





Kuvaterner

Al

Alüvyon

Eosen

Te

Kumtaşı, şeyl

Pliyosen

Tpl

Konglomera, kumtaşı

Ü. Kretase-Paleosen

MzT

Kireçtaşı, marl, andezit

U. Miyosen

Tm

Kireçtaşı, şeyl

Triyas

Tr

Kumtaşı, konglomera, kireçtaşı

Oligosen

Tol

Kumtaşı, şeyl

Ordovisyen-Karbonifer

Pz

Kumtaşı, kuvarsit, şeyl, kireçtaşı, çert

Eosen

Te

Kireçtaşı, marl

Ü. Kretase

γ_3

Granodiyorit

Paleozoyik - Jurasik

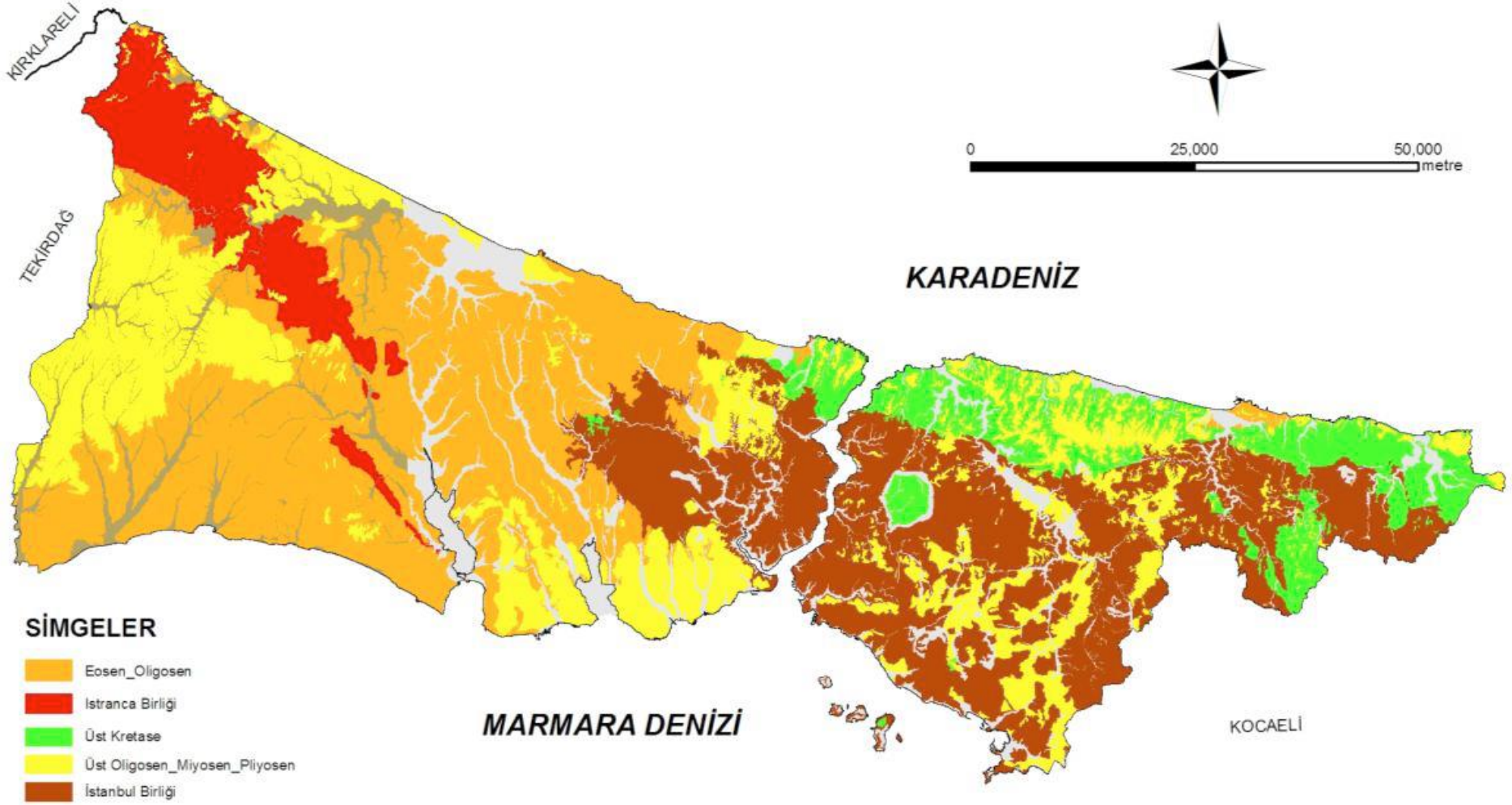
Trm

Fillat, metakuvarsit

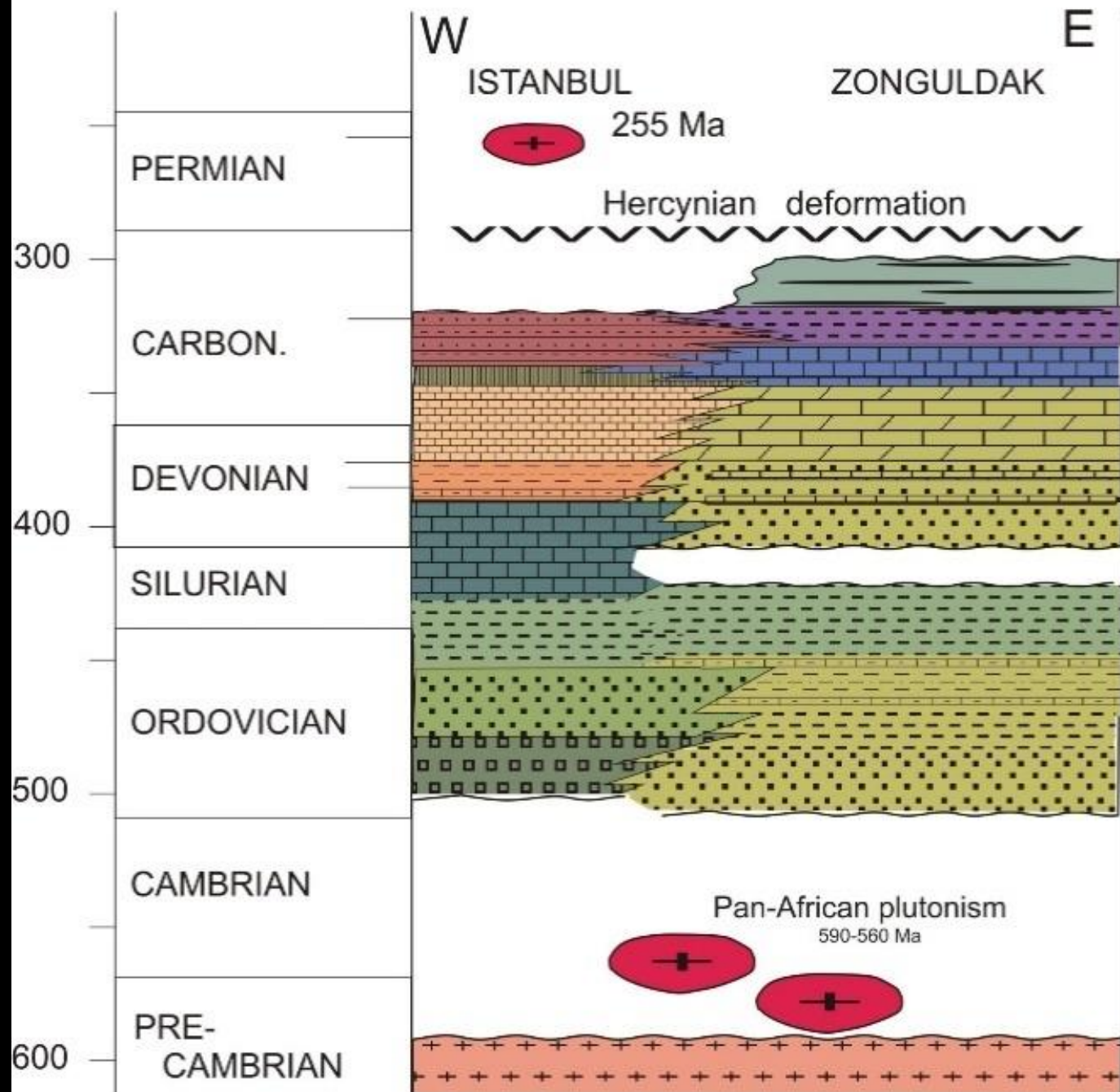
Ü. Permien

γ_1

Granodiyorit



ISTANBUL ZONE



İstanbul Zonu

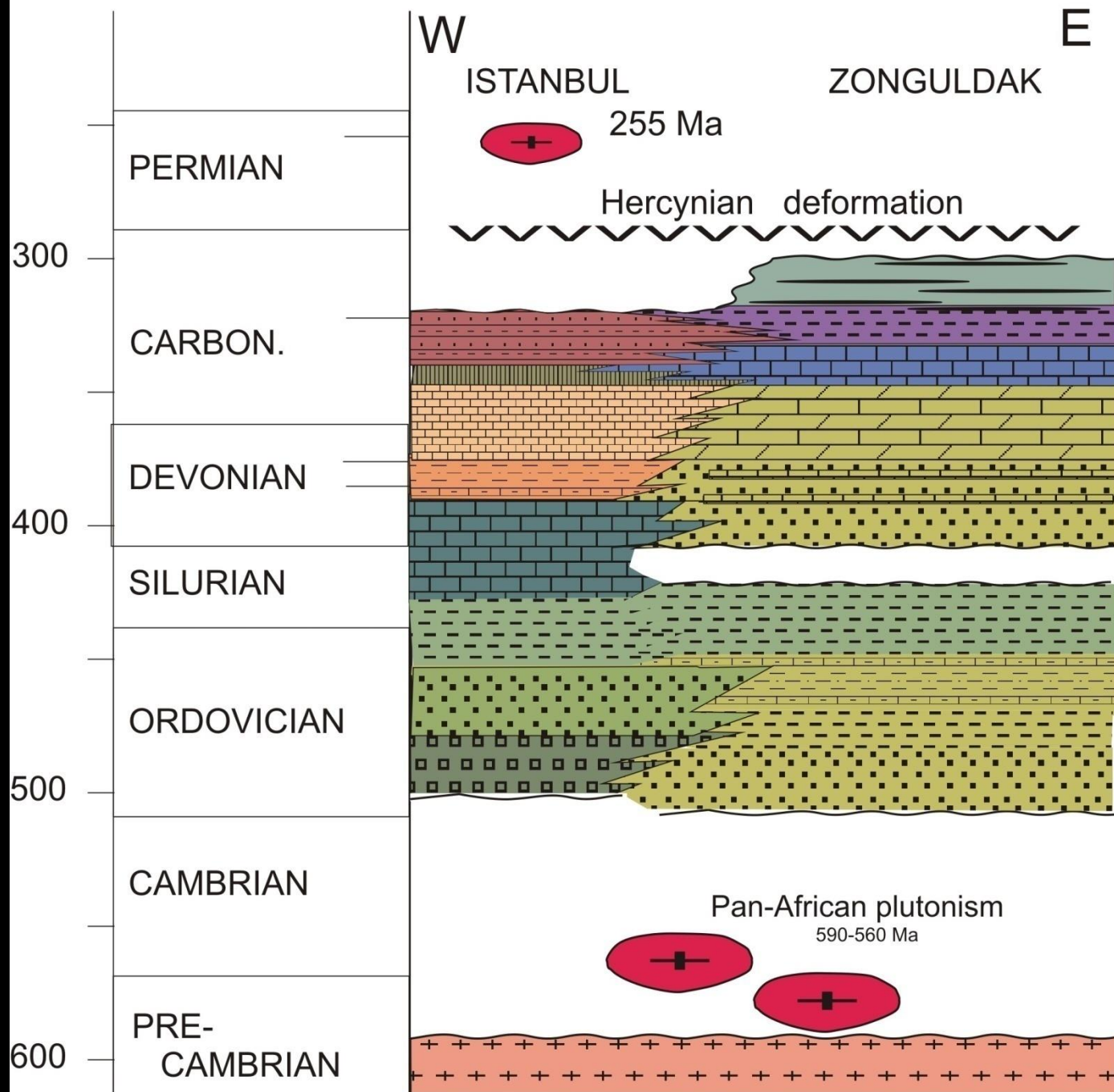
1. Pan-Afrikan/Kadomiyen yaşlı metamorfik-granitik temel.
2. Pasif kıta kenarı tipinde sedimenter Paleozoyik istif (Ordovisyen-Karbonifer).
3. Karbonifer deformasyonu.
4. Batı kesiminde, iyi gelişmiş, kalın bir Triyas sedimenter istifi.



