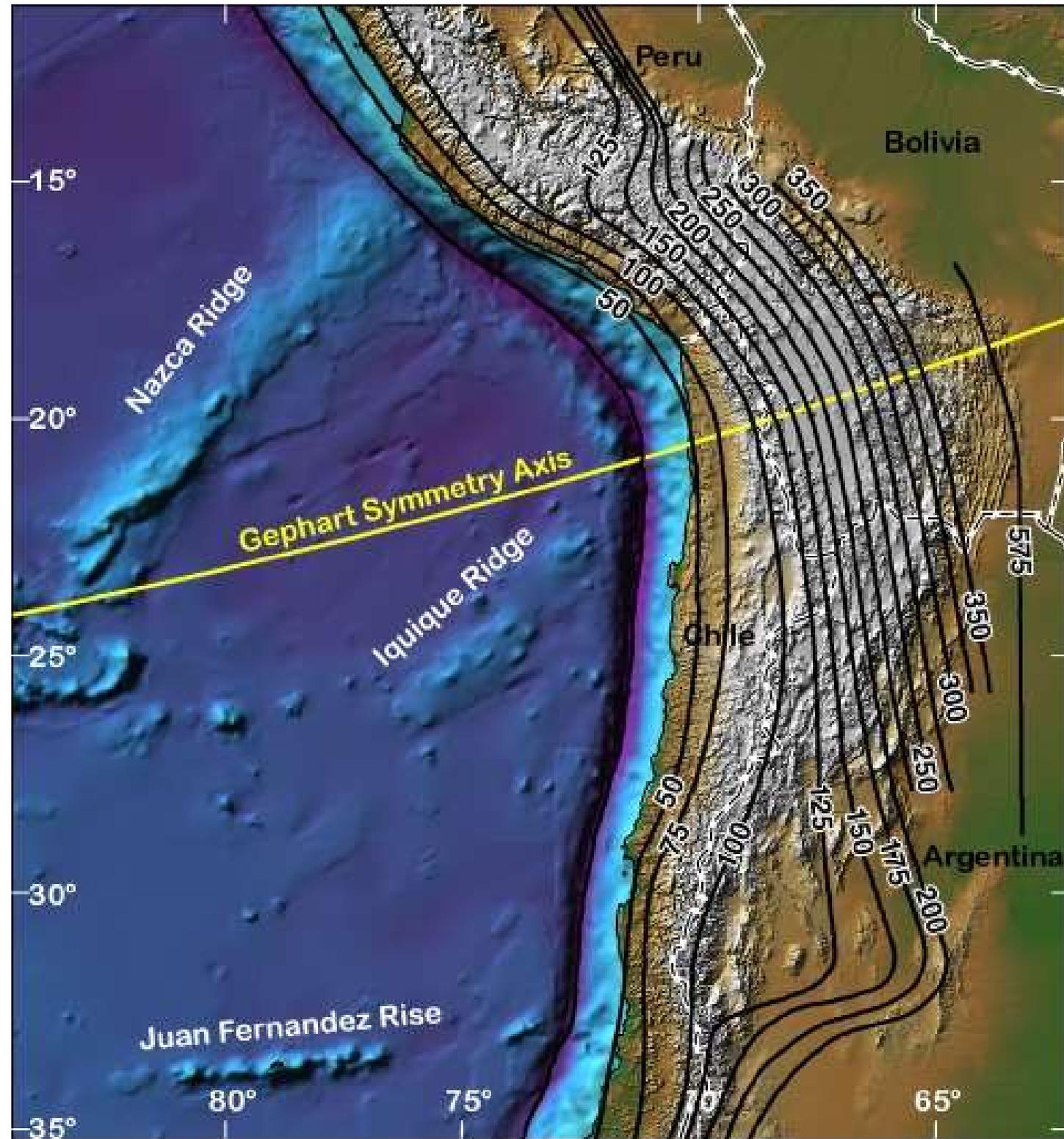
- Arcos de ilhas e/ou cordilheiras
- Vulcões
- Elevada sismicidade

