

Significance of detection of ancient city of Phasis with Earth Sciences and Archaeology

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The ancient city of Phasis was one of the colonies of Ionian Greeks, who made more than 90 colonies in the Caucasus region during the period between 6th and 4th centuries BC. Phasis is assumed to be located somewhere around Poti, which is a Georgian town on the East coast of the Black Sea. However, the exact location of Phasis is still unknown, even BRUN(1880) had discussed, and GAMKRELIDZE(2012) listed twelve candidates of Phasis.

By recognizing the location of Phasis and digging the remaining materials, we could understand cultures and communications of the 6th to 4th century BC leading the expansion of our understanding of cultural propagation.

Lichelli (2016) proposed the possible location of Phasis by taking peat, earthquake and ancient scripts into consideration. He pointed out that the possible location as follows, Supsa river as a southern end, Black sea coast which should be deferent from the current one as a western end, and a meridian line passing Sagvichio town in Georgia as an eastern end. Moreover, he suggested that Phais is located inside a triangle with edges consisting of three intersectional points between Supsa river and Black sea coast, Rioni river and Black sea coast, the meridian line passing Sagvichio and Pichori river. The area of the triangle is 150 square km.

According to the ancient scripts, Phasis was a city on wet-land, based on artificial hills. The settlement consists of one central island having 60m of radius, 7-8 m high, and other small islands locating the area surrounded by wet-land and the Black sea from the western side, rivers, and lake. It is assumed that the islands had 300m times 300m scale, and the area is 0.06% of the triangle. This place was found in 60-ies of the last century as an ordinary settlement, but due to the absence of a coordinate system, identification of the settlement is impossible in the high density forests and wet-lands. Therefore, we made a plan to find out the city. We need to determine the coastal line of 5th century BC, determine the river-meandering area by river-morphology, and we have to take experiments of sedimentation to know which type of shape would appear on the surface of sediment having islands/artificial hill in its beneath. Then, we will find the shape by satellite images of ALOS-2, SAR.

This project is very precious because it leads to the propagation of copper, iron, and litters in Eurasia.

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