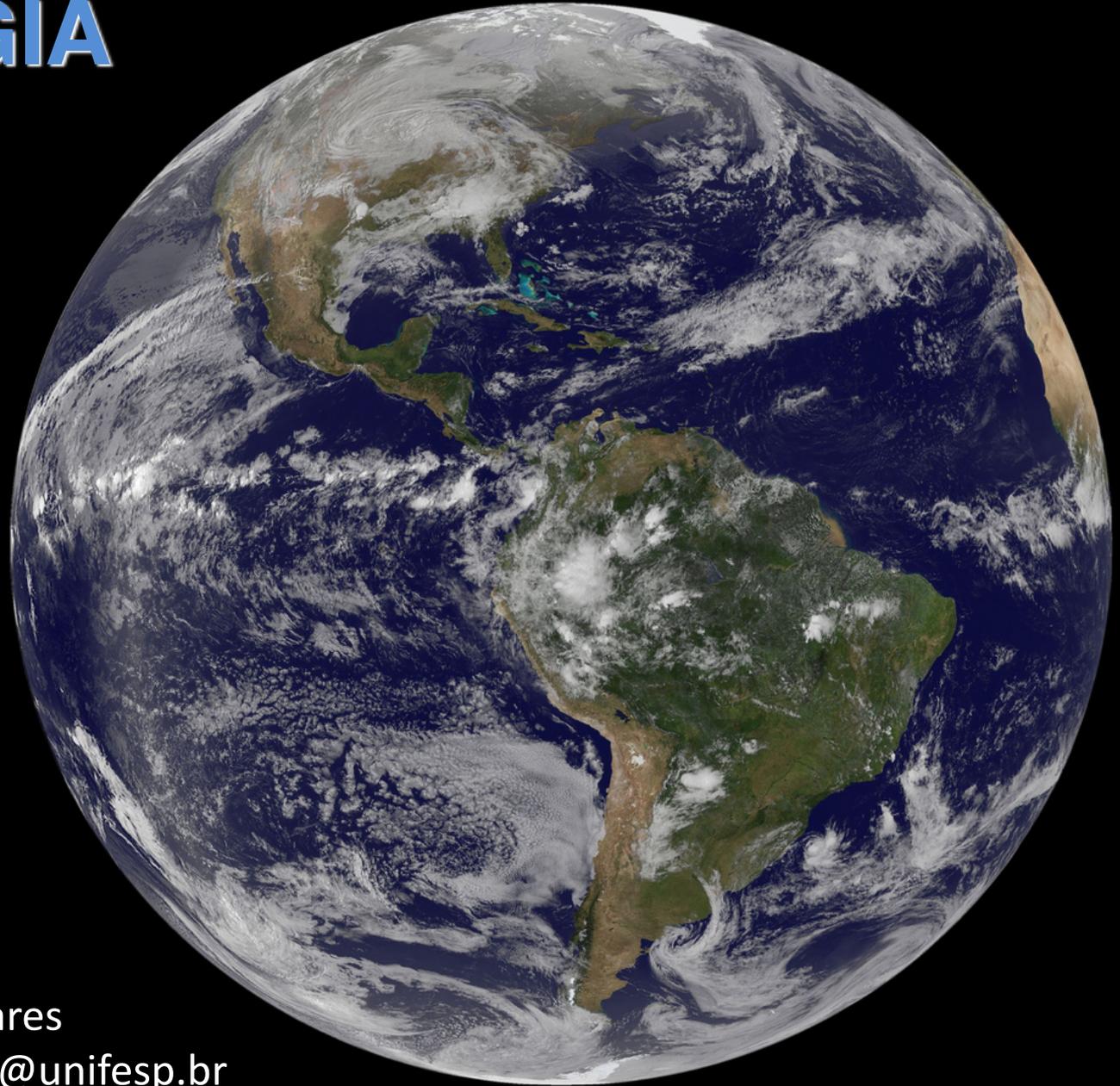


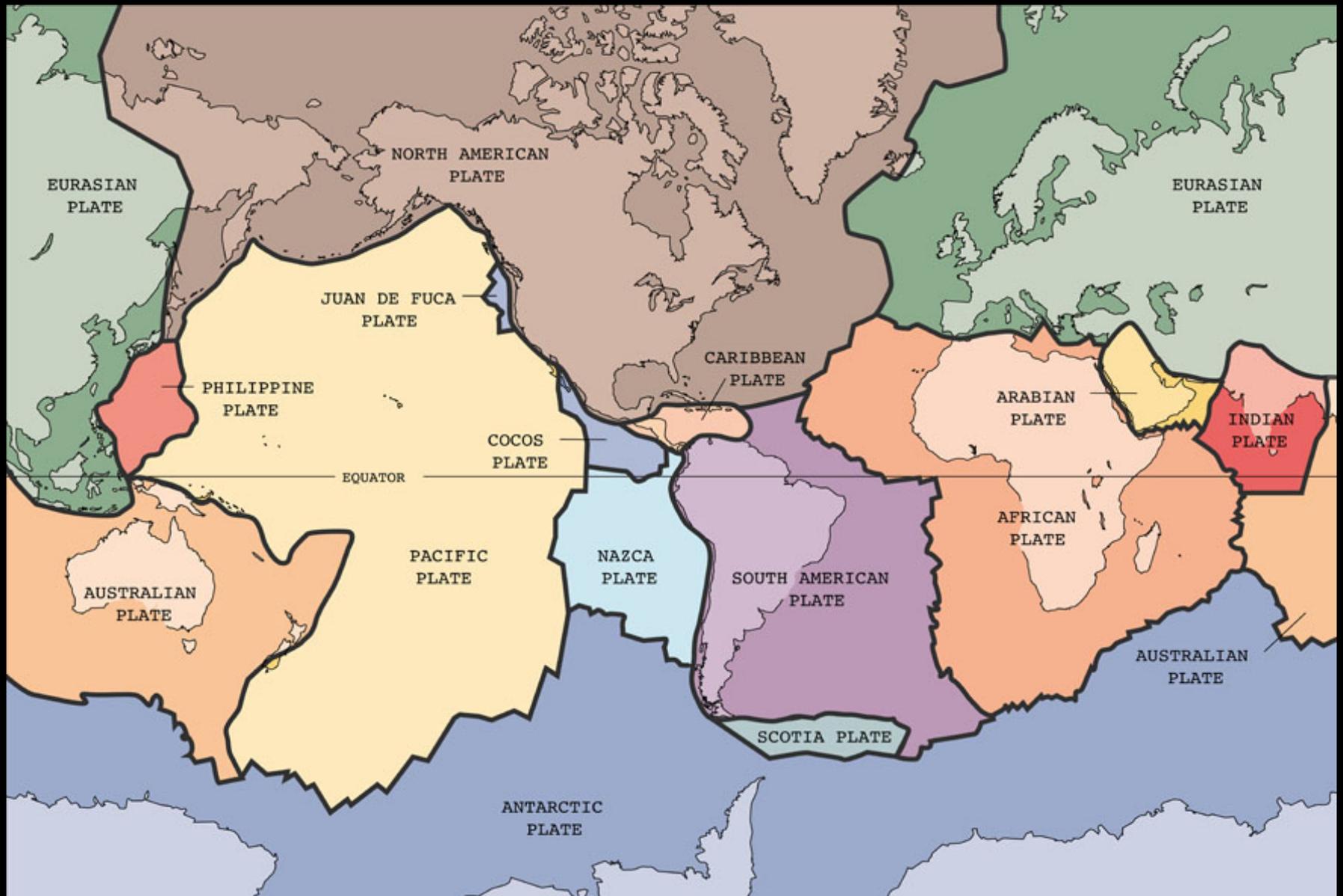
GEOLOGIA



Professor: Adilson Soares
E-mail: adilson.soares@unifesp.br
Site: www.geologia.wiki.br

Tectônica de Placas

Placas Litosféricas



Estrutura Interna da Terra

Placas cobrindo o manto e o núcleo



Dinâmica Interna Terrestre

Sumário

- Deriva Continental: desenvolvimento da teoria
- Estrutura Interna da Terra
- Tectônica de Placas
- Limites de Placas
 - Limites Divergentes
 - Limites Convergentes
 - Limites Transformantes
- Terremotos, vulcanismo, dobras, falhas

Deriva Continental

Deriva Continental

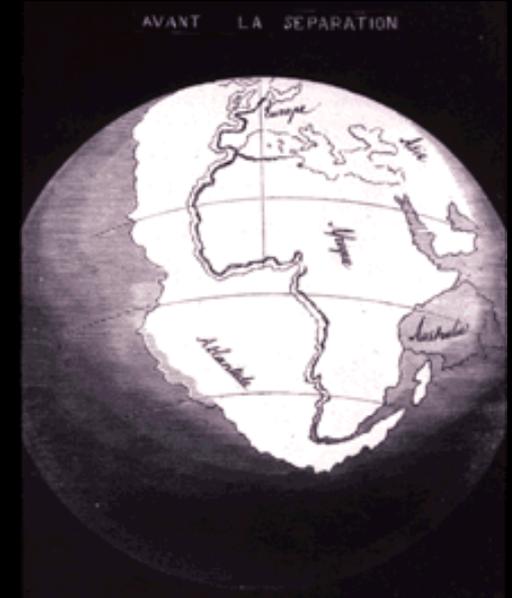
Desenvolvimento da teoria



Coincidência do contorno das costas da América do Sul e África

Deriva Continental

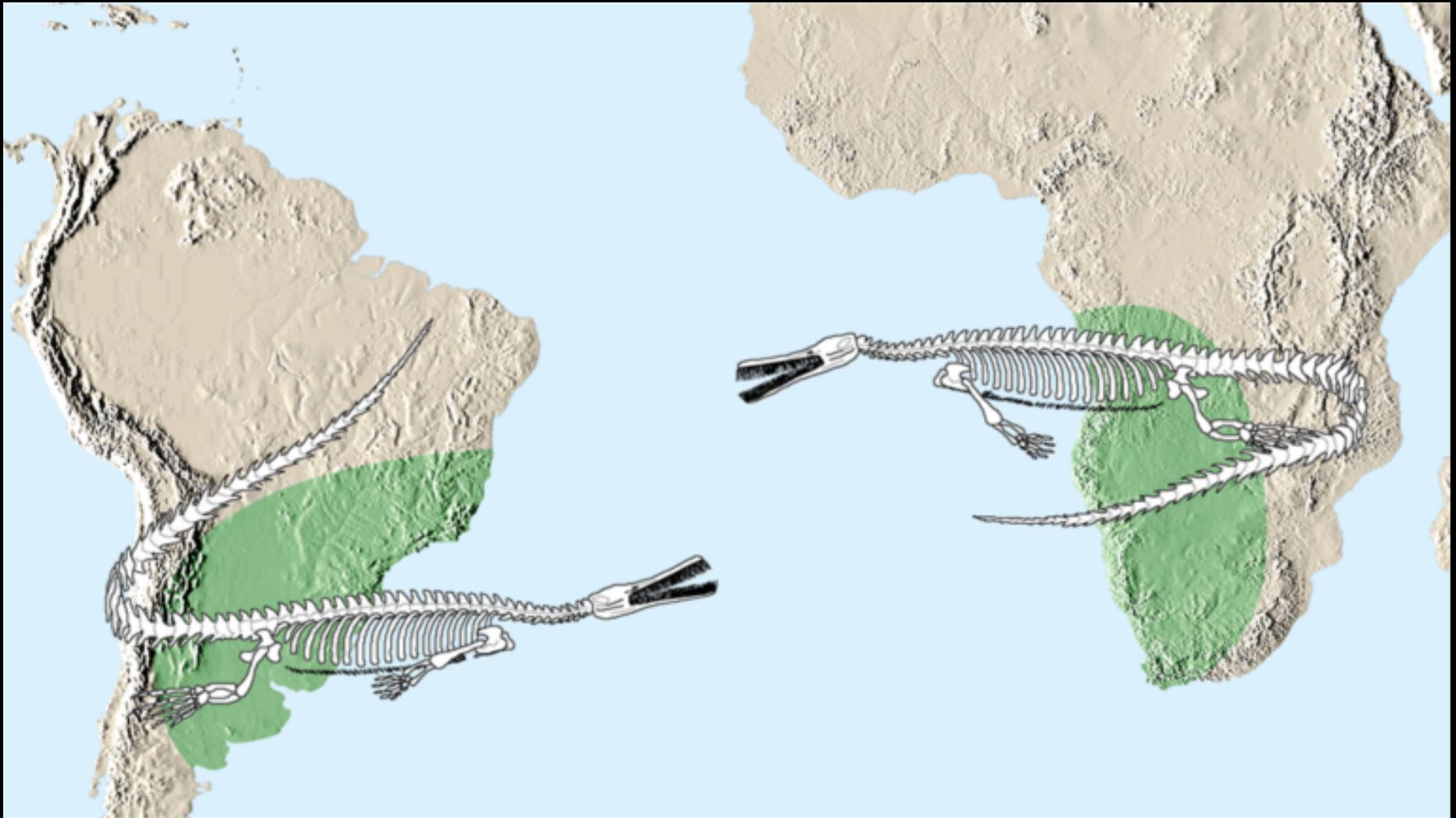
Desenvolvimento da teoria



Alfred Lothar Wegener (1880 – 1930)

