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Coastal Environmental Change  
During Sea-Level Highstands:  
A Global Synthesis with implications  
for management of future coastal change

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Quaternary coastal morphology and sea level changes



Project 437

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## Relative sea-level changes and shoreline evolution in Lebanon

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### Abstract

Interdisciplinary studies of marks left by former sea levels have shown that vertical tectonic displacements took place between about 1750 and 2000 conventional radiocarbon years BP in the Eastern Mediterranean sea, between central Greece and the Levant coasts. After calibration, this period seems to range between the middle of the 4th century and the middle of the 6th century AD.

In a preliminary review, based on field results from Greece, and on compilation from other areas, Pirazzoli (1986) suggested that these movements could be interrelated. Based on the time interval and on the extent of the geographical area involved, the tectonic episode was called the "Early Byzantine Tectonic Paroxysm" (EBTP).

In the following years, field work allowed to document and date the vertical displacements on the coast of Hatay, Syria, the Ionian Islands, and the Gulf of Corinth. Additional new evidence for EBTP movements was subsequently reported from the Gulf of Corinth and possibly from Samos Island. New data are provided from the Lebanon coast, that has been surveyed systematically. Our aim was to test the EBTP.

### Reference

Pirazzoli P.A. (1986). *The Early Byzantine Tectonic Paroxysm*. Z. Geomorph. N.F., Suppl.-Bd., 62, 31-49.



**Figure 1. and Figure 2.** Two photos of the rocky coast of Lebanon.

