oblique faults were formed due to extension in this regime. The last tectonic regime affecting the region is NNE–SSW and WSW–ENE directed simultaneous extension which enabled the formation of approximately N–S-trending normal faults (Kırkağaç Fault) and E–W-trending normal faults (Soma Fault) controlling especially the boundary of Çamlıca High. This regime additionally reactivated older faults within the region.

Mesozoic radiolarians from the Dinarides (Serbia and Bosnia)

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The territories of Serbia and Bosnia are very interesting for studies of Mesozoic Radiolaria. Radiolarian ages determined in the Dinarides reveal the following age clusters: Middle to Late Triassic, Middle Jurassic, Late Middle to Late Jurassic, Late Jurassic to Early Cretaceous and Late Cretaceous. No Early Jurassic faunas were found.

In the internal Dinarides radiolarian cherts can generally be found in 3 different tectonic settings: (1) Radiolarian chert sequences which are a part of an ophiolitic mélange formed during the Late Jurassic, underlying obducted (Dinaric or West Vardar) ophiolites of Jurassic age. Within blocks, the radiolarites are often in original stratigraphic contact with basalts. Therefore, such blocks either represent gravitationally emplaced olistoliths, or alternatively, tectonically emplaced slivers. Interestingly, the mélanges often contain Triassic (Ladinian and Carnian to Norian) as well as Jurassic radiolarite sequences, both occasionally associating with basalts. This indicates that the mélange underlying the obducted Jurassic ophiolites also incorporated blocks that represent the remnants of Triassic in age ocean floor (Maliac-Meliata ocean). These occur side by side with blocks that are derived from the obducted Dinaric and West Vardar ophiolites. We interpret the Triassic and Jurassic ophiolites within the mélange to be a part of one and the same Triassic-Jurassic oceanic domain. (2) Jurassic in age radiolarian cherts are also found as an integral part of a still preserved in situ passive margin sedimentary sequence in the footwall of the ophiolitic mélange (East-Bosnian-Durmitor and Drina Ivanjica units). Deposition of radiolarites onto Triassic to Early Jurassic platform carbonates of the distal Adriatic margin indicates subduction of the platform below the CCD initiated during the Aalenian. The onset of subduction predates final obduction which occurred soon afterwards (i.e. at the end of the Jurassic). The radiolarian faunas from different localities in Serbia indicate ages that range from the Aalenian to the Tithonian. (3) Radiolaria may also occur within the so-called “Radiolarite Formation” and within the background sediments of the “Flysch Bosniaque” (or Vranduk Flysch) in Bosnia. The Radiolarite Formation represents a very thick sequence of radiolarites which were separated from their original substratum that belongs to the Adriatic margin. This formation yielded ages ranging from the Bajocian to the Berriasian and the earliest Valanginian. These radiolarites are tectonically overlain by the ophiolitic melange. In contrast to the melange no Triassic radiolarians were found. The radiolarite formation probably represents the detached cover of the East Bosnian Durmitor unit, since both directly underlie the ophiolitic mélange formation. The radiolaria found within the Vranduk flysch, located in the footwall of the Radiolarite Formation are of Oxfordian age and indicate that this flysch basin, which is characterized by ophiolitic detritus, came into existence in the Oxfordian.

Radiolarites contained in Scaglia Rossa type sediments were dated as Campanian. These form the matrix of MORB-type pillow basalts that are part of the Sava Zone. The Sava Zone forms the suture zone between the Dinarides and the Tisza and Dacia blocks. This latter age group provides evidence that the final collision between Adria and Tisza did not take place before Latest Cretaceous times.