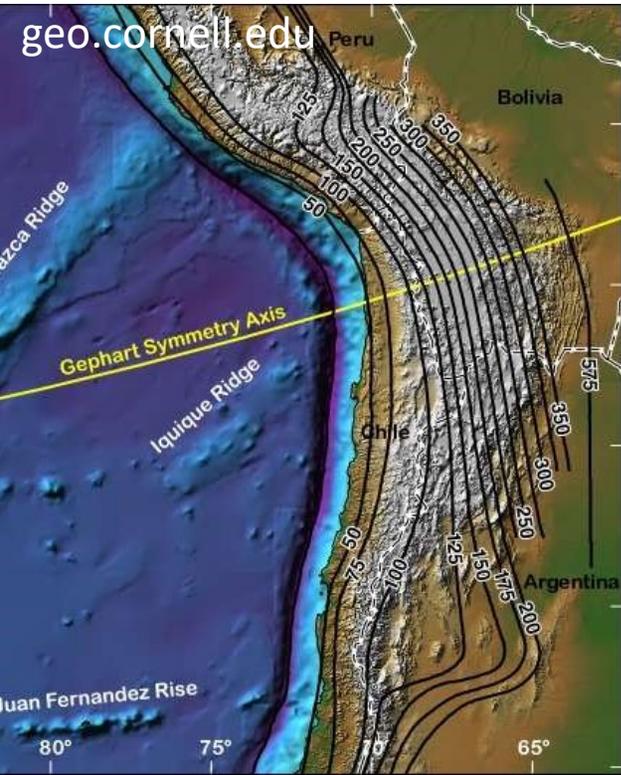


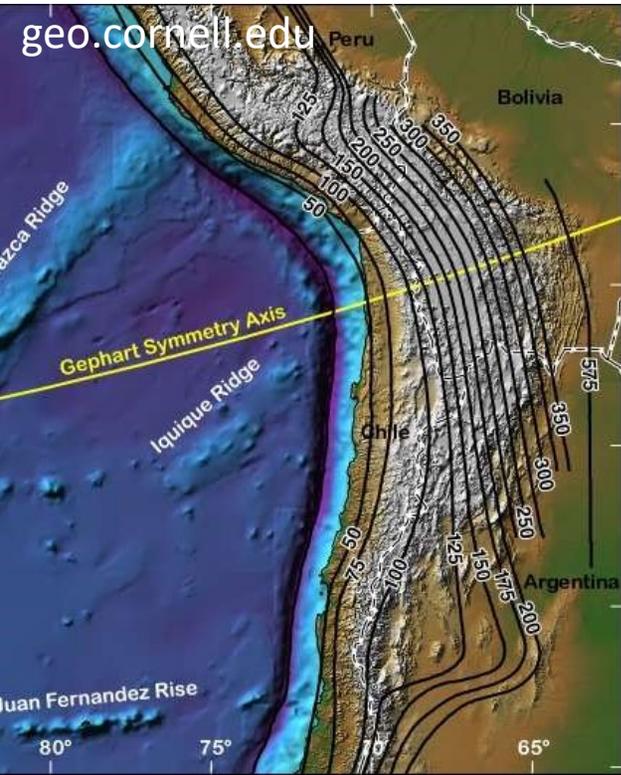