Vergence of folds

Palaeozoic in the Istanbul Zone

ISTANBUL ZONE

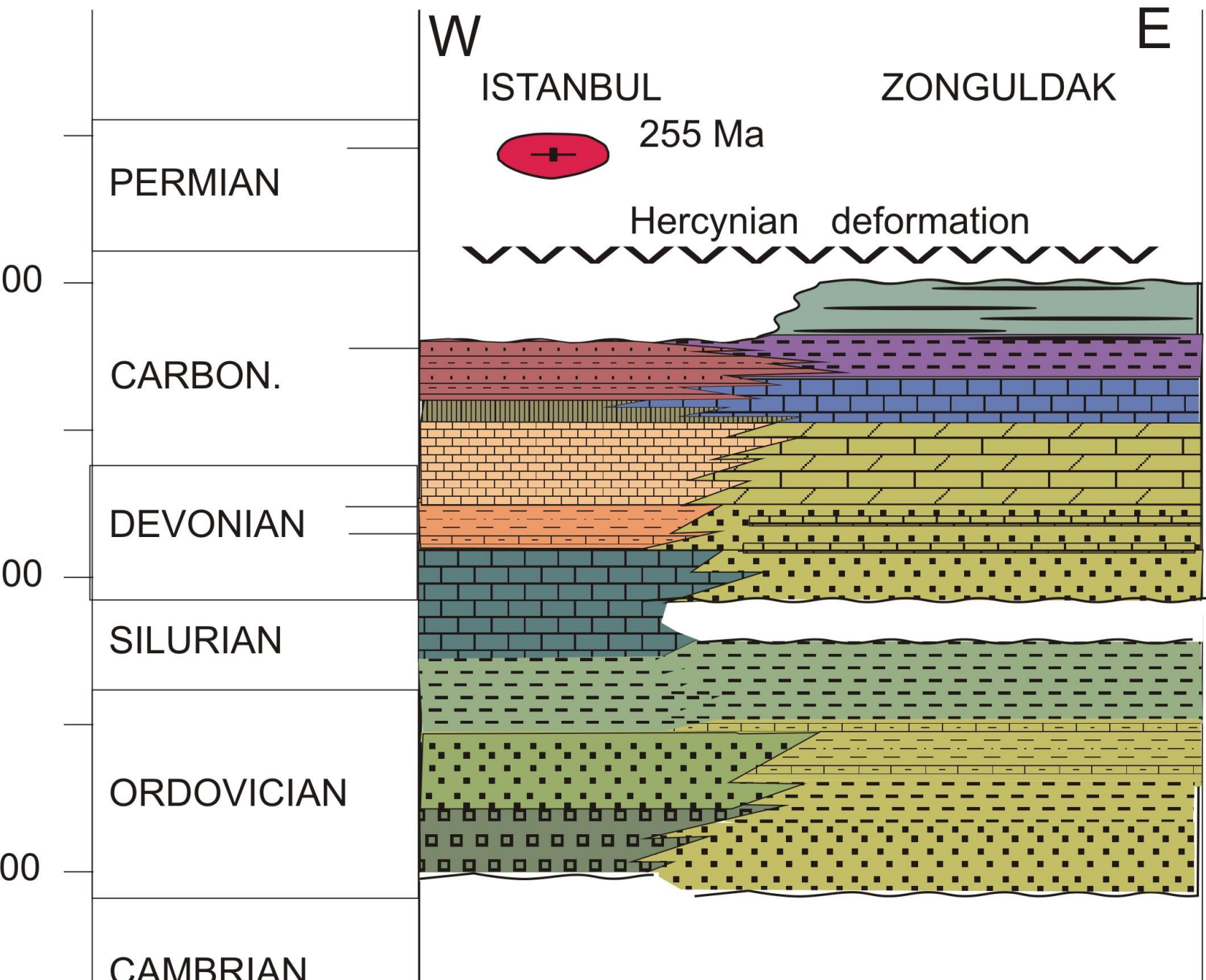








ISTANBUL ZONE

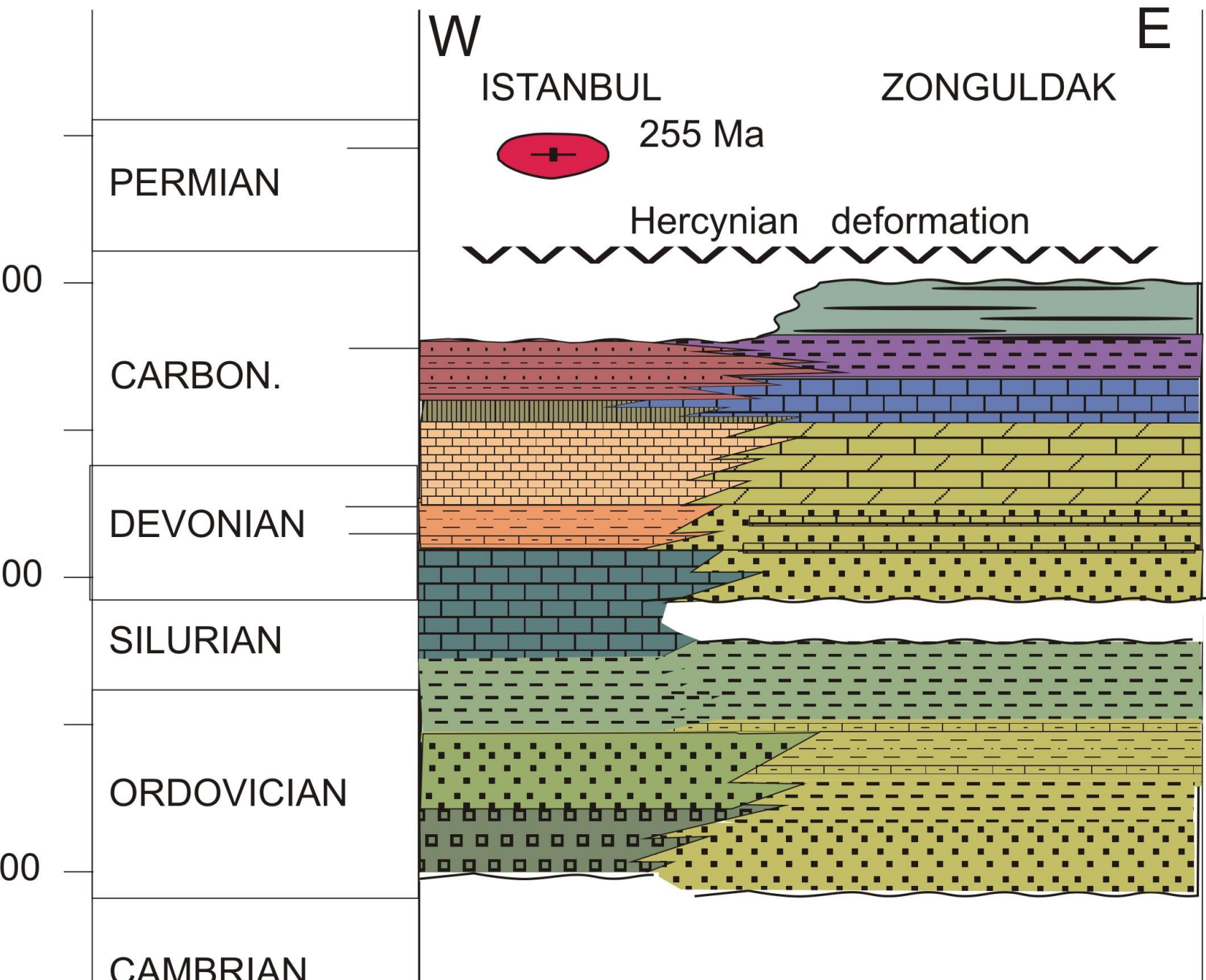






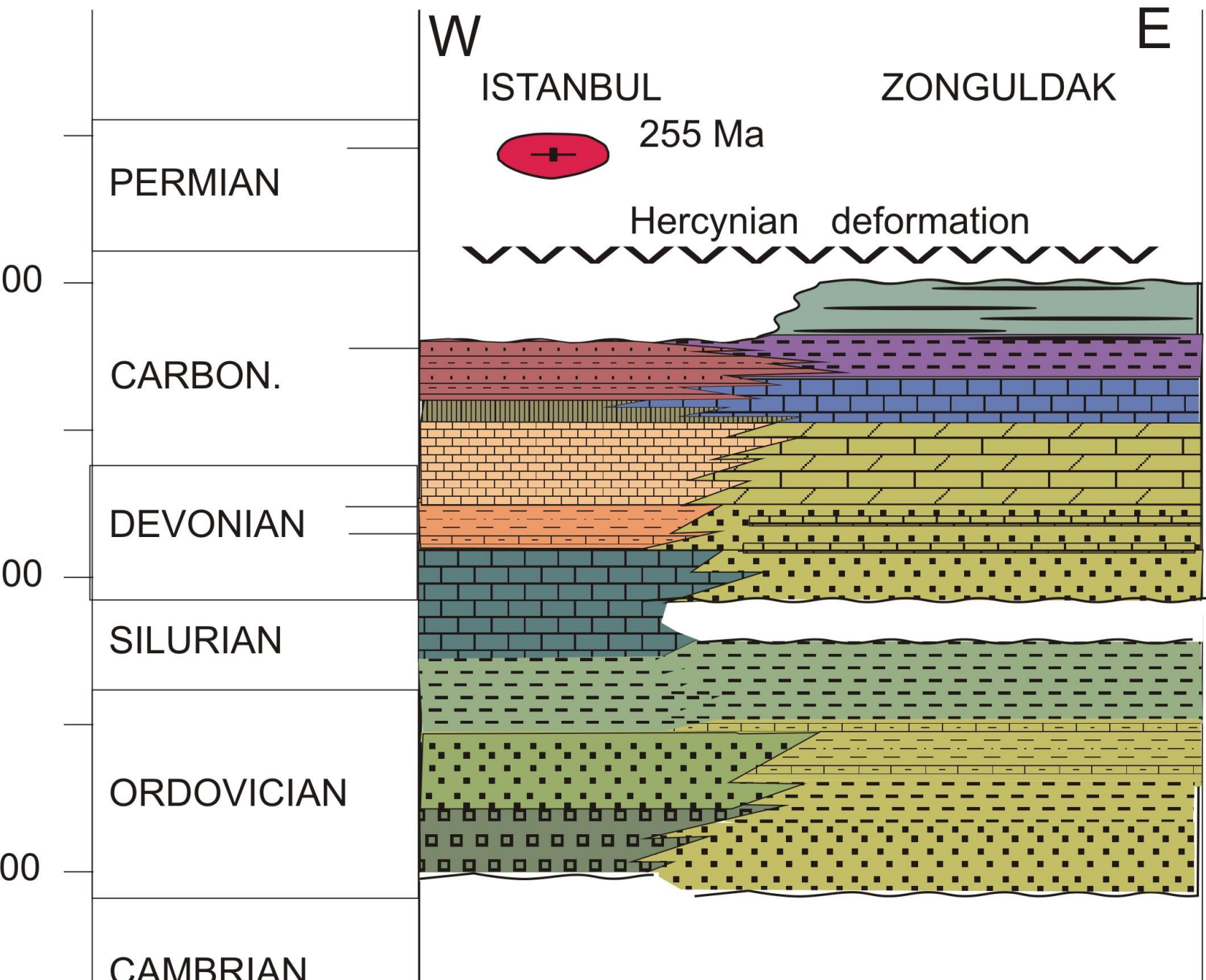


ISTANBUL ZONE





ISTANBUL ZONE

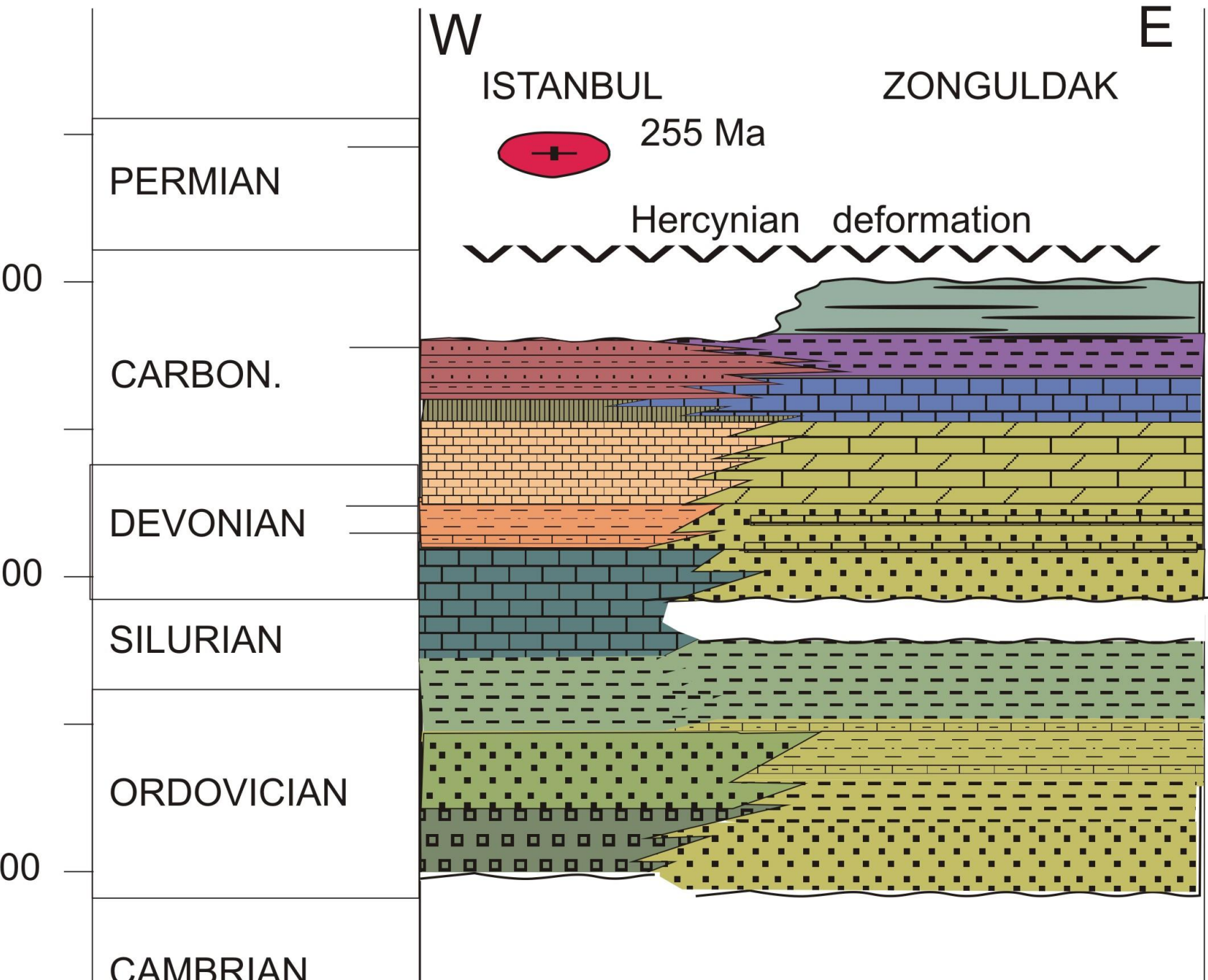


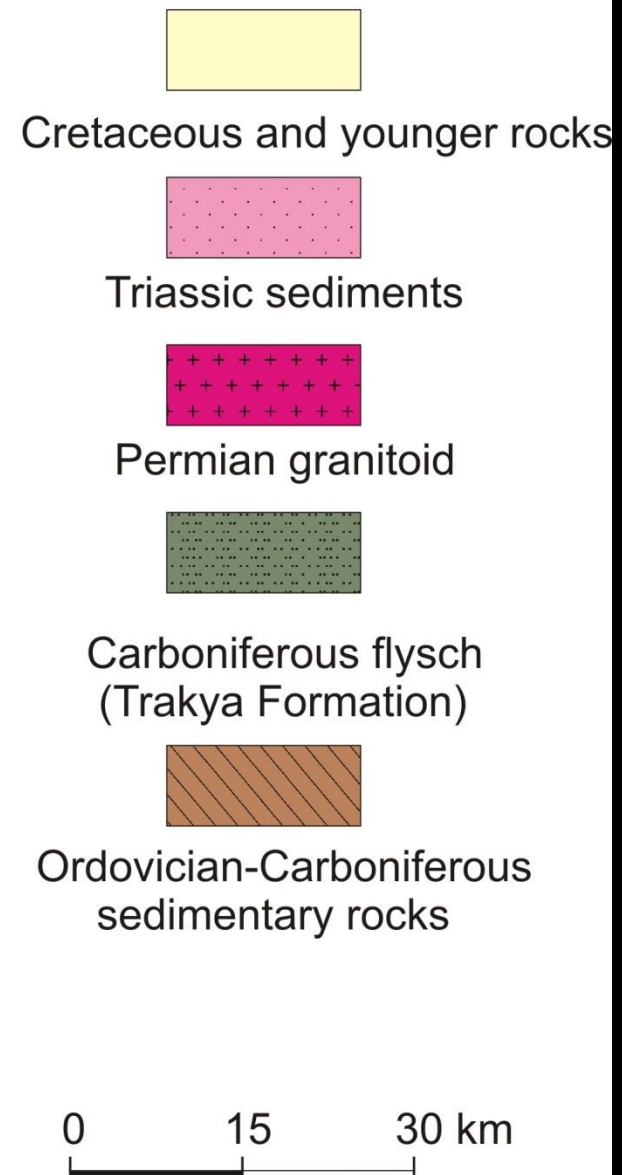






ISTANBUL ZONE





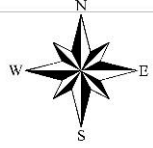




2B



İTÜ AYAZAĞA KAMPÜSÜNÜN JEOLojİ HARİTASI



AÇIKLAMALAR

- Dolgu
- Alüvyon
- Belgrad Formasyonu
- Trakya Formasyonu
- Baltalimanı Formasyonu
- Tuzla Formasyonu
- FAY
- YOL
- YAPI
- Jeolojik Kesit Doğrultusu
- Tabaka Eğim Doğrultusu

0 0,075 0,15 0,3 0,45 0,6 Km

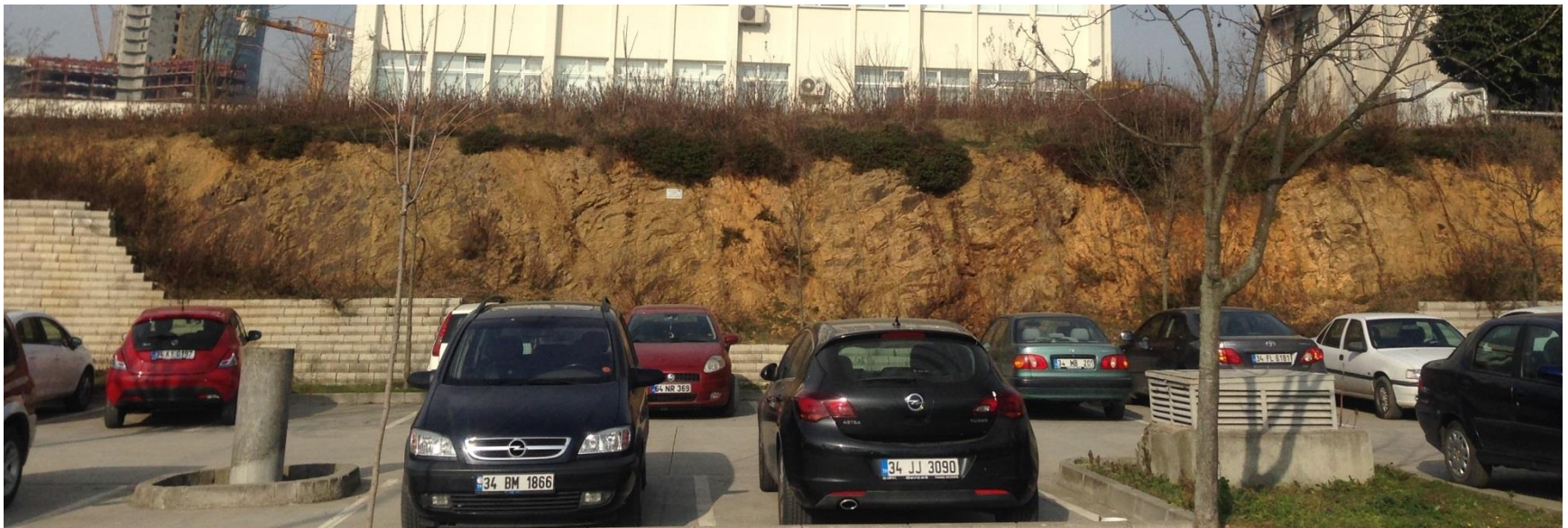
Ulucay, Sahin ve Bicer (2018)



weathered, altered (oxidized), often faulted, intruded by dikes
thick massive sandstone exposed in ITU Campus

