

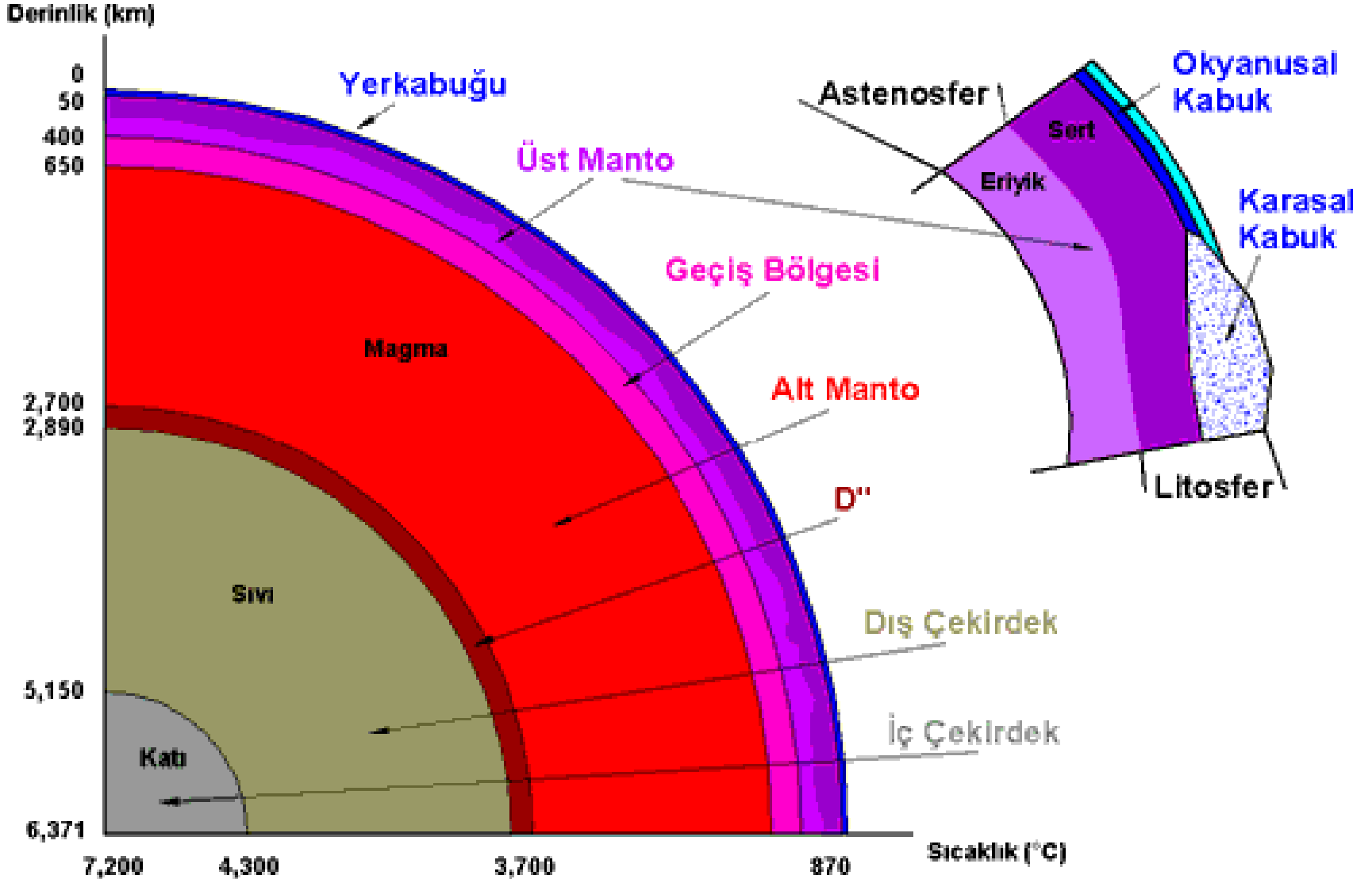
DEPREMLER

Deprem; yer kabuğunu meydana getiren kayalarda, doğal etkiler sonucunda başlayan ani ve kısa süreli titreşim ve sarsıntılardır.

Özellikleri:

- Ne zaman meydana geleceği bilinmez**
- Ani ölüm, yaralanma ve hasarlara yol açar**
- Şiddeti ve etkileri azaltılamaz**
- Çok geniş bir alanda, büyük oranlı bir tahribat yapar**
- Olayın kendisi görülmez, sadece etkileri görülür**
- Artçı şoklar insanları sürekli tetikte durmaya zorlar**
- Bireylerin tüm duyularını kuşatır etkiler...**

Yerin katmanları



Manto

Derinlik: 7 ile 50-2 890 km

Kalınlık: $\geq 2 840$ km.

Kütle oranı: % 67.4

Yoğunluk: 3.3 gr/cm³

Yerkabuğu

Derinlik: 0-7 ile 50 km

Kalınlık: ≤ 50 km.

Kütle oranı: % 0.4

Yoğunluk: 2.7-3.0 gr/cm³

Okyanusta kabuk: ~7 km

Kıtalarca kabuk: 30-50 km

Litosfer

Manto

Kabuk

En Üst Manto

Astenosfer

Dış Çekirdek

Derinlik: 2 890-5 150 km

Kalınlık: 2 260 km.