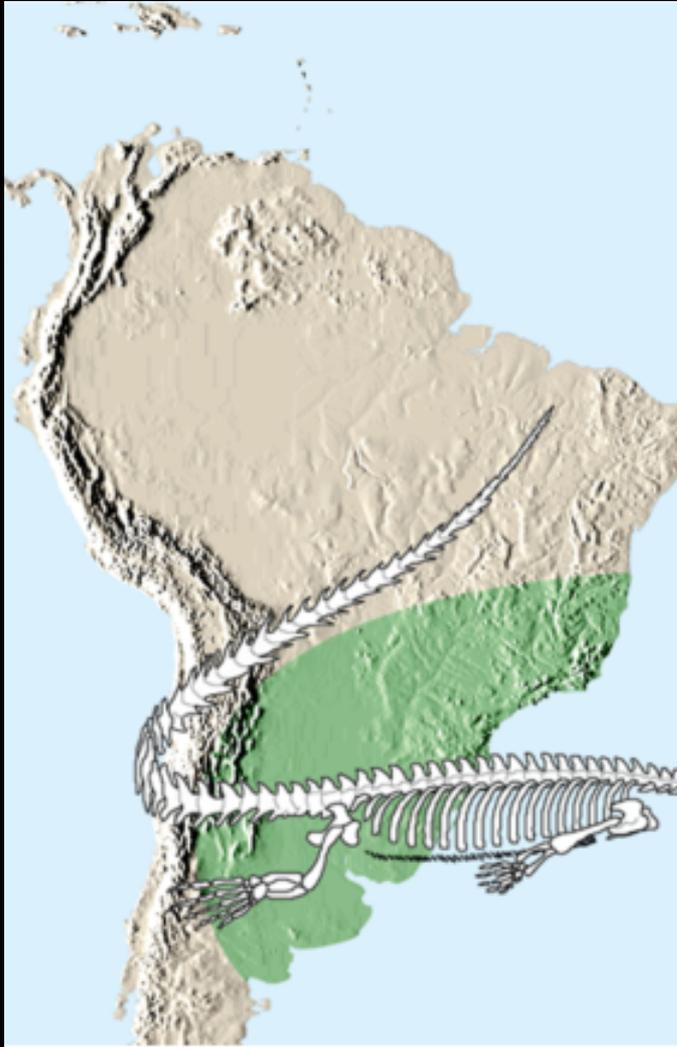
Deriva Continental

Desenvolvimento da teoria



Deriva Continental

Desenvolvimento da teoria



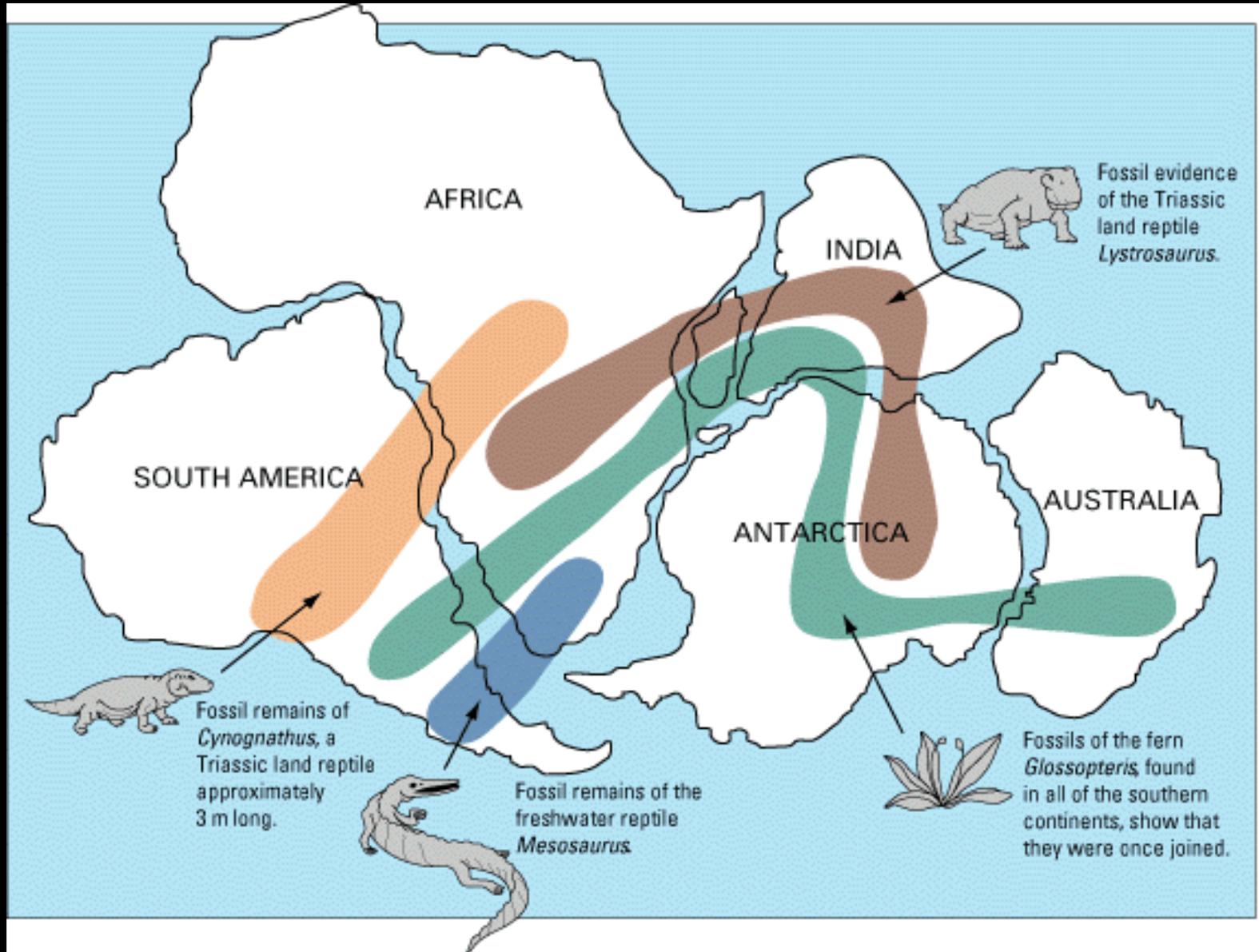
Deriva Continental

Desenvolvimento da teoria



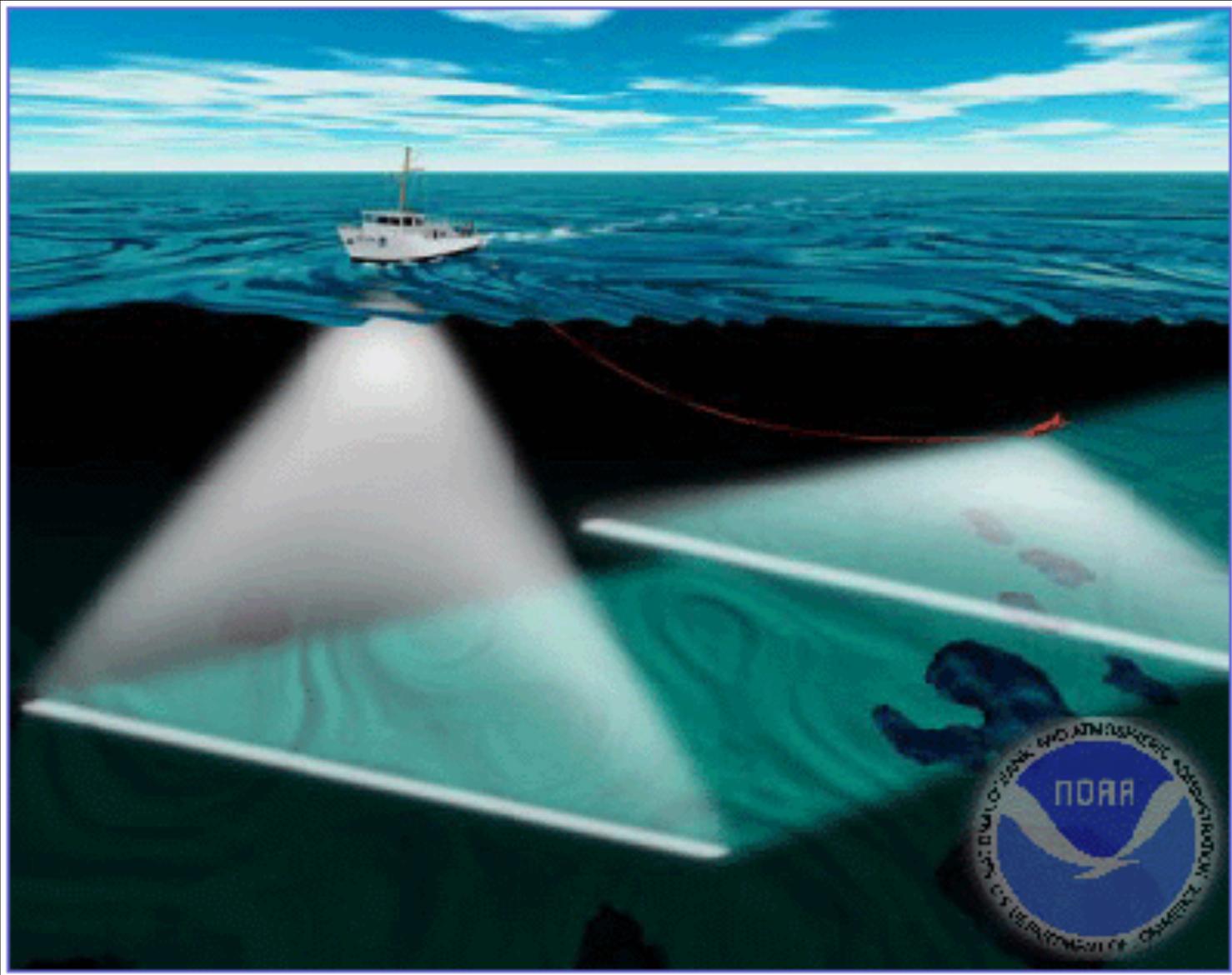
Deriva Continental

Desenvolvimento da teoria



Deriva Continental

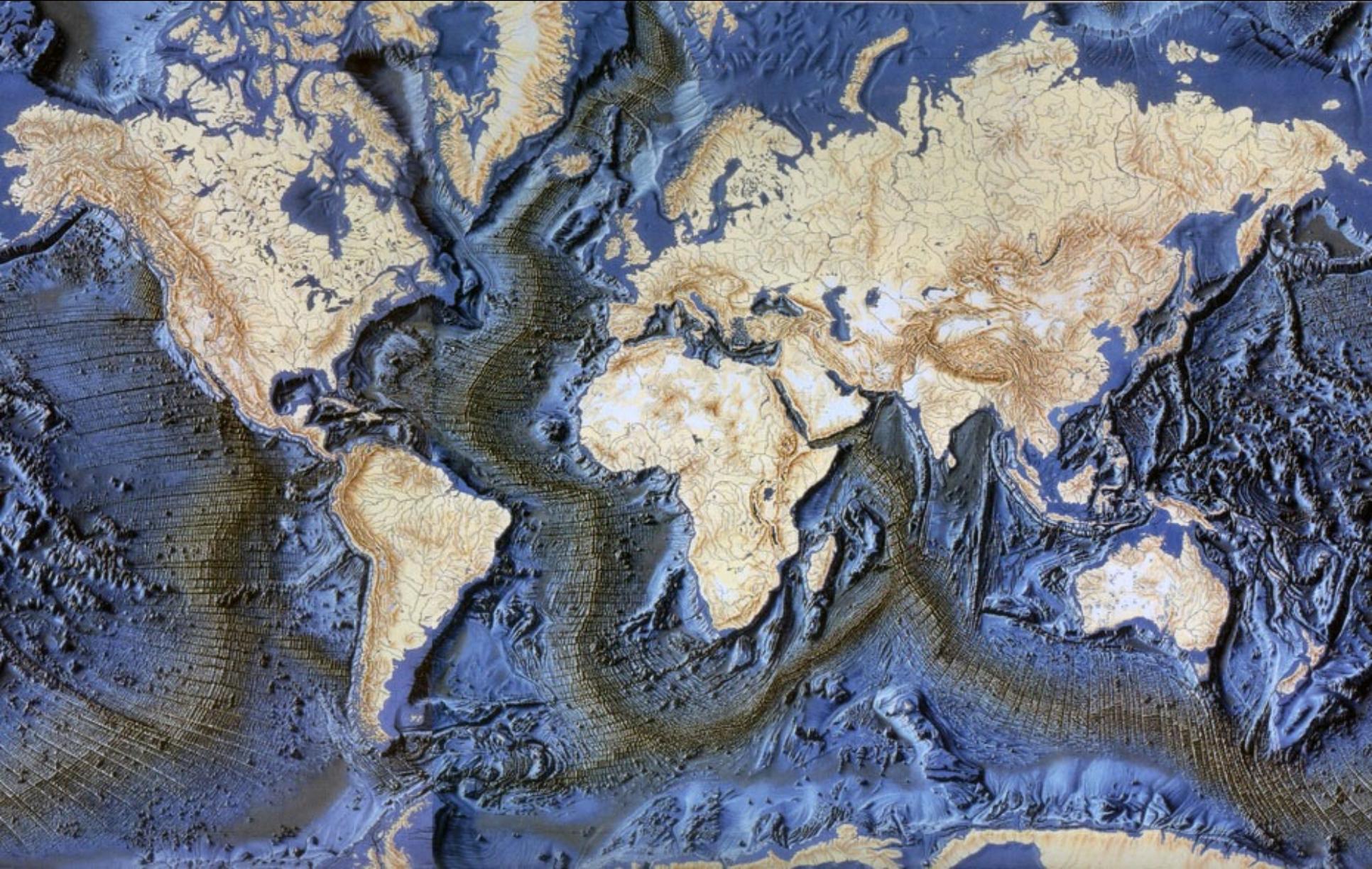
Desenvolvimento da teoria



Desenvolvimento dos sonares – SONAR (SOund NAvigation Ranging) – 2ª guerra mundial

Deriva Continental

Desenvolvimento da teoria



Deriva Continental

Desenvolvimento da teoria



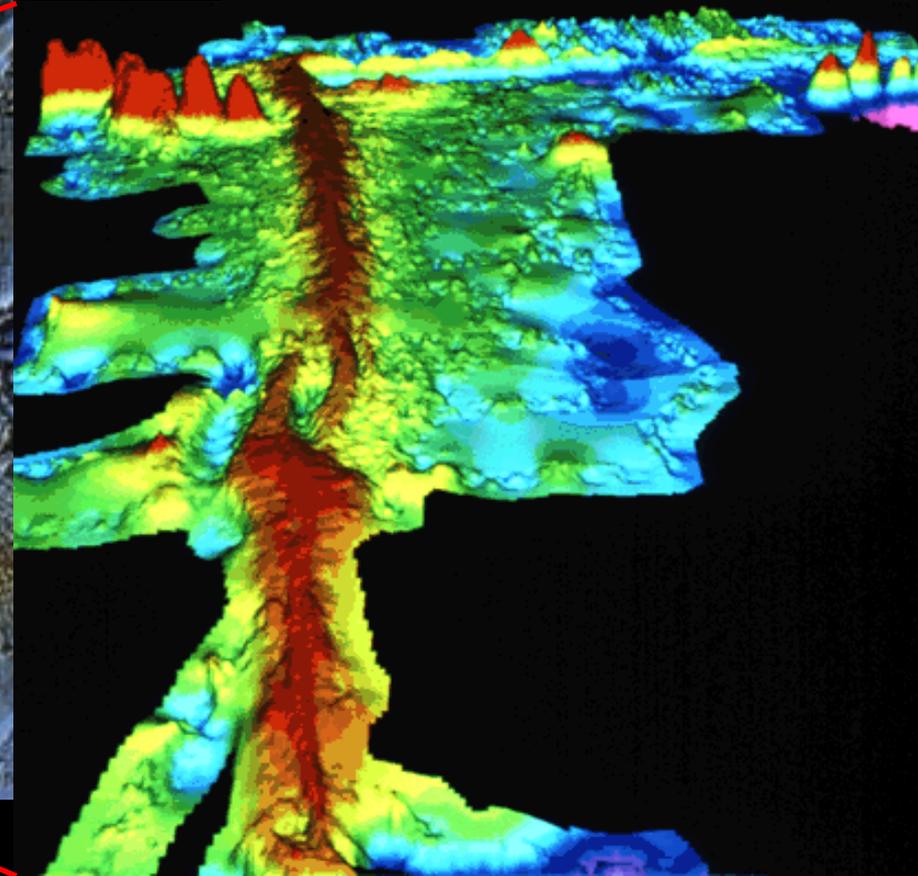
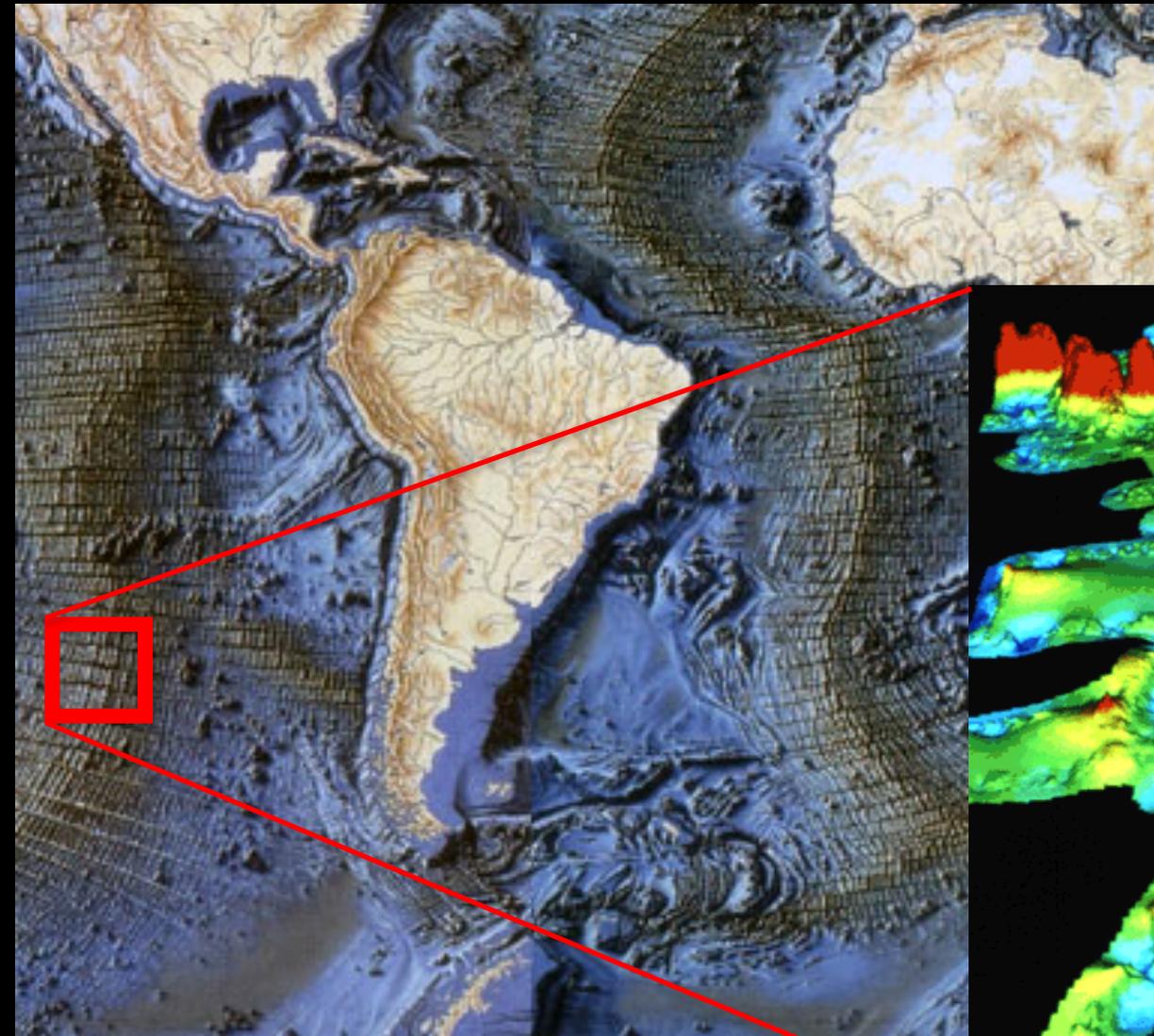
Deriva Continental

Desenvolvimento da teoria



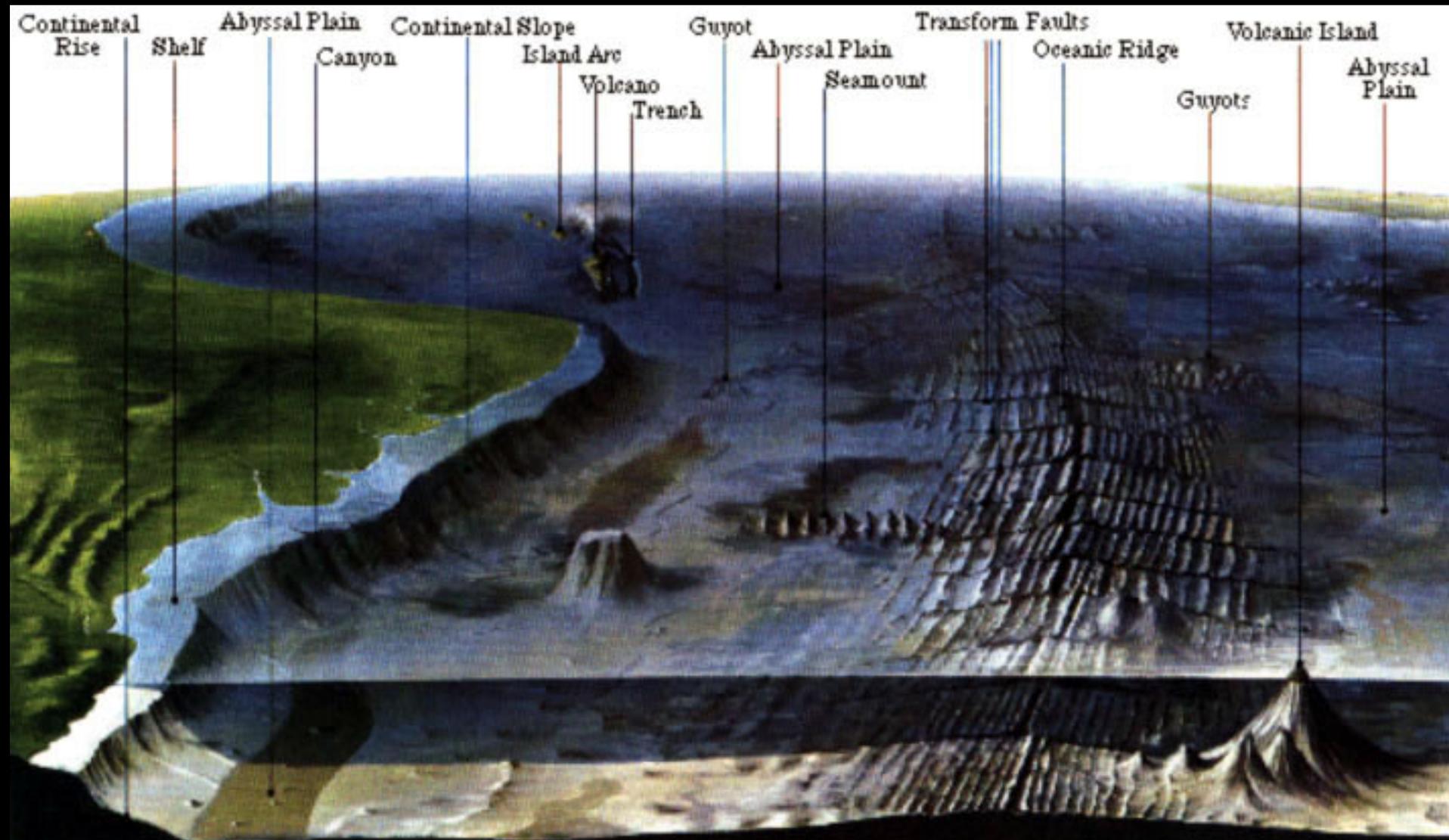
Deriva Continental

Desenvolvimento da teoria



Deriva Continental

Desenvolvimento da teoria

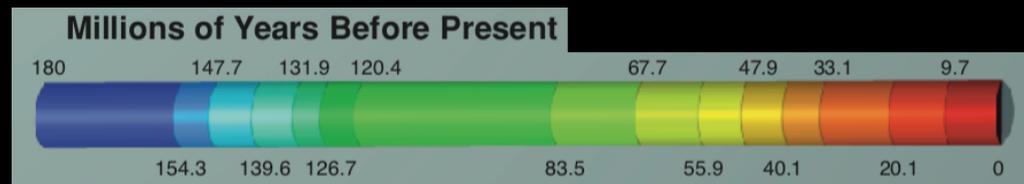
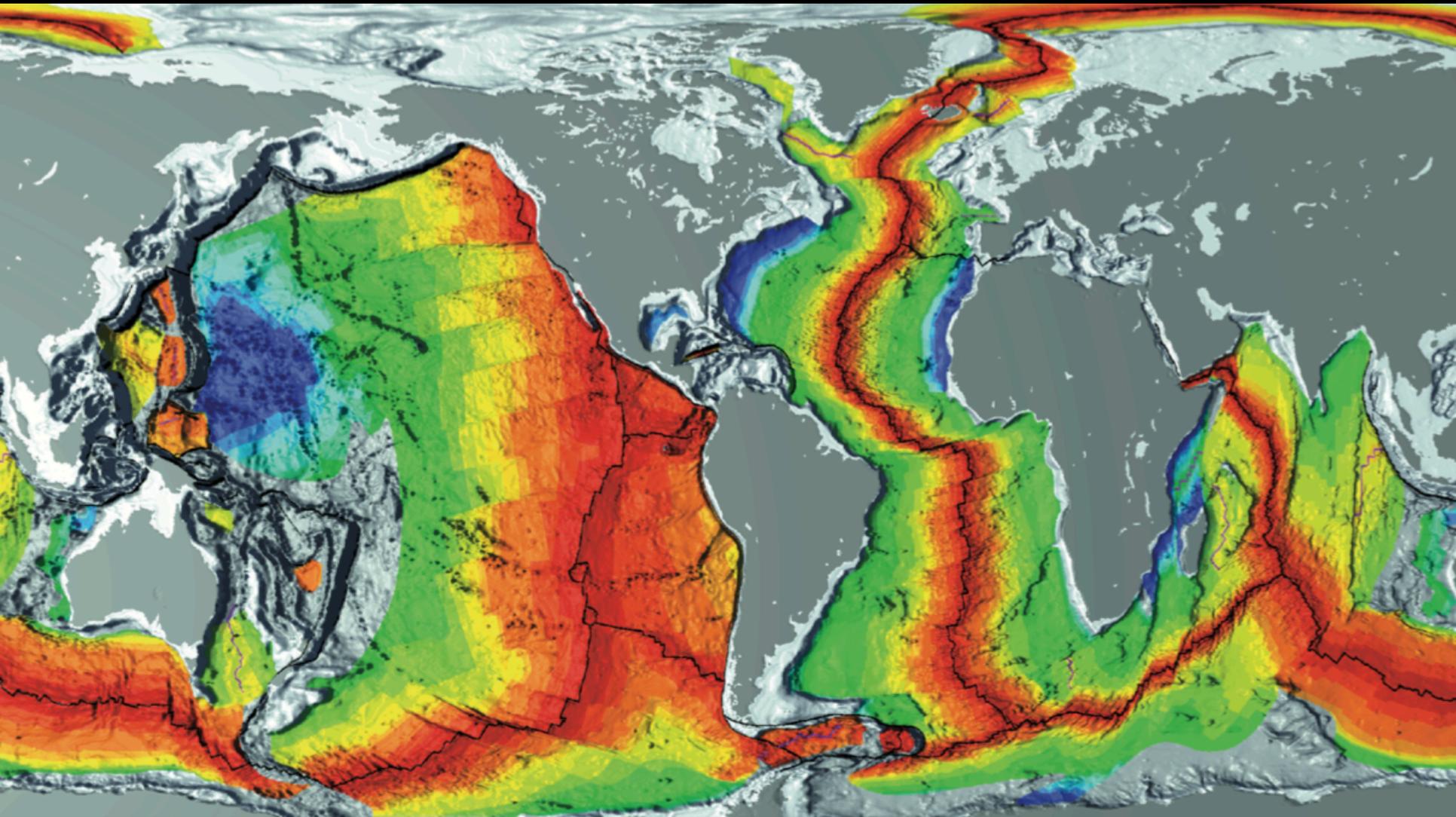