Station 0

Chemistry-Metallurgy Faculty Parking



Station 1

Behind İTÜ ARI MOLA





Station 4

along the road of near Civil Eng Building



Station 5

Dolunay Café/Sport Center-Tennis Court





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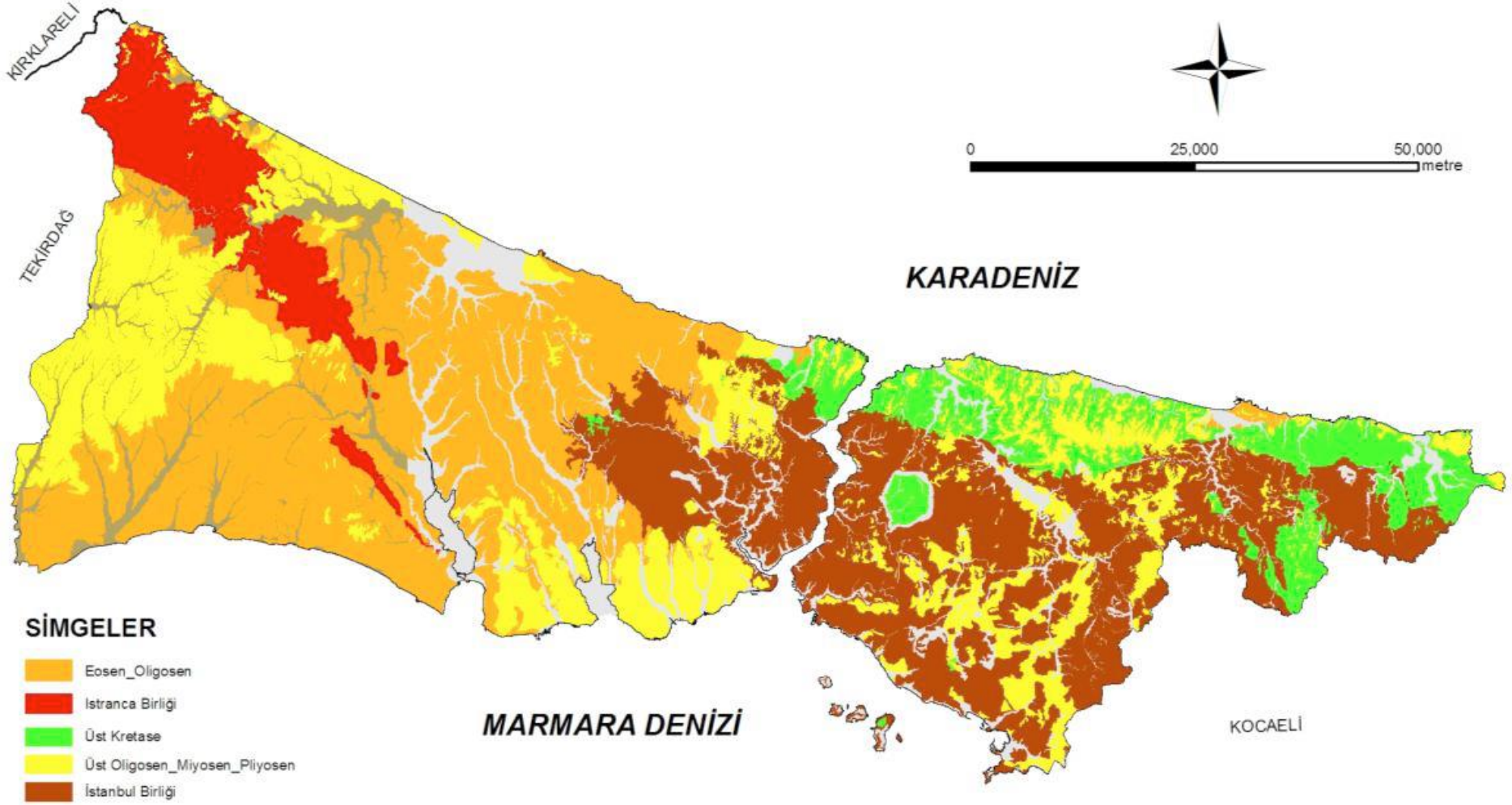
Ü. Permiyen

γ_1

Granodiyorit



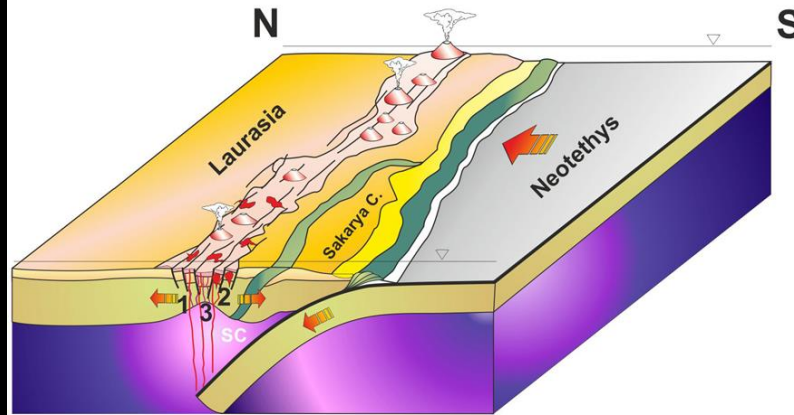
Permiyen Sancaktepe Graniti



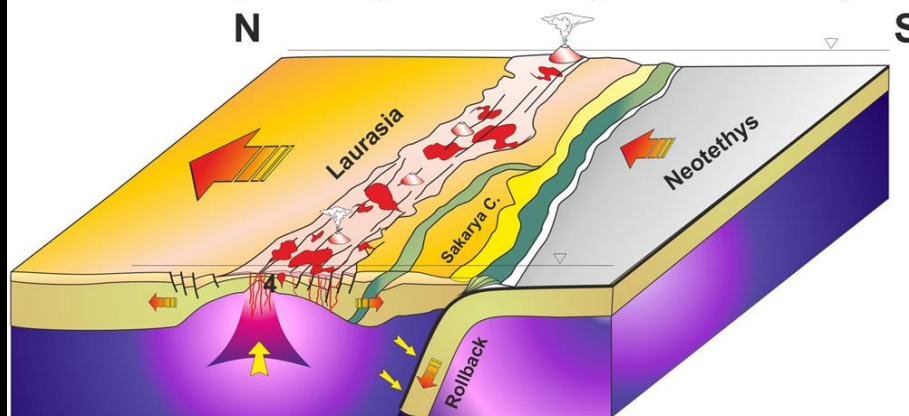
Upper Cretaceous



(a) **TURONIAN - CONIACIAN: Arc-rifting along the W Pontides.**
Formation of calc-alkaline magmas with subduction signature



(b) **CAMPANIAN TO PALEOCENE: Stretching & thinning of the lithosphere,**
asthenospheric melting, formation of OIB type alkaline lavas and dykes



-  Trench sediments
-  Forearc basin
-  Accretionary prism
-  Pontide arc massif
-  Continental crust of the Pontides
-  Lithospheric mantle
-  Adiabatic decompressional melting of the asthenosphere due to extension
-  Normal convecting asthenosphere
-  Asthenosphere with subduction component

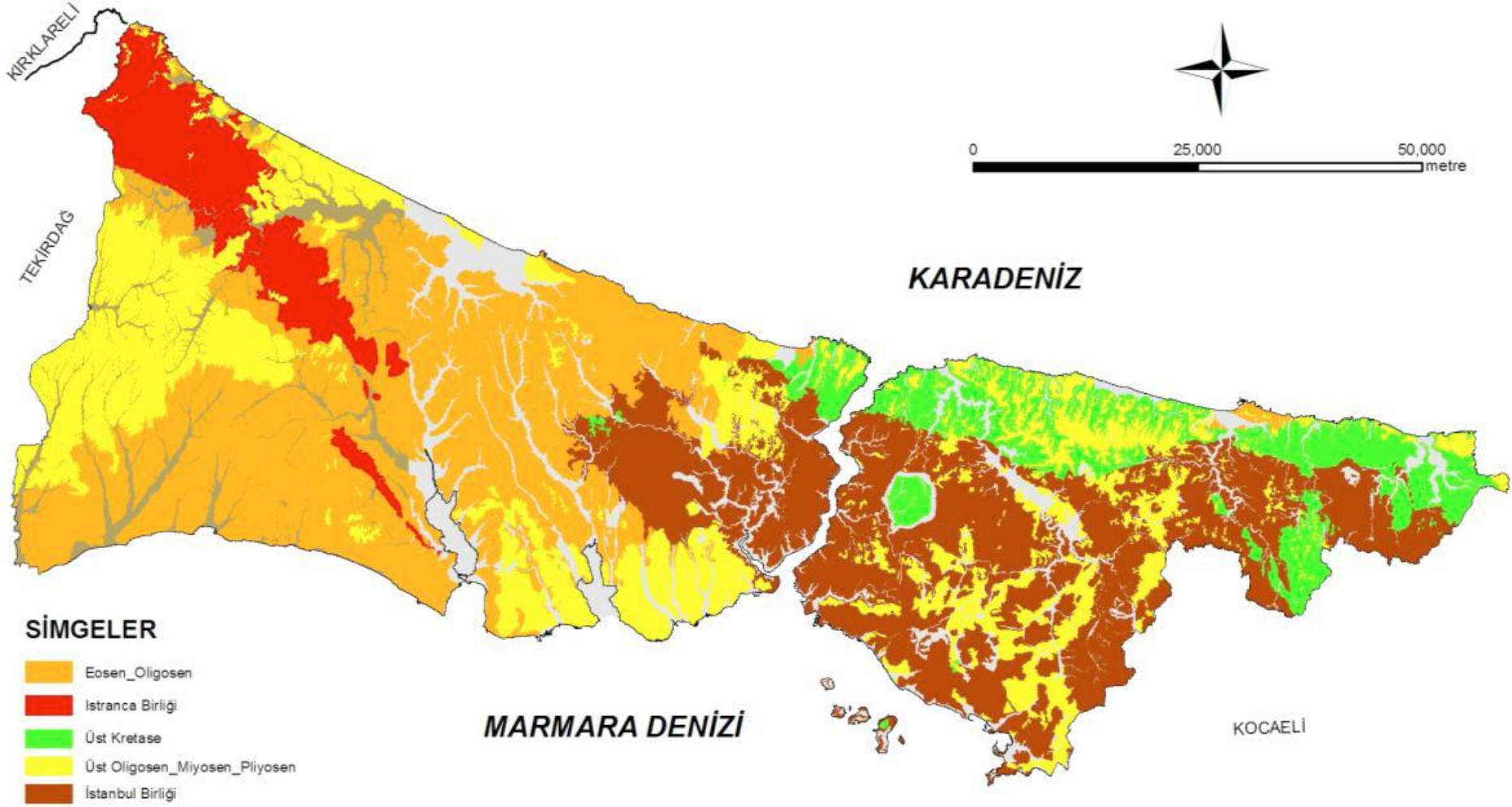
- 1) Intermediate dyke: 72.49 ± 0.79 Ma
- 2) Çavuşbaşı Granodiorite: 67.59 ± 0.5 Ma
- 3) Intermediate dyke: 65.44 ± 0.93 Ma
- 4) Tavşantepe Diorite: 58.9 ± 1.8 Ma











Black Sea

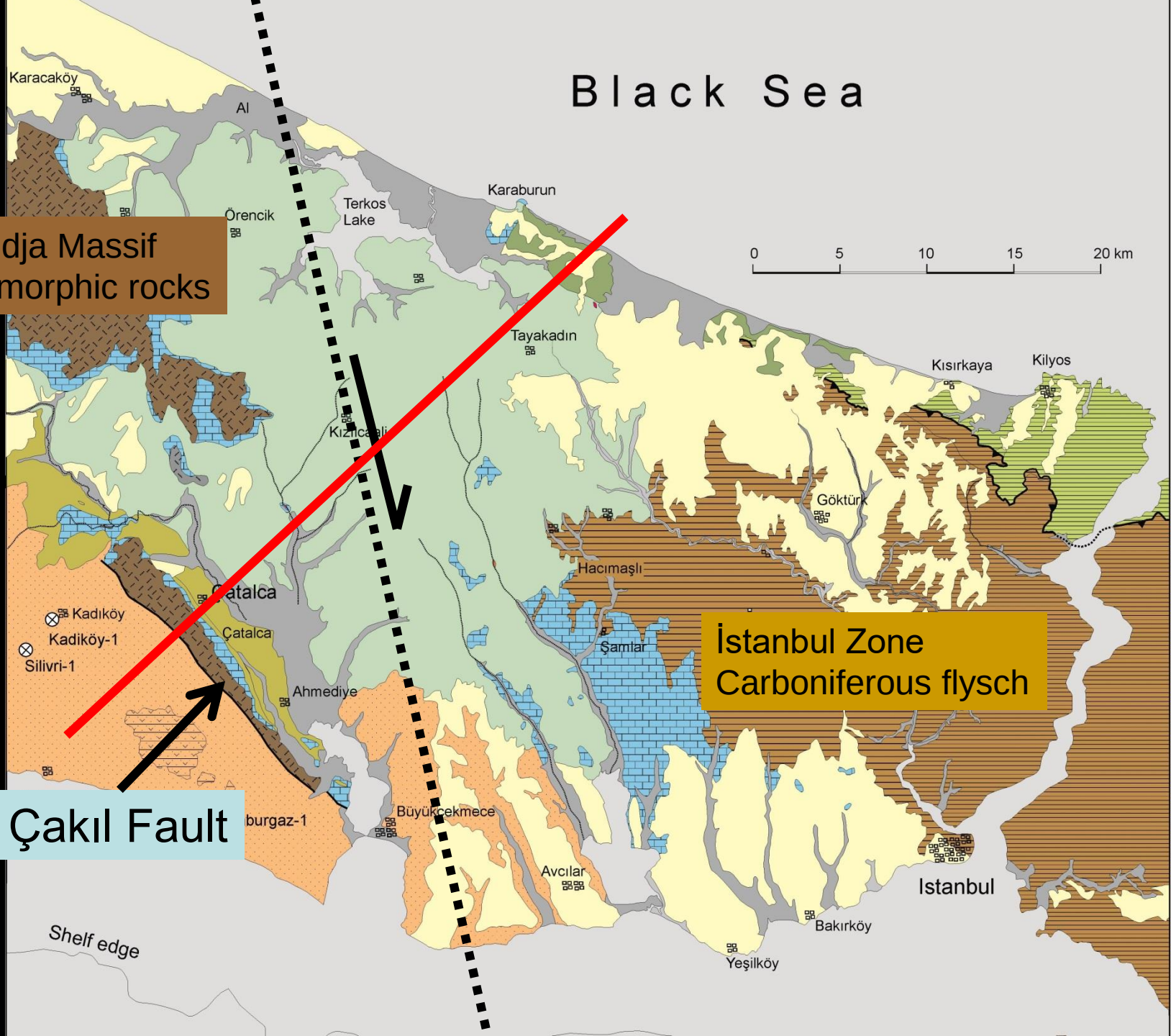
0 5 10 15 20 km

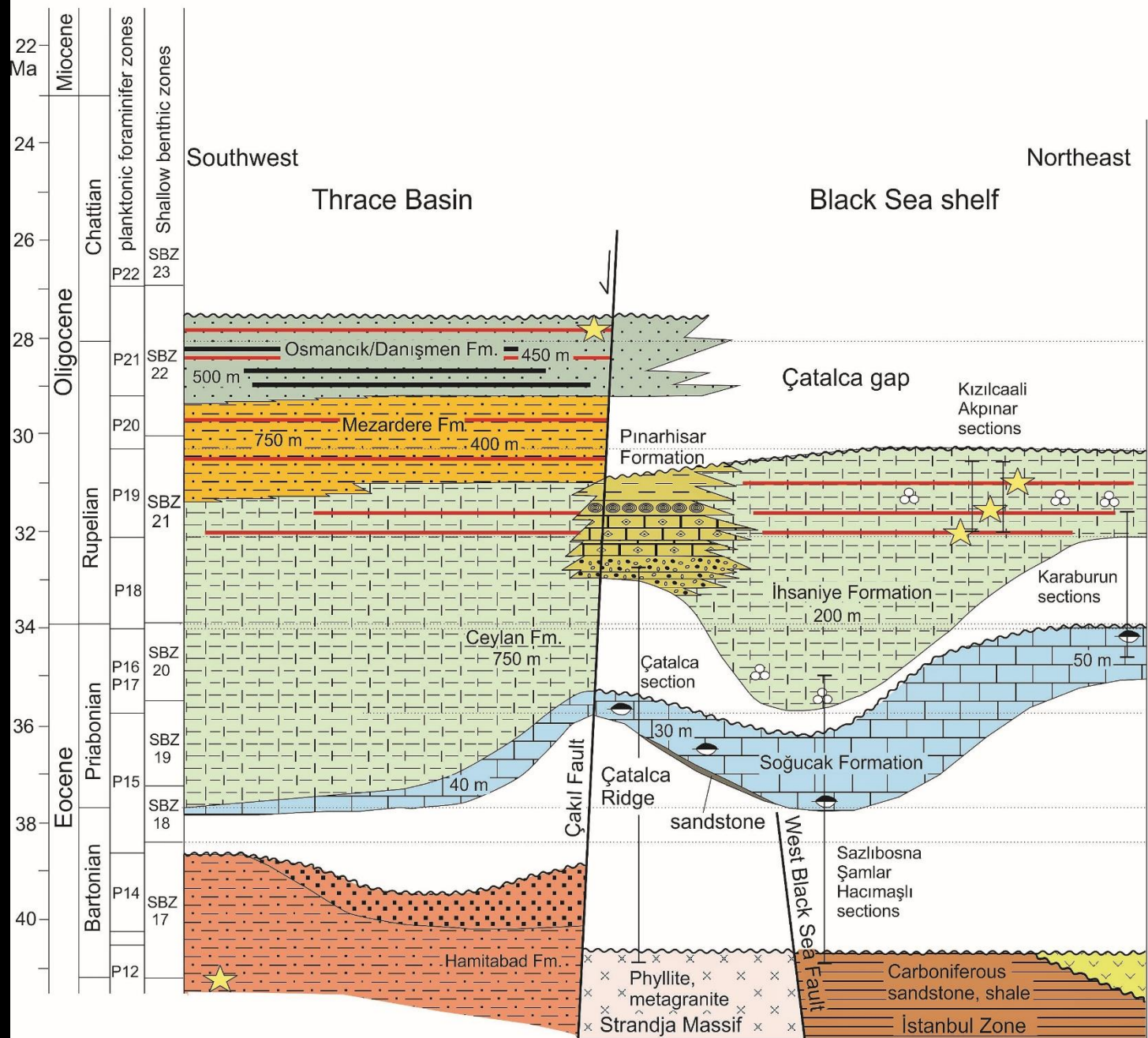
Strandja Massif
metamorphic rocks

Istanbul Zone
Carboniferous flysch

Çakıl Fault

Shelf edge





- Benthic foraminifera age
 Planktonic foraminifera age
 Sedimentary manganese deposits
 U-Pb zircon sample
 Tuff
 Coal

Black Sea

0 5 10 15 20 km

Shelf edge

Locations marked with red stars: Sazlıbosna, Acımaşlı, Şamlı.

Other locations: Karacaköy, Al, Örencik, Terkos Lake, Karaburun, Tayakadın, Kızılcaali, Kısırkaya, Kilyos, Göktürk, Çatalca, Kadıköy, Kadıköy-1, Silivri-1, Selimpaşa, Kumburgaz-1, Ahmediye, Büyükçekmece, Avcılar, Yeşilköy, Bakırköy, İstanbul.