Kütle oranı: % 30.6

Yoğunluk: 10.8 gr/cm³

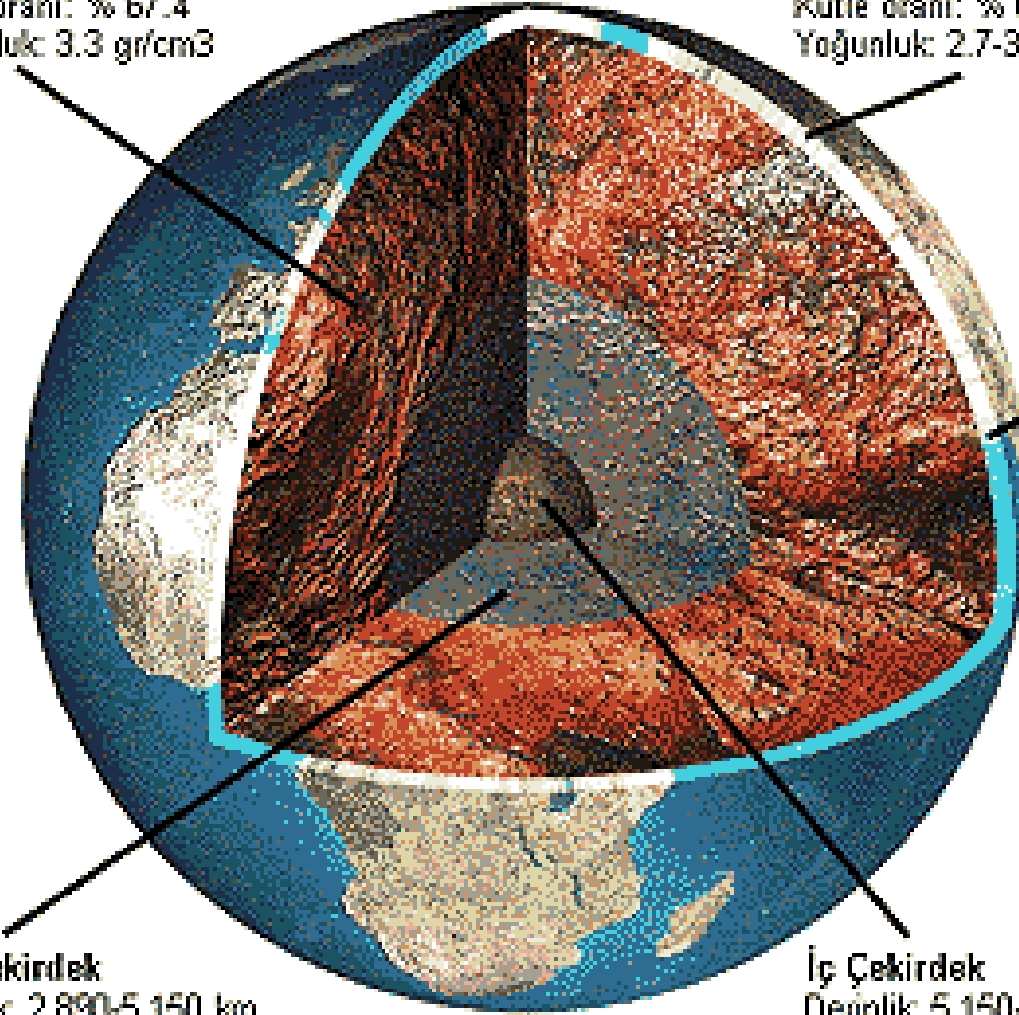
İç Çekirdek

Derinlik: 5 150-6 371 km

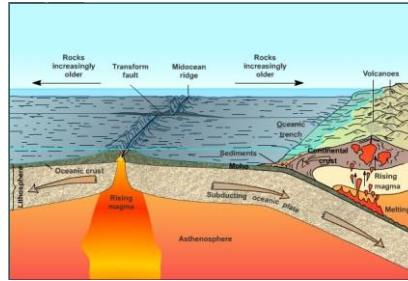
Kalınlık: 1 221 km.

