

**MACROSEISMIC OBSERVATIONS AFTER THE OCTOBER 16th 1988  
EARTHQUAKE AT THE KYLLINIS-PENINSULA  
(NW PELLOPONNESUS, GREECE)**

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On October 18th, 1988 Northwestern Peloponnesus was stricken by an earthquake with a magnitude of 6.0 R. The most stricken area was the Kyllini peninsula where at a lot of important damages and macroseismic phenomena were observed. Concretely, seismic faults, territorial fractures rockfalls, shoreline displacements, liquifacting water and sand shake off phenomena were observed.

The seismic faults were observed in limestones near Kastro village and caused a throw of 5-20 cm. These faults are directly connected with the seismic movement and their general N-S direction coincides with the general direction of the regional neotectonic-tectonic macrofractures.

The territorial fractures were observed at a lot of areas and they may be considered as result of the seismic movement. They are caused because of the loss of support and the costal instability near the morphological discontinuities. Especially at the Bouka Vartholomio area, these fractures were observed in a superficial formation overlaying another which was liquifacted.

The rockfalls were observed either on natural steep slopes along the western coasts of the peninsula or on artificial slopes at quarries at Kastro village and north of Kyllinis baths.

The coastline displacements were observed at several parts of the western coastline where beach rocks outcrop. From the erosion at the lower part of these formations, an uplift of about 15-20 cm is arised.

The liquifaction phenomena were observed at the Bouka Vartholomio area, at the western coast and Kyllini. They seem to be the result of the same seismic movement and of the presence of thin - middle sands with an important water bearing.

The water and sand shake off phenomena were observed at Bouka Vartholomio area and they are the result of the presence of a lower formation of thin-middle sands with water bearing which were liquifacted and of the presence of an upper cohesive formation through the fractures of which the shake off was done.

Finally, from the damages registration at the settlement units it was concluded that the damages are directly dependent on the foundation formations and generally on the subordinate geological structure and geotectonical conditions.