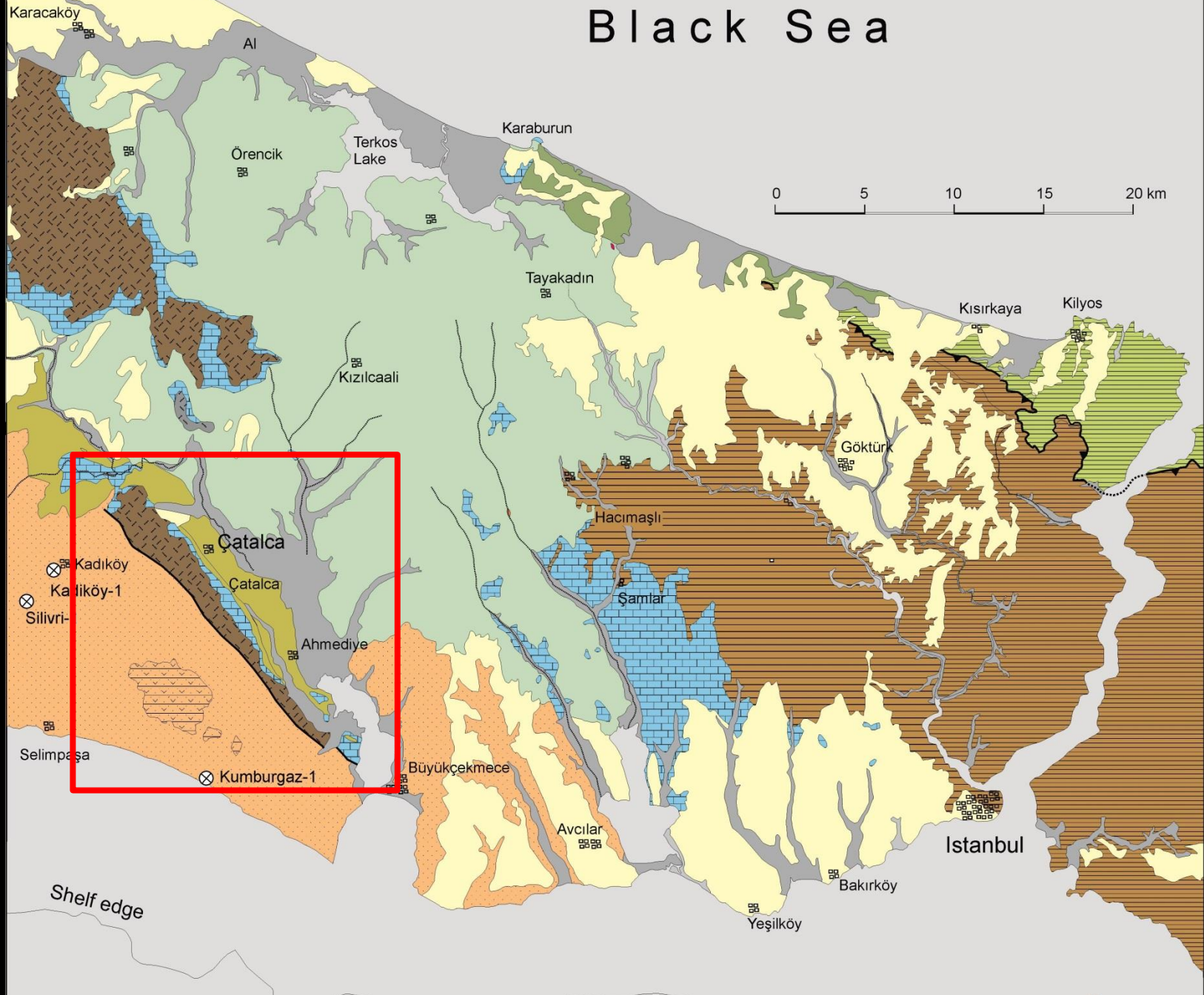


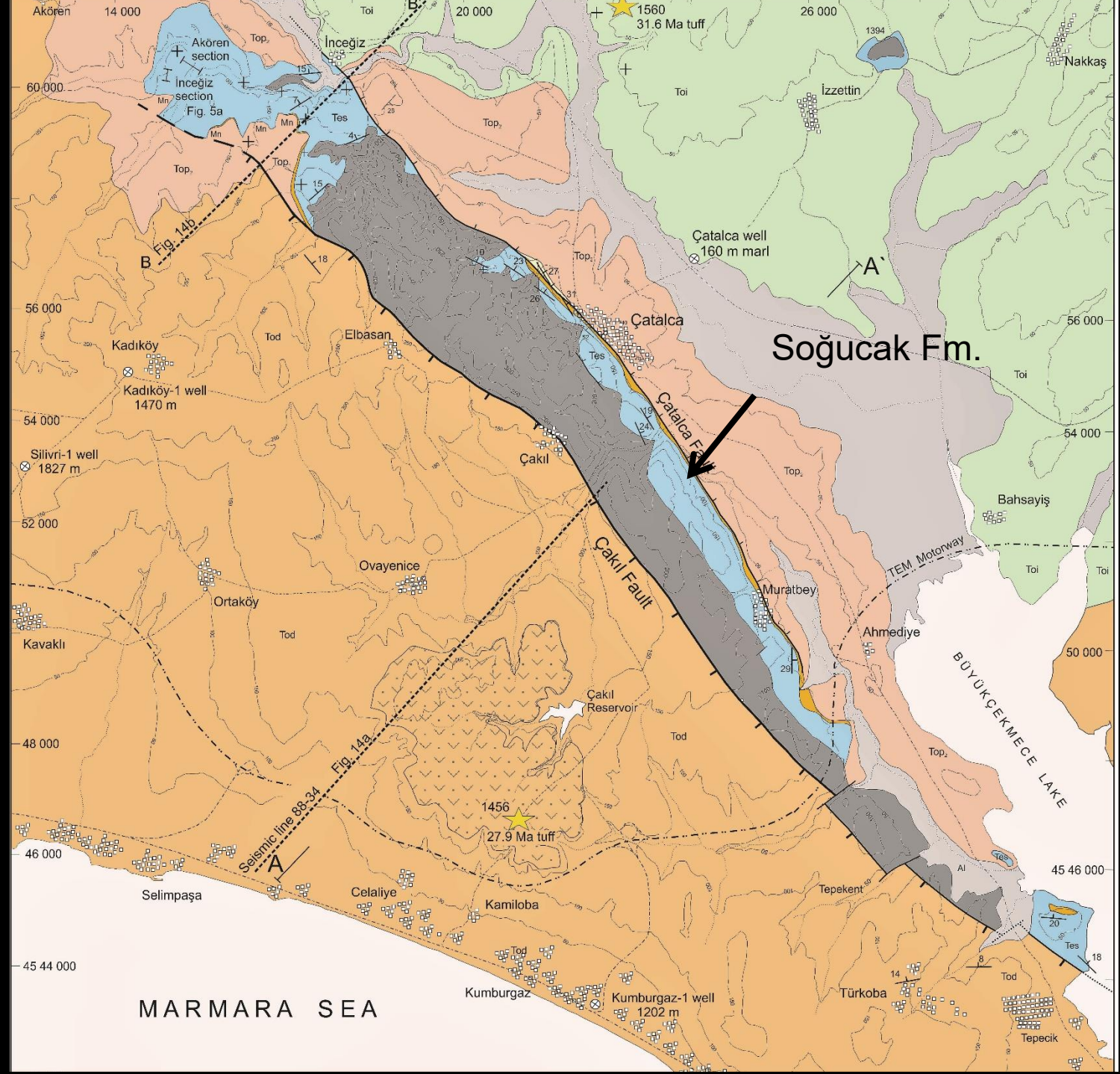
Upper Bartonian (Middle Eocene) limestone

