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The Triassic of the Kocaeli Peninsula (NW Turkey) with emphasis on Anisian conodonts

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In the present structural concept, the Kocaeli Peninsula, as a part of the Istanbul Zone, was in Triassic times part of an Eurasian fragment on the northern edge of the northernmost Tethys branch. The Triassic sequence, exposed in the Kocaeli Peninsula (NW Turkey), represents well dated transgressive and regressive marine deposits. This "Kocaeli Triassic", being regarded as an important Triassic sequence has attracted the attention of a large number of scientists. The Kocaeli Triassic encompasses six formations: The red coloured Scythian Kapaklı Formation is barren and shows regressive features, resembling the underlying Permian facies; The Erikli Formation is the first marine deposition of Scythian age. The Late Scythian Demirciler Formation consists of micritic and dolomitic limestone. The unit shows bioturbation in the clayey limestone-limestone sequence. Covering a karstic surface, the Anisian Ballıkaya Formation consists of dolomite, dolomitic limestone and limestone, follow by the Tepeköy Formation that shows 4 different lithologies. At base, Anisian grey nodular and red nodular limestones equals the nodular limestones of the Kazmalı Formation laterally; The Late Anisian-Ladinian Ammonitico Rosso facies. The upper part consists of Carnian shale with Halobia and grey-green marls. Restricted to the Çerkeşli region, the Çerkeşli Formation consists of a pebbly limestones, as a lateral equivalent of the Tepeköy Formation. The Anisian platform conodonts include new taxa that are described. We also focus on several new ramiforms, adding to the multi-elemental and taxonomic diversities. The revised Anisian conodont biostratigraphy is presented.

Key Words: Triassic, Anisian, Conodont, Kocaeli