Geophysical Research Abstracts
Vol. 18, EGU2016-6510-1, 2016
EGU General Assembly 2016

Environmental and morphological changes around the Maritime Maya site Vista Alegre.

Roy Jaijel (1), Beverly Goodman (1), Jeffrey Glover (2), Patricia Beddows (3), Alice Carter (3), Derek Smith (4), Dominique Rissolo (5), and Zvi Ben Avraham (1)

(1) Leon Charney School of Marine Sciences, University of Haifa, Israel (roijiel@gmail.com), (2) Department of Anthropology, Georgia State University, Usa, (3) Department of Earth Sciences, Northwestern University, Usa, (4) Department of Biology, University of Washington , Usa, (5) Center of Interdisciplinary Science for Art, Architecture, and Archaeology ,University of California, San Diego, Usa

The untold story of the Maritime Maya from the ancient port site Vista Alegre, is being written for the first time using a multidisciplinary effort that aims to reconstruct the environmental and morphological history of the site. Vista Alegre is located on the north-eastern tip of the Yucatan peninsula, on the ancient Maritime Maya trade routes. This strategic point between the Caribbean Sea and the Gulf of Mexico, offers an ideal setting for this kind of research, which will add to the general Maritime Maya history. The multidisciplinary effort is part of a larger project called “Costa Escodida”. The project’s main goals are to learn how the ancient inhabitants adapted to the environment, and to understand how this coastal site was integrated into broader maritime trade routes. The portion of the research presented here concentrates on the sites geomorphology and climate during the past 2-3000 years through the multiproxy analysis of marine sediment core and surface samples combined with archaeological data. This study aids our understanding of the site’s possible functions, the environmental challenges the local inhabits contended with, and the identification of ancient harboring locations. The site was inhabited from the 9th century B.C until the mid 16th century A.D., with an apparent two century abandonment phase from the mid 7th to 9th century A.D. According to the results, five depositional phases can be recognized, and the related shoreline reconstruction shows a general trend of a flooded terrestrial landscape. This ‘flooding’ relates well to relative sea-level curves published in the region. Continued analysis of results from the research, and future research activities, may make it possible to recognize hurricane proxies in the sediment, locate underwater manmade seafaring artifacts and facilities, determine the range of economic opportunities for past inhabitants and quantify the availability of potable water sources.