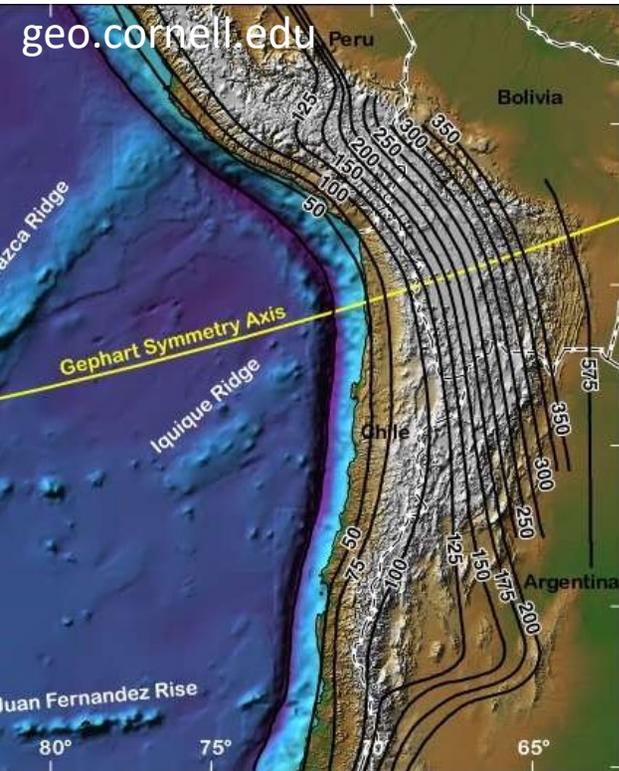


Fossa do Peru – Chile
8000 m
de
profundidade

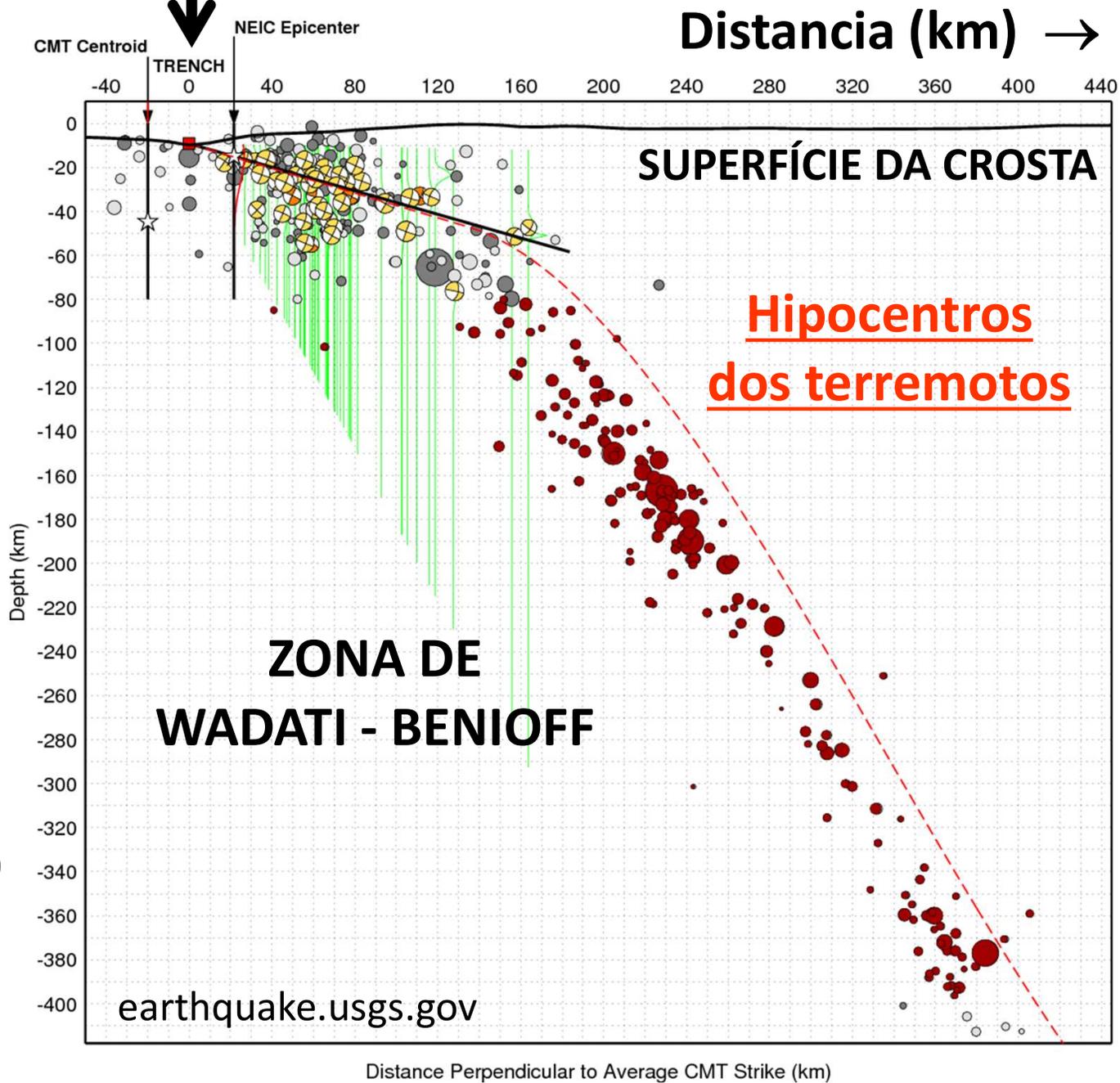


