



Neotectonic evolution of the algerian seismogenic basins

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Tertiary evolution of the seismogenic algerian basins is characterized by three main neogene and quaternary episodes which led to their structuration and the actual seismicity. Indeed, after the early paroxysmal alpine phases which built the structural edifice of the tellian chain, the three tectonic phases between the Cretaceous and the Oligo-Miocene period are: (1) a collapse of the north-kabylian zones and installation of the neogene basins from the Oligo-Miocene period (2) then a shortening accommodated by conjugate NE-SW sinistral and NW-SE dextral strike slip faults, indicating a NNW-SSE stress orientation, (3) finally, a late shortening phase from the late quaternary to the actual period marked by thrusting faults with a south to south-east vergency. In the Mitidja basin (Algiers region), the tectonic structurations in the neogene and plio-quaternary deposits correspond to: 1) a synchronous collapse of the Oligo-Miocene deposits of the Kabylian deposits marked by the activity of synsedimentary normal faults with a general orientation from N040-050 to NW50 followed by (2) a folding oriented N060 which uplifts the pliocene series, this is visible along the Algiers-Sahel anticline. The strike slip faults which are less visible in the plio-quaternary deposits of the basin are more marked in the magmatic intrusions which cross-cut the neogene deposits

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