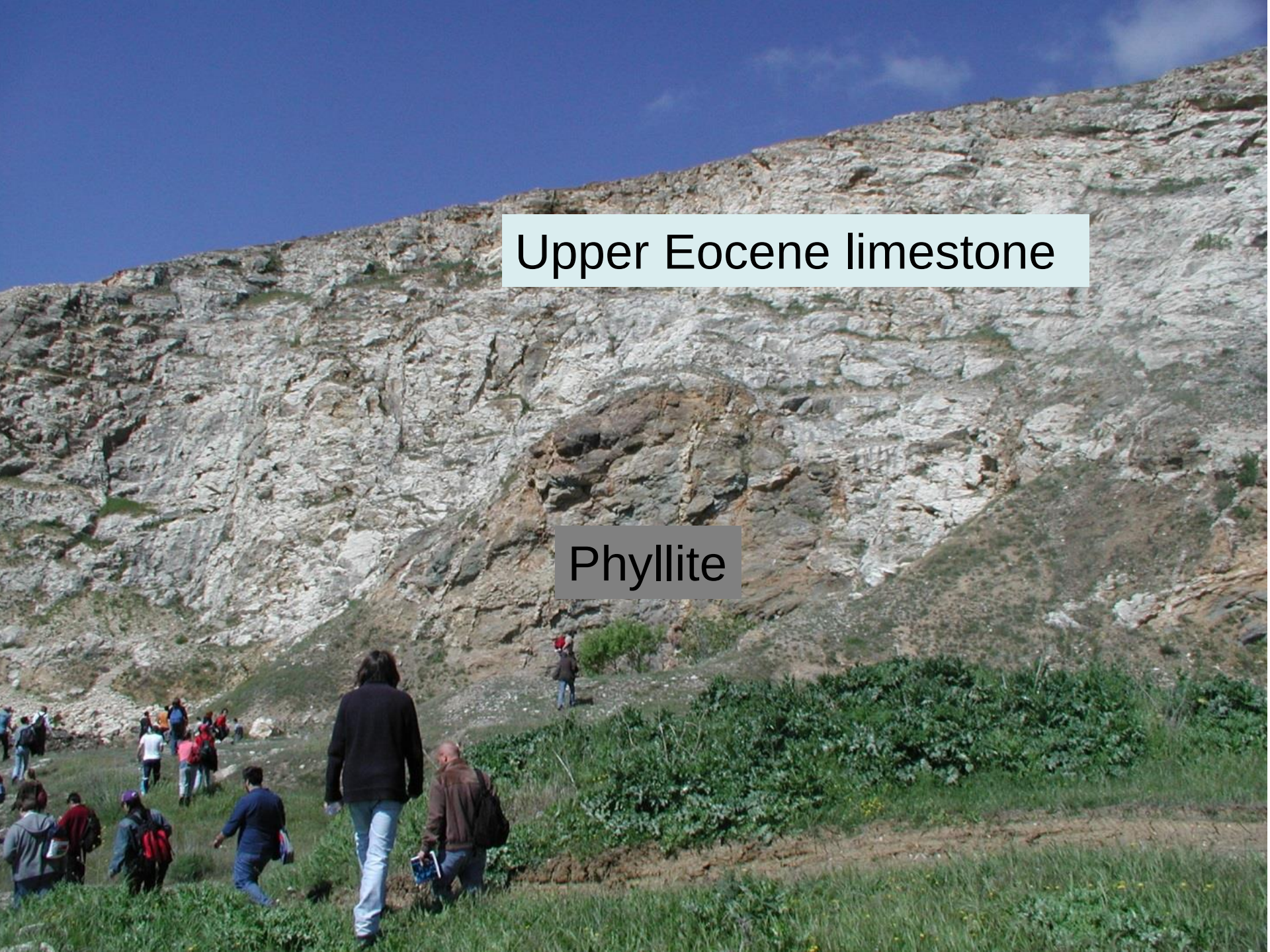
Carboniferous sandstone



Black Sea

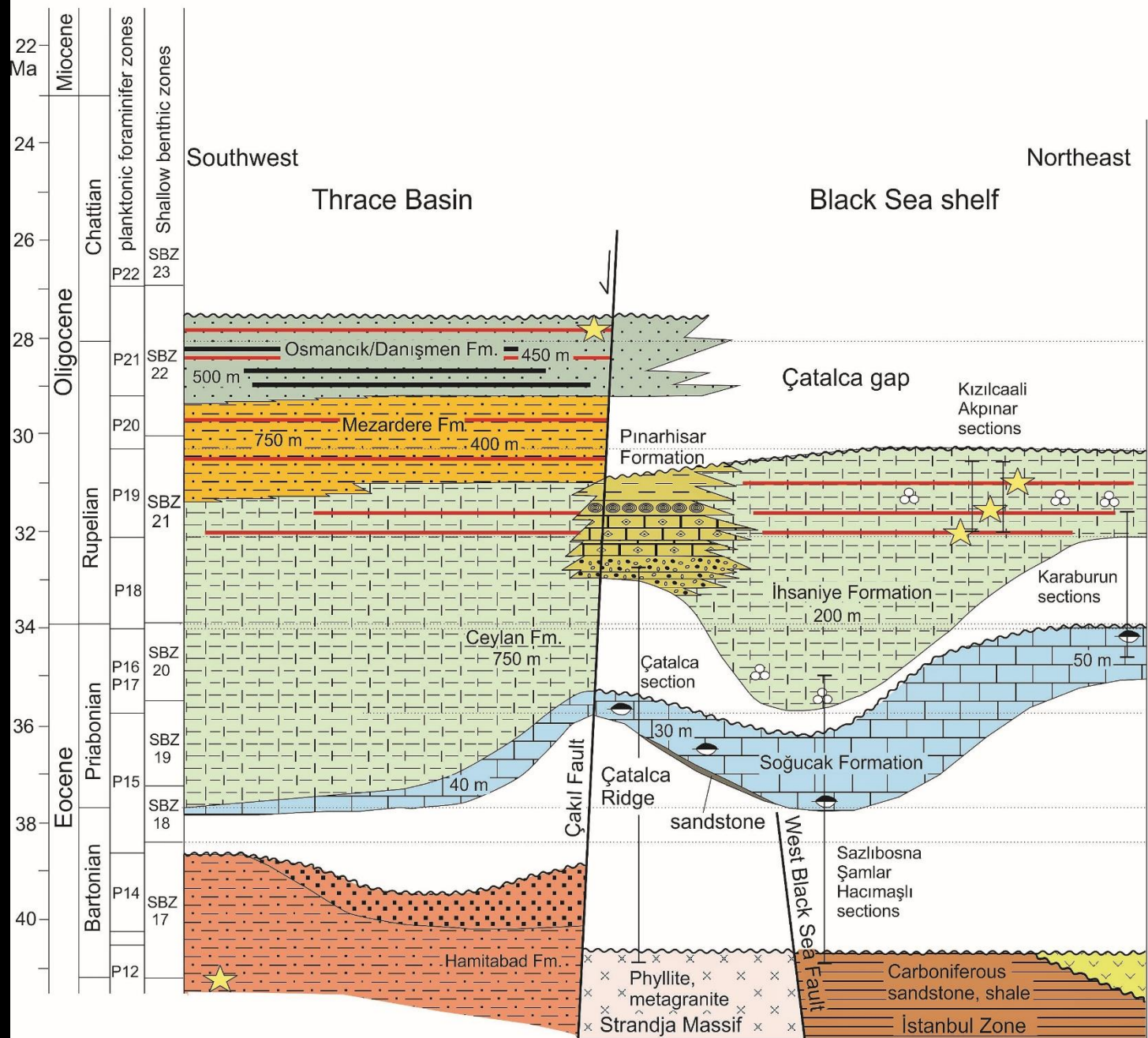






Upper Eocene limestone

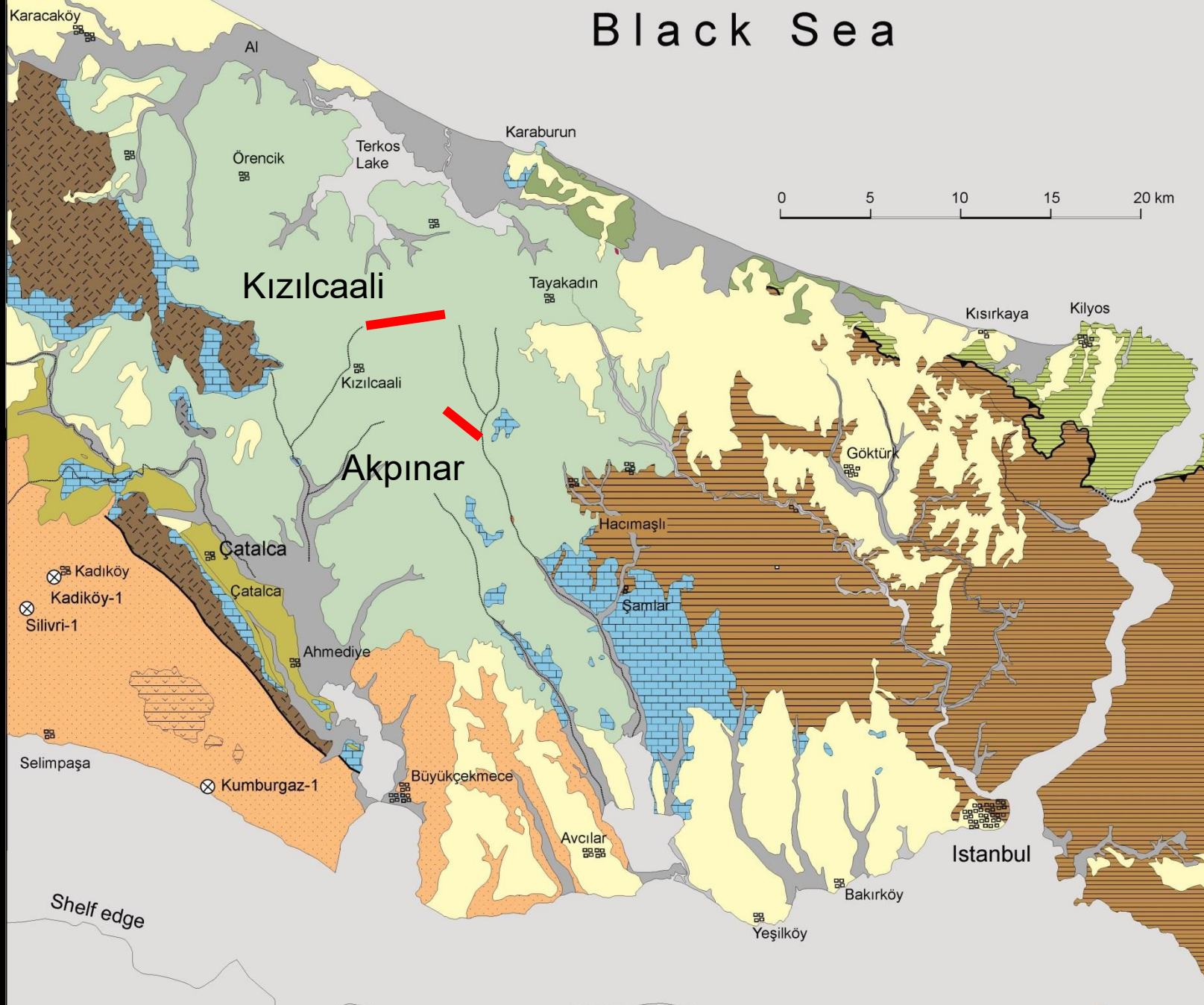
Phyllite



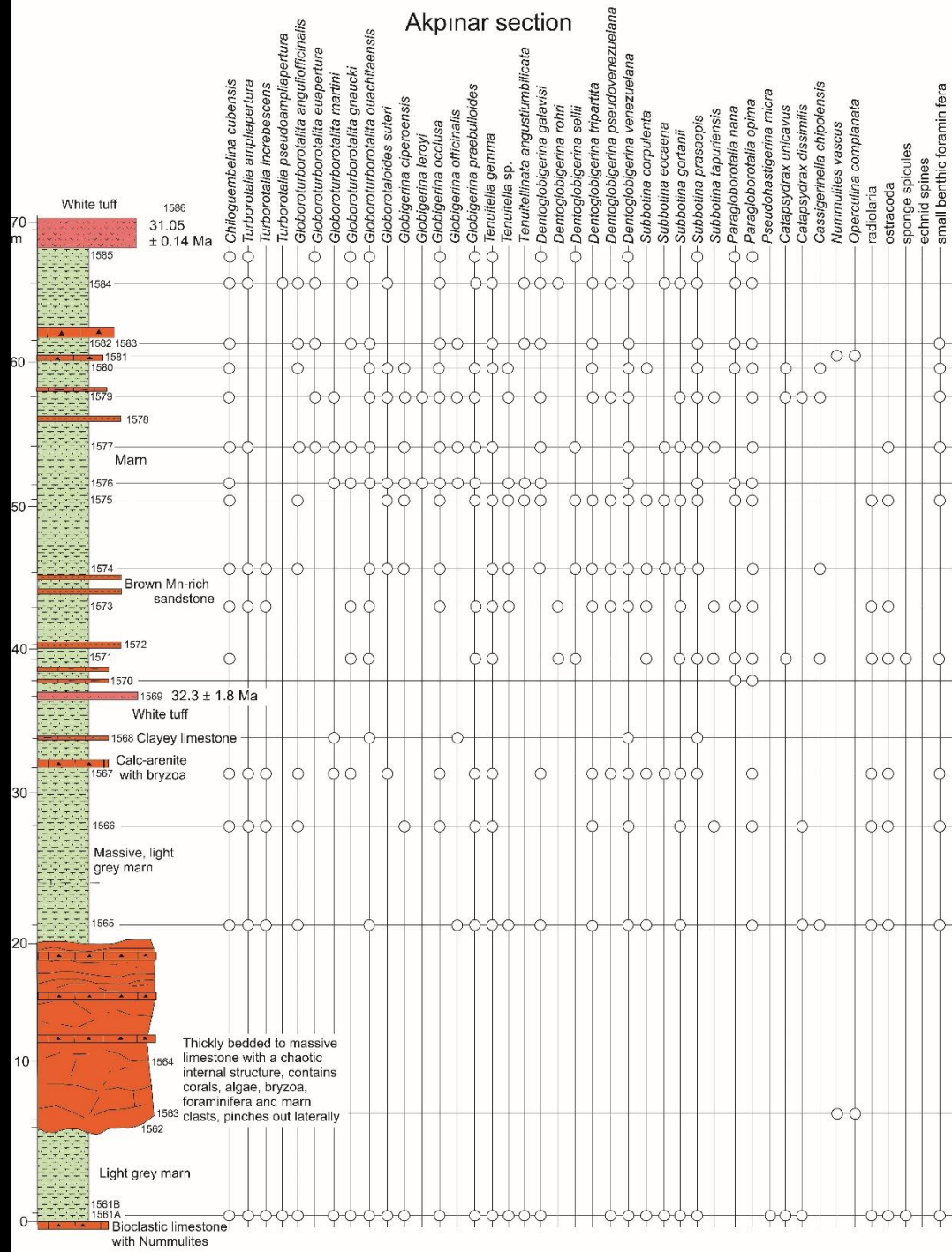
- Benthic foraminifera age
 Planktonic foraminifera age
 Sedimentary manganese deposits
 U-Pb zircon sample
 Tuff
 Coal