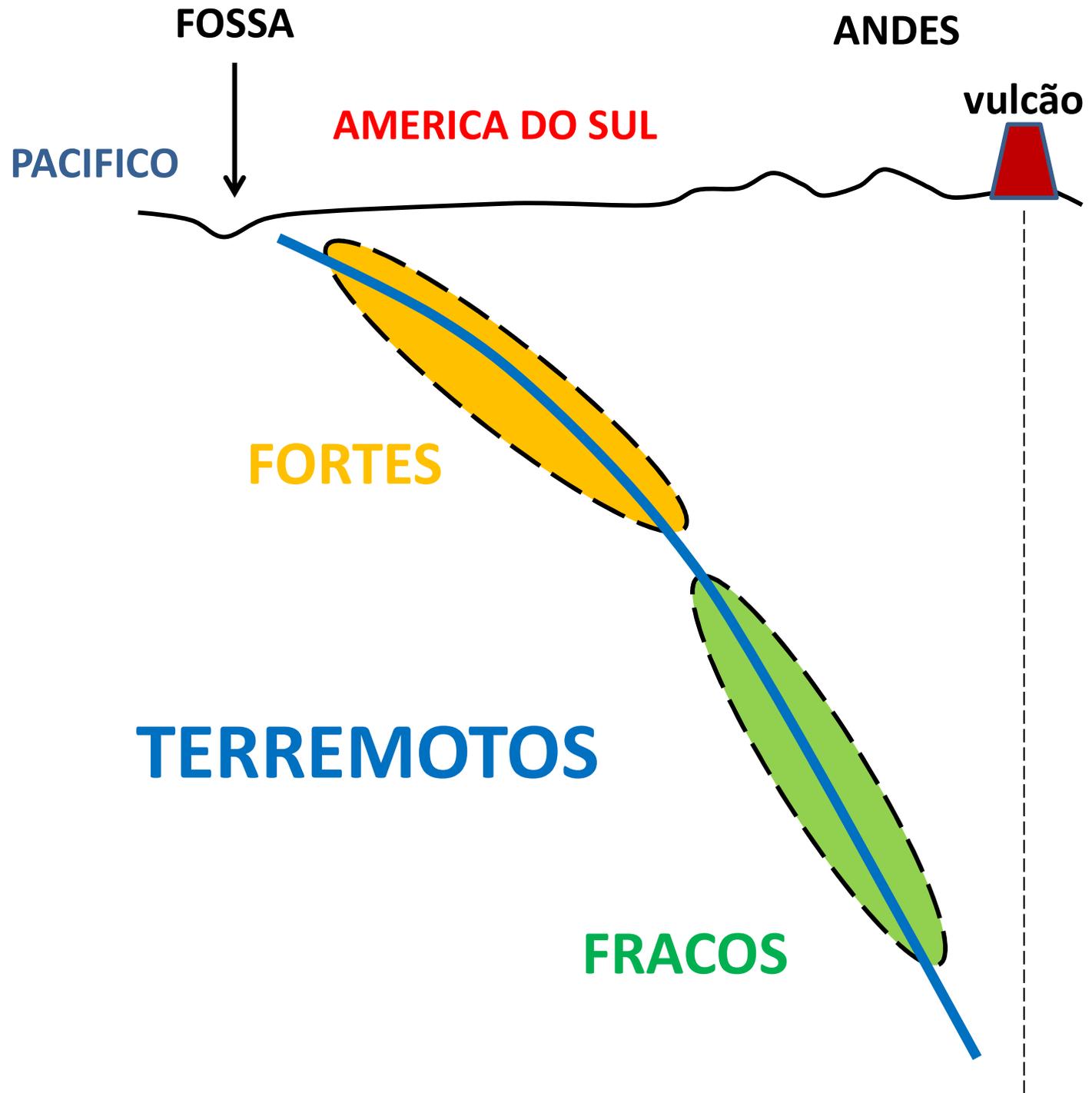
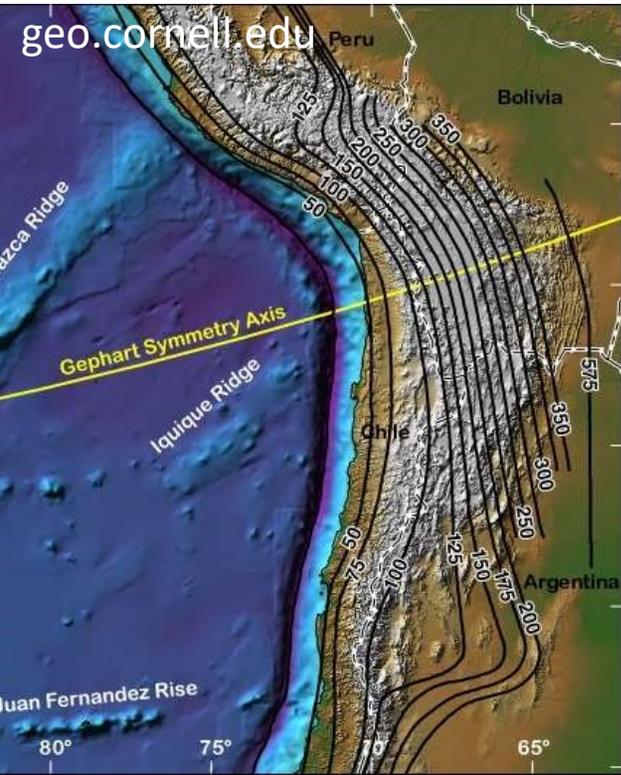