Deriva Continental



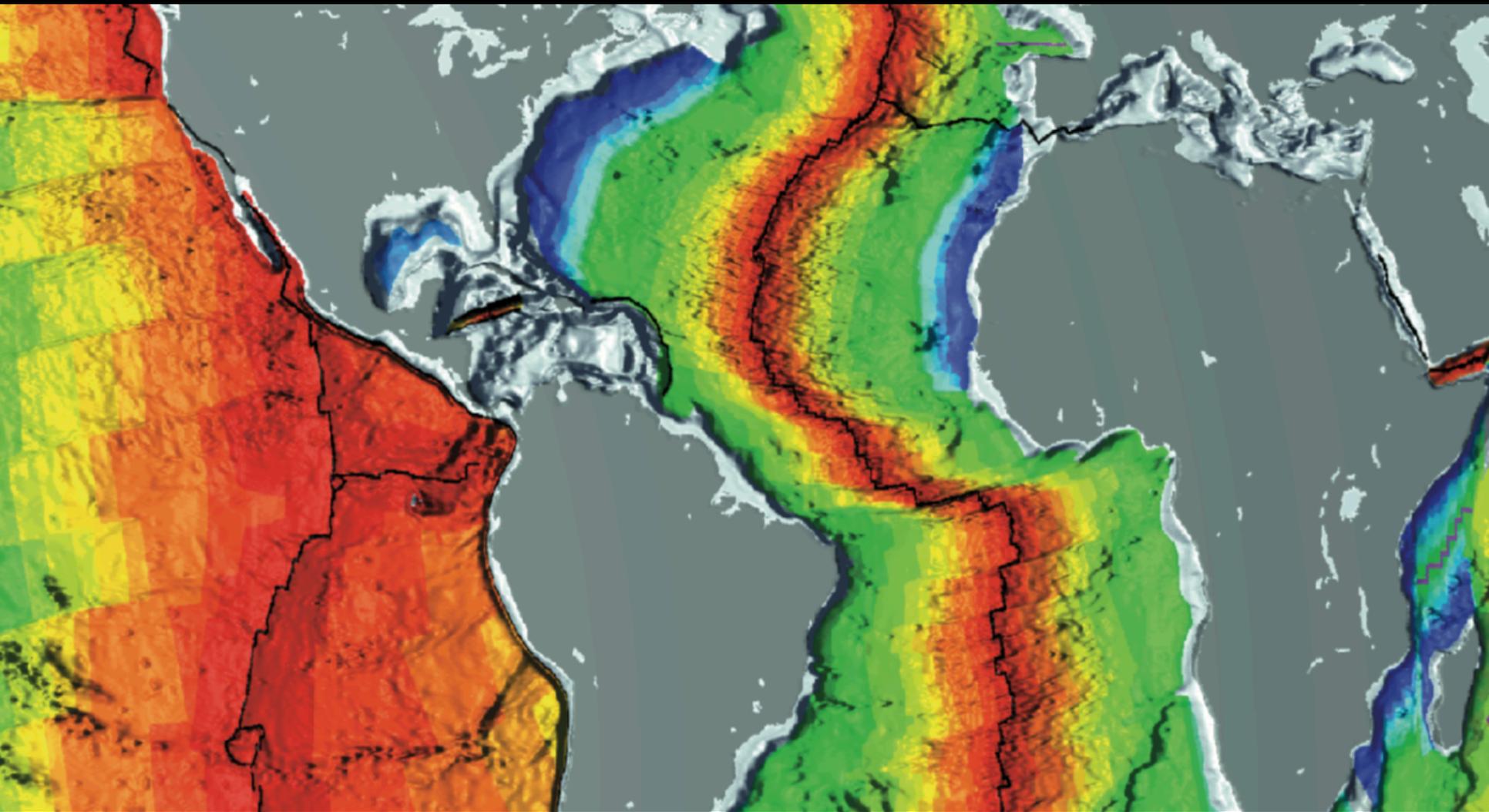
Sonar – imagem de navio naufragado

Deriva Continental



Idade do assoalho oceânico

Deriva Continental

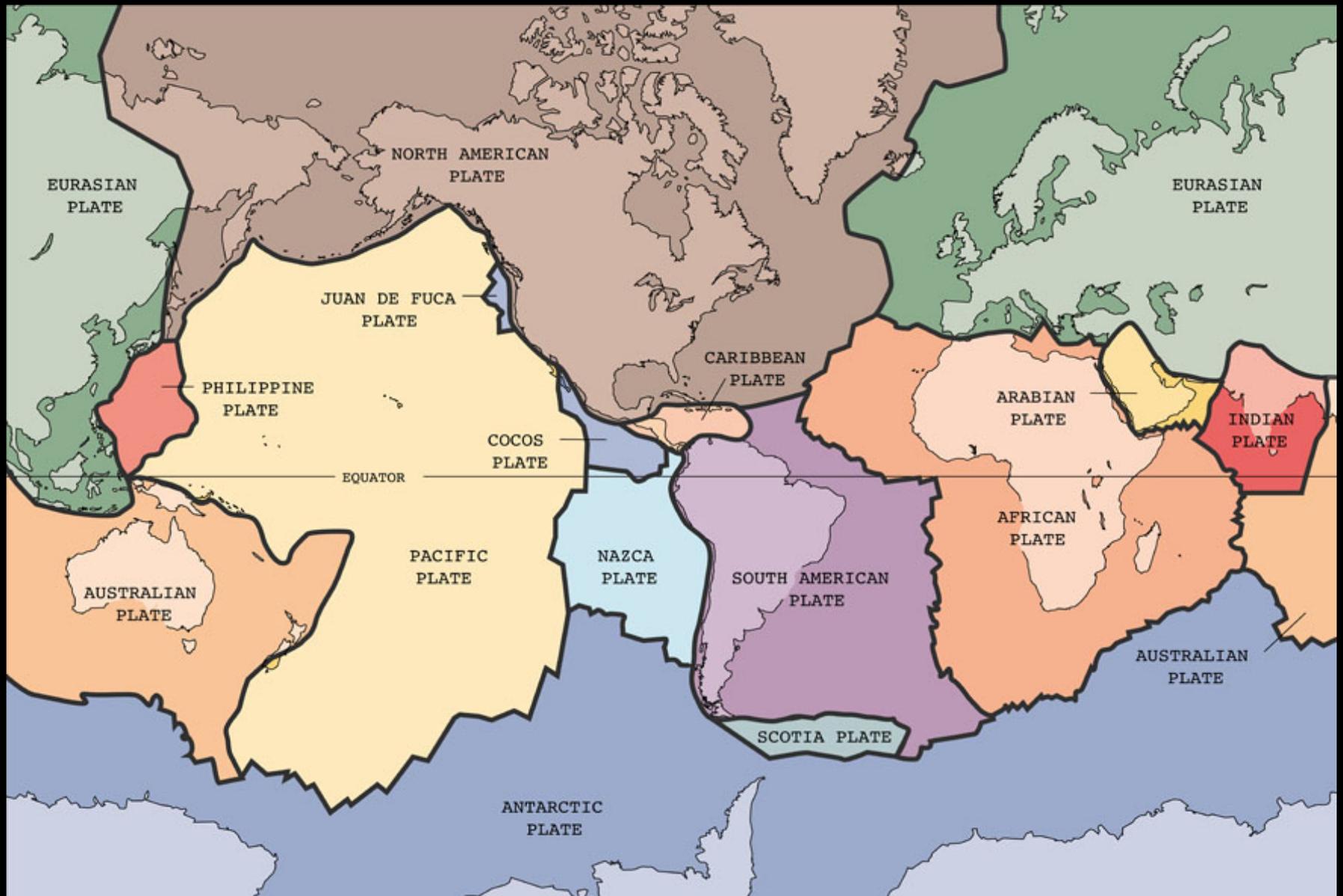


Millions of Years Before Present

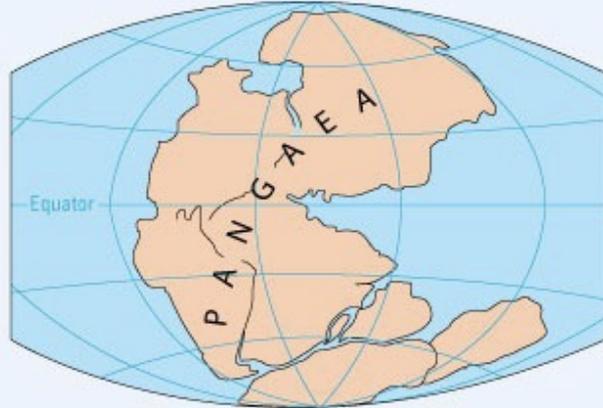


Idade do assoalho oceânico

Placas Litosféricas



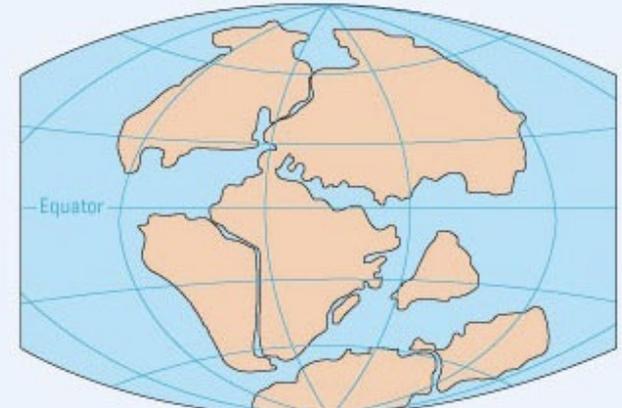
Deriva Continental



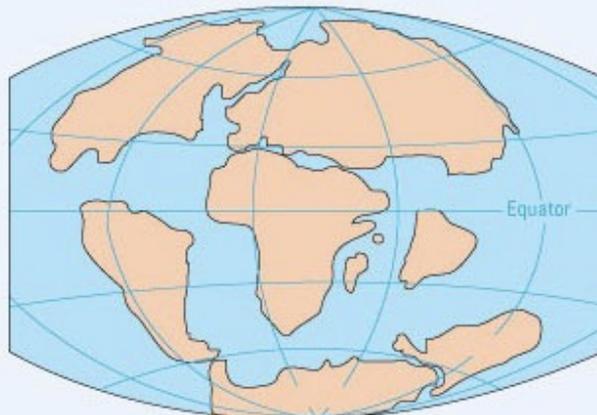
PERMIAN
225 million years ago



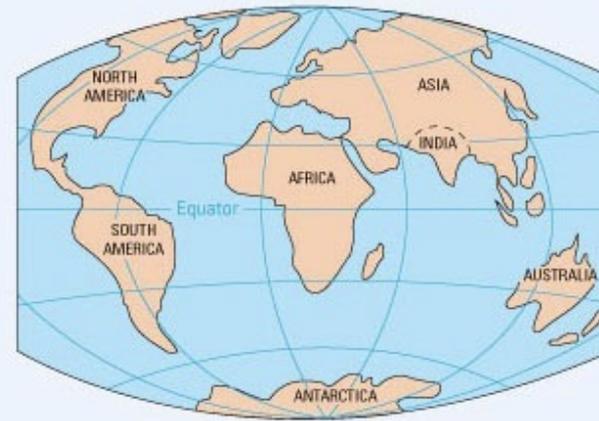
TRIASSIC
200 million years ago



JURASSIC
150 million years ago



CRETACEOUS
65 million years ago



PRESENT DAY

Reconstituição dos continentes

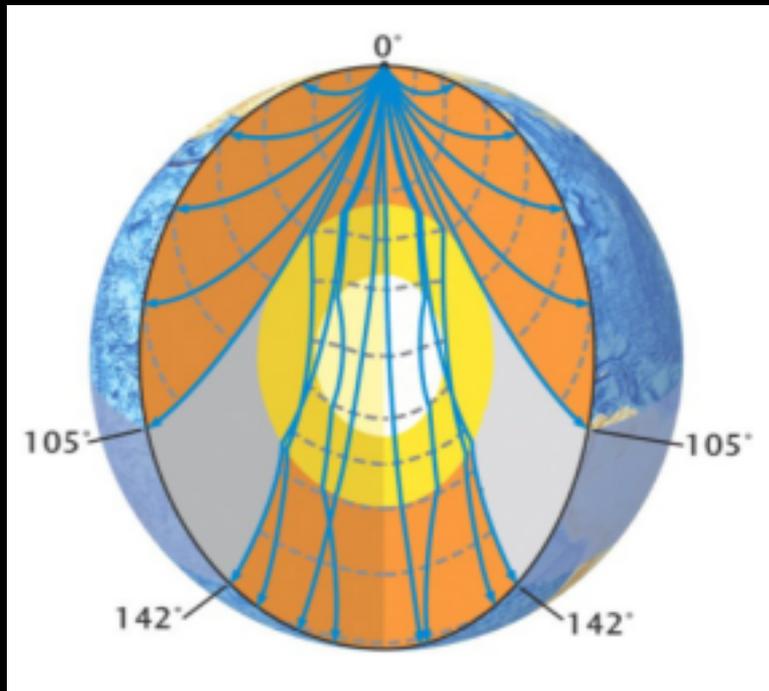
O que move as placas litosféricas?

?