Kütle oranı: % 1.6

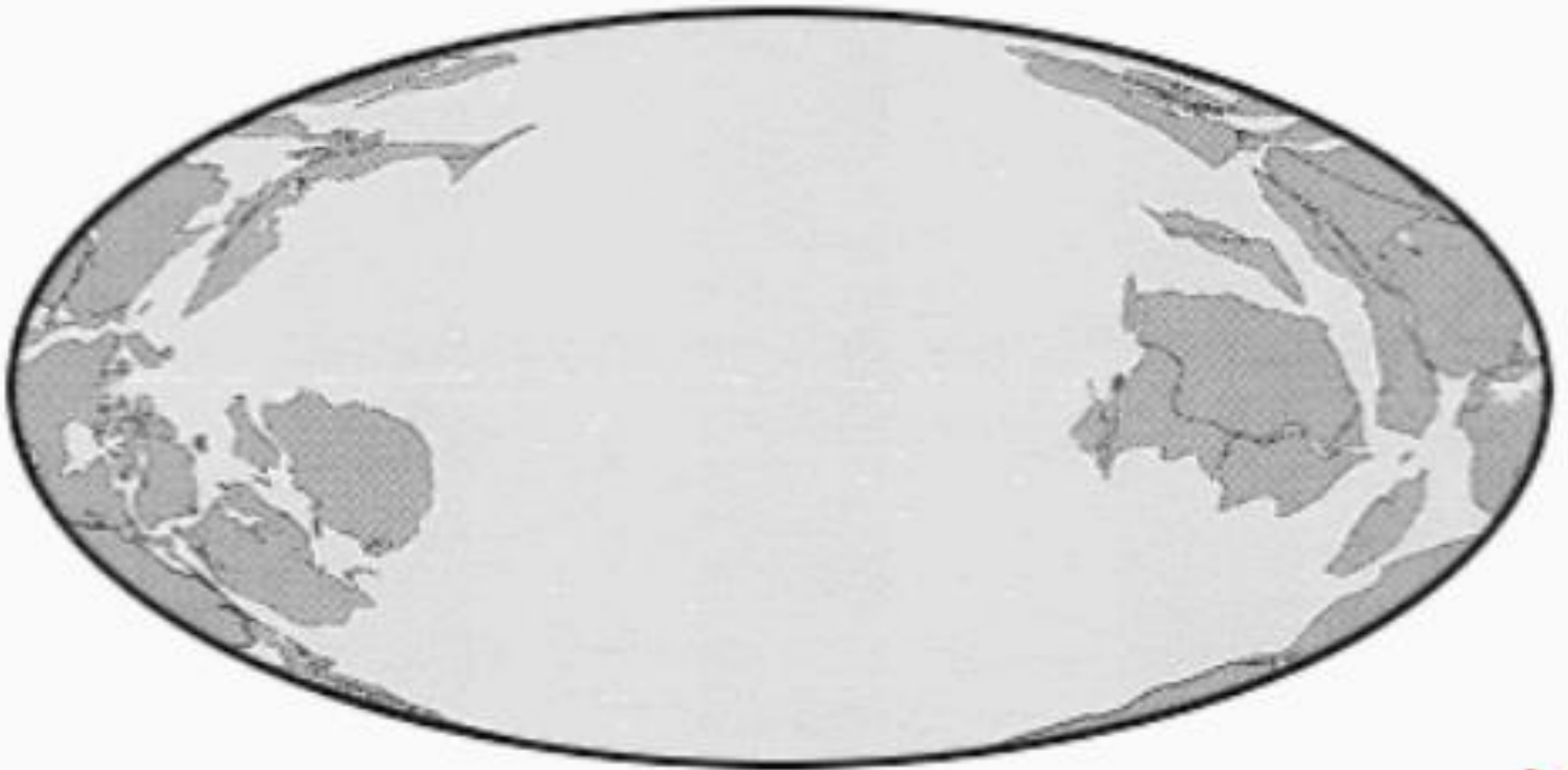
Yoğunluk: 13.4 gr/cm³

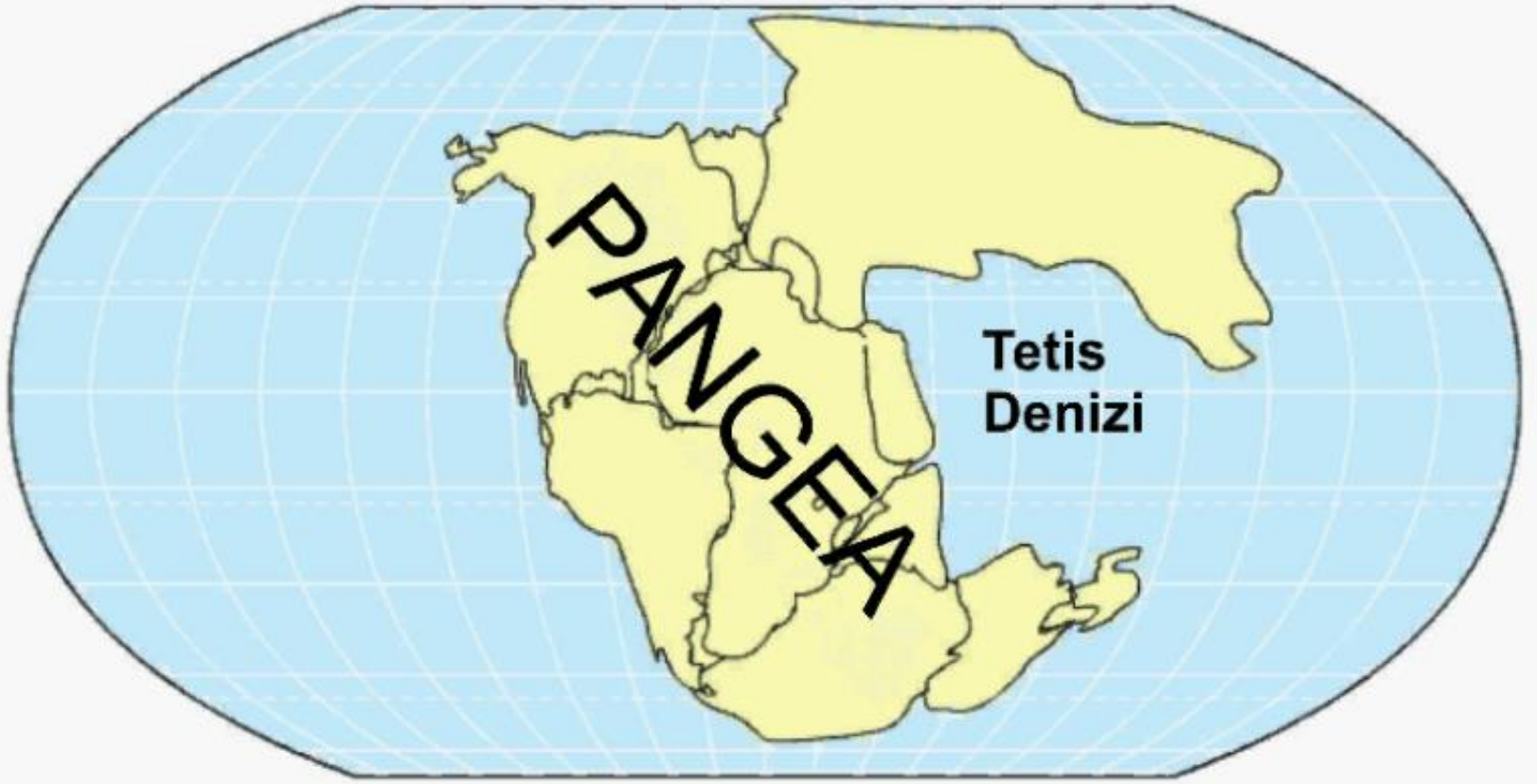


Kıta hareketleri ve volkanizma



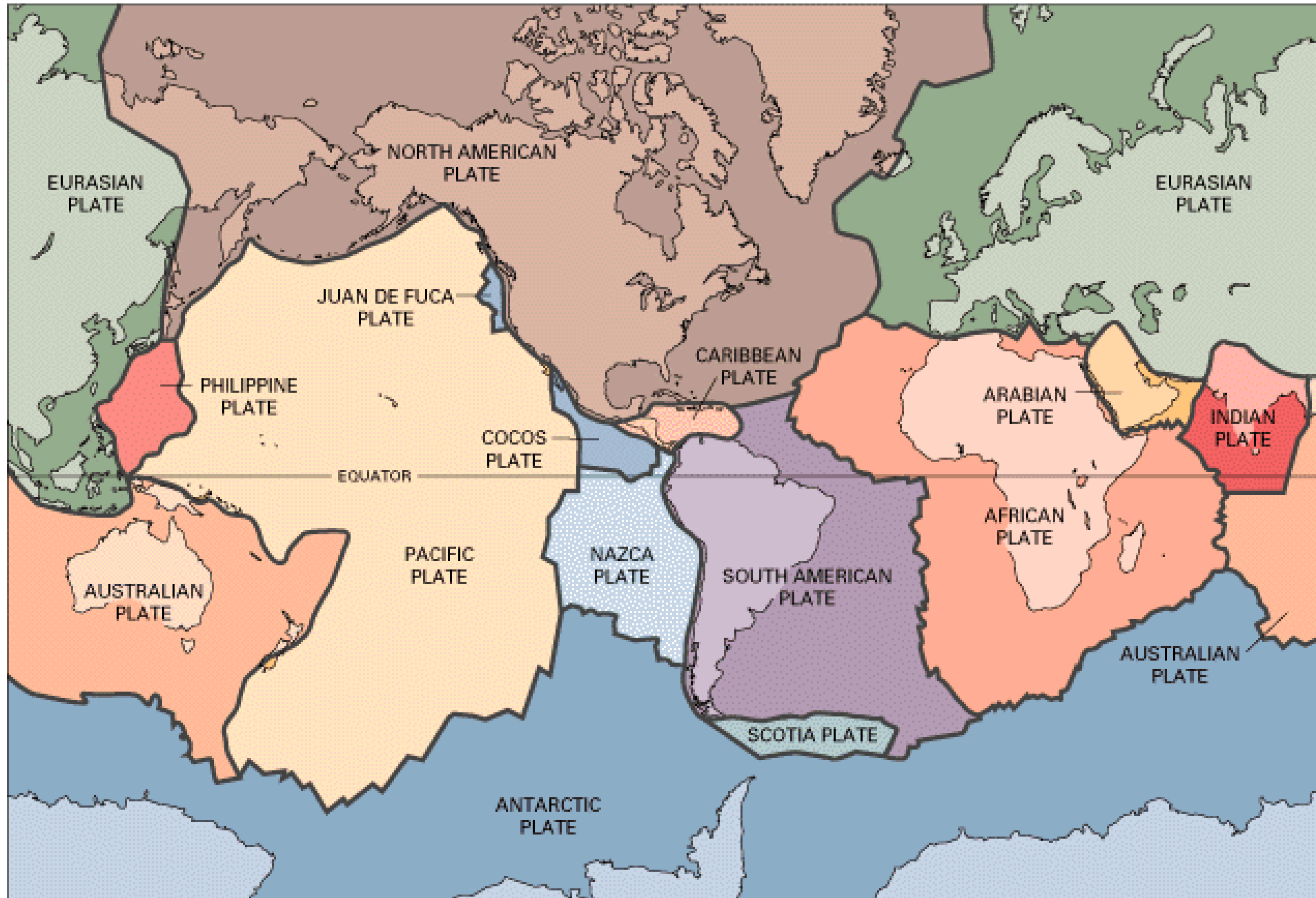
Levha tektoniği