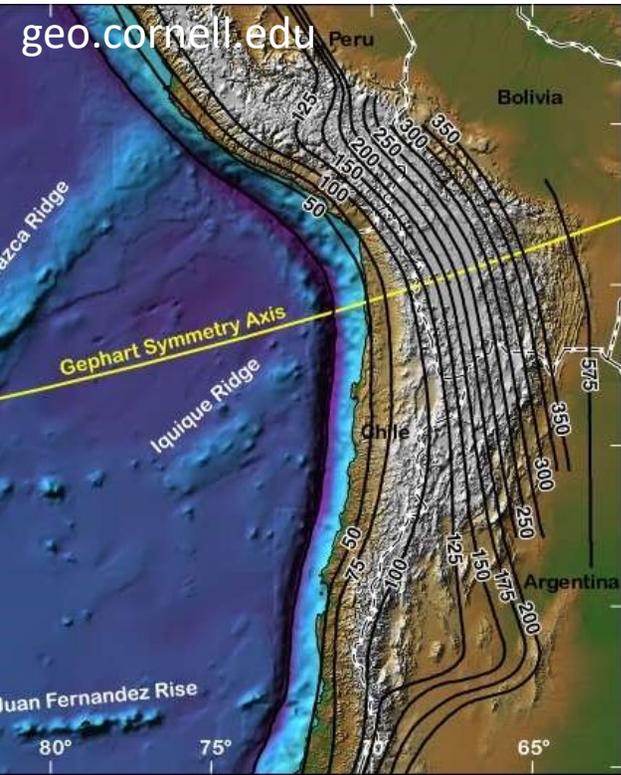


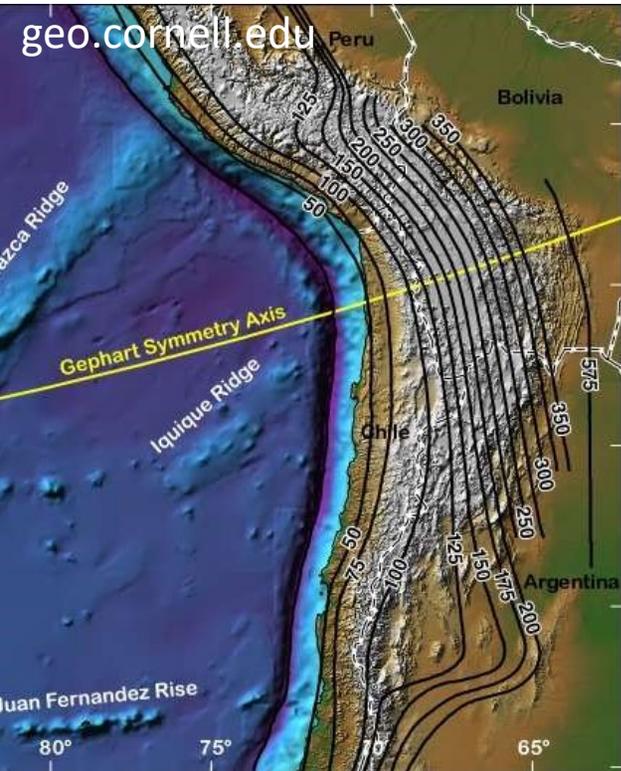


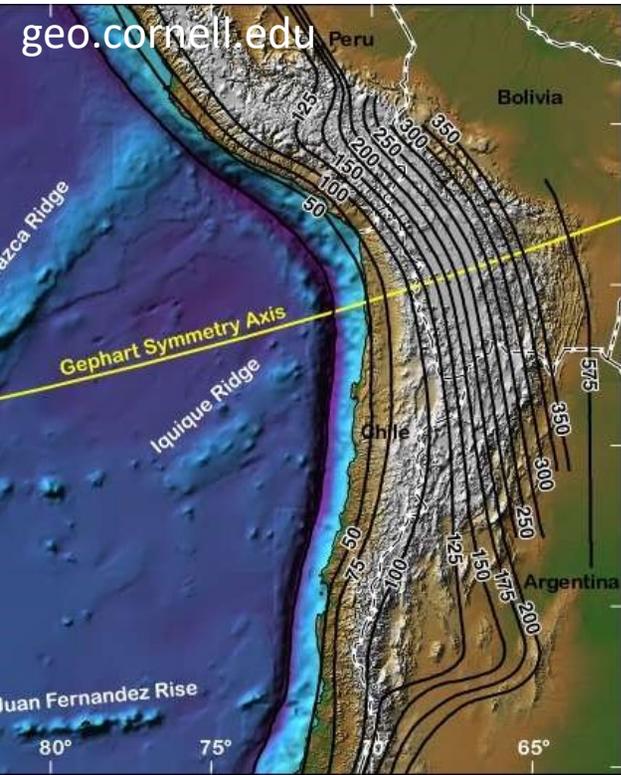