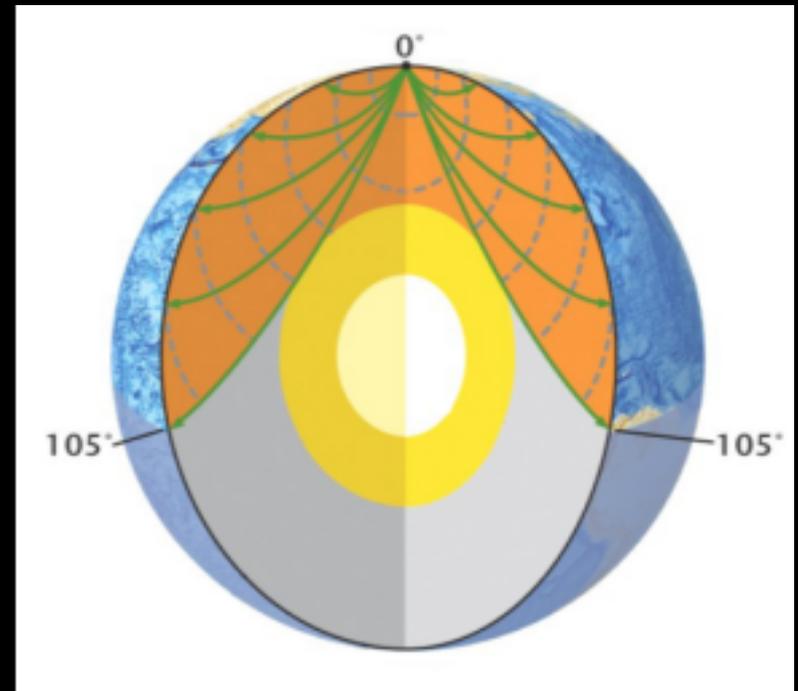
Estrutura Interna da Terra

Estrutura Interna da Terra

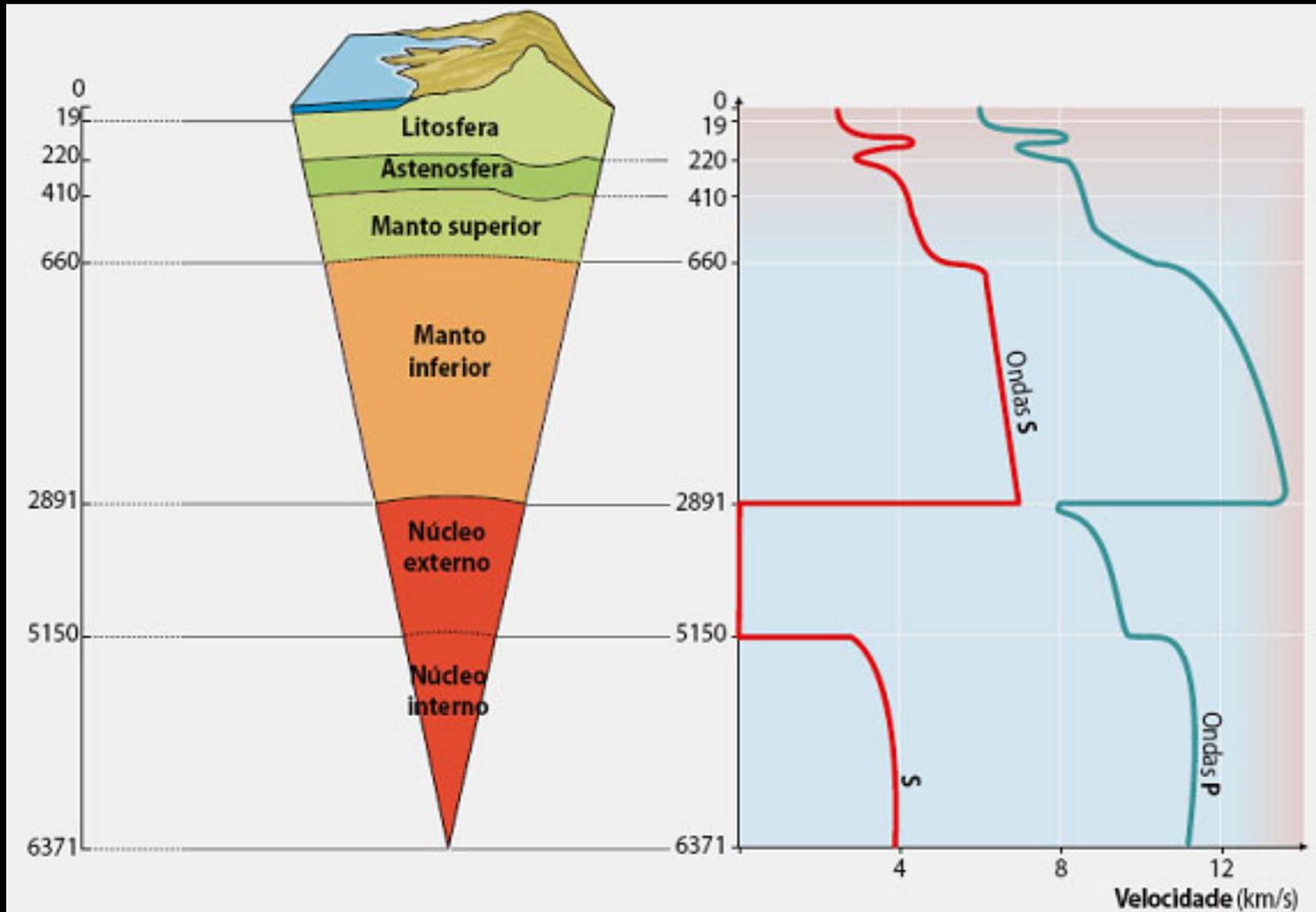
Ondas P



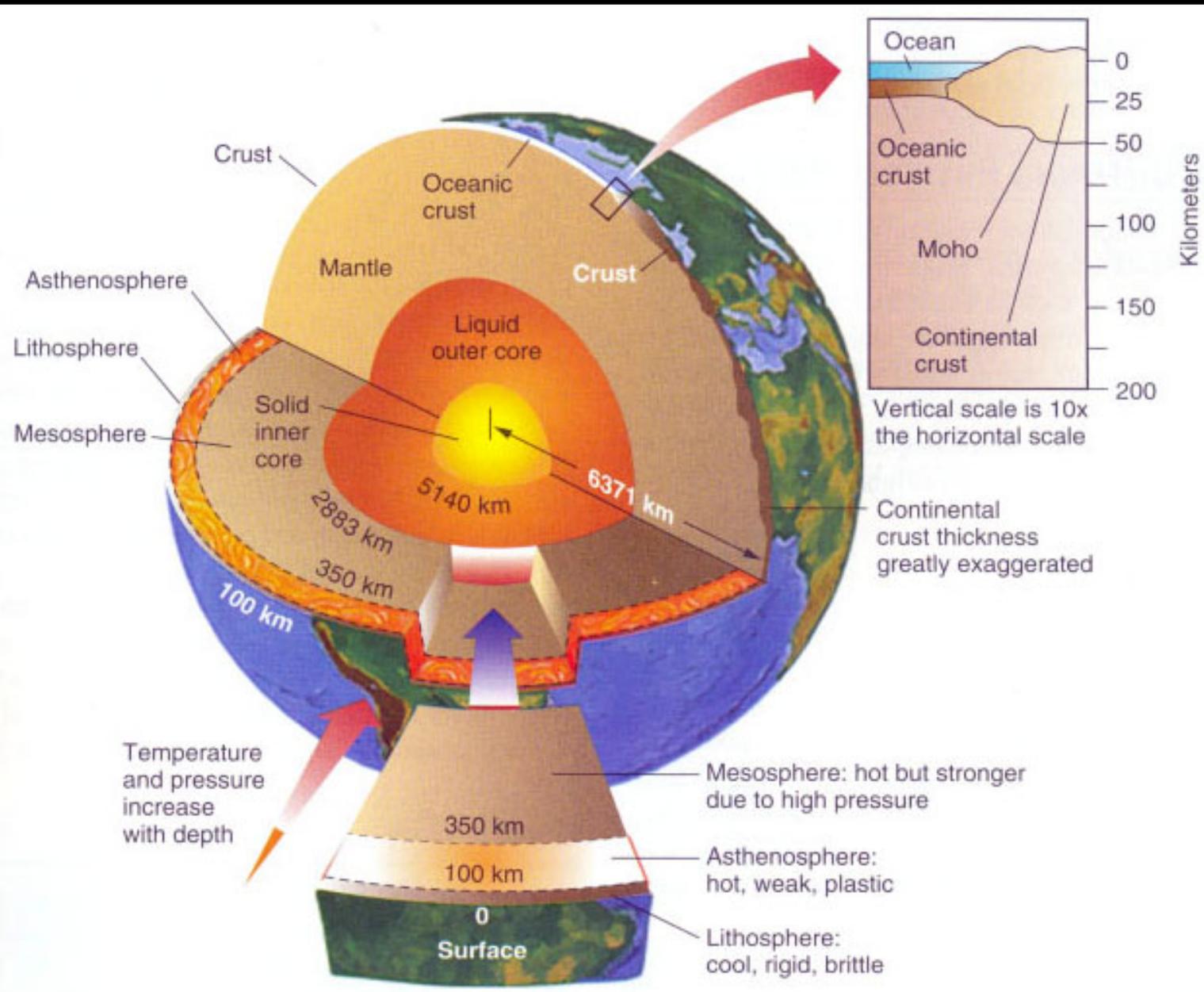
Ondas S



Estrutura Interna da Terra



Estrutura Interna da Terra



Estrutura Interna da Terra

Placas cobrindo o manto e o núcleo

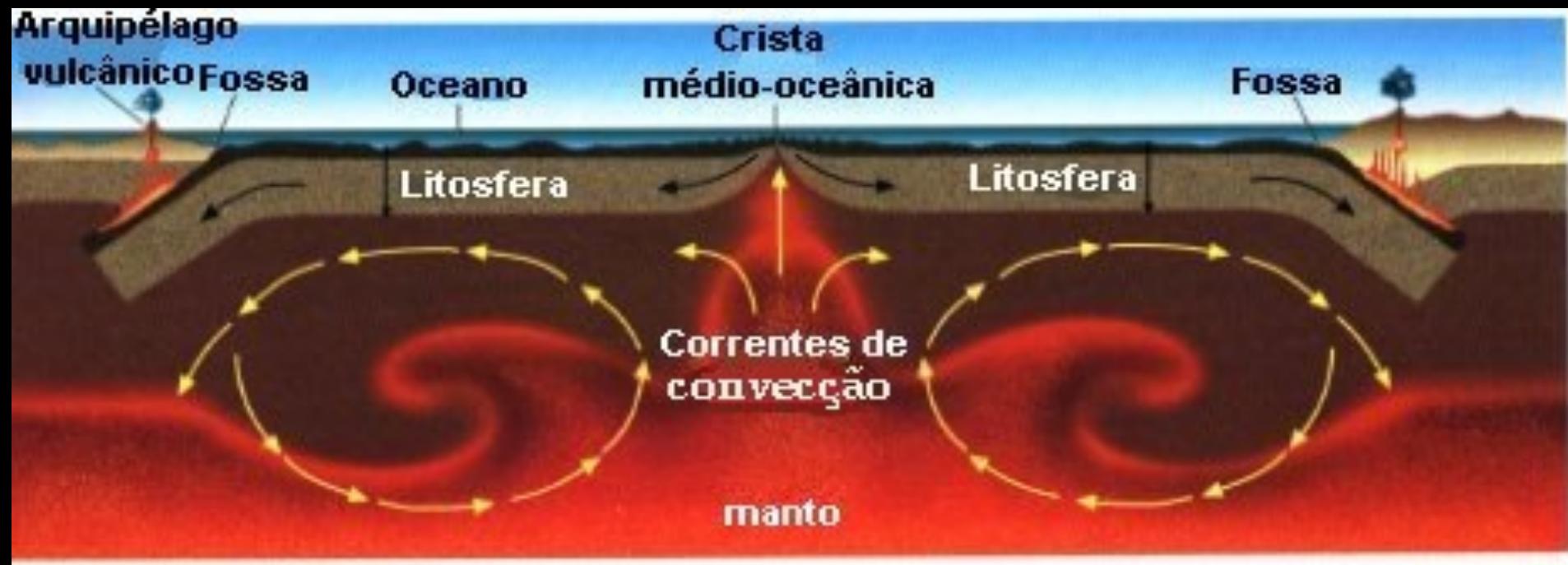


O que move as placas litosféricas?

O que move as placas?

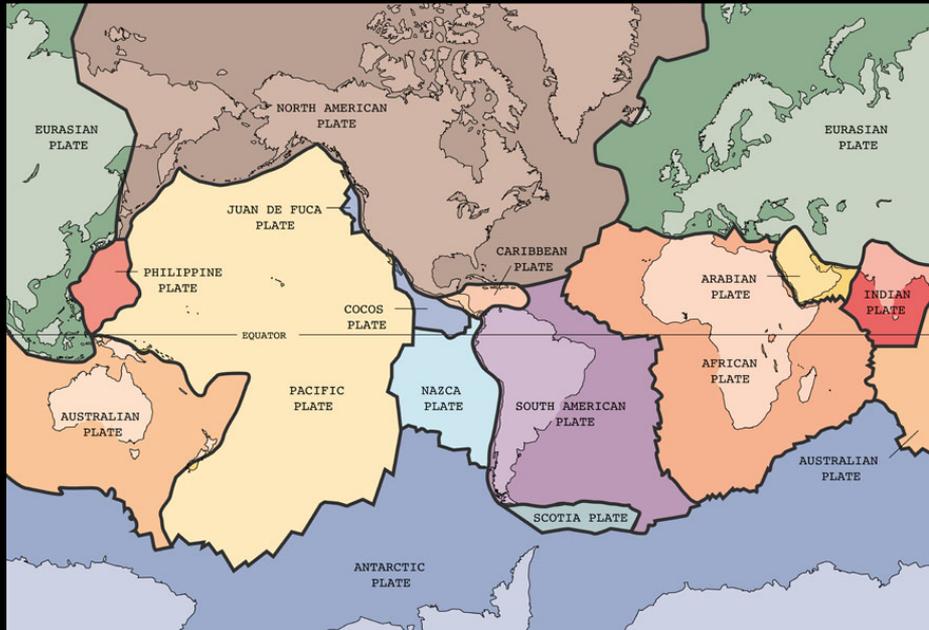


O que move as placas?