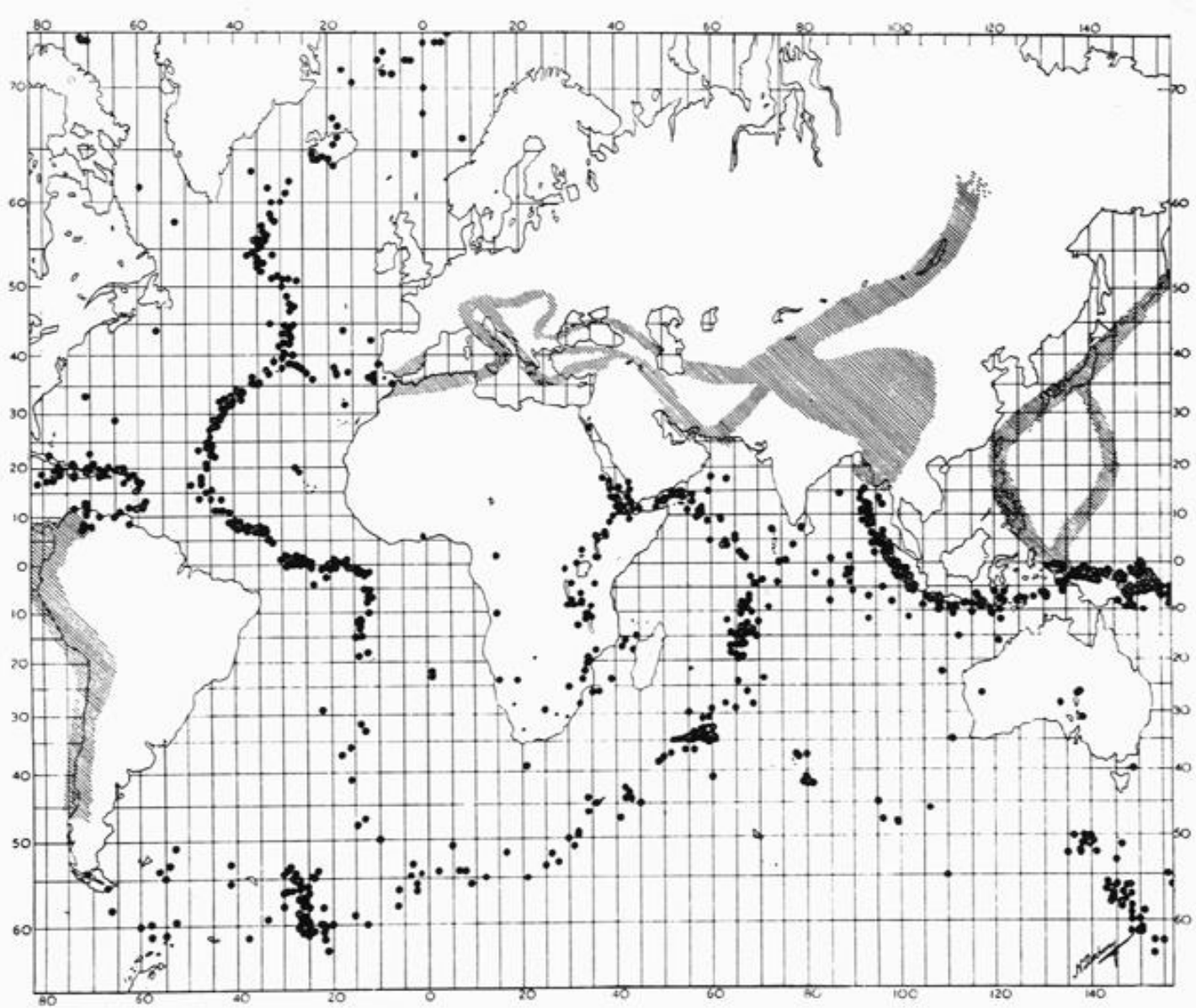


200 milyon yıl önce

Levhalar

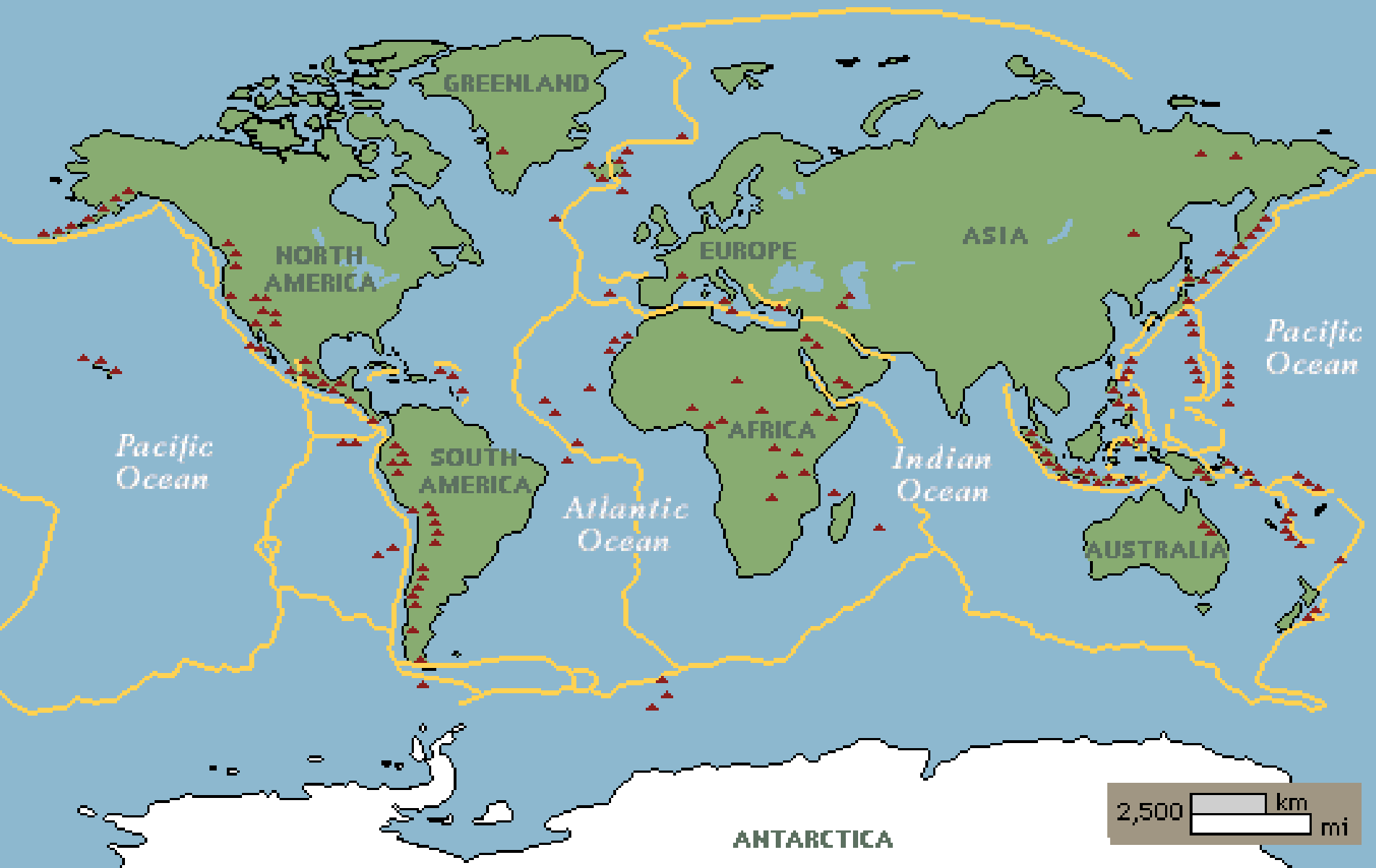


Deprem Kuşakları



Arctic Ocean

Arctic Ocean



Pacific Ocean

Pacific Ocean

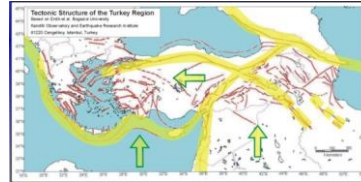
