Microseismic Investigations in the western Mediterranean Sea.

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During autumn 1991 a team of German, Spanish and Marocco scientists investigated on/offshore microseismic activity in the Alboran Sea, in the Gibraltar Strait and adjacent onshore regions (Fig. 1). This project was a joint venture involving the Institut für Geophysik, Universität Hamburg (FRG), who provided 40 seismic landstations (LOBS), 15 ocean-bottom-seismographs (OBS) and the german research vessel RV - VALDIVIA, the Centre National de Recherche, Marocco, the SNED, Marocco, the Instituto Geografico Nacional, Spain and the SECEG-SA, Spain.

Aim of the experiment was to record and locate microearthquakes, and, by correlating the seismic data with the tectonic model, to locate areas of high seismic risk and active deformations, also to define the driving forces behind deformations.

Taking the new crustal models, as resulted from the interpretation of our wide-angle reflection and refraction seismic profiles, which were an additional part of the investigations, and the method proposed by SHAPIRA (1983), the p-wave arrivals and their orientation will be used to calculate hypocentres and their times of origin.

First results will present, the tectonic implication will be discuss and the on/offshore seismic activity, its intensity and frequency will be shown.

REFERENCES

SHAPIRA A., 1983. - A guide for using program LME-83. *IPRG Rept.* (Israel) ZI/567/79-(16)

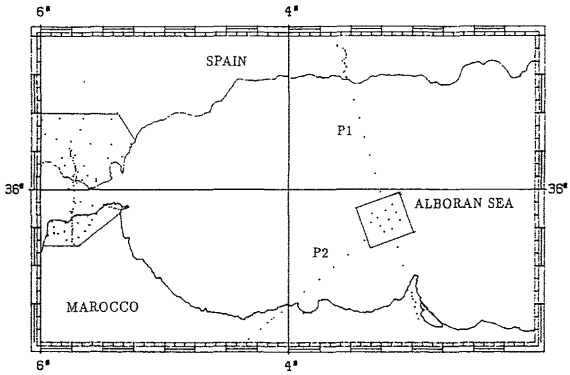

Fig. 1 : Location map of the on/offshore microseismic areas and the OBS/LOBS positions.