Correntes de convecção

Tectônica de Placas



Placas litosféricas



Movimento



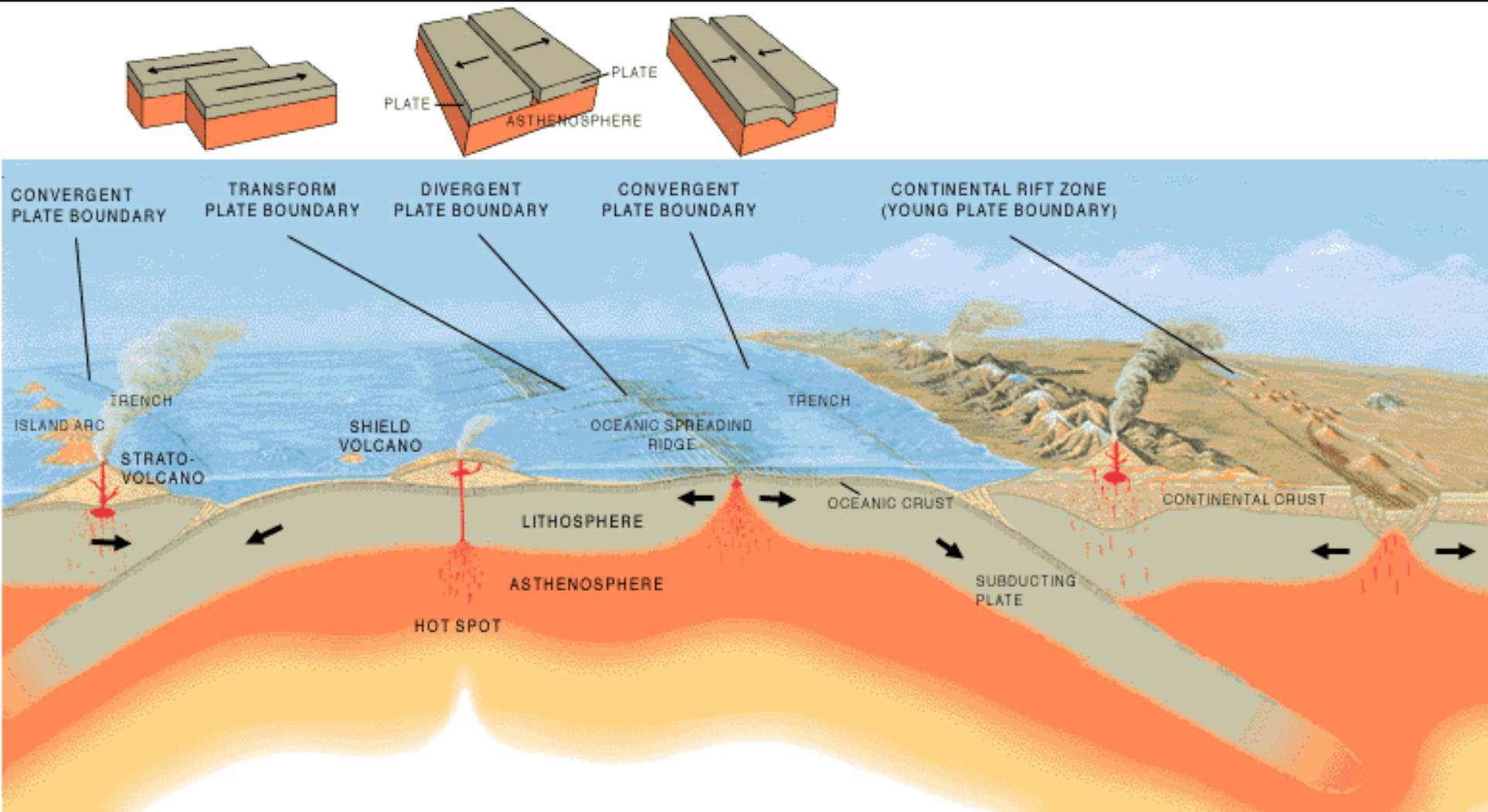
Placas Tectônicas

Placas Tectônicas

- Limite Divergente
- Limite Convergente
- Limite Transformante

Tectônica de Placas

Limites

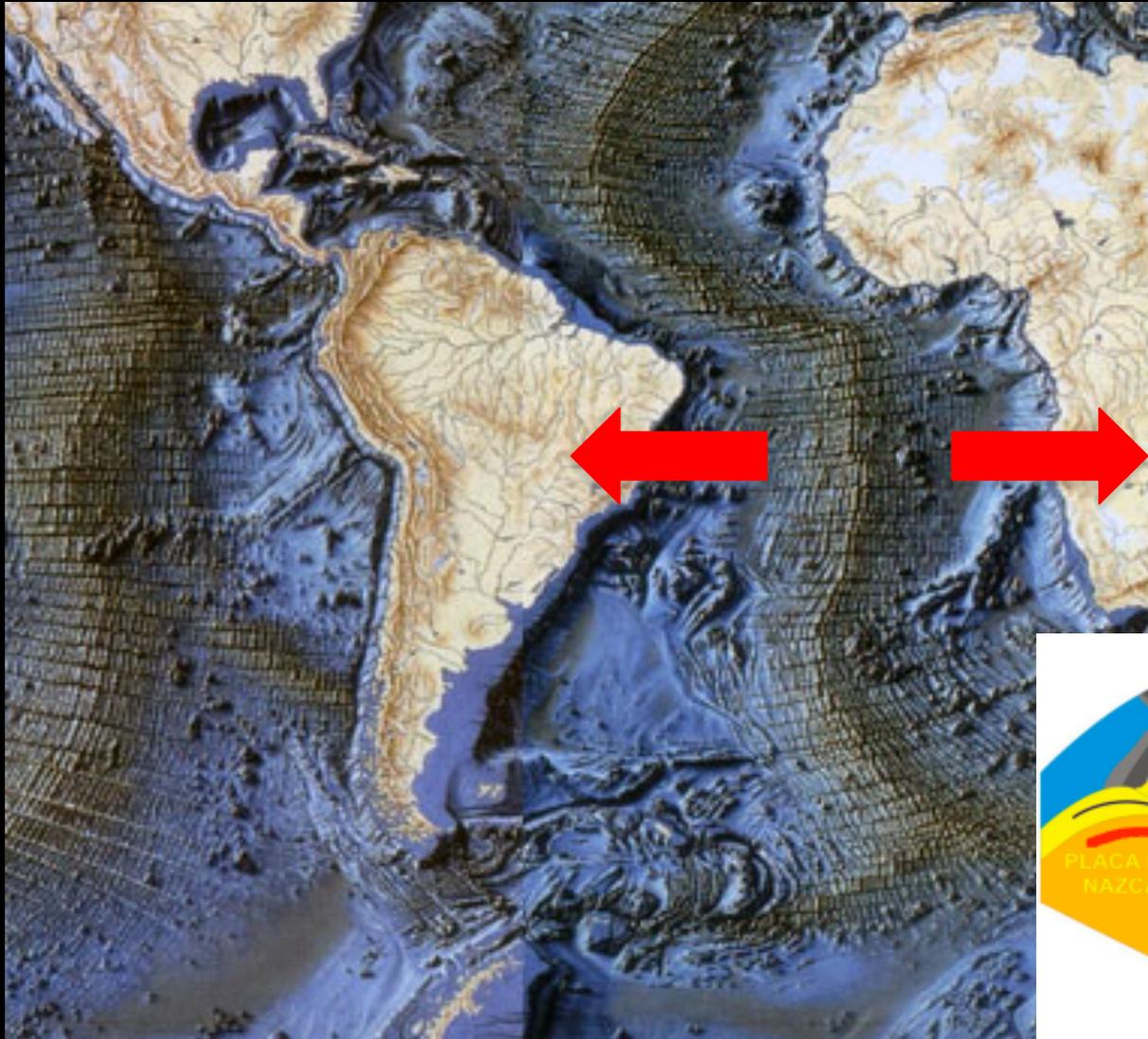


Placas Tectônicas

- Limite Divergente

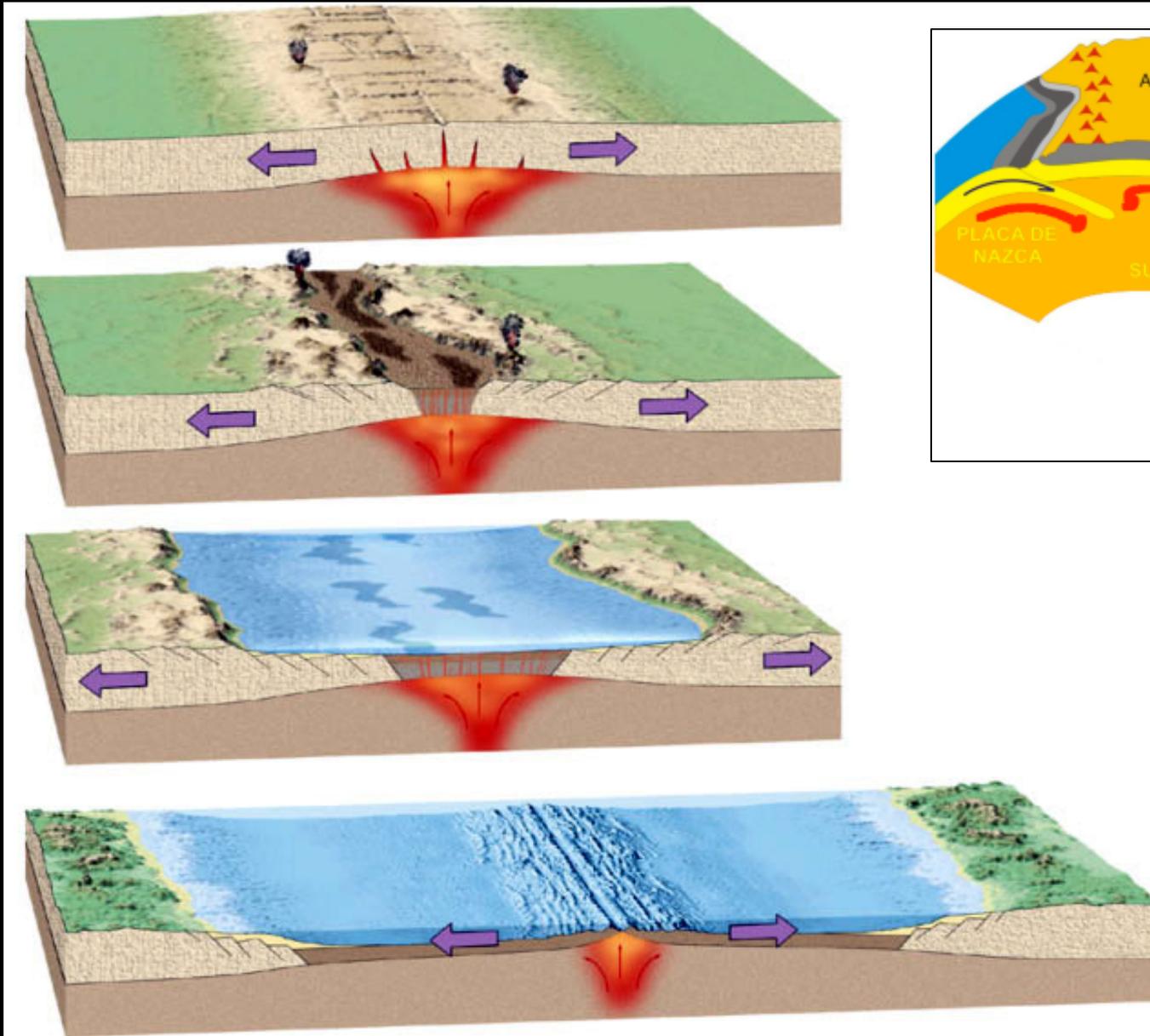
Tectônica de Placas

Limites Divergentes



Tectônica de Placas

Limites Divergentes



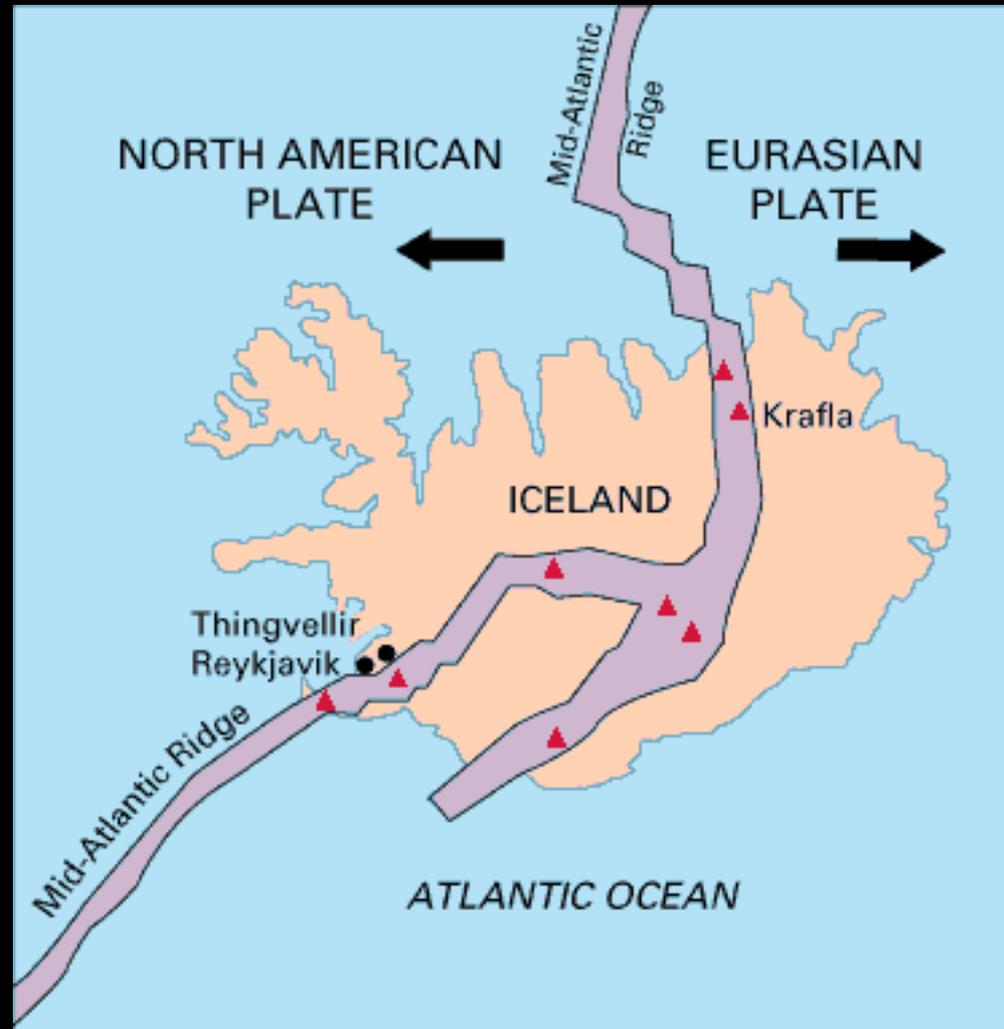
Tectônica de Placas

Limites Divergentes



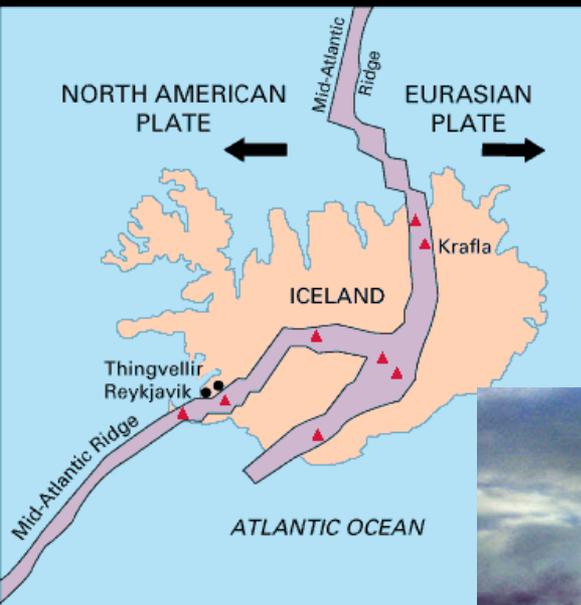
Tectônica de Placas

Limites Divergentes



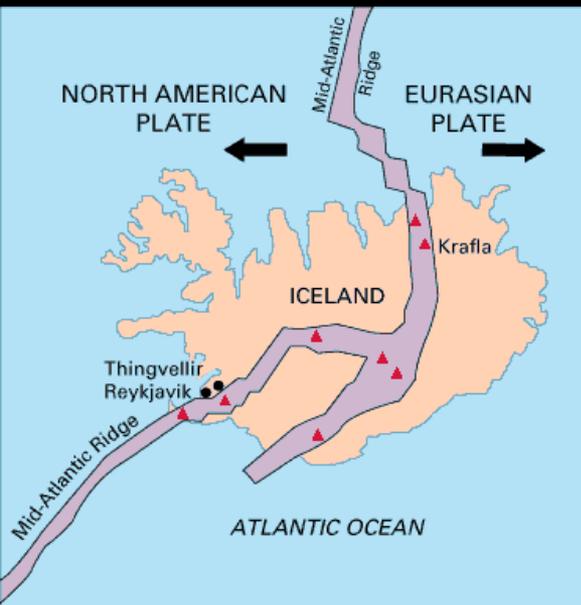
Tectônica de Placas

Limites Divergentes



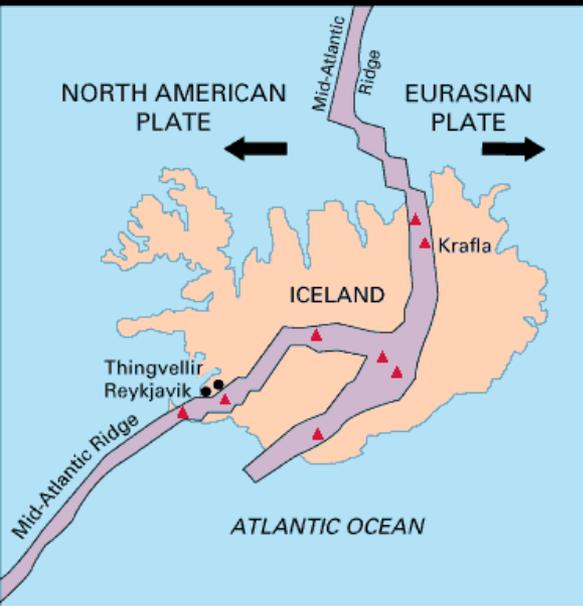
Tectônica de Placas

Limites Divergentes



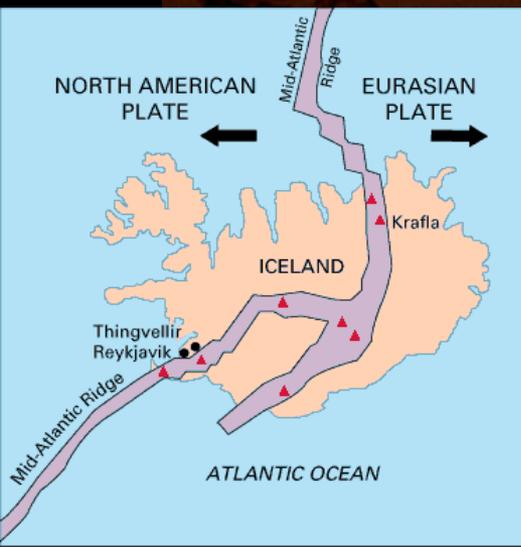
Tectônica de Placas