Atlantic Ocean

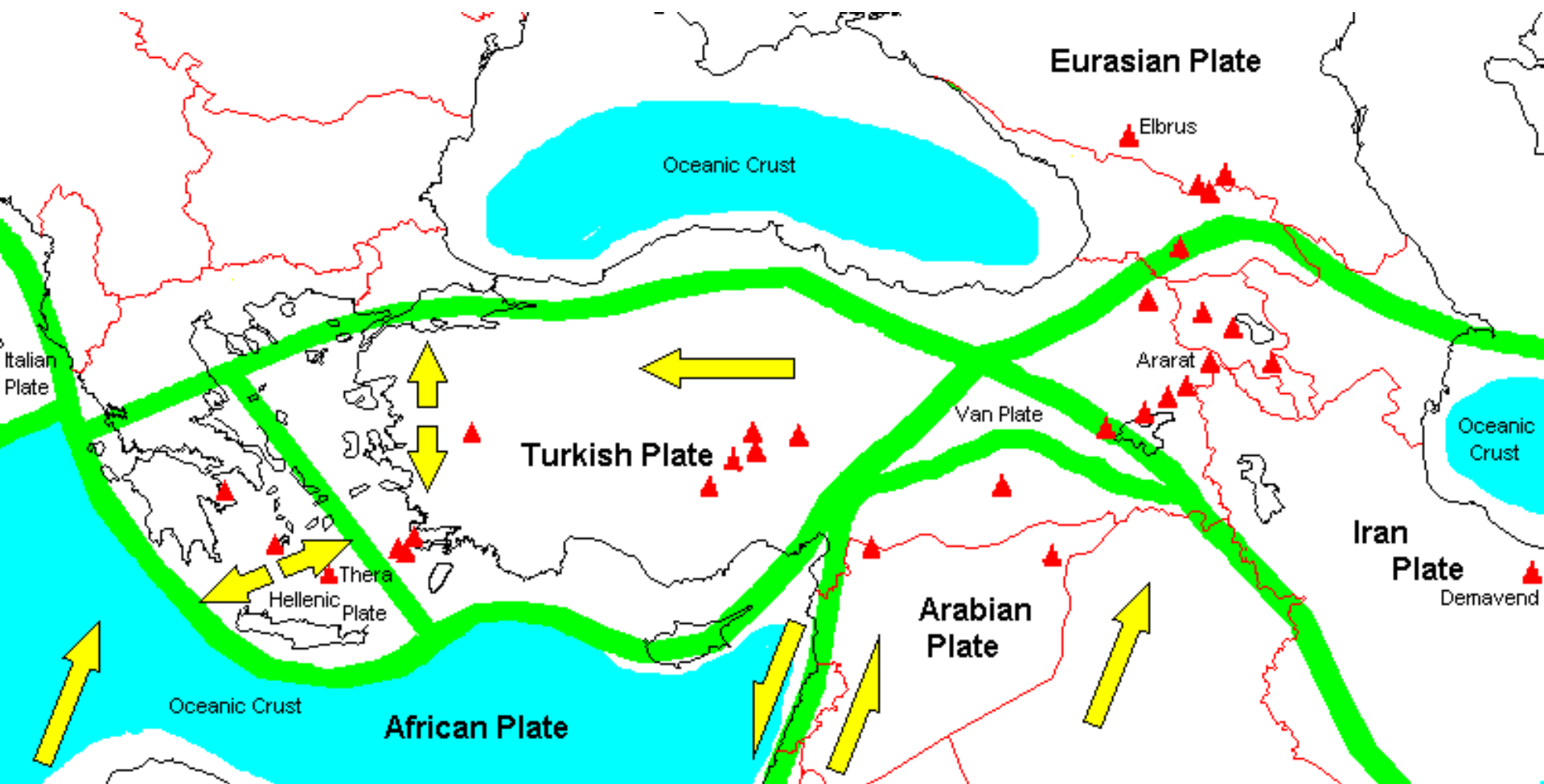
Indian Ocean

2,500 km
2,500 mi

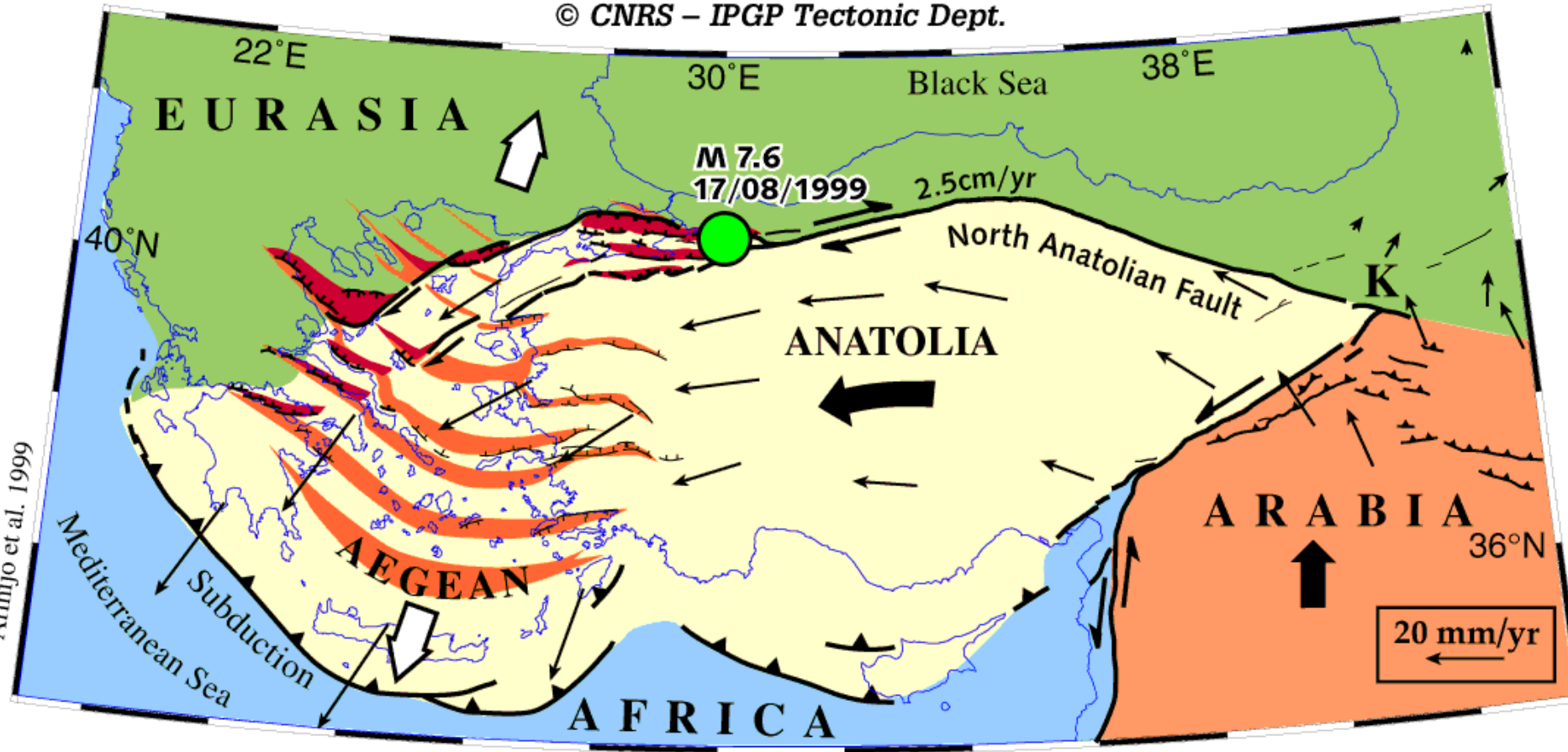
Yellow line: Tectonic plate boundaries Red triangle: Active volcanoes