FOSSA
PACIFICO **AMERICA DO SUL**



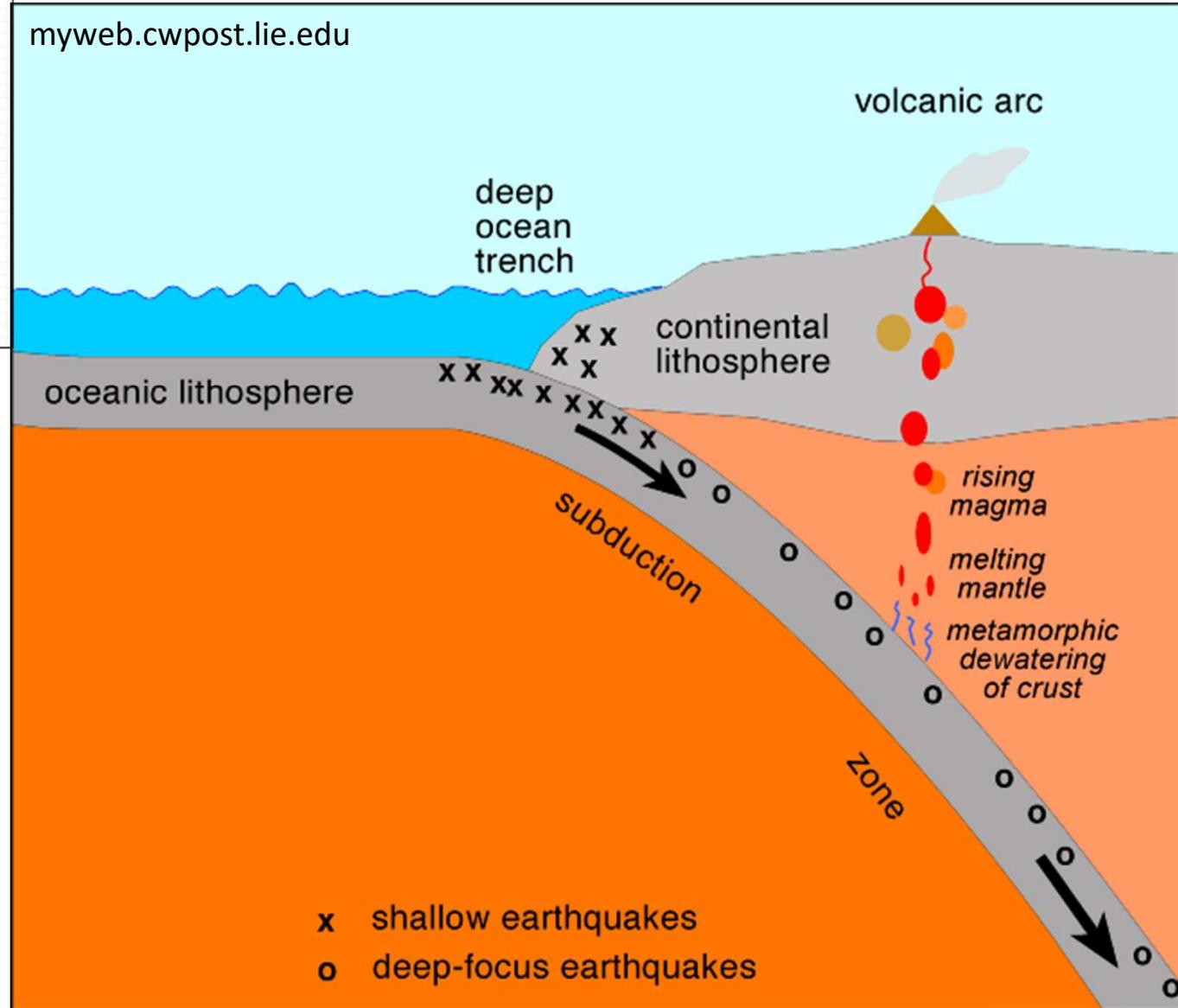