Limites Divergentes



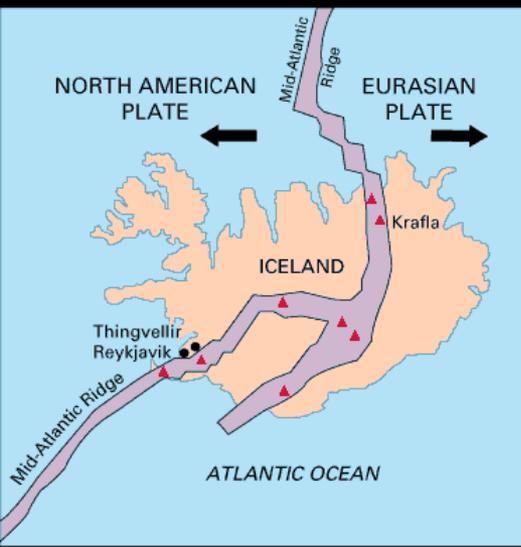
Tectônica de Placas

Limites Divergentes



Tectônica de Placas

Limites Divergentes

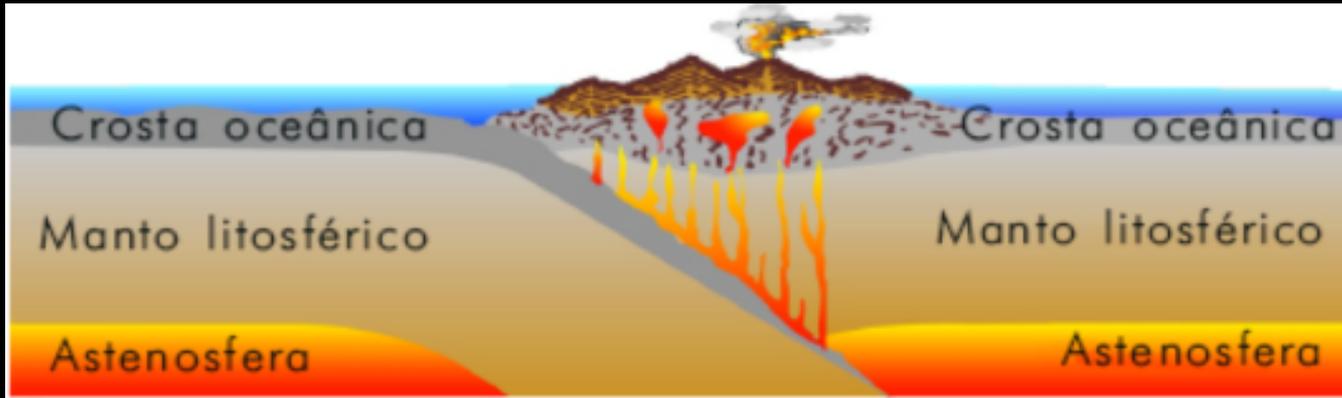


Placas Tectônicas

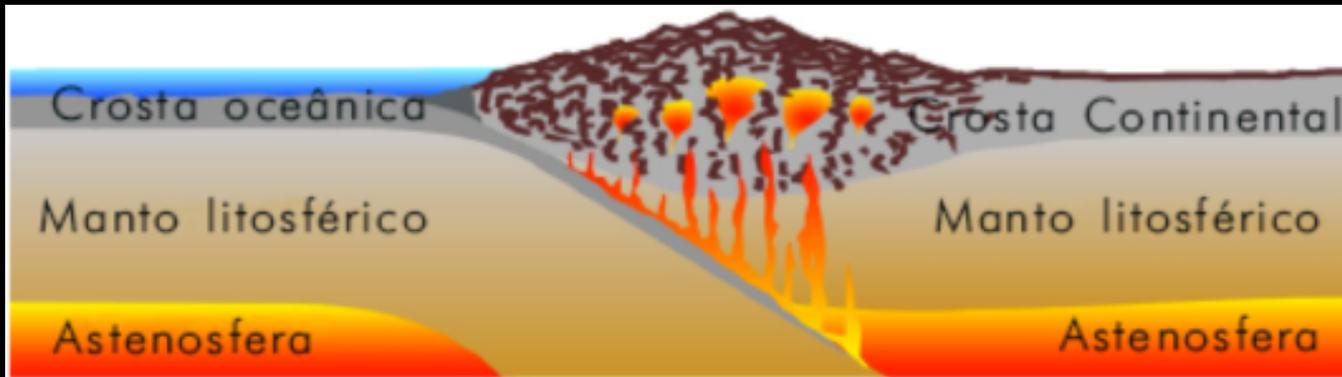
- Limite Convergente

Tectônica de Placas

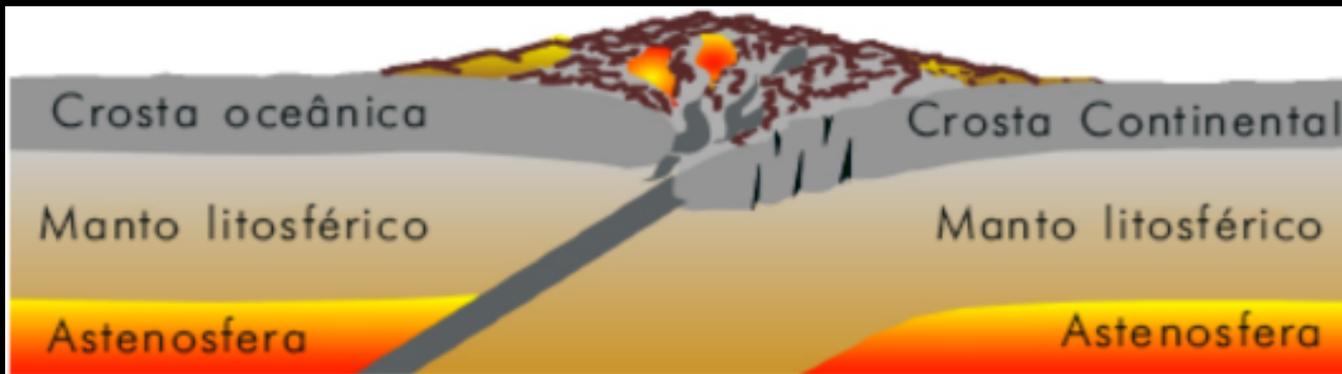
Limites Convergentes



**Crosta oceânica –
Crosta oceânica**



**Crosta oceânica –
Crosta continental**



**Crosta continental –
Crosta continental**

Placas Tectônicas

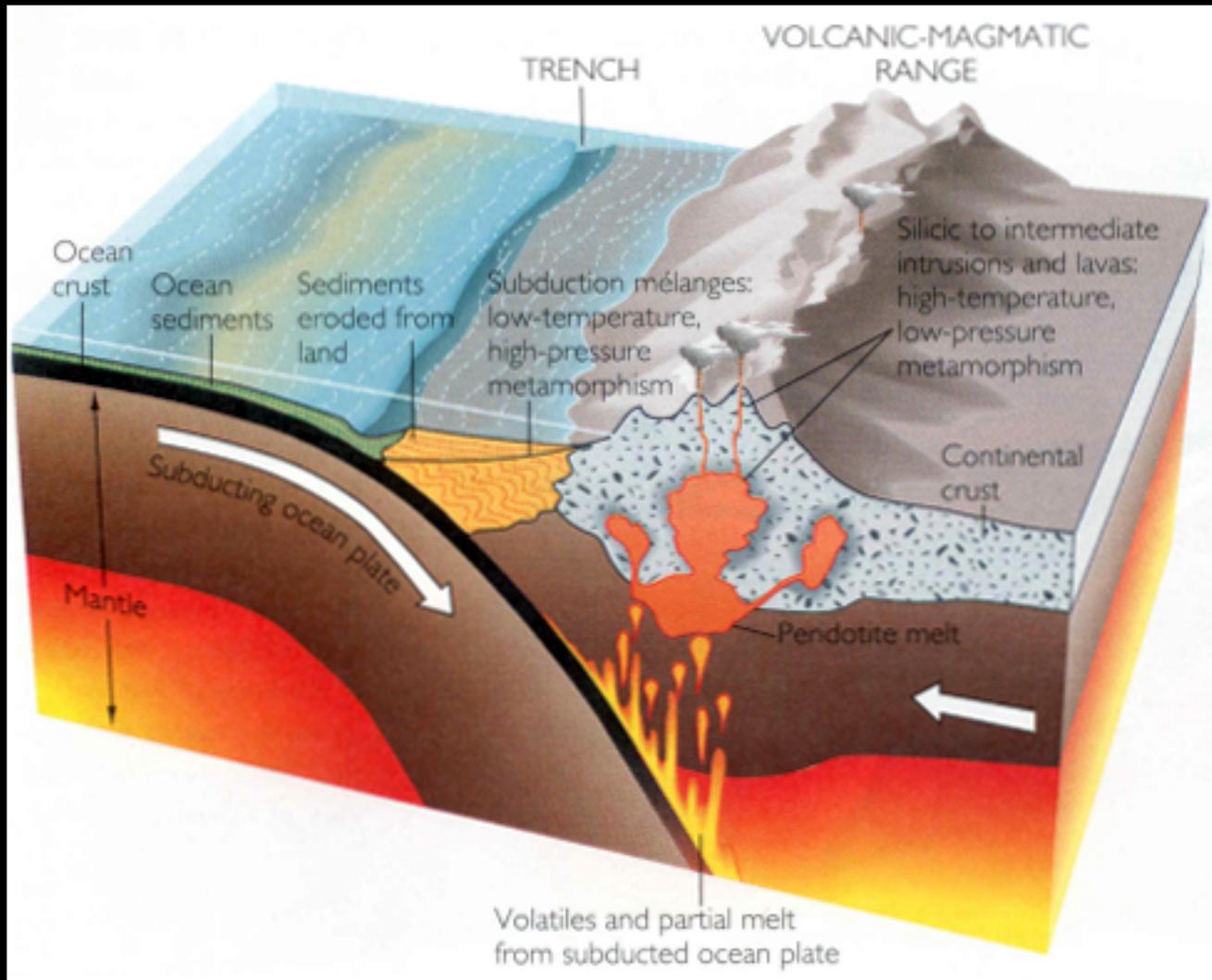
Limite Convergente

Crosta oceânica – crosta continental

Tectônica de Placas

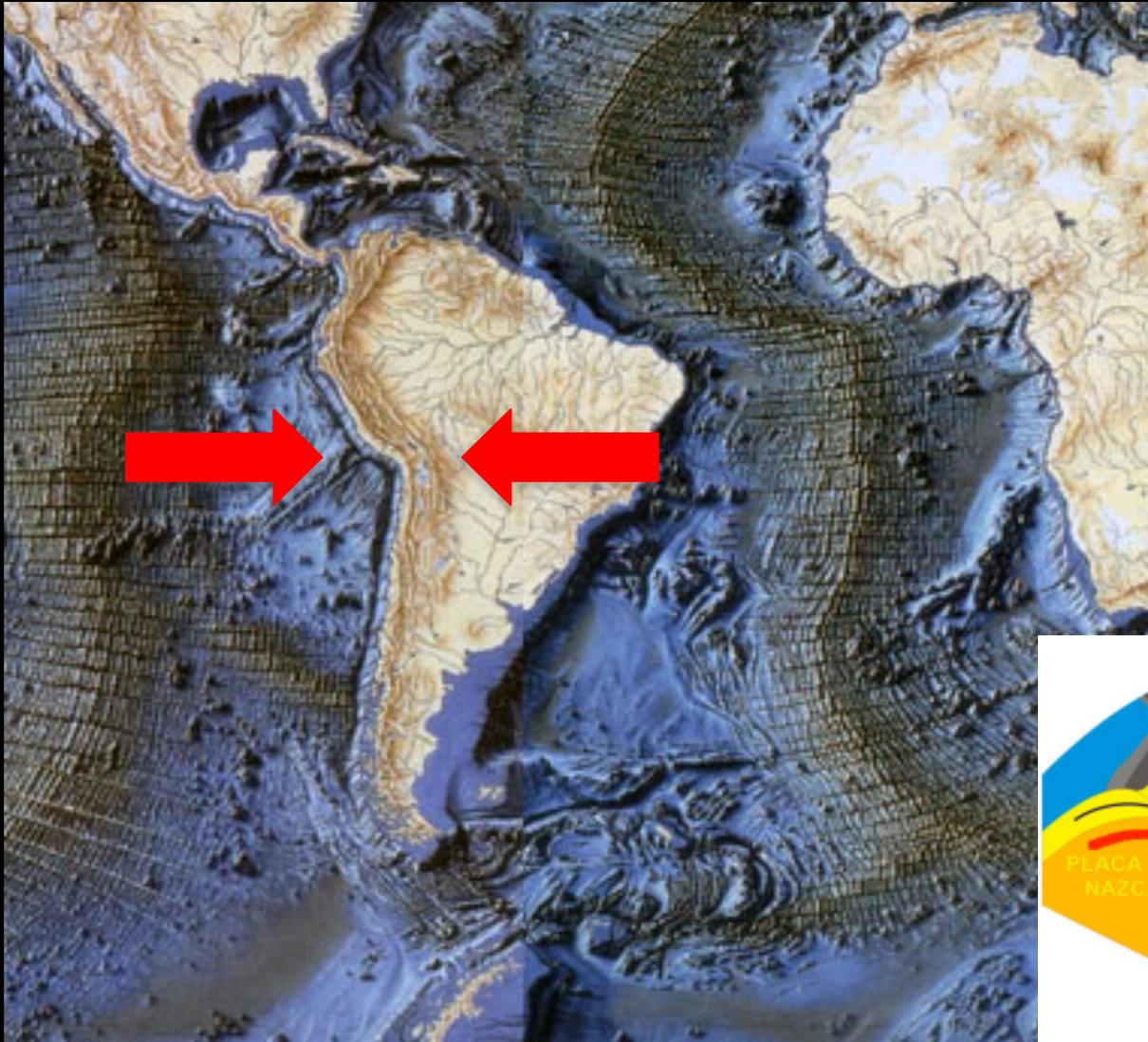
Limites Convergentes

Crosta oceânica –
Crosta continental



Tectônica de Placas

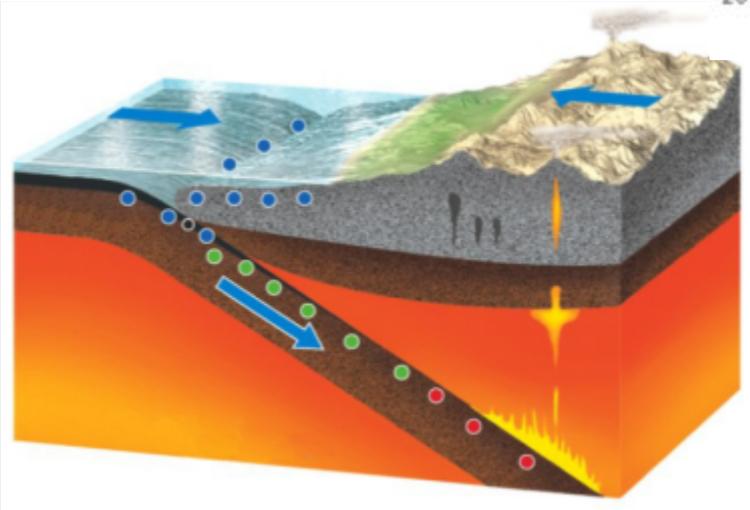
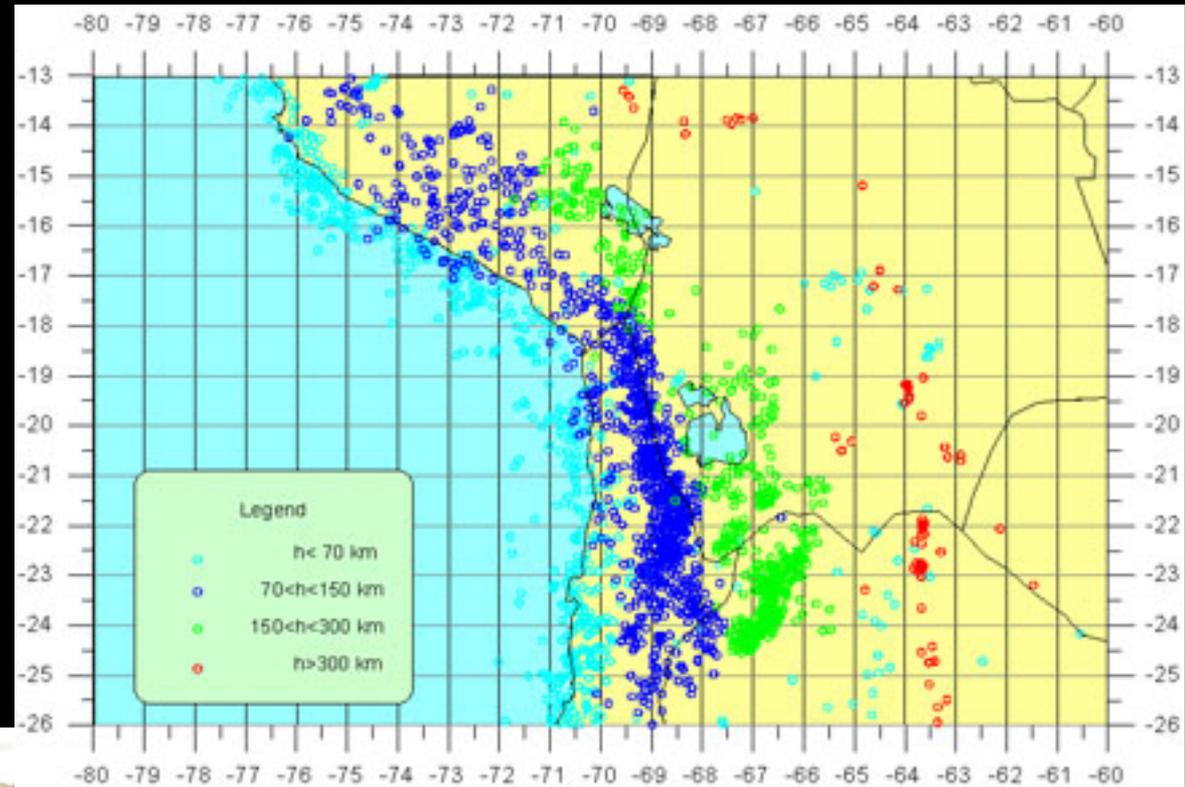
Limites Divergentes



