



## Archaeogeophysical Studies in Ancient Tios, Zonguldak-Caycuma-Filyos, Turkey

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Ancient Tios is located in the Filyos township of the Caycuma District of Zonguldak on the western Black Sea region, Turkey. The ancient city was probably founded by Milesians in the 7th cent. B.C. The region was inhabited through the centuries by Persians, Romans, Genoese and all the way to the Ottoman times. About the archaeological history of the city, we have relatively limited knowledge both in ancient records and in contemporary archaeological research. In the Roman period coastal defensive walls, aqueduct, theatre, defensive tower and the port with its breakwater are the only visible remains of the city.

The acropolis of the ancient city is located immediately to the east of the present Filyos township on a hill. The original architectural form of the defensive wall located in the acropolis will be revealed after research to its foundation completed. A partially destroyed stone building is another remaining ruin in the acropolis. The Roman period theatre of Tios is located in the north of the road leading into Filyos. Built on a sloping land, local stones were used in its construction. Mostly ruined its original stones have been used later in other buildings.

Only a few of the arches of the aqueduct, located to the north of the theatre, are still standing. There are the remains of another structure which could have been a defensive tower located in 200 meters to the west of the theatre. GPR measurements display the exact location of any sub-surface structures. To the west of the acropolis and within the ancient port, there are the under water remains of a breakwater. The local sandstones, quarries were studied archaeogeologically as they provided the main building materials.

Since there has been no archaeological research done on the site until the 2006 season, archaeogeophysical data are reveal additional information about ancient Tios. Surface survey and georadar, magnetic and geoelectric studies have been done and after that, excavations were started. Trenches were opened in potentially promising locations since 2006. Wall remains and pottery sherds were revealed providing better evidence for the dating of the foundation of the city.

Key words: Tios, Archaeogeophysics, GPR, Geoelectric, Magnetic.