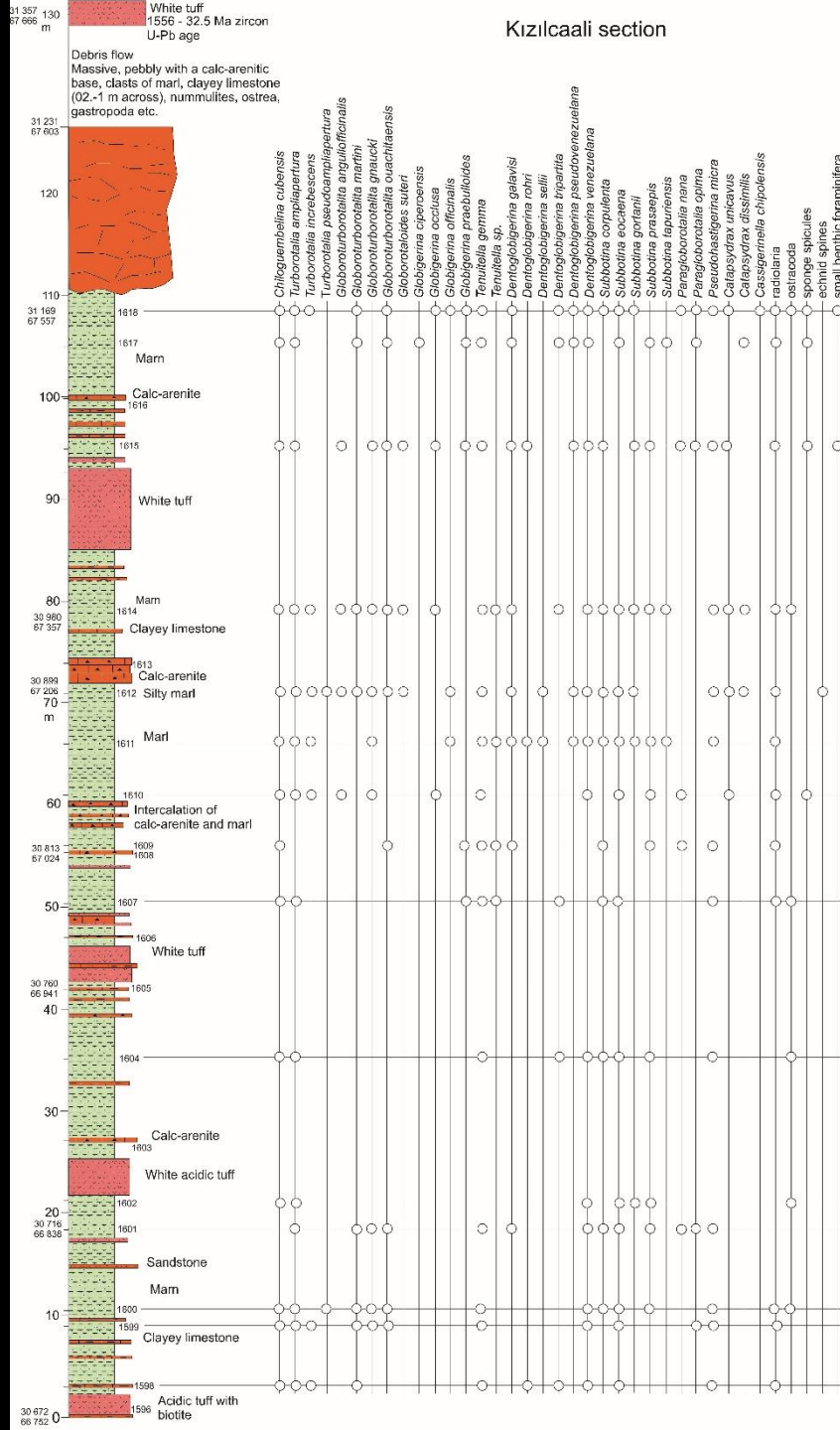
Black Sea

0 5 10 15 20 km



Akpınar section

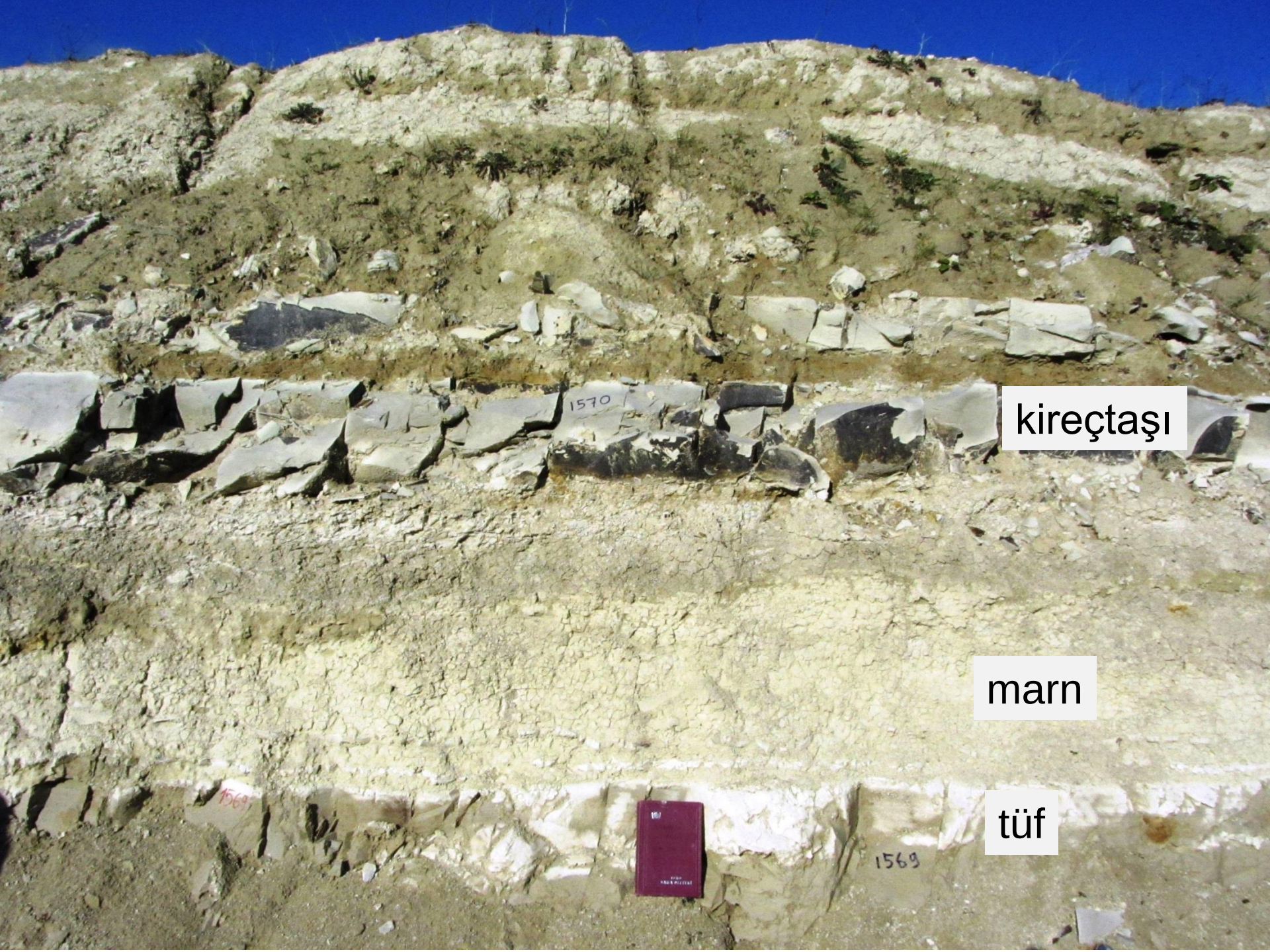




Kızılcaali section

Lower Oligocene marl, limestone and acidic tuff
Akpınar section

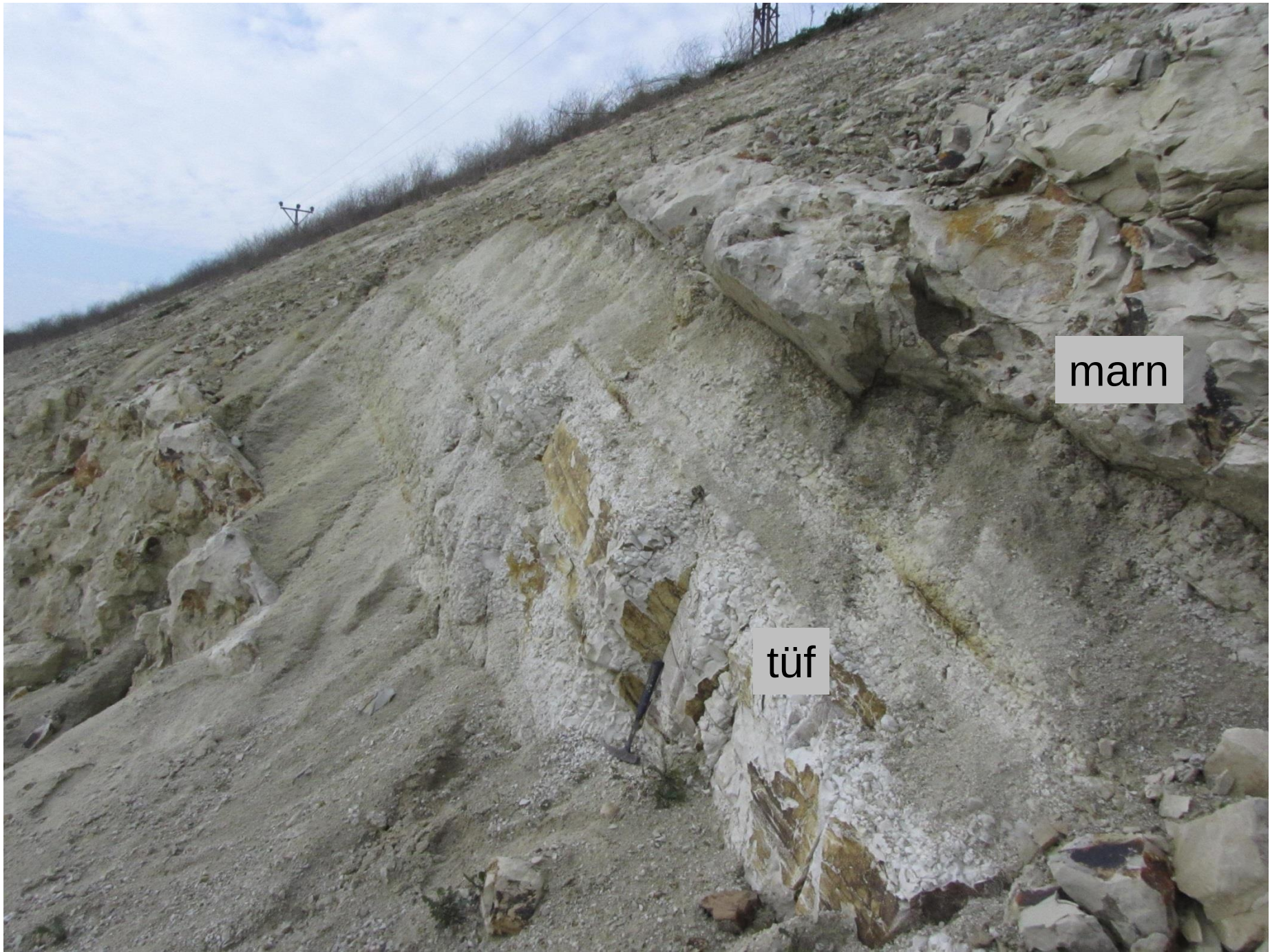




kireçtaşı

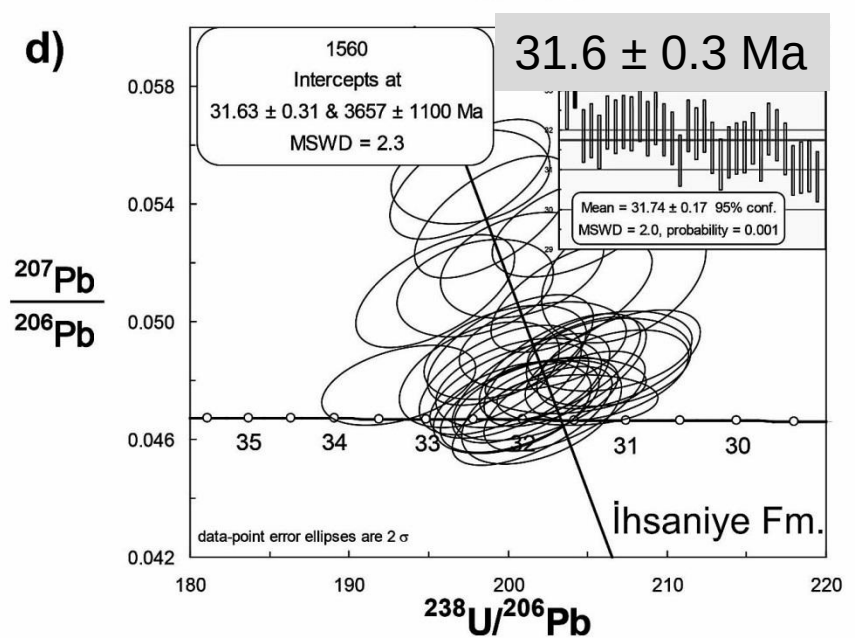
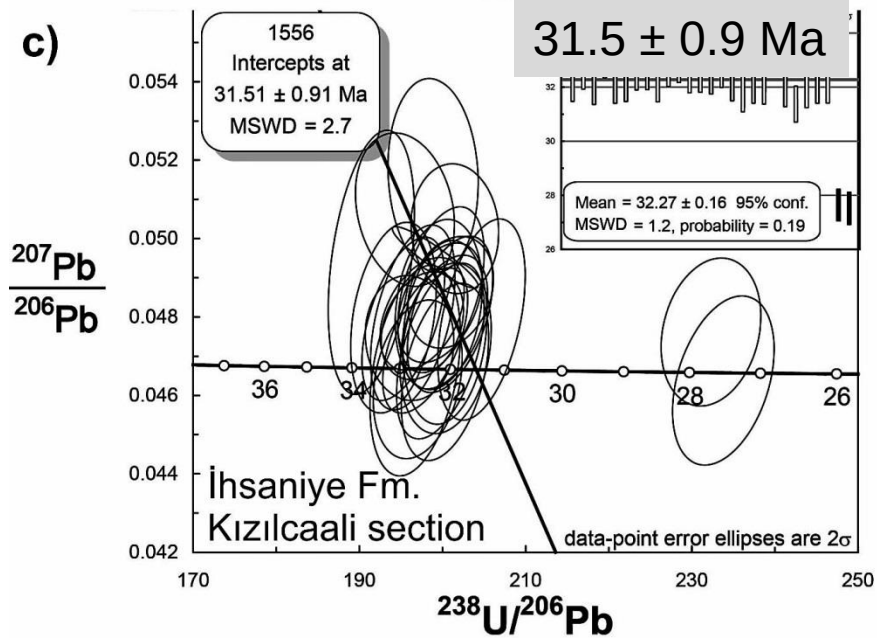
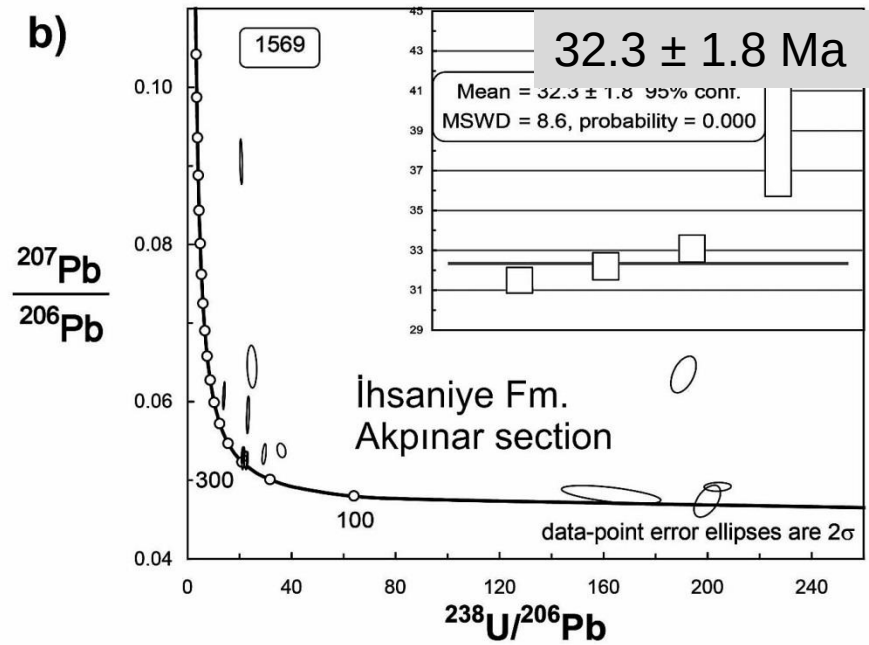
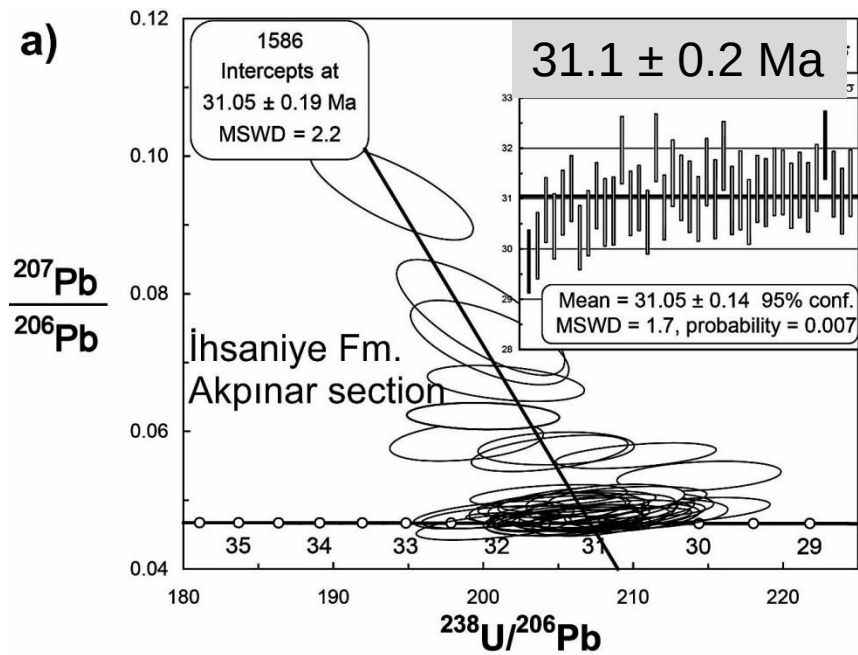
marn