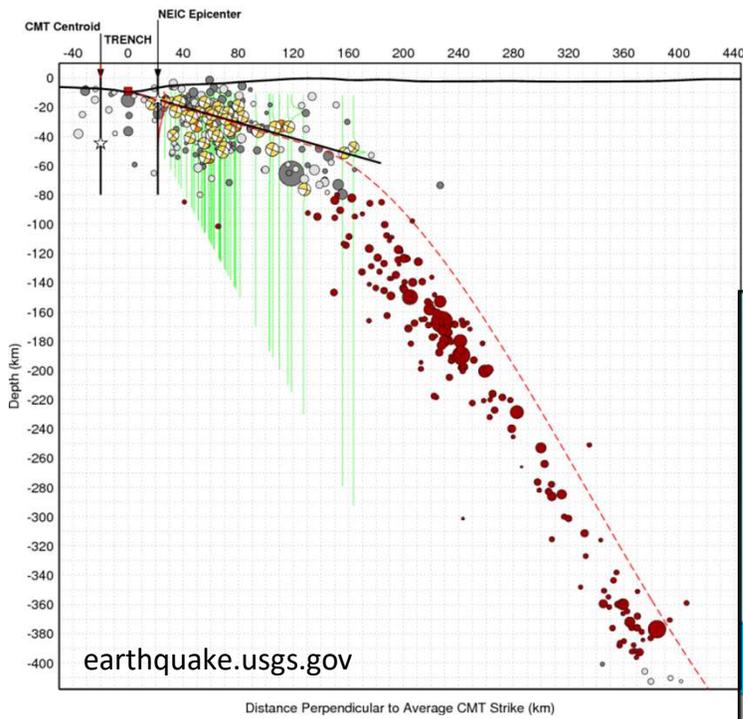








Processo de subducção



Processo de subducção

FOSSA, ANDES, VULCÕES

