STRATIGRAPHIC AND TECTONIC FEATURES OF MIOCENE BASIN SOUTH OF IMRANLI AND HAFIK (SIVAS)

Yavuz ÇUBUK*** and Selim İNAN****

ABSTRACT.- Basement of the autochthonous units cropping out in the south- southeast of İmranlı (Sivas) and south-southwest of Hafik (Sivas), comprises the Refahiye ophiolitic complex, whose time of emplacement is Late Cretaceous-Early Eocene. This basement is overlain unconformably by the Middle Eocene Bozbel formation, composed of marine sediments with occasional volcanic components. The Bozbel formation is overlain again unconformably by the Oligocene Selimiye formation, comprising shallow marine (possibly lagoonal) sediments. Chattian-Burdigalian aged Ağılkaya formation, which is composed of red colored aluvial fan-sabkha-limited cycle sediments, overlyes transgressively the Selimiye formation. The Ağılkaya formation crosses gradually into the Lower Miocene Karayün formation of red colored fluviatile-playa sediments. The Karayün formation and Ağılkaya formation are overlain unconformably by the Lower-Middle Miocene age Sanhaci formation, which comprise green colored mudstone, with shallow marine sandstone-limestone interlayers. All these units are overlain by the Upper Miocene-Pliocene Eğerci formation, comprising fluviatile sediments. Sivas Tertiary basin, whose evolution started in Early Eocene, has been subject to the influence of N-S trending compressive regime in Late Eocene. Chattian-Aquitanian gypsum deposits have caused the first period of salt uprisal which shaped the recent structural units of the basin in Early Miocene. This salt tectonics has been effective in the basin up to Late Pliocene. In this epoch, abundantly salt uprisals and related folds and overthrust have been developed in the basin.