Anadolu çevresindeki levha hareketleri

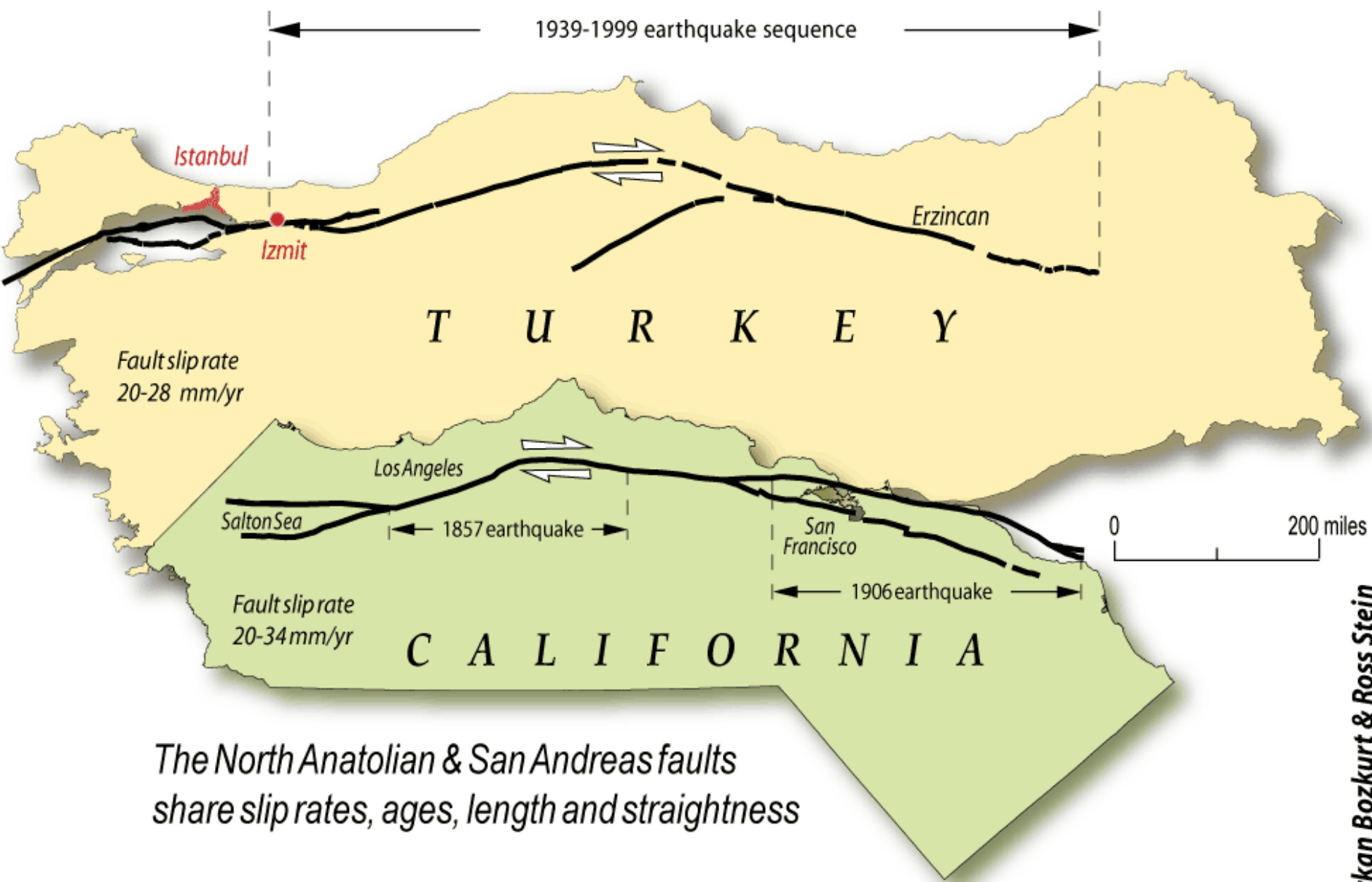




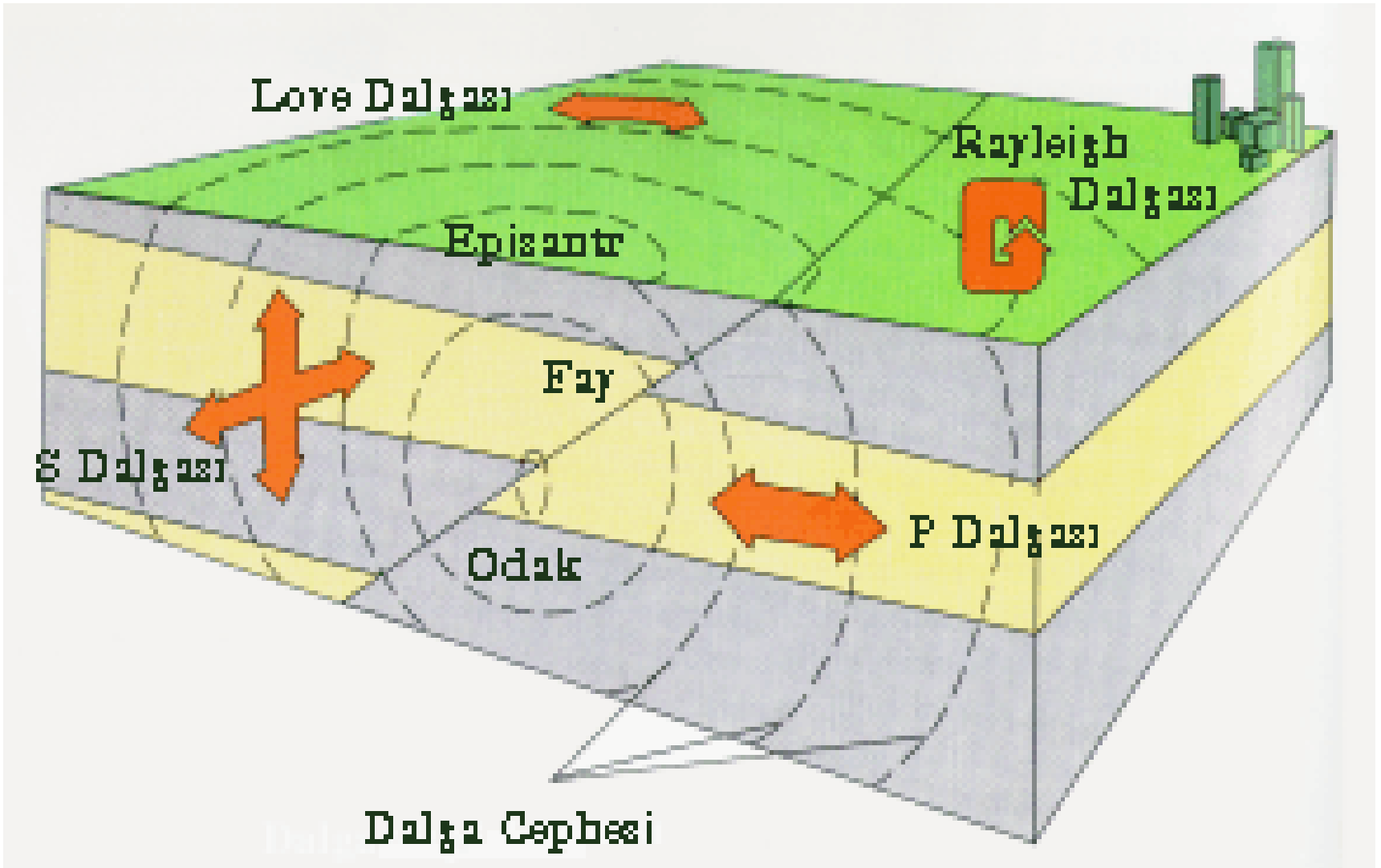
© CNRS – IPGP Tectonic Dept.