Crosta oceânica –
Crosta continental



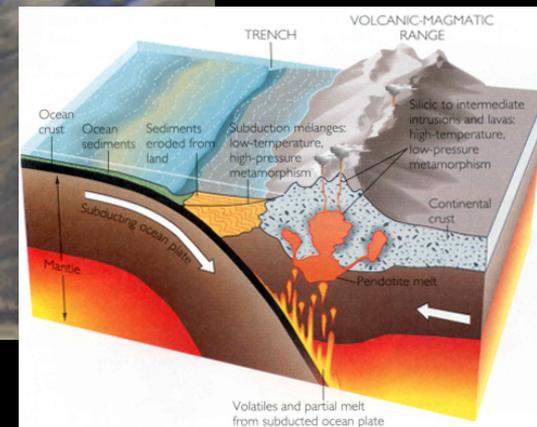
Regime tectônico convergente



Tectônica de Placas

Limites Convergentes

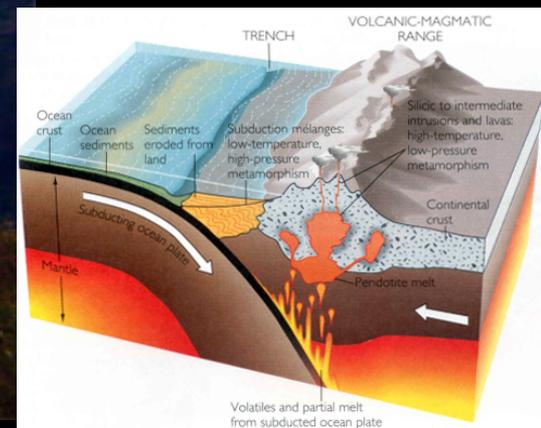
Crosta oceânica –
Crosta continental



Tectônica de Placas

Limites Convergentes

Crosta oceânica –
Crosta continental

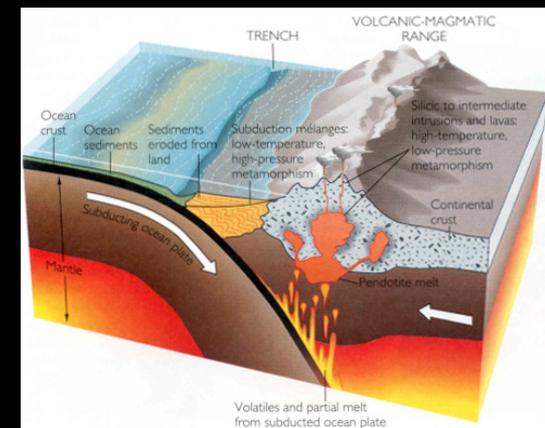


Tectônica de Placas



Limites Convergentes

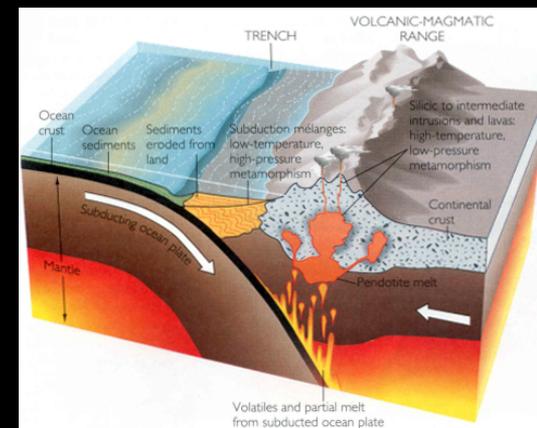
Crosta oceânica –
Crosta continental



Tectônica de Placas

Limites Convergentes

Crosta oceânica –
Crosta continental



Placas Tectônicas

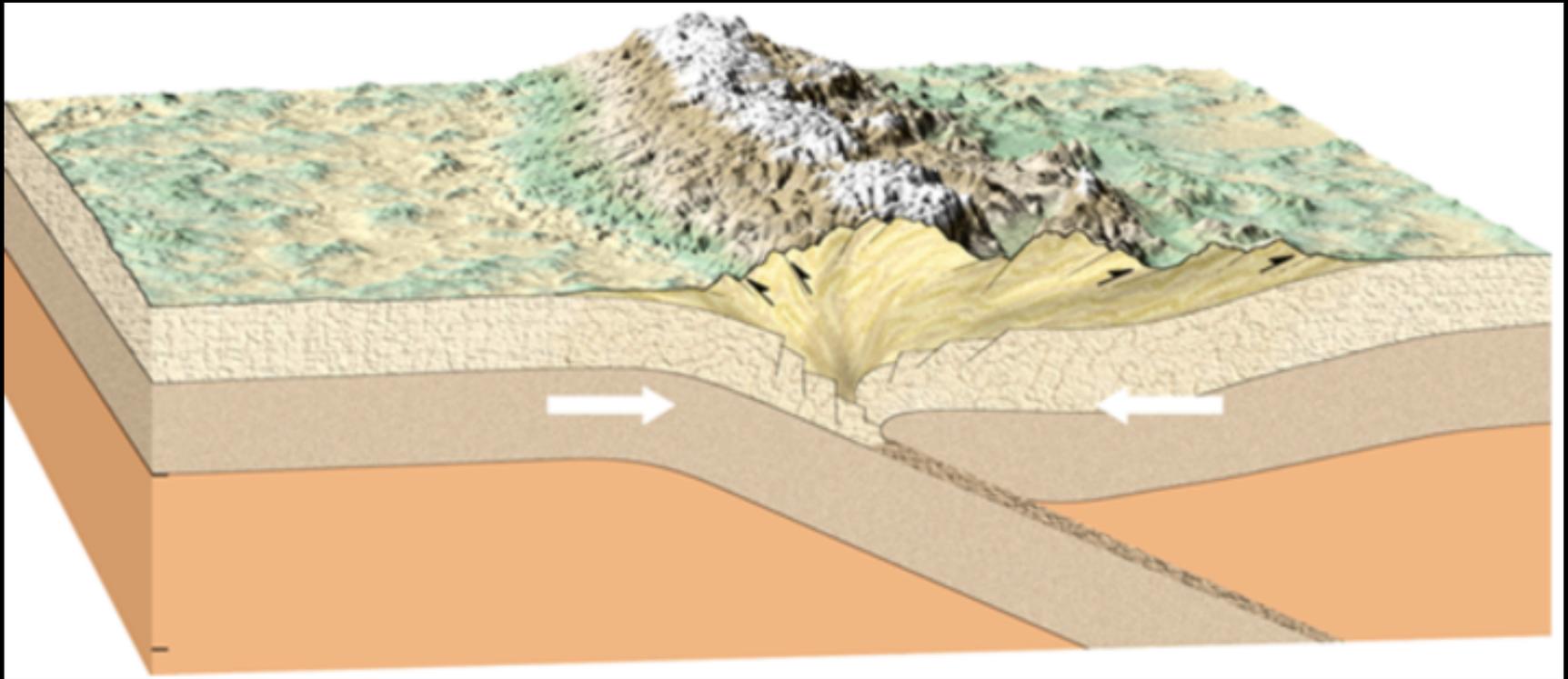
Limite Convergente

Crosta continental – crosta continental

Tectônica de Placas

Limites Convergentes

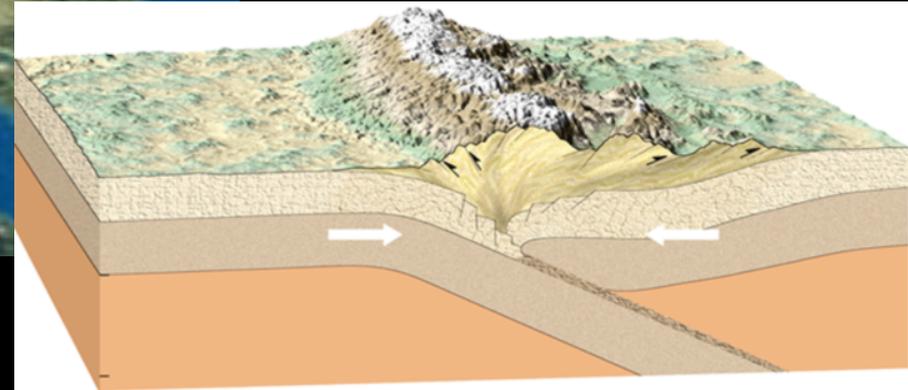
Crosta continental-
Crosta continental



Tectônica de Placas

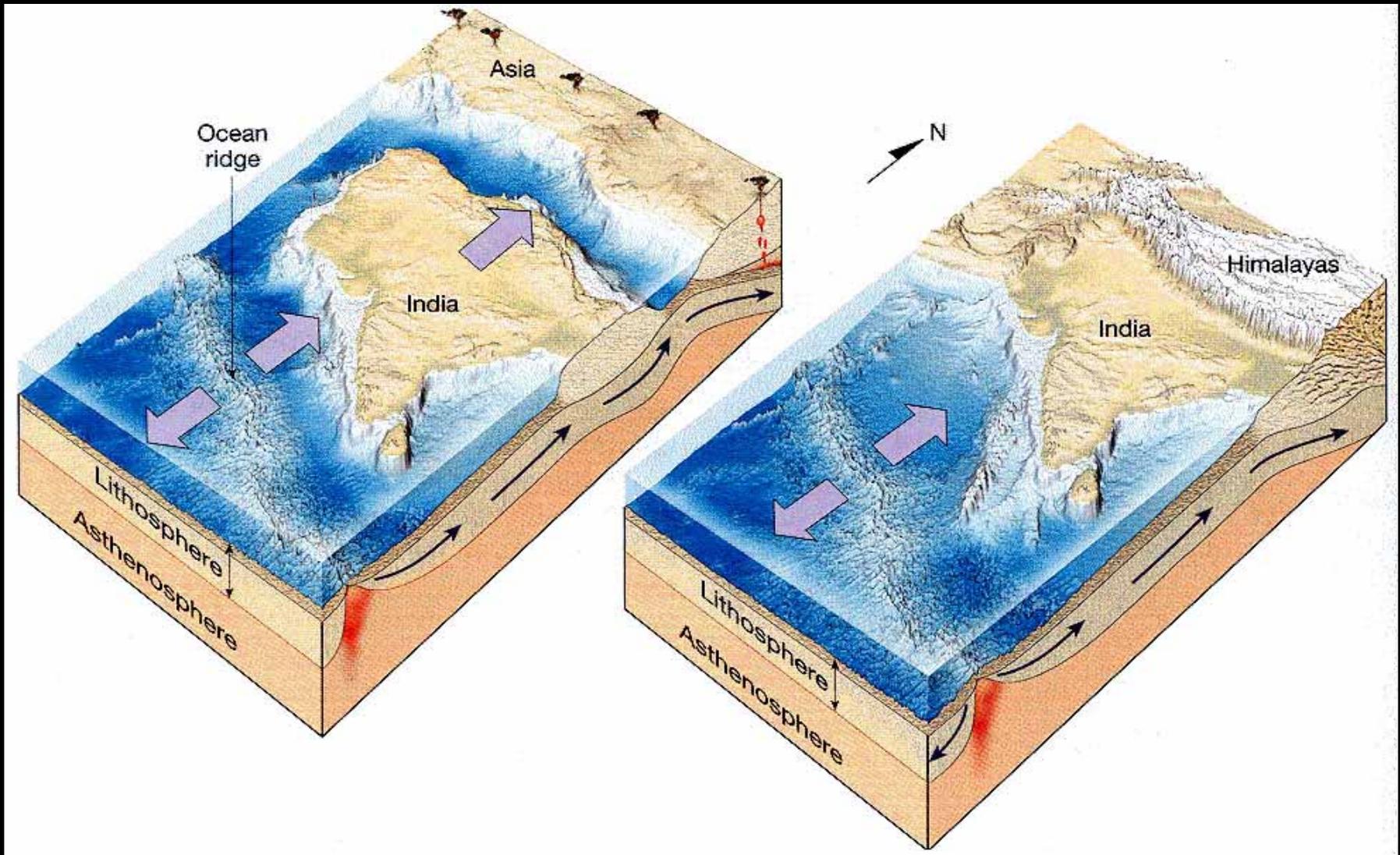
Limites Convergentes

Crosta continental-
Crosta continental



Tectônica de Placas

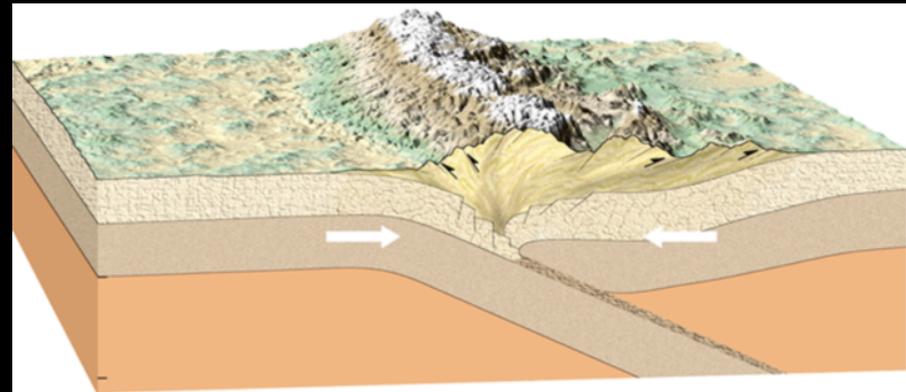
Limites Convergentes



Tectônica de Placas

Limites Convergentes

Crosta continental–
Crosta continental



Dobras

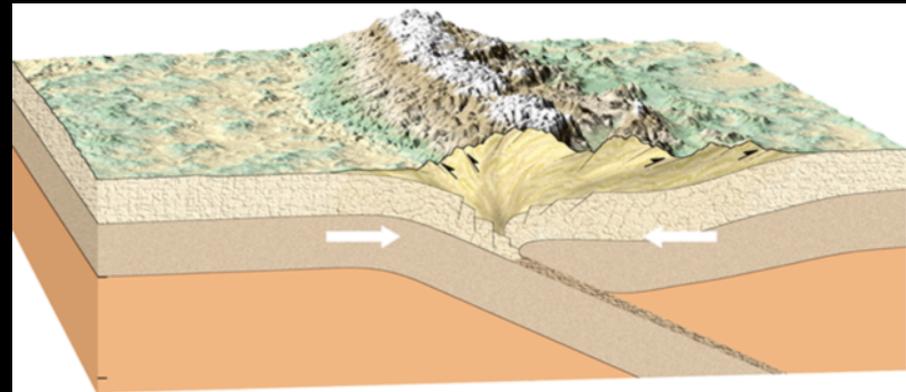
Tectônica de Placas

Limites Convergentes

Crosta continental-
Crosta continental



Falhas



Tectônica de Placas

Limites Convergentes



Dobras e falhas

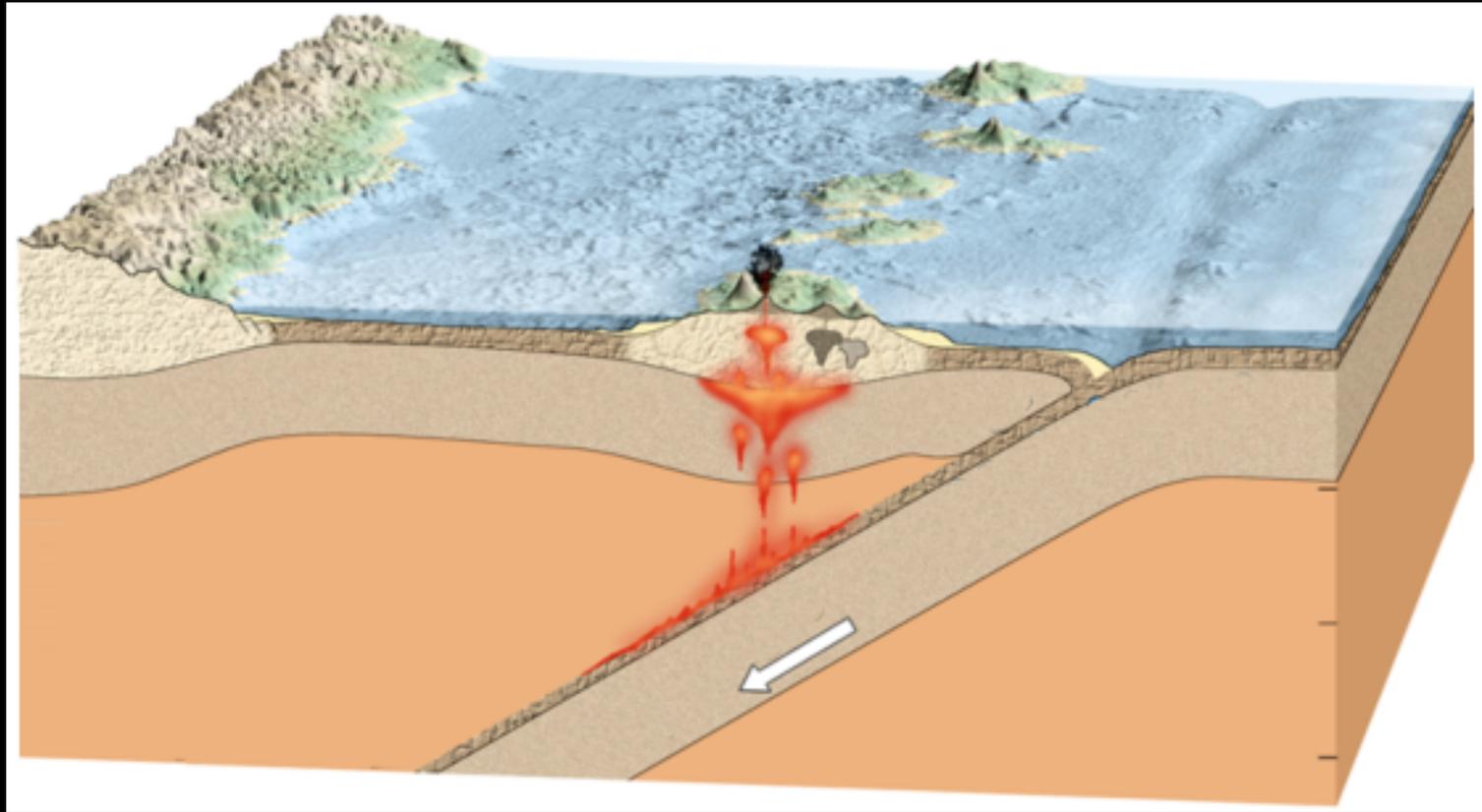
Placas Tectônicas

Limite Convergente

Crosta oceânica – crosta oceânica

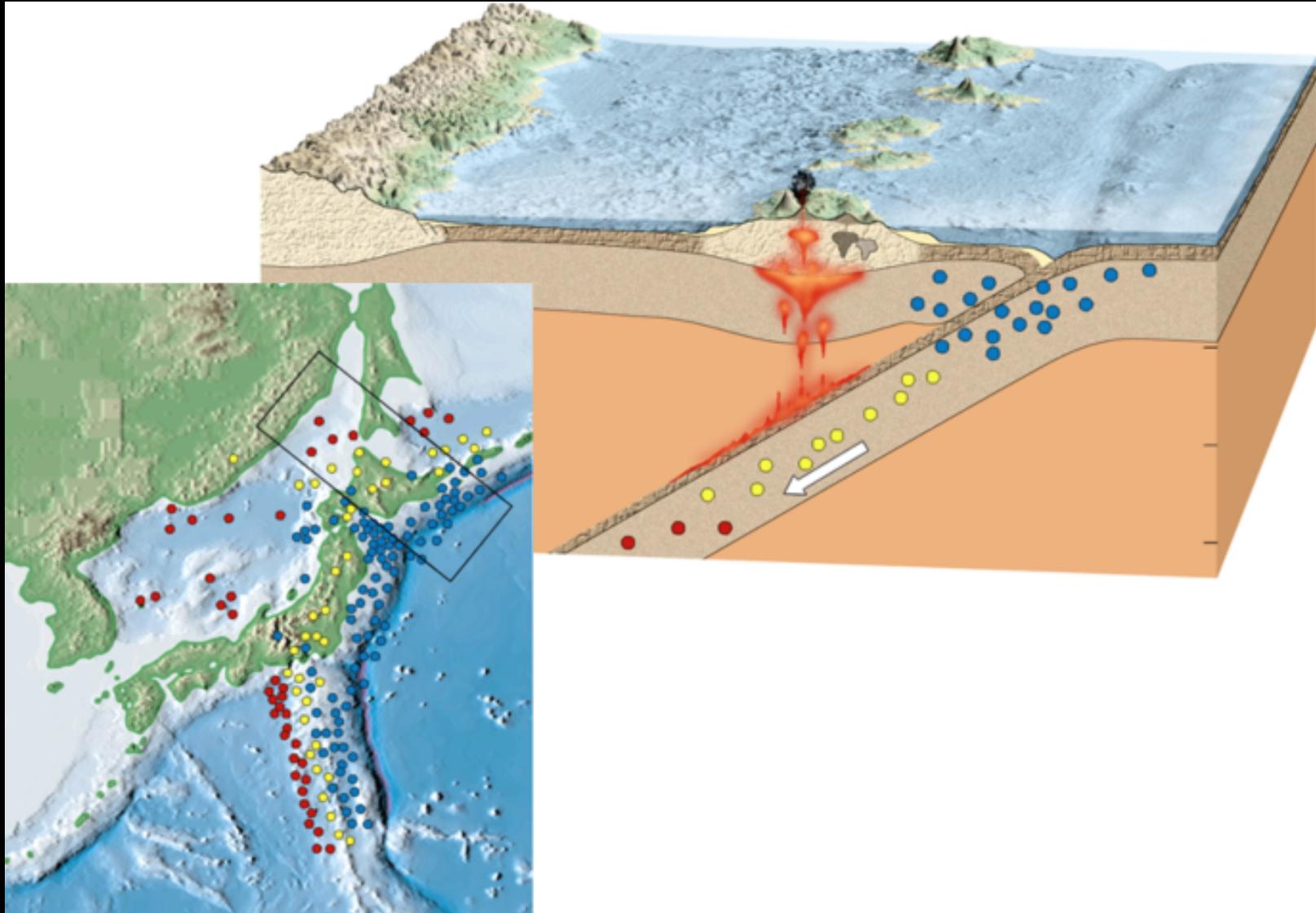
Tectônica de Placas

Limites Convergentes



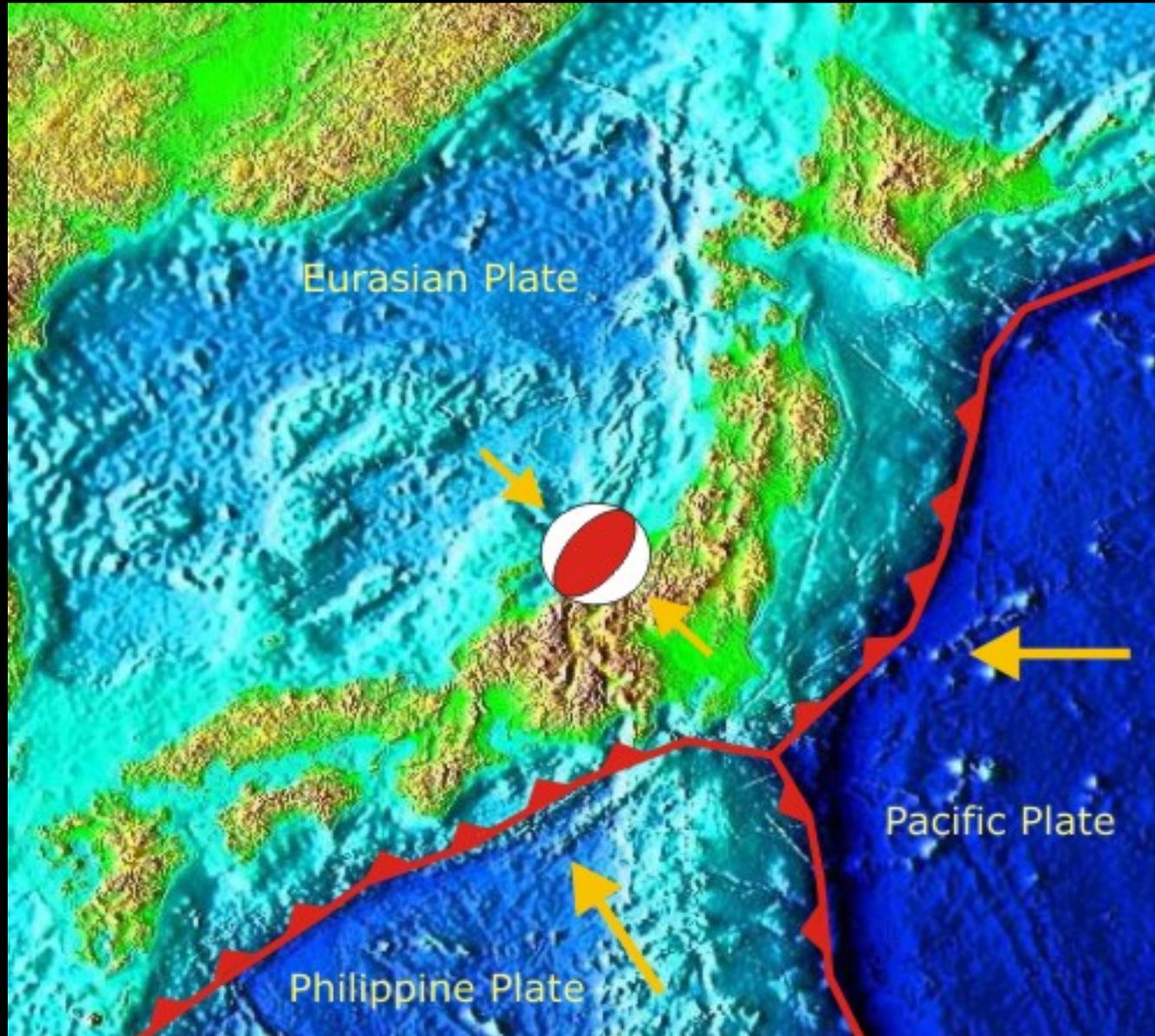
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Limites Convergentes



