New stratigraphical data of Upper Miocene-Pliocene deposits from Romanian Black Sea self

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The Upper Miocene-Pliocene sedimentary succession of Romanian Black Sea self is presented in the light of new biostratigraphical data.

The Romanian (~ Kuyalnikian) deposits rich up to 200 m and contain an ostracod assemblage represented by brackish to fresh water species like *Caspiolla kosloduensis, Loxoconcha gibboides, L. lepida, Tyrrhenocythere pontica, Cytherissa sp, Leptocythere (Amnicythere) andrussovi* and *Iliocypris bradyi*. The Dacian (~ Upper Kimmerian) stage can be recognized by the presence of *Cytherissa plana, Loxoconcha* ex.gr. *schweyeri* and *Scottia dacica*. The presence of *Scottia dacica* can be regarded as a marker for the Lower Dacian. The boundary between Dacian and Romanian is relatively difficult to be defined using only the micropaleontological data.

The Pontian stage represents a time interval when the Eastern Paratethys (including the Black Sea region) experienced few transgressive and regressive moments, partly related to MSC-events (Krijgsman et al., 2010). The Pontian sedimentary sequences can rich up to 1700 m being dominated by pelitic sediments especially in the lower part. The most common ostracod species are represented by *Bakunella dorsoarcuata, Candona (Pontoniella) acuminata, C. (Caspiolla) balcanica, C. (Caspiocypris) ex gr. alta, Leptocythere (Amnicythere) palimpsesta, L. (A) andrussovi, Tyrrhenocythere sp.*

Bellow the Pontian sequence there is a predominantly sandy interval (up to 1000 m thickness) with silty and clayly intercalations that contains no relevant microfossils. The top of is very rich in microgastropods (Hydrobia, Theodoxus species) and *Congeria novorossica* shell fragments. These rich layers with *Congeria novorossica* have been recorded onshore at the top part of Meotian sequence being associated with the onset of the transgressive moment recognized at Meotian/Pontian boundary in Eastern Paratethys. Previously, this interval has been incorporated to the Pontian sequence, but according with the new data we suggest the Meotian age for it.

The underlying deposits (less than 200 m) are represented by silts and clays that contain rare Elphidium species as well many foraminifers and ostracods reworked from the Senonian chalk. We attribute this interval to the Sarmatian stage.

Key words*:* Upper Miocene, Pliocene, Black Sea, Ostracods.

References:

Krijgsman, W., Stoica, M., Vasiliev, I. and Popov, V.V. (2010). Rise and fall of the Paratethys Sea during the Messinian Salinity Crisis, *Earth Planet. Sci. Lett.*, ***290,*** *183-191*