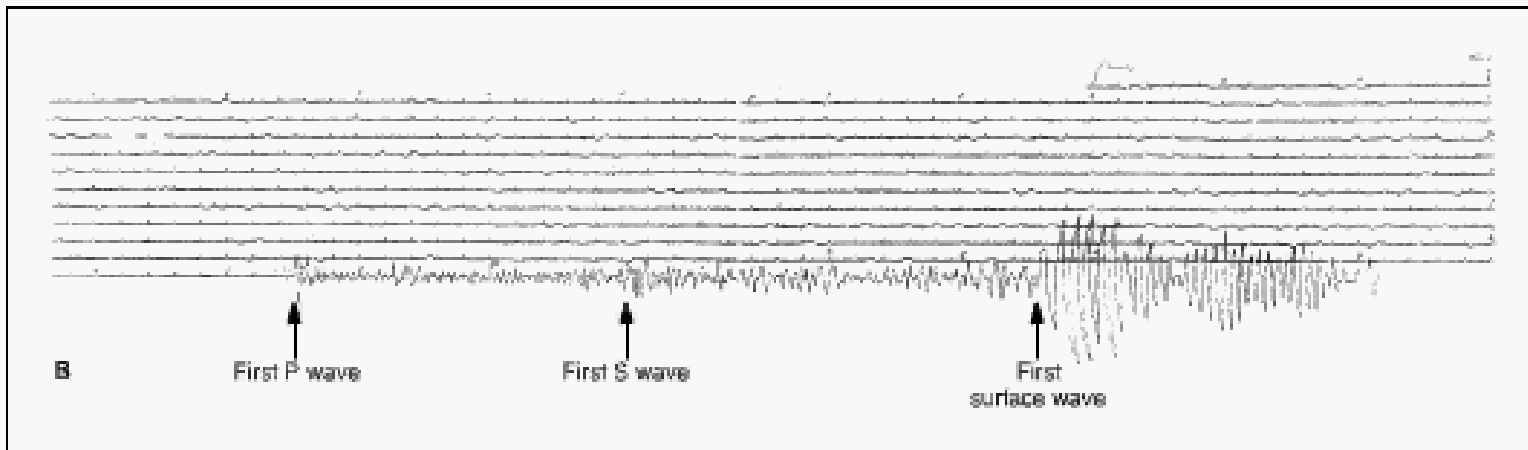
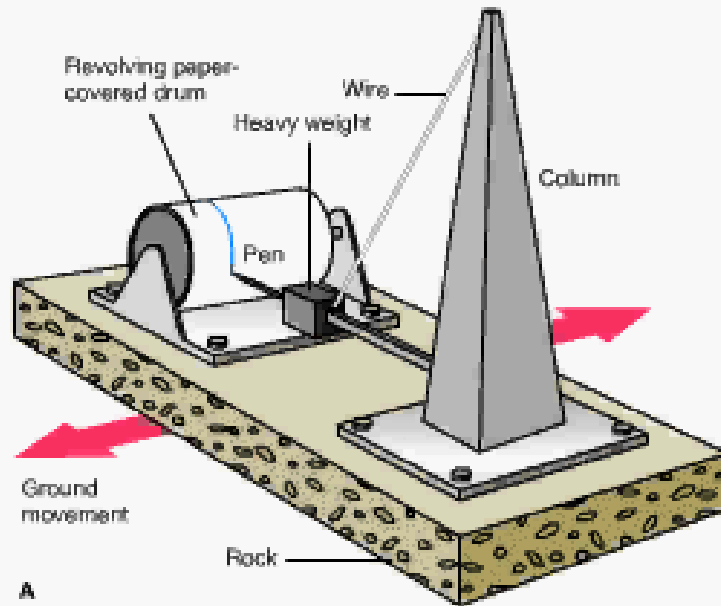
Armijo et al. 1999



The North Anatolian & San Andreas faults share slip rates, ages, length and straightness

