

C.I.E.S.M. Mediterranean Ocean Drilling Program Workshop

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So far, three scientific deep sea drilling cruises have been conducted in the Mediterranean : DSDP Leg 13 in 1970, DSDP Leg 42 in 1975, and more recently ODP Leg 107, in 1986.

DSDP Leg 13 was chiefly devoted to the first global exploration of the recent sedimentary cover of the domain. the results focused on one of the specific catastrophic event that occurred in the Mediterranean : the Messinian dessication-salinity crisis. These results have allowed discussions and speculations on the significance, reasons and consequences of this paleo-environmental catastrophe, that occurred some 5 MA ago.

DSDP Leg 42A, also facing the Messinian salinity model, allowed to illustrate the complex and puzzling evolution of the present Mediterranean, made of recent back-arc type basins developing in the middle of Mesozoic oceans remnants as a consequence of the Africa-Europe convergence.

ODP Leg 107 recently focused on a transect study of the most recent the Mediterranean sub-basins : the Tyrrhenian Sea where opening processes also interact with the Messinian dessication event. Both the drilled sedimentary and basement sections have allowed to better understand and tentatively model rifting and magmatic processes that occur in response to a collision controlled opening and subduction.

Since 1986 and the COSOD II conference, many reports from various ODP structures have strongly recommended to look both towards global perspectives and new frontier experiments. After nearly twenty years of successful results in the Mediterranean, we believe that it is also time to propose drilling operations that should adress global prospects. In this challenge we believe that the Mediterranean Sea can play its part. As stressed during a previous Mediterranean ODP workshop held in Athens (1988), the Mediterranean represents the only area in the world where two large continents are progressively entering collision, therefore the Mediterranean is the only area where processes at colliding continental plate boundaries can really be studied.

In organizing this second workshop, we are concerned by a triple goals :

- 1.- to propose global scientific targets that can be addressed using new development in drilling technology (deep hole);
- 2.- to combine if possible deep drilling with *in situ* (logging) and possibly nearby geophysical experiments;
- 3.- to preserve further use of holes for future potential *in situ* experiments that may be organized using other platforms (drilling, submersible).

We believe that potential ODP programs for the Mediterranean sea will be successfull only if these goals are reached under internationaly managed team.