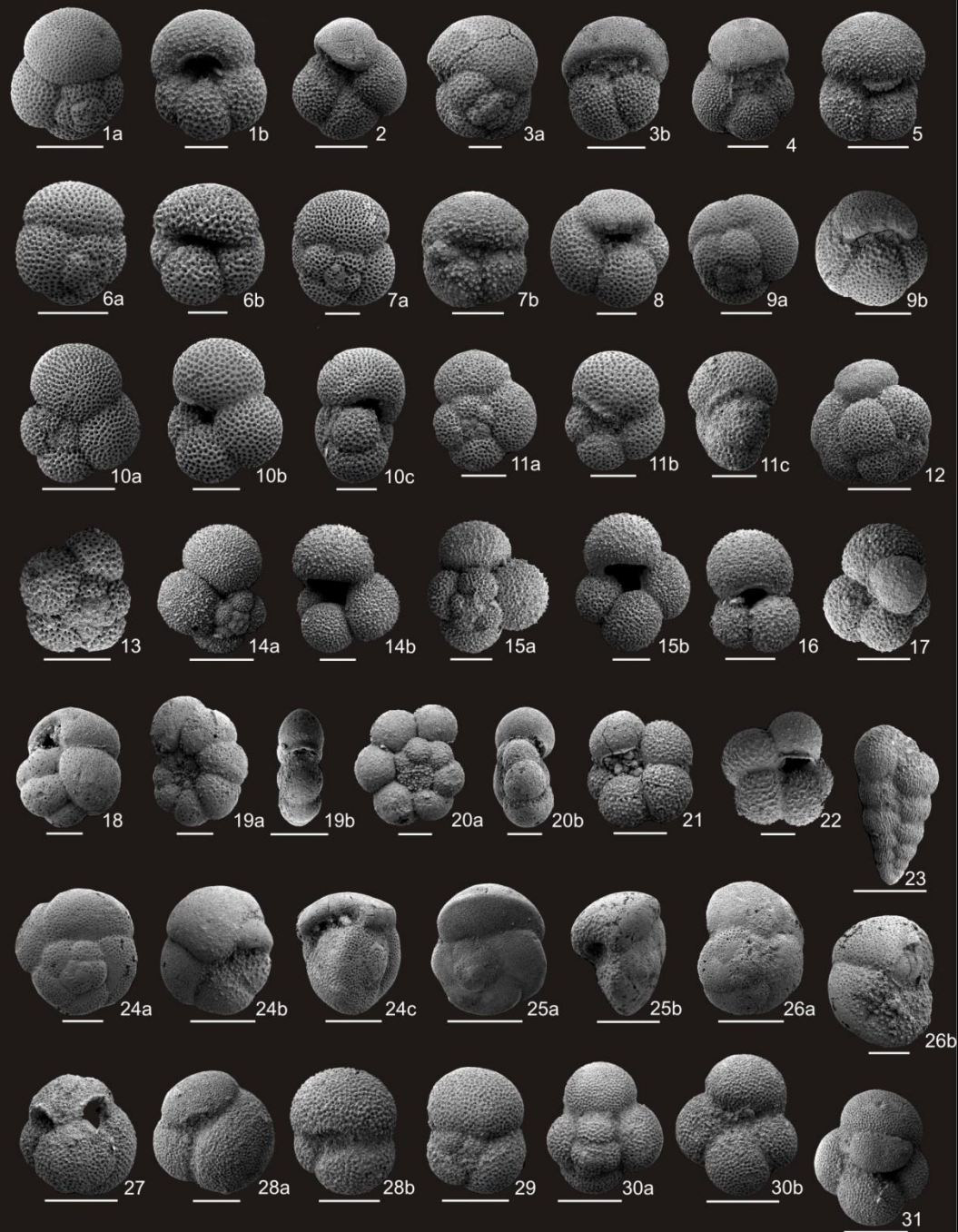
tuf

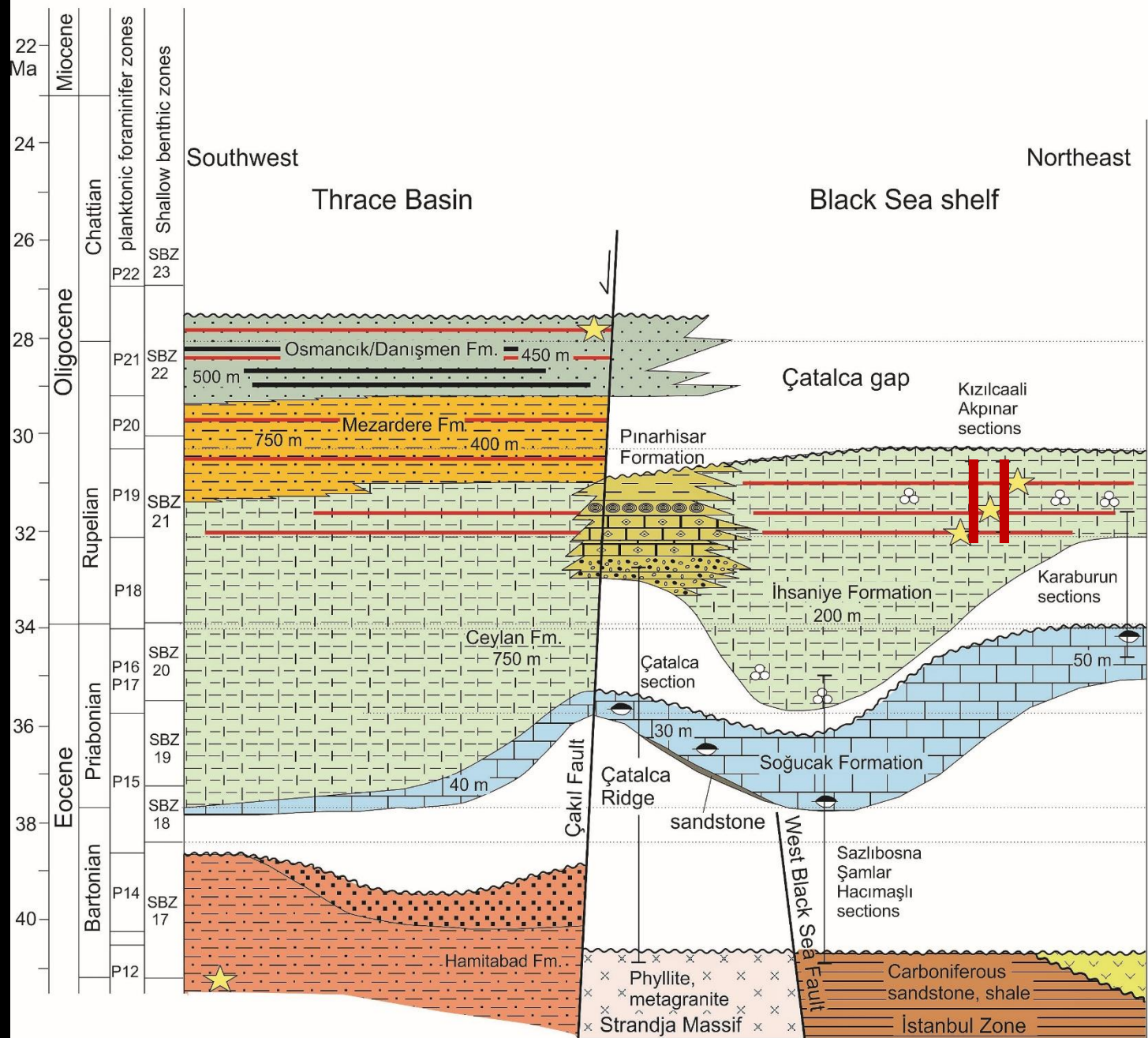


marn

tüf

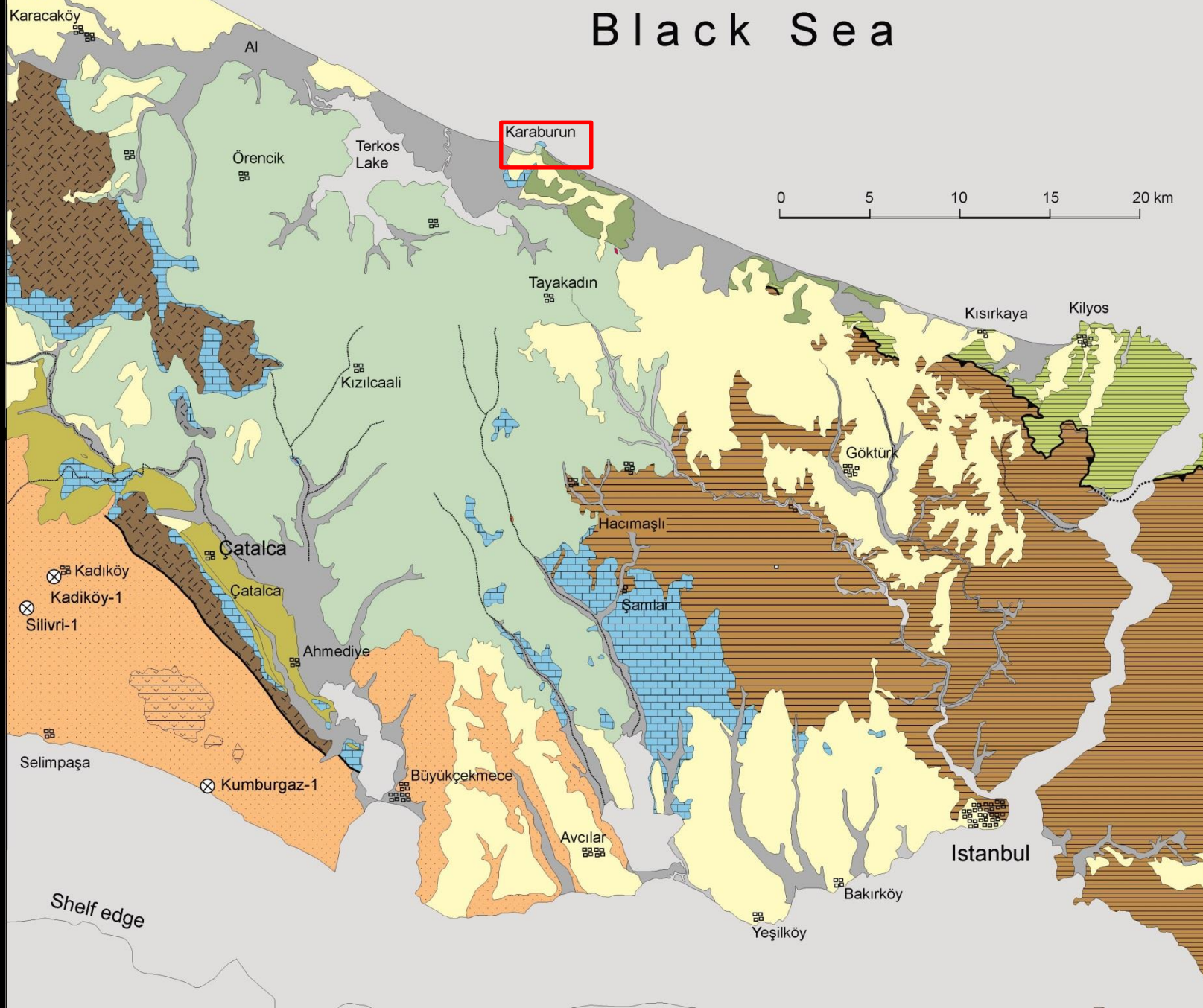


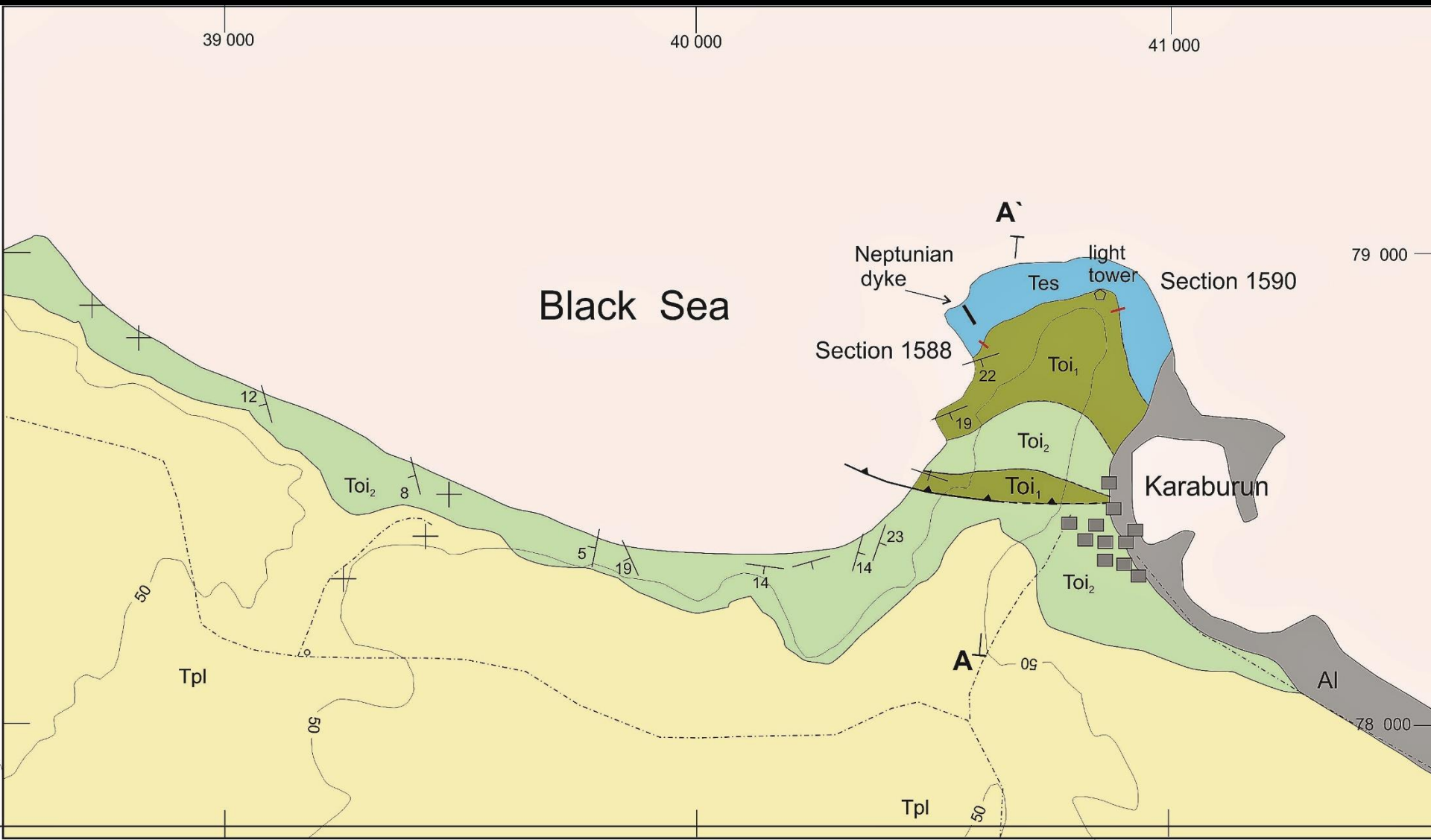


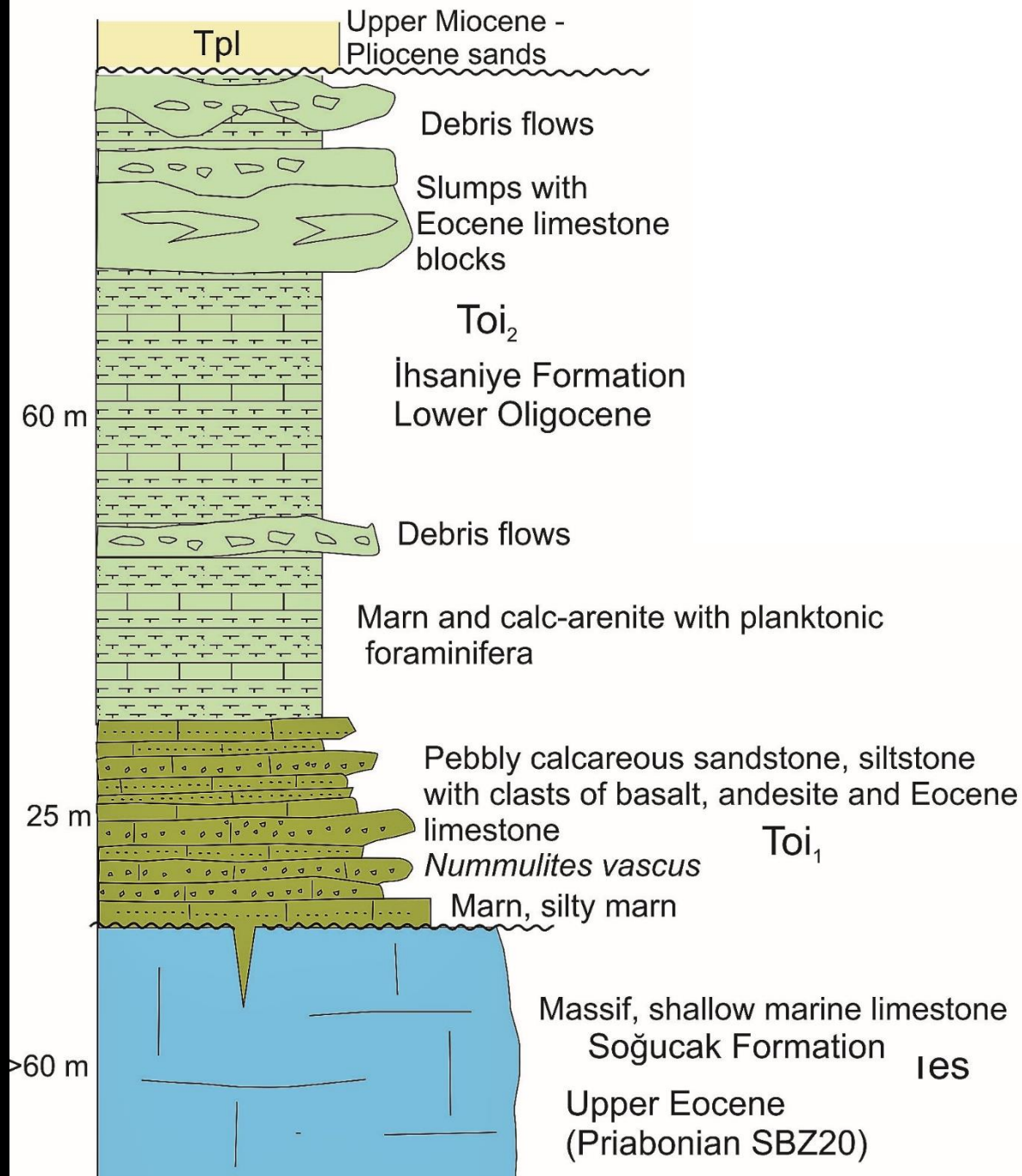


- Benthic foraminifera age
 Planktonic foraminifera age
 Sedimentary manganese deposits
 U-Pb zircon sample
 Tuff
 Coal

Black Sea





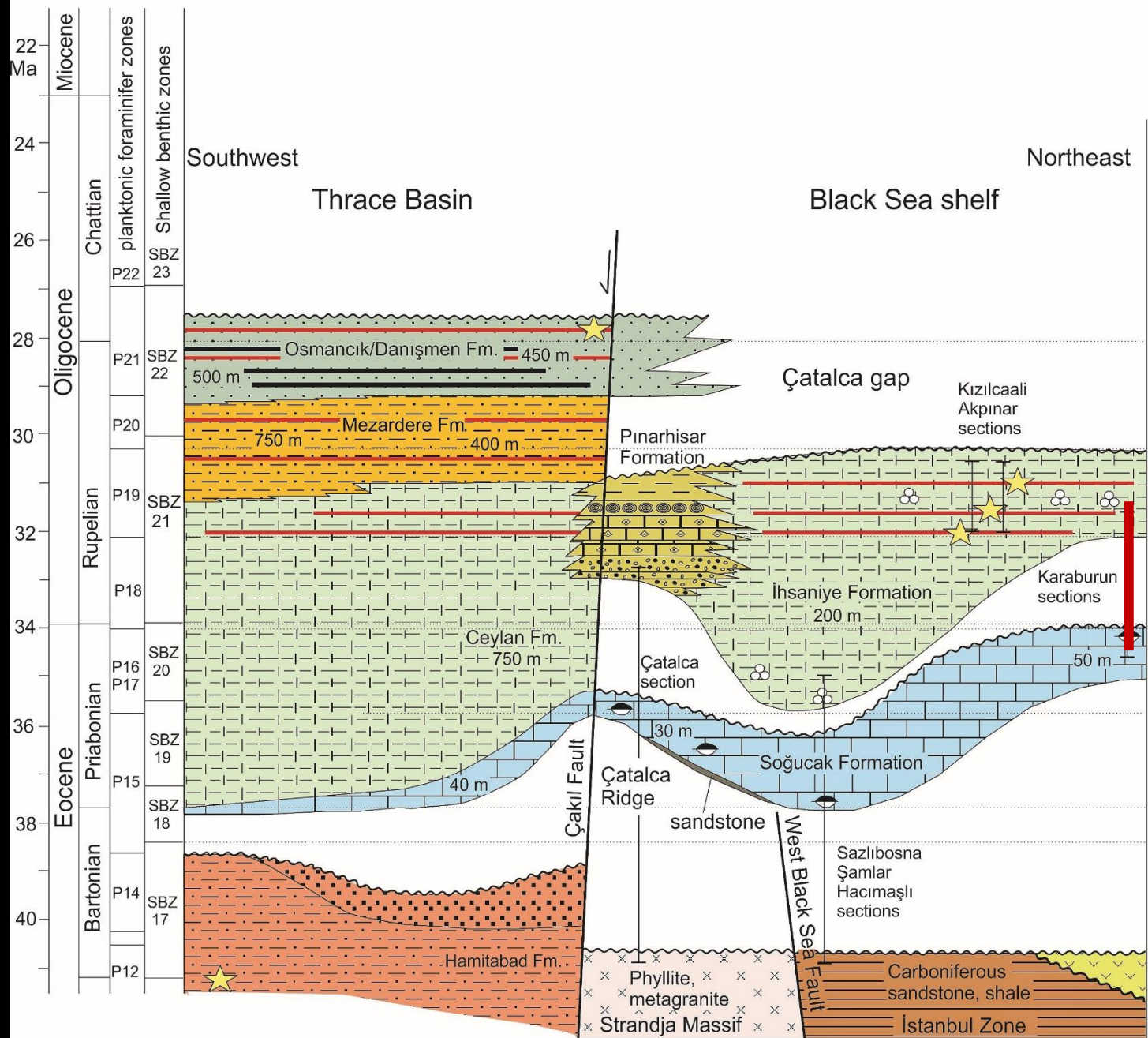






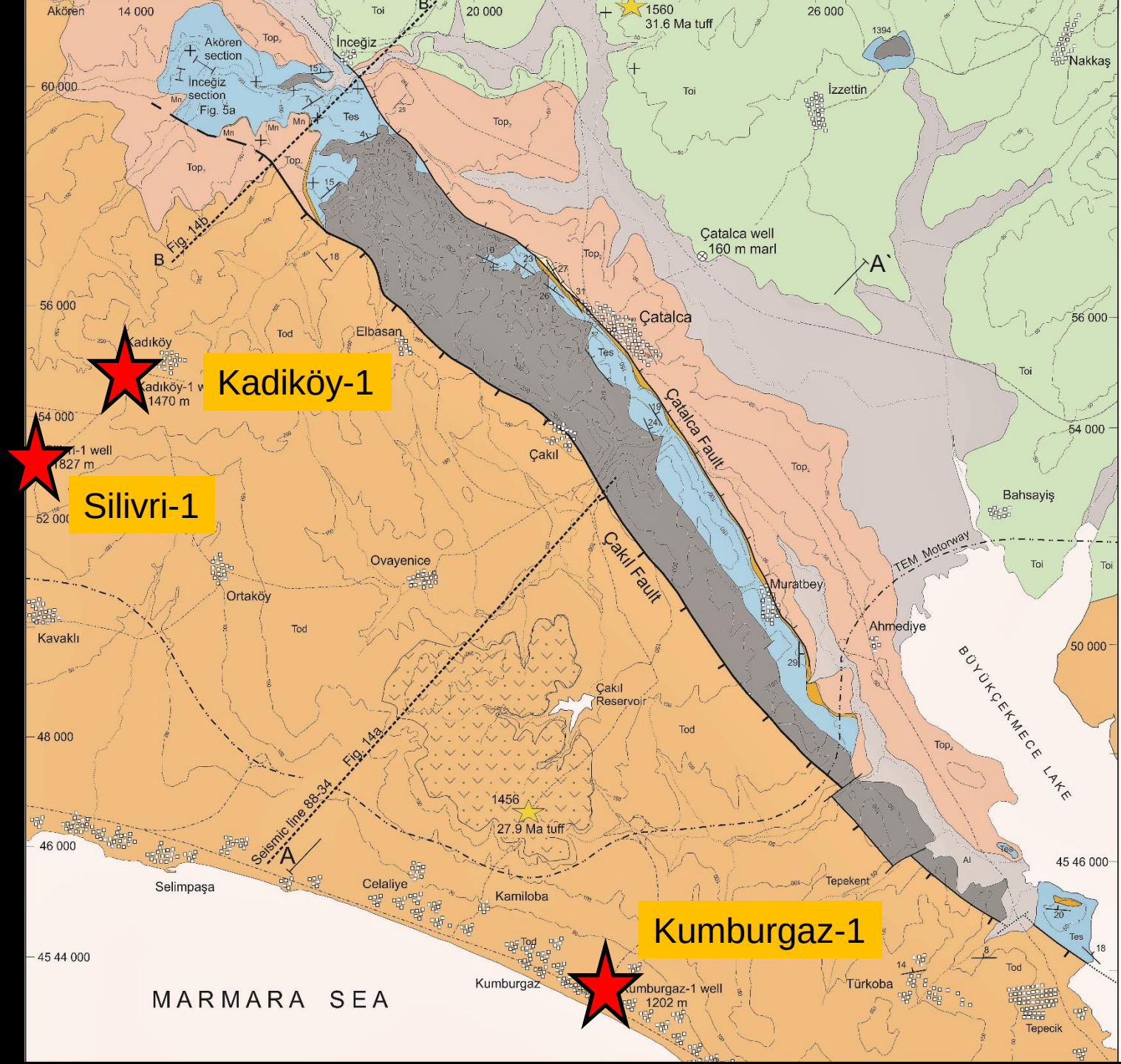
Lower Oligocene marls of the İhsaniye Fm.

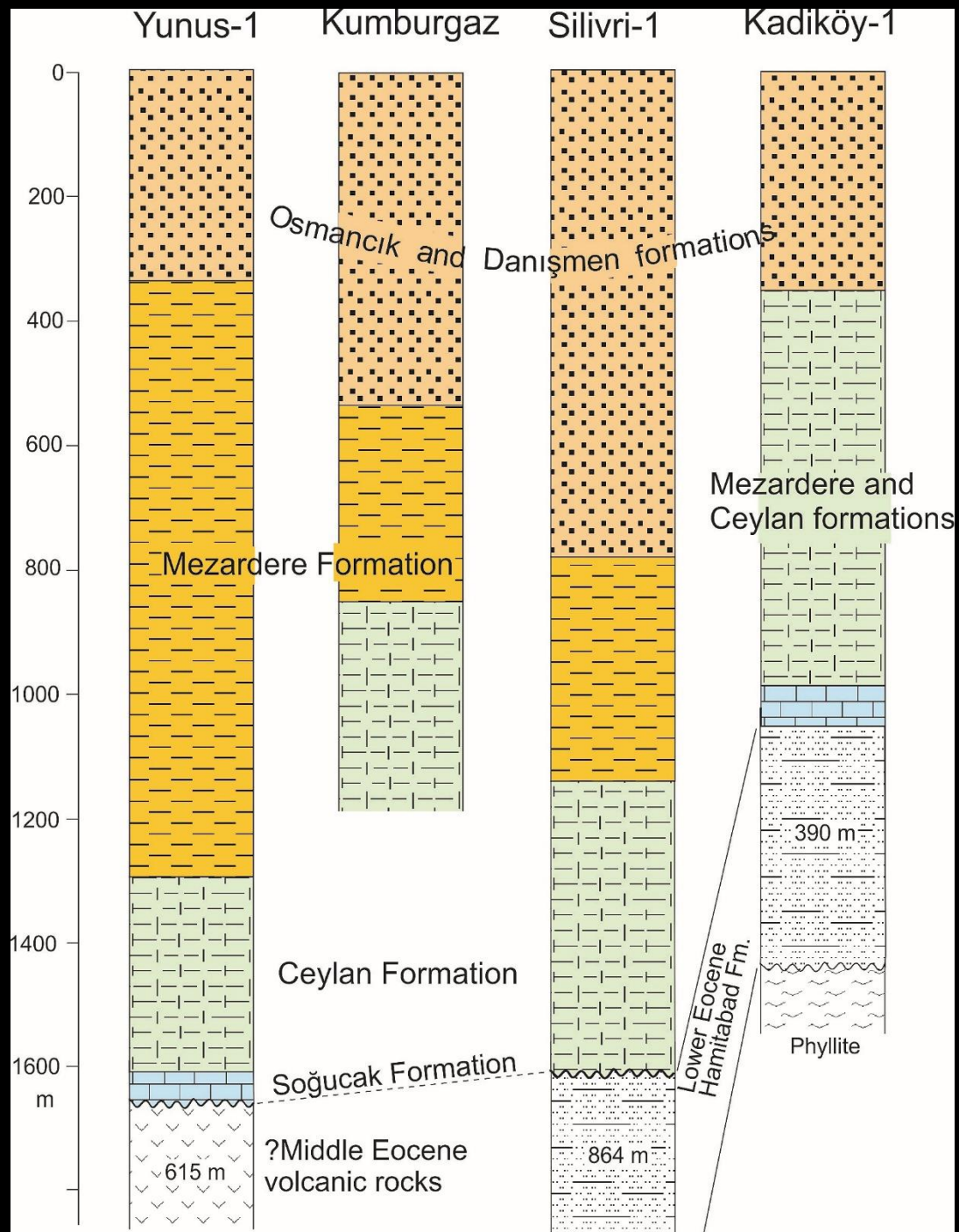
Upper Eocene reefal limestones of the Soğucak Fm.