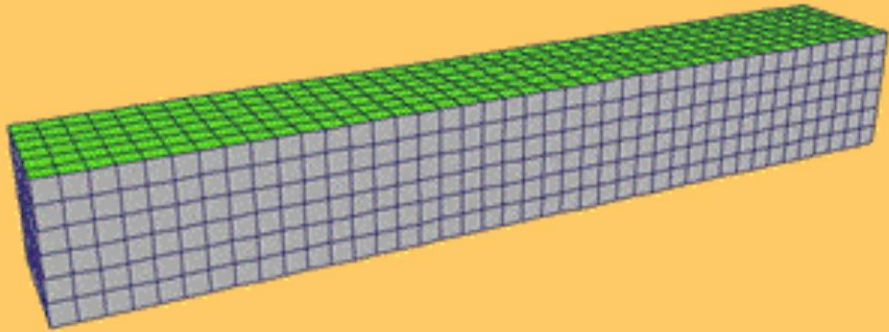


Sismograf

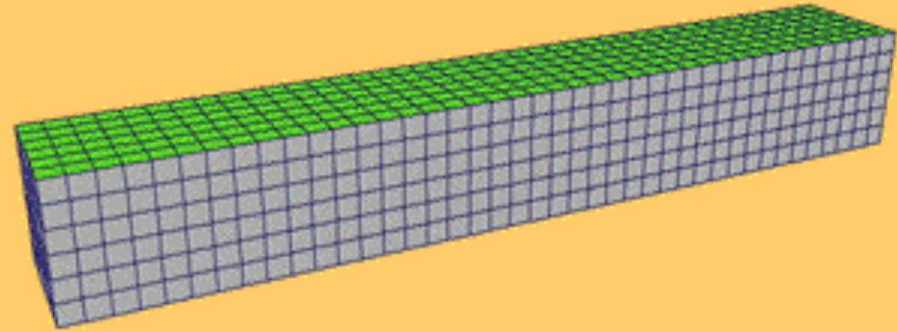


Deprem dalgaları

P wave



S wave

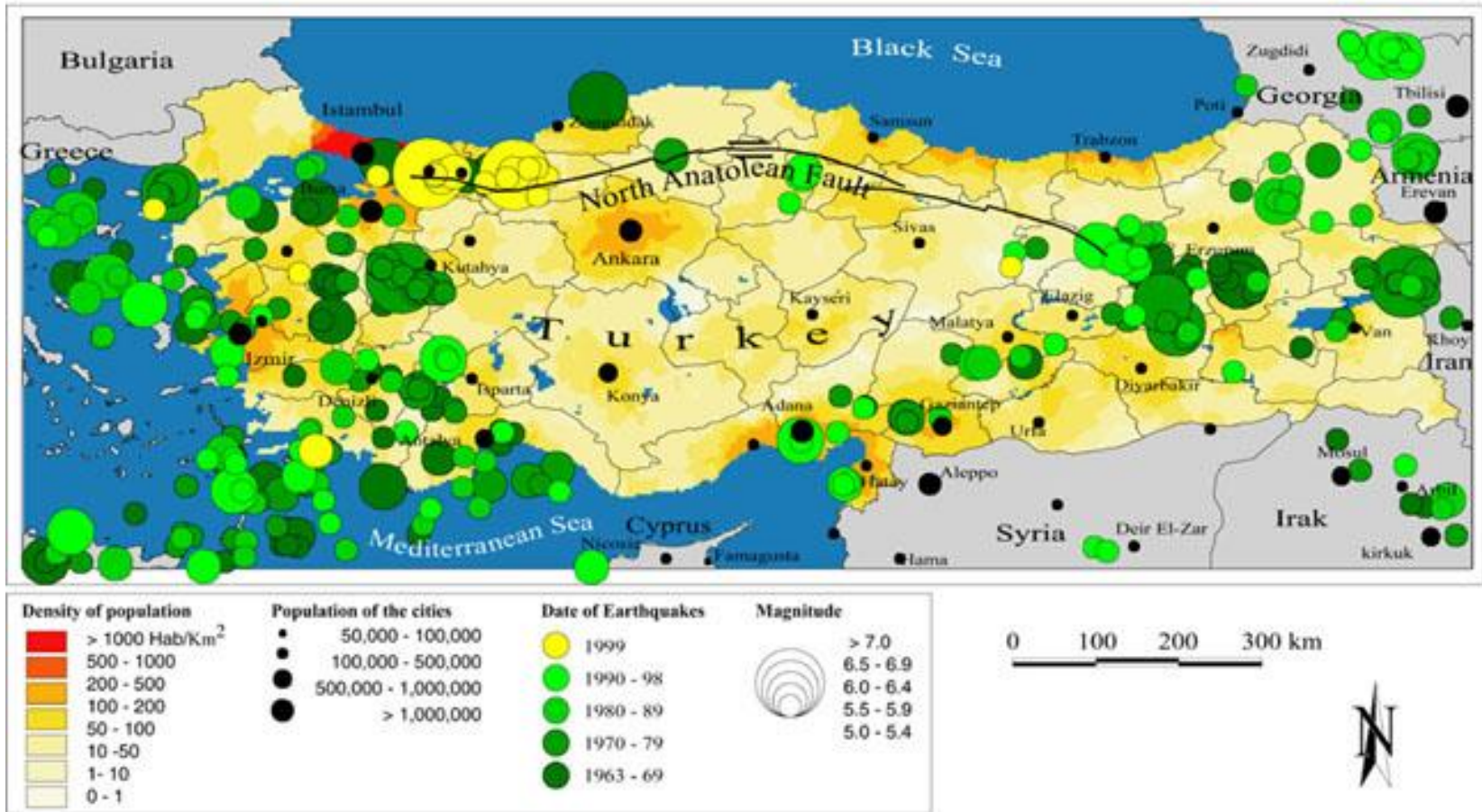


Türkiye'de depremlerin dağılışı

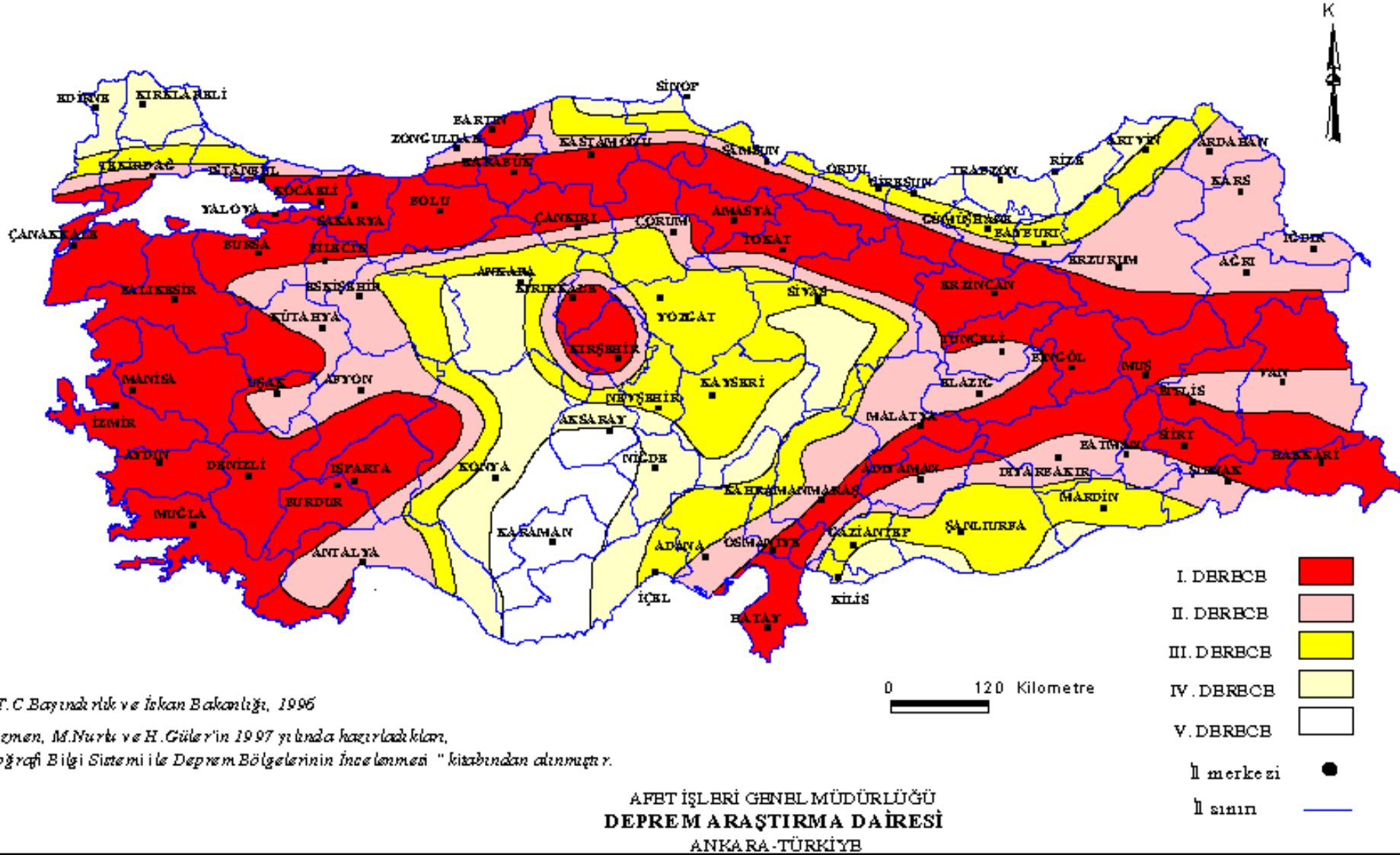


Major Earthquakes in Turkey

- Magnitude 5 and higher between 1963 and 1999 -



DEPREM BÖLGELERİ HARİTASI*





Düzce 1999





Erzincan-1992







