

## **Variations of the ancient coast line and their interference with the *Magna Graecia* city of Kaulon, Calabria, Italy.**

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The ruins of the ancient city of Kaulon, a Greek colony of the Classic times, lie along the Ionian shore of Calabria, Italy. A large part of the site has been excavated, including part of the settlement, the walls, the akropolis and three temples, one of which is of the 5<sup>th</sup> Century B. C. The city was active until the Middle Age. It is covered by three dune layers, and itself lies on dune sands. At a distance of 40m from the shore, on the sea bottom lie 201 finds such as crude quarry bloks, column segments and bases, bollards, rock blocks with led handles, stone and led anchors, and other small items. The finds better preserved are those more distant from the shore, probably because the coastal erosion has resumed first the items closer to the beach. The finds lie on a submerged bar whose plan shape is like a rounded spit bar made of sand, some 100 m wide. The ancient morphology of the area has been reconstructed on the basis of drillings and field work. During Classic and Hellenistic times, an old promontory corresponded with the present delta of the Assi Torrent, north of the study zone, while the Assi Torrent debauched south, with an estuary. The presently submerged bar was a promontory making one bar of the estuary mouth on which a temple was under construction or an atelier was sited where parts for temples were made. The present depth of the finds, that are *in situ*, can be accounted for by both eustatism and subsidence. The coast is under strong marine erosion that has reached both the modern and the ancient buildings and infrastructures. As erosion apparently involves the near shore zone, the defence the continental cultural and modern goods, and at the same time the possibility of visiting the submerged archaeological zone, might be easily achieved by means of submerged coastal erosion defences.