- Benthic foraminifera age
- Planktonic foraminifera age
- Sedimentary manganese deposits
- U-Pb zircon sample
- Tuff
- Coal

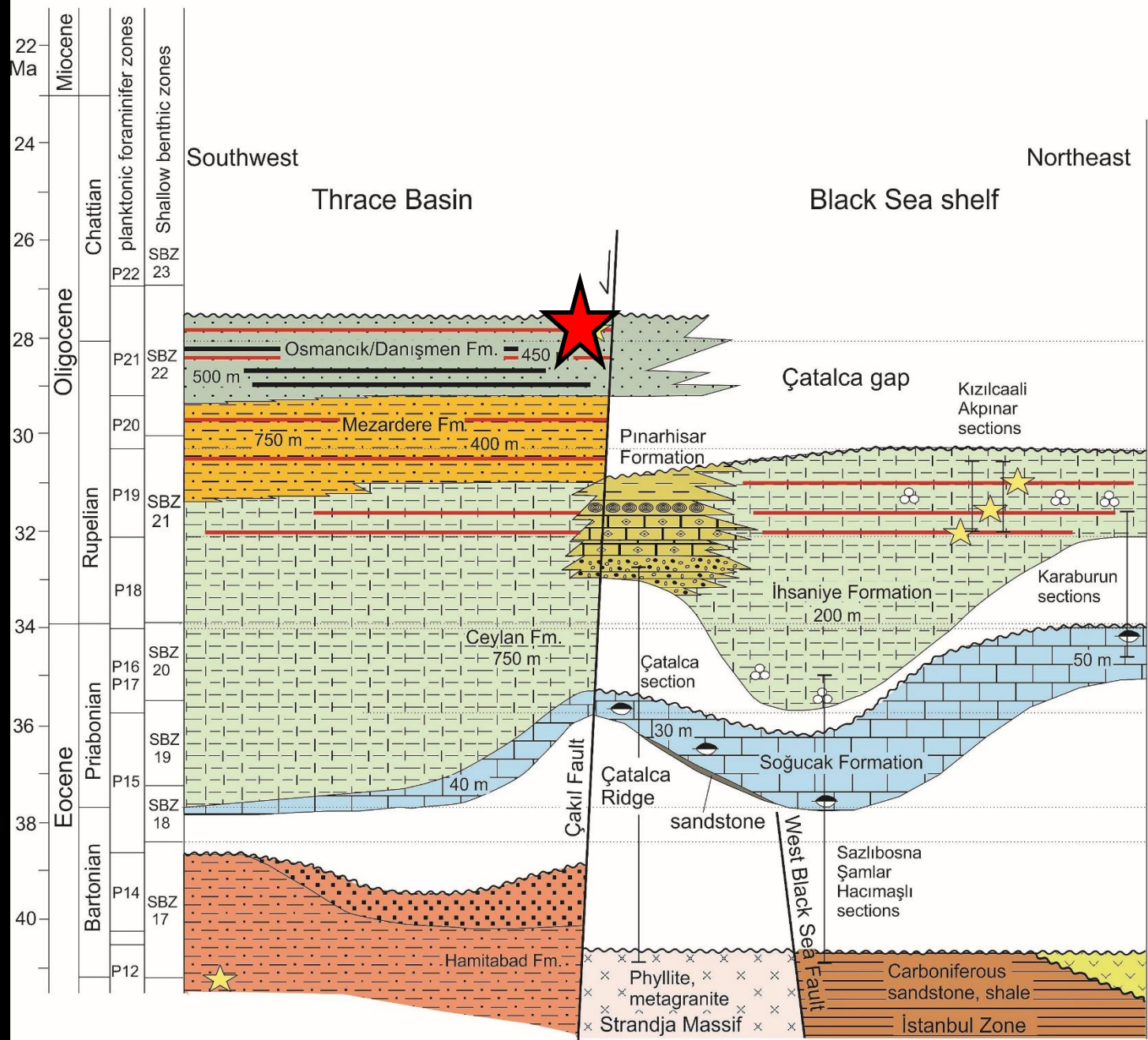






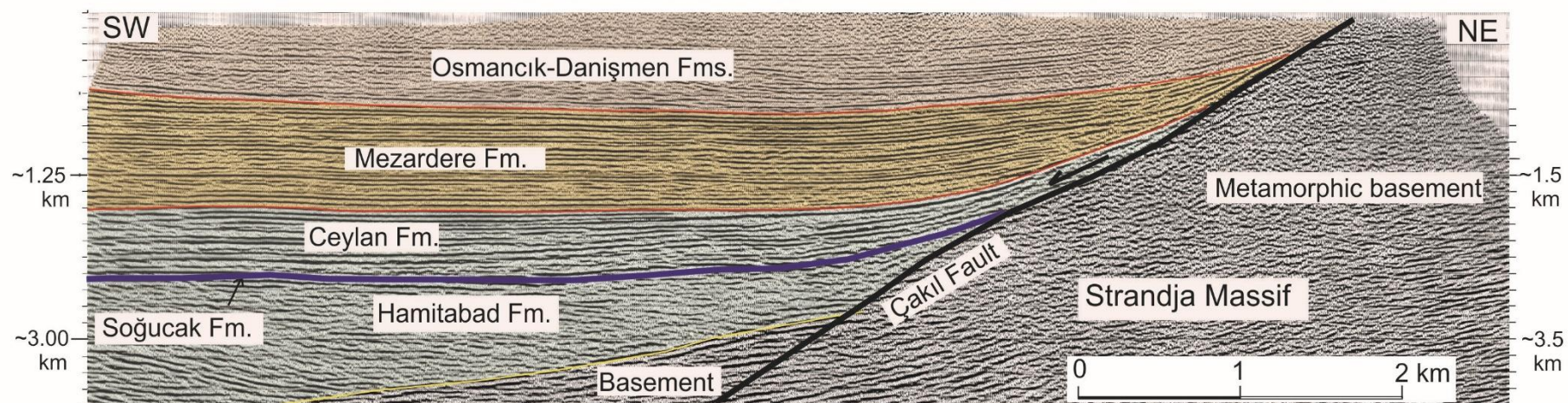
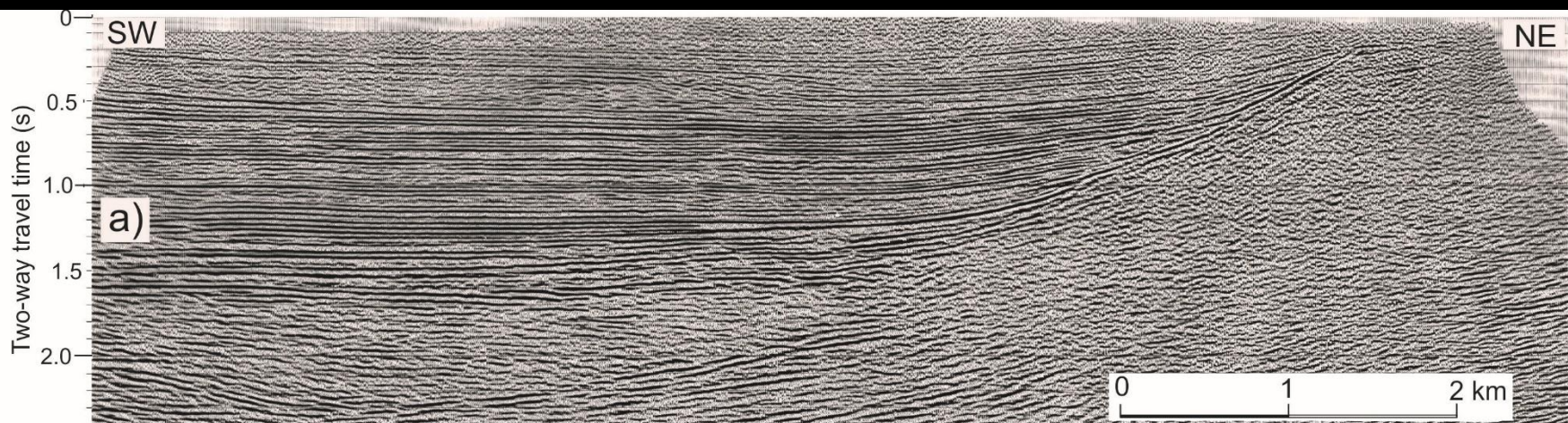


Osmancık Formasyonu kumtaşları

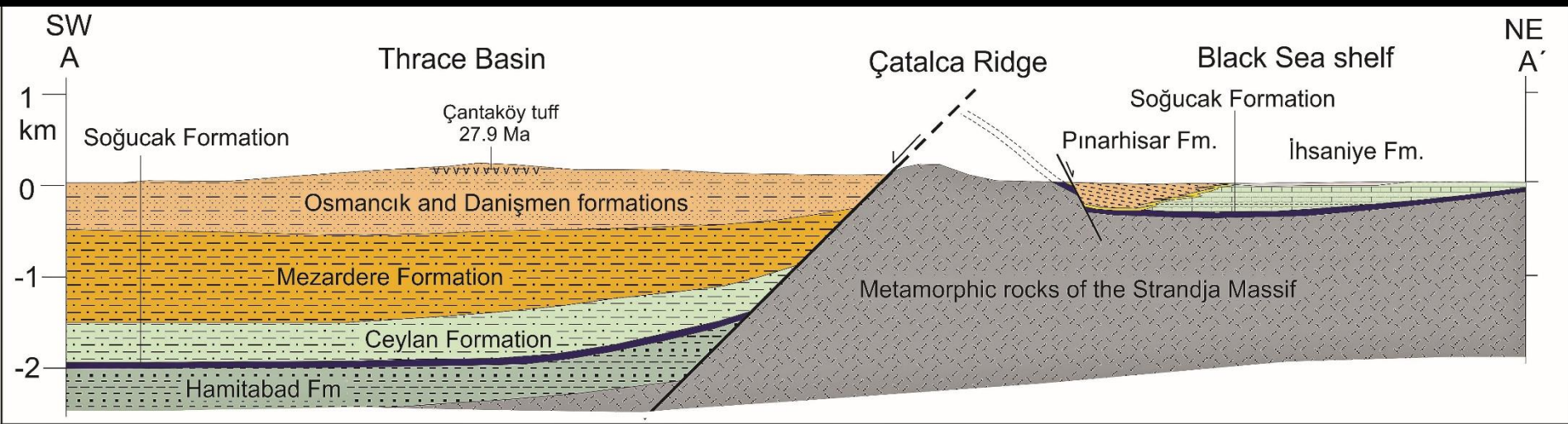


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 Planktonic foraminifera age
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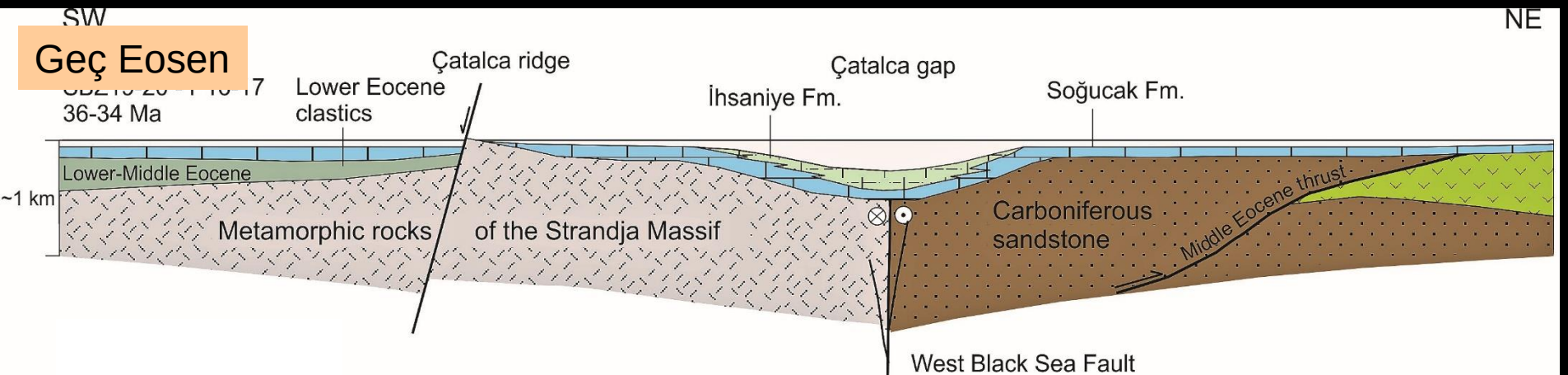




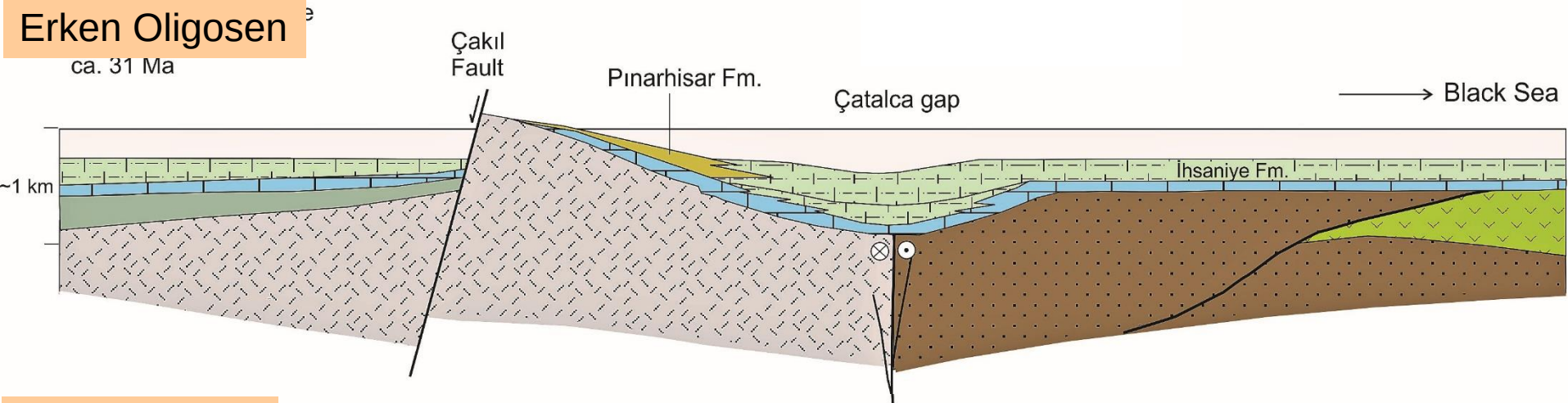




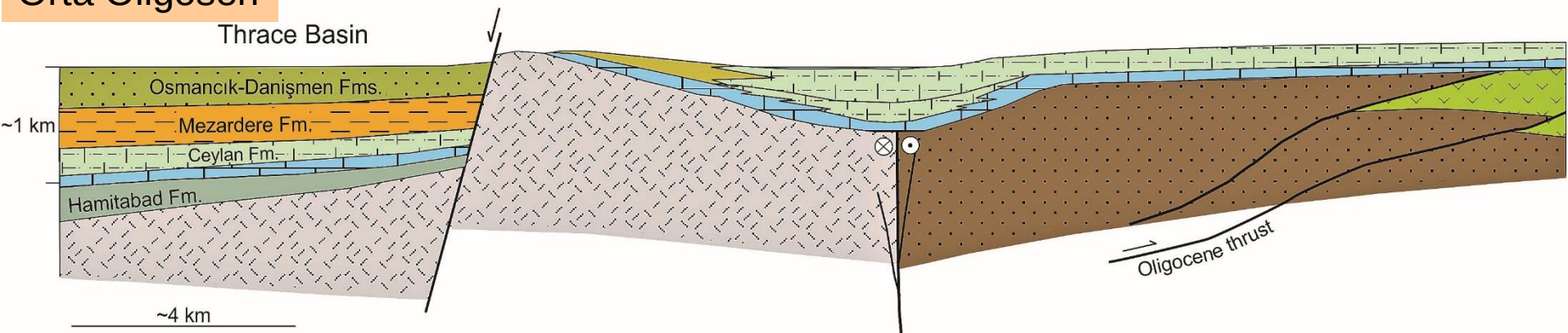
Geç Eosen



Erken Oligosen



Orta Oligosen



Black Sea

0 5 10 15 20 km

