

Accepted Manuscript

Coastal reconstruction of Vista Alegre, an ancient maritime Maya settlement

Roy Jaijel, Jeffrey B. Glover, Dominique Rissolo, Patricia A. Beddows, Derek Smith, Zvi Ben-Avraham, Beverly Goodman Tchernov



PII: S0031-0182(17)30472-8
DOI: <https://doi.org/10.1016/j.palaeo.2018.02.003>
Reference: PALAEO 8661

To appear in: *Palaeogeography, Palaeoclimatology, Palaeoecology*

Received date: 4 May 2017
Revised date: 29 January 2018
Accepted date: 5 February 2018

Please cite this article as: Roy Jaijel, Jeffrey B. Glover, Dominique Rissolo, Patricia A. Beddows, Derek Smith, Zvi Ben-Avraham, Beverly Goodman Tchernov , Coastal reconstruction of Vista Alegre, an ancient maritime Maya settlement. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. *Palaeo*(2017), <https://doi.org/10.1016/j.palaeo.2018.02.003>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Coastal reconstruction of Vista Alegre, an ancient maritime Maya settlement

Roy Jaijel^{1*}, Jeffrey B. Glover², Dominique Rissolo³, Patricia A. Beddows⁴, Derek Smith⁵, Zvi Ben-Avraham¹, Beverly Goodman Tchernov¹

¹ Department of Marine Geosciences, University of Haifa, Haifa, Israel

² Department of Anthropology, Georgia State University, Atlanta, GA, USA

³ Center of Interdisciplinary Science for Art, Architecture, and Archaeology (CISA3), University of California, San Diego, CA, USA

⁴ Department of Earth and Planetary Sciences, Northwestern University, Evanston, IL, USA

⁵ Department of Biology, University of Washington, Seattle, WA, USA

*Correspondence to: roijiel@gmail.com

Abstract

Past coastal reconstruction is useful for understanding archaeological coastal settlements and predicting how coastal change might affect modern populations. The ancient Maritime Maya inhabitants of Vista Alegre in the northeastern Yucatan were active seafaring peoples. However, the past coastal landscape environmental history is unknown. Previous research concentrated on the fully terrestrial component of the site, and did not approach the issue from an earth sciences, sedimentological perspective. In this study, a sediment core campaign in the shallow offshore of Vista Alegre aimed to reconstruct the coastal and environmental changes that occurred over the past 3000 years; and specifically identify the changes in sea-level. Nine cores were analyzed using a multi-proxy approach including a range of sedimentological parameters such as granulometry, micropaleontology (foraminifera), radiocarbon dating, and loss-on-ignition. The sediment cores provided an archive of environmental changes related to sea-level change, anthropogenic influence, and shifting microenvironments which can be associated with cultural time periods. The environmental phases and shifts show some linkage to the archaeological chronology; suggesting an association between the environmental conditions and human activities. Sea-level changes and shifting shorelines have always

Download English Version:

<https://daneshyari.com/en/article/8868250>

Download Persian Version:

<https://daneshyari.com/article/8868250>

[Daneshyari.com](https://daneshyari.com)