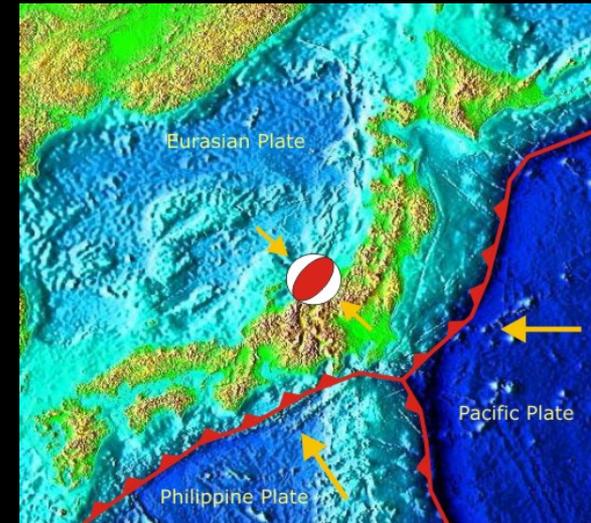
Tectônica de Placas

Limites Convergentes



Tectônica de Placas

Limites Convergentes

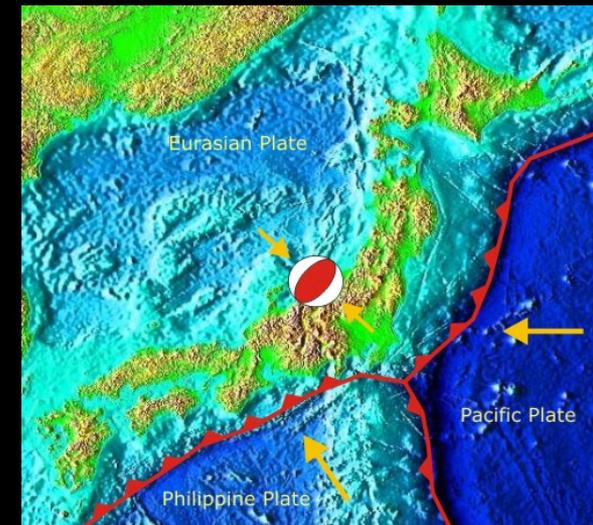


Tectônica de Placas

Limites Convergentes



Monte Fuji, vulcão com 3.776 m de altitude, o ponto mais alto do Japão

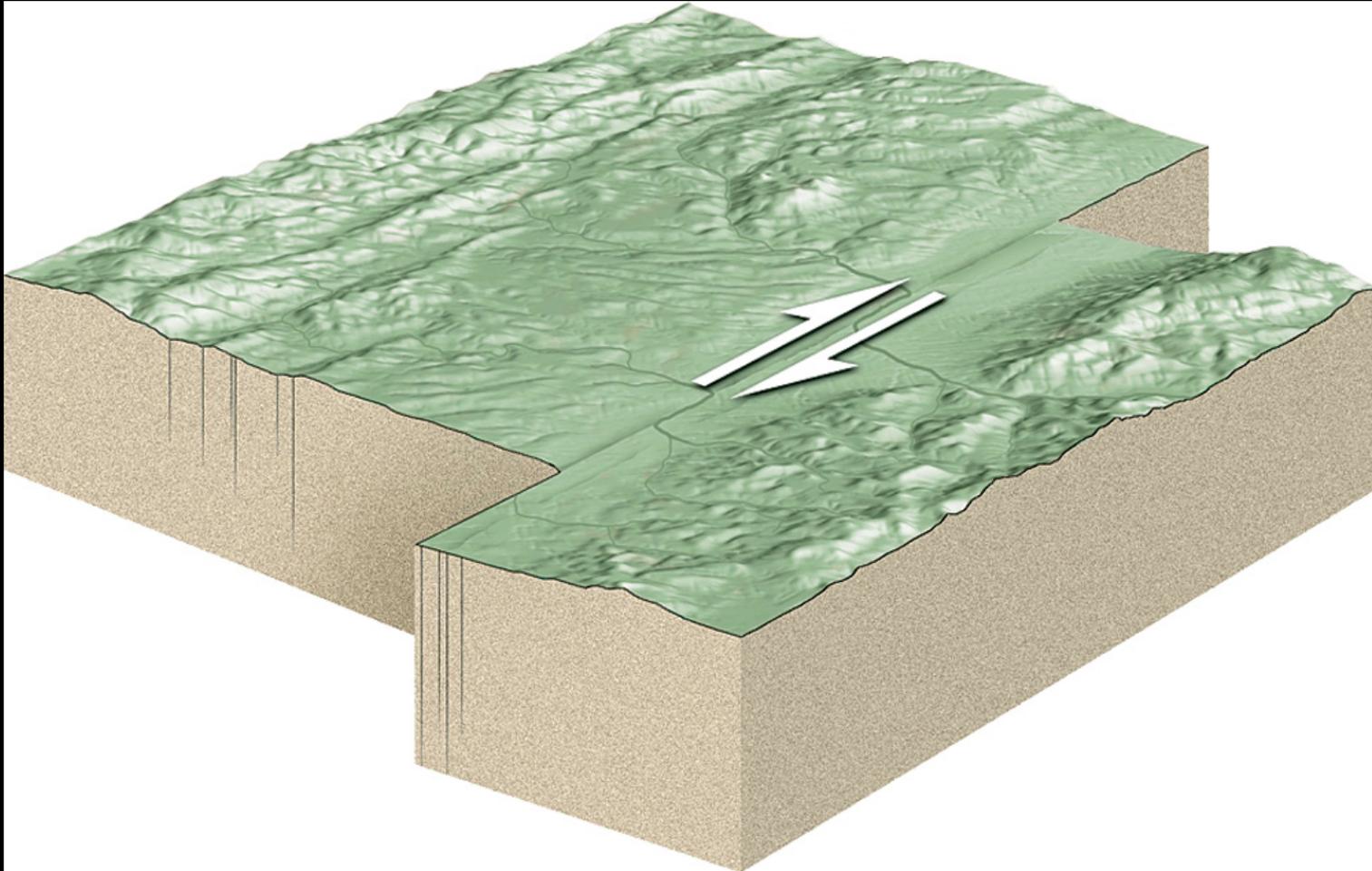


Placas Tectônicas

Limite Transformante

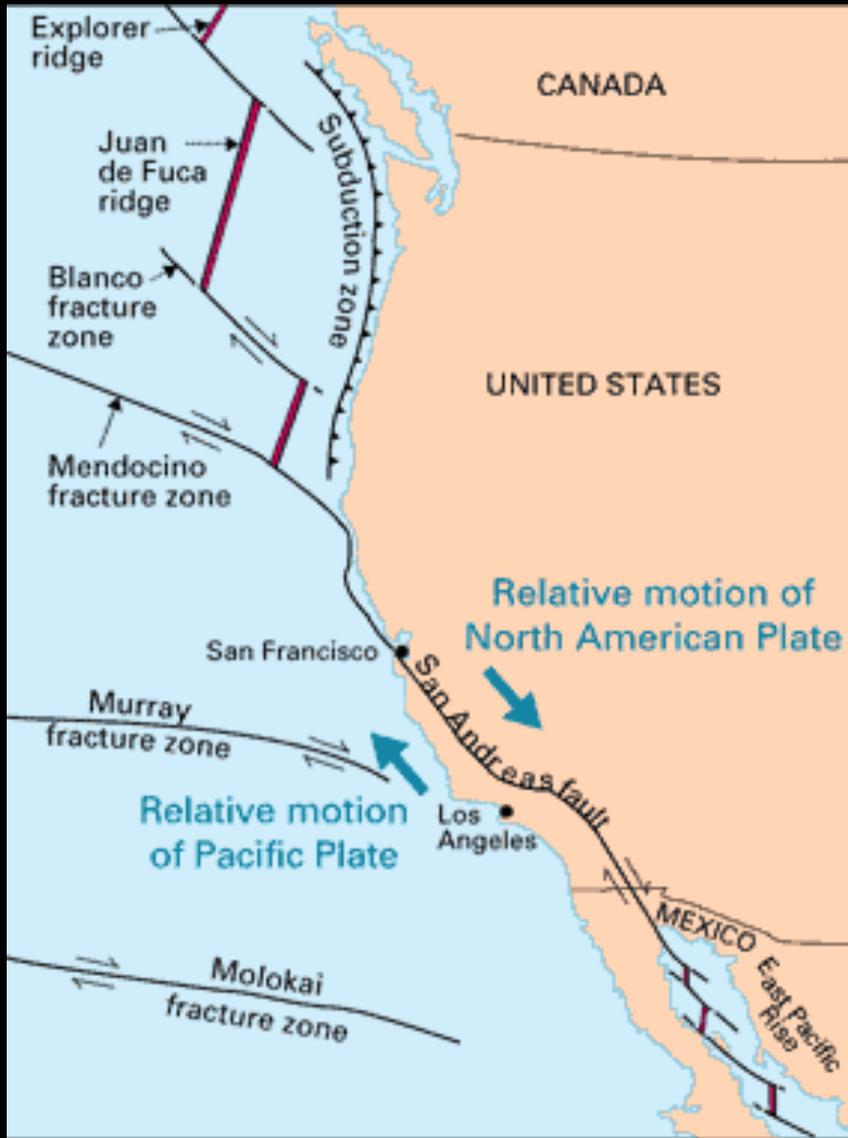
Tectônica de Placas

Limites Transformantes



Tectônica de Placas

Limites Transformantes



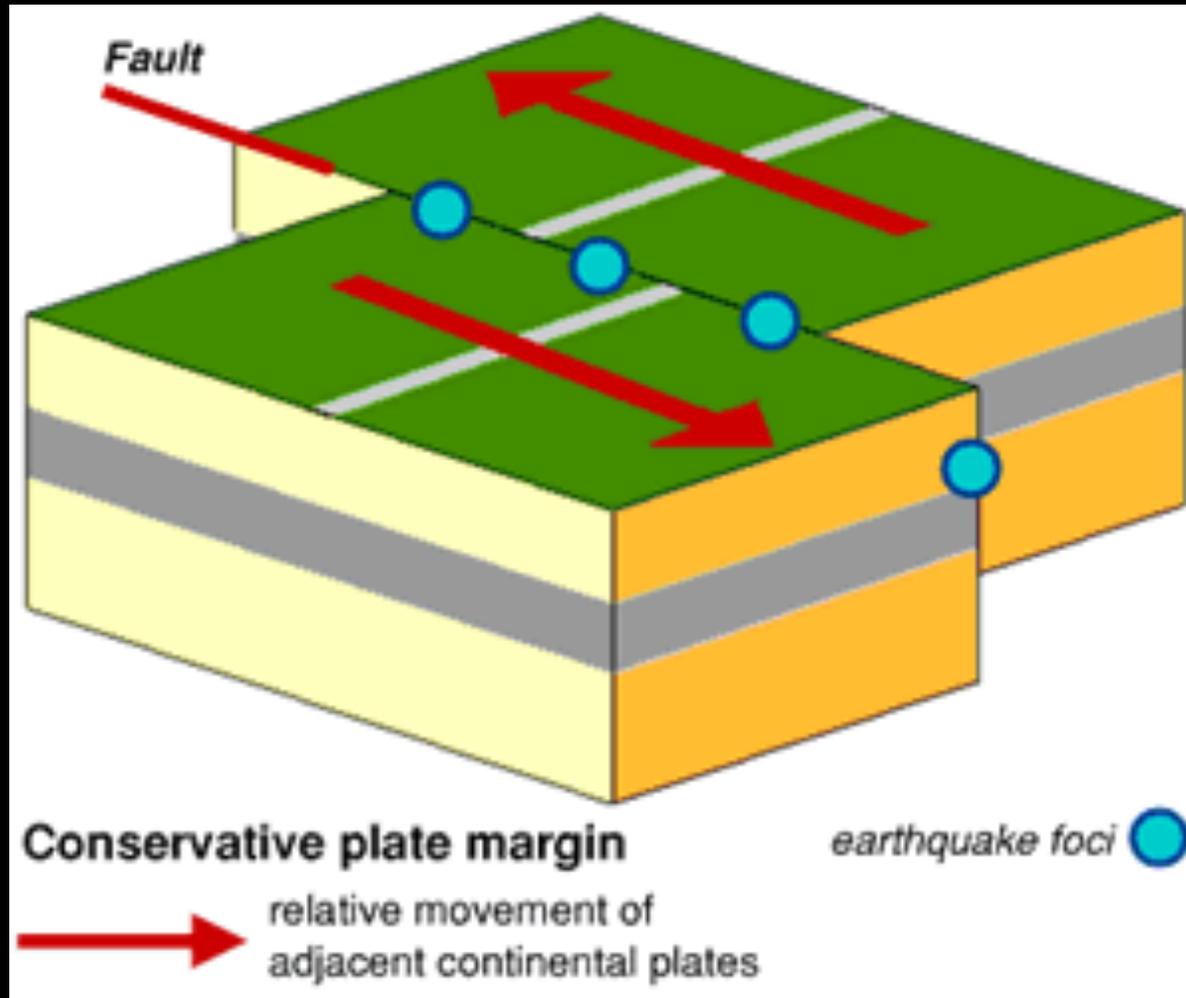
Falha de San Andreas, nos EUA.

Tectônica de Placas

Limites Transformantes



Falha de San Andreas, nos EUA.



Tectônica de Placas

Limites Transformantes



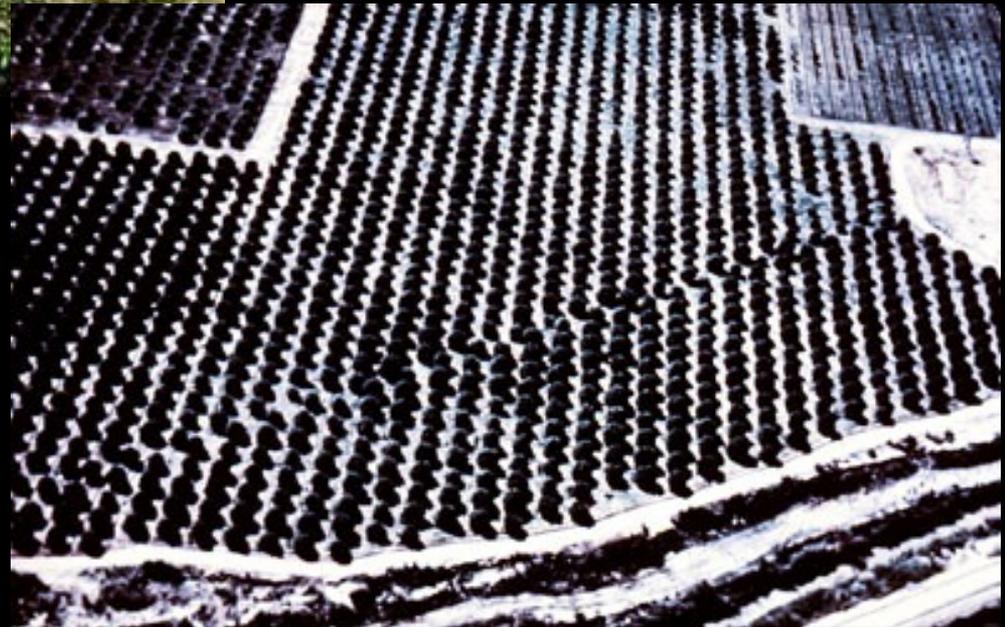
Tectônica de Placas

Limites Transformantes



Tectônica de Placas

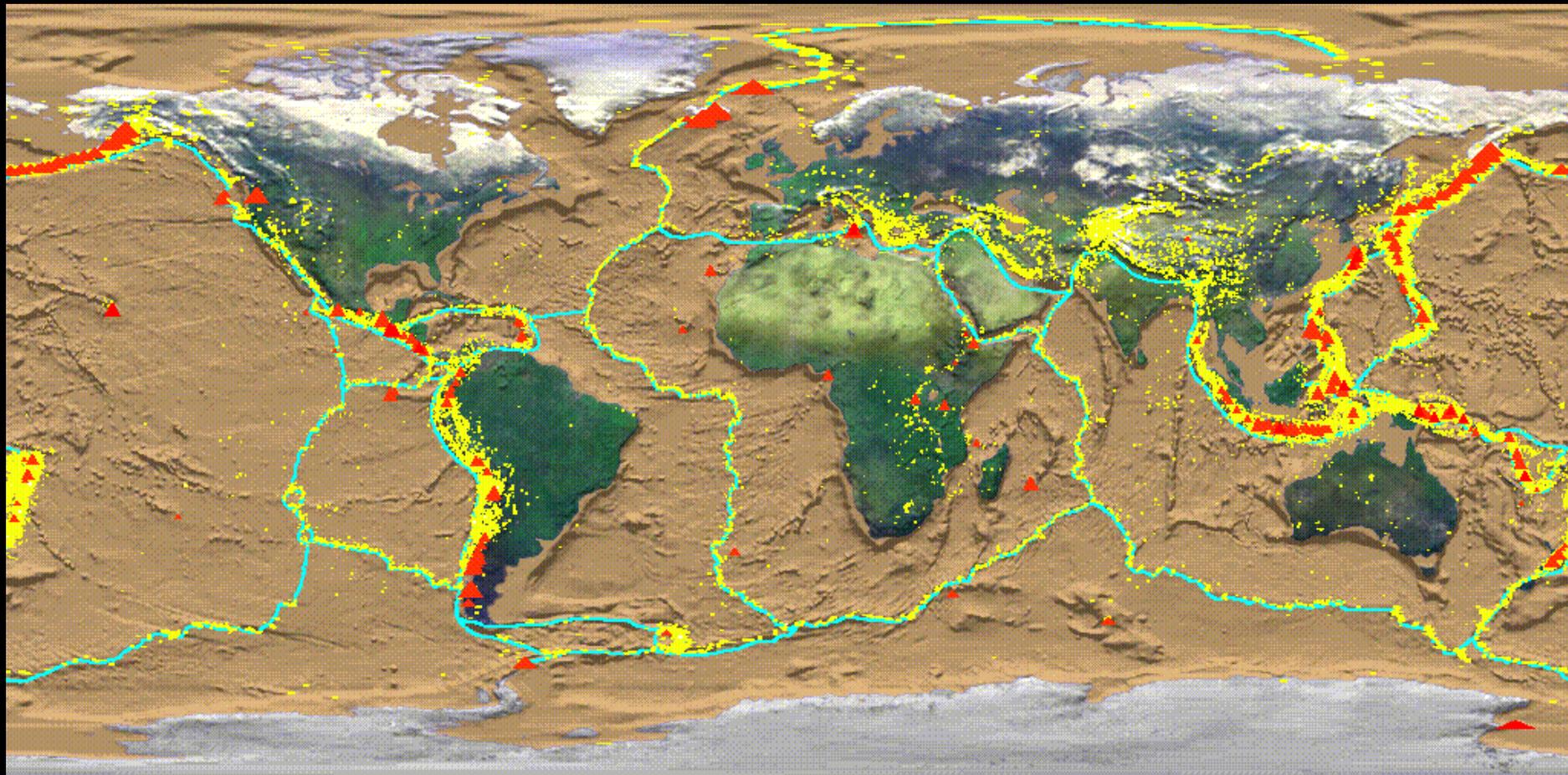
Limites Transformantes





Tectônica de Placas

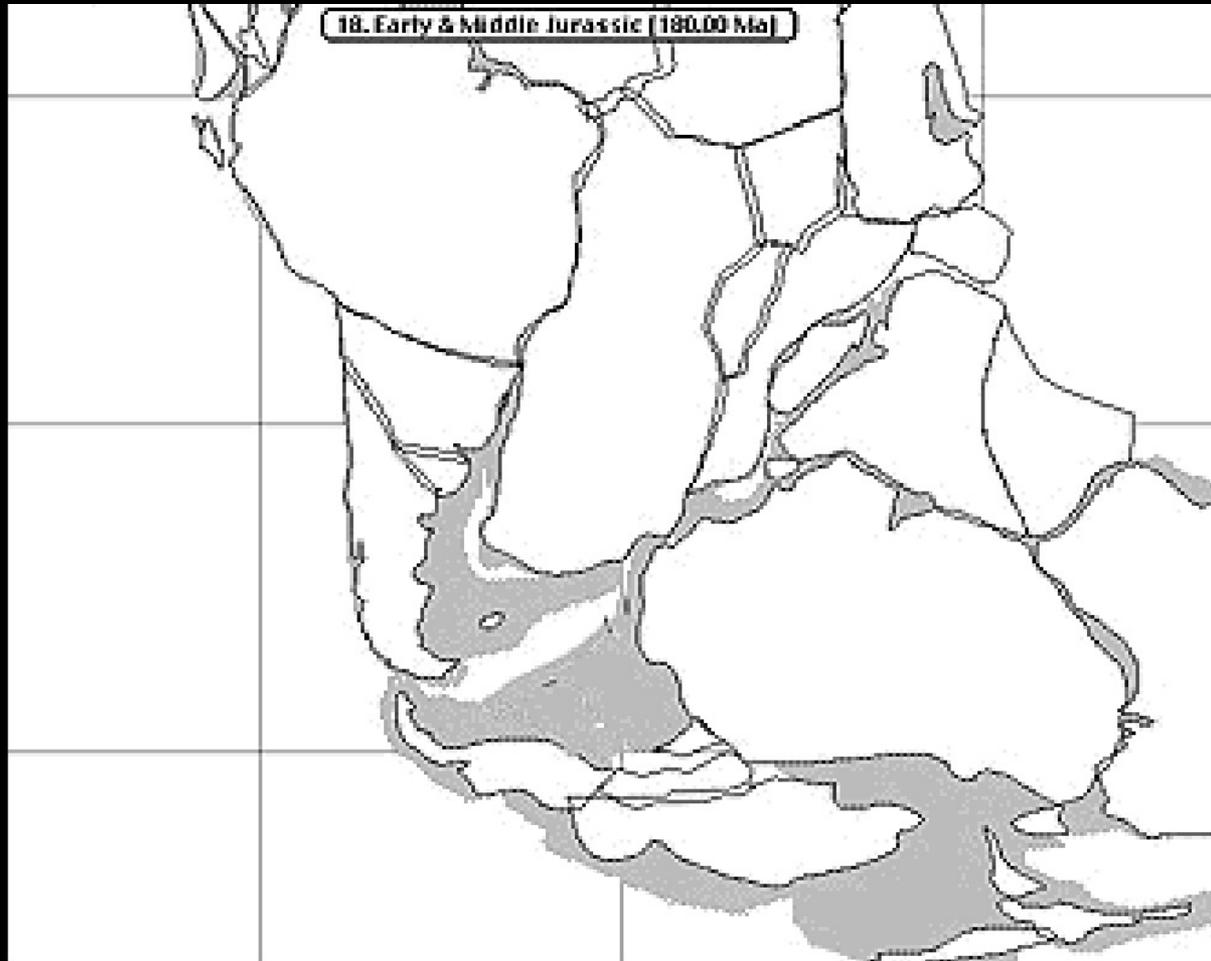
Limites



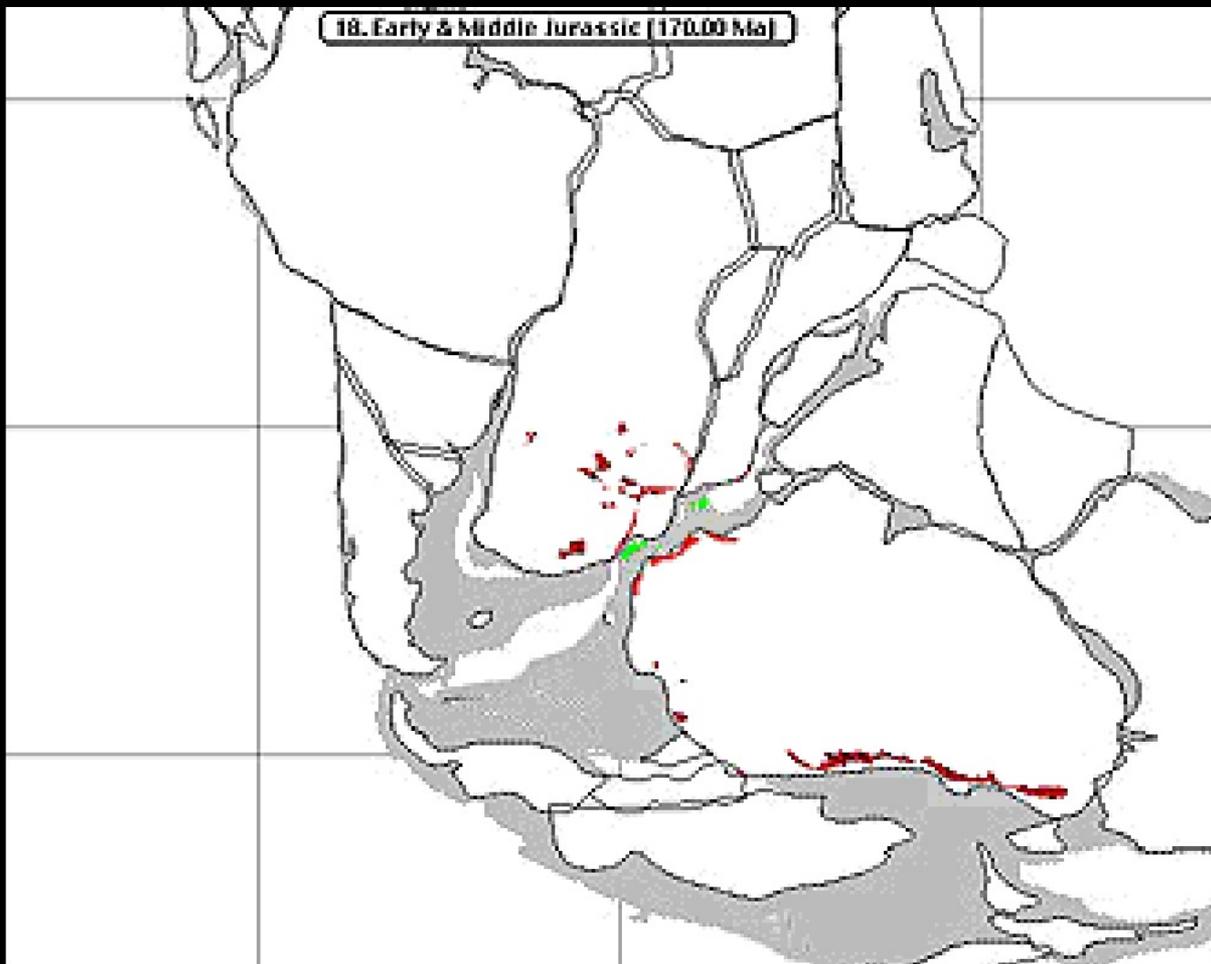
▲ Vulcão

● Terremoto

18. Early & Middle Jurassic (180.00 Ma)



18. Early & Middle Jurassic (170.00 Ma)



19. Late Jurassic (160.00 Ma)

