

The Tertiary convergence of the Africa Eurasian plates has been characterised, in the Western Mediterranean region, by several phases of rifting involving creation of marginal basins as the Algero-Provençal, the Thyrrenian and the South Balearic basins (AUZENDE *et al.*, 1973 ; BOCCALETTI and GUAZZONE, 1974 ; REHAULT *et al.*, 1984) and detachment of different blocs belonging to the Alpine chain (Corso-sarde bloc, Kabylia blocs).

As the Algerian margin remained one of the less surveyed area around the Western Mediterranean region, and in order to evaluate the structure of this margin, two seismic surveys were carried out in the Eastern part of the Algerian continental margin during 1973 and 1977 by the Algerian oil company in association with foreign companies.

Despite of the processing of the data was not performant, some important features have been revealed from the seismic lines.

The Eastern continental shelf displays large variations in its wideness from several tens of kilometers in the bays to few kilometers in front of the tellian chain. We also note that the wideness increases from the Bejaia gulf towards the Tunisian-Algerian border, to reach its maximum value in the region of the Galite island. This zone corresponding to the Sardinia-Tunisia strait, marks the transition between the Algero-Provençal basin and the Thyrrenian basin.

The transition between the continental shelf and the abyssal plain is marked by an important step in the bathymetric values. The high declivity of the slope could have been generated by major NE-SW faults observed on the seismic profiles. Those important accidents also induce sedimentary slides towards the floor basin.

In the basin, the sedimentary cover displays several sequences lying on the acoustic basement as follows:

- a thick quaternary, pelagic or /turbiditic series.
- evaporitic series of Messinian
- Pre-Messinian series lying above a Miocene substratum

According to these data, we conclude that Algerian margin has been formed at the early Miocene. Since that time, a regular sedimentation occurred with an exceptional salt crisis during the Messinian. From fluage of the salt, important salt domes have been formed.

In other hand, major deformations as shock occurrences are mainly observed in the continental shelf. This indicates as suggested by AUZENDE *et al.*, 1975, that the African-European convergence is absorbed by continental formations or/an incipient subduction zone suggested by an important negative free air anomaly and the thickening of the plioquaternary units towards the African continent.

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