

**Active faulting on the northern side of the Gulf of Corinth during the 373 B.C.
Helike earthquake: evidence from the Delphi area.**

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Historical data are fundamental to the understanding of the seismic history of an area. At the same time, knowledge of the active tectonic processes allows us to understand how earthquakes have been perceived and recorded in legends and myths by past cultures.

Delphi, positioned above the surface expression of one of the major active faults that control the asymmetric crustal rift of the Gulf of Corinth, is a key area for improving our understanding of the seismotectonic behavior of this highly seismic ($M > 6$) region. Integration of geological data, archaeological evidence and historical sources, suggests in fact that in the earthquake of 373 B.C. ground ruptures, due to slip on the fault plane, opened not only at Helice on the principal fault of the tectonic depression, but also on the opposite fault at Delphi. Such a mechanism would have been similar to what observed in the earthquake of 1981 near Corinth.

The Delphic Oracle, by far the most venerated oracle of the Greek ancient world, was worshipped since its remote origins in the 14th century B.C. for almost 2000 years. According to tradition, the prophetic prophecies of this oracle were obtained from a gas-exhaling, open "chasm" in the earth. Existence of this fissure has been a subject of debate ever since. Reexamination of the myth on the basis of the local geological setting, and the fact that the temples of the oldest sanctuary are positioned directly above the active fault which ruptured in 373 B.C., seem to indicate that the mythological oracular chasm might well have corresponded to a pre-historic event of surface faulting at the same location.