Manisa city, between Akhisar and Sindirgi towns, is studied along Sogutlu stratigraphic section in detail. Sogutlu section is 73,5 m thick and composed of green to red, mainly thin to medium-bedded chert and mudstone alternation. Ten samples out of eighteen yielded relatively diverse radiolarian assemblages.

Basalmost part of the section contains characteristic latest Bajocian – early Callovian radiolarian taxa (*Acanthocircus suboblangus suboblangus* (Yao), *Higumastra* sp., *Tritrabs ewingi* s. l. (Pessagno), *Acaeniotyle diaphorogona* s. l. Foreman, *Hsuum* sp., *Crubus* sp., *Ristola altissima major* Baumgartner & De Wever, *Mirifusus fragilis* s. l. Baumgartner, *Spongocapsula* sp., *Parvicingula* sp., *Podobursa helvetica* (Rüst), *Podobursa* sp., *Sethocapsa* sp. A sensu Baumgartner, *Stichocapsa* spp. and *Eucyrtidiellum unumaense* s. l. (Yao)). Succesively, radiolarian assemblages indicating Late Jurassic, early Early Cretaceous and late Early Cretacous and early Late Cretacous time intervals have been obtained from the section. Youngest radiolarian assemblage yielded from the section includes diverse radiolarian taxa (*Dactyliosphaera silviae* Squinabol, *Pseudoaulophacus* sp., *Godia* sp., *Rhopalosyringium* sp., *Dictyomitra* spp., *Dictyomitra crassispina* (Squinabol), *Pseudodictyomitra pentacolensis* Pessagno, *Pseudodictyomitra pseudomacrocephala* (Squinabol), *Xitus* spp., *Novixitus mclaughlini* Pessagno and *Stichomitra communis* Squinabol) and these taxa clearly reveals the late Cenomanian age.

Previous studies reveal that the Izmir-Ankara oceanic basin was initially opened during late Ladinian – early Carnian. The new radiolarian data obtained from this olistolith reveals that relatively condensed, continuous pelagic sedimentation took place in this basin during the latest Bajocian to late Cenomanian time span.

Secular variation of the Earth's magnetic field in the Balkan region during the last 5 millennia

Tema E.[1] and Kondopoulou D.[2]

[1]*Dipartimento di Scienze della Terra, Università degli Studi di Torino, via Valperga 35, 10125, Torino, Italy, evdokia.tema@unito.it*

[2]*Department of Geophysics, School of Geology, Aristotle University of Thessaloniki, 54124, Thessaloniki, Greece, despi@geo.auth.gr*

Archaeomagnetic data available for a certain region have been traditionally used to construct reference secular variation curves for single countries. Nevertheless, even though the Earth's magnetic field varies from a geographic region to another, there is no reason to limit its study into national borders. We present here the first archaeomagnetic secular variation curve for the South Balkan region, based on all data that are included in a 700 km circle centered at Thessaloniki. This dataset consists of 226 directional and 416 intensity data, mainly originating from Greece, Bulgaria and former Yugoslavia. Some data from Southern Italy that fall within this circle are also included. The data cover almost continuously the last 5 millennia with a small gap around 2000 BC. The directional data are well consistent to each other while the intensity data show considerable dispersion. All data have been reduced at the latitude of Thessaloniki (40.60^{o} N, 23.00^{o} E) and plotted versus time. The moving window technique with windows of 100 years shifted by 50 years has been used to calculate a continuous secular variation curve for both direction and intensity. The obtained curves clearly show some characteristic features of the geomagnetic field variation during the last 5 millennia. Low inclination values are well documented around 1200 AD, 300-400 AD and 1800 BC, even though only few data are available for the latter period. Eastward declination is observed around 1200 AD and 800 BC while for the period between 200 BC and 500 AD only small variations in declination are noticed. The intensity curve is highly influenced by the important dispersion of the reference data points. Comparison with the predictions of the SCHA.DIF.3K regional and the CALS7K and ARCH3K global geomagnetic field models shows good agreement with the regional modelling curve while the global models show much smoother variations. The bulk number of reference data used to calculate the proposed Balkan curves makes them better constrained and thus more reliable compared to the curves constructed using limited data of individual countries.