Summary of Paper No. 5

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* Title in English: Structural architecture and tectonic e olution of the Shabrawet Syrian Arc in erted one at the Northern termination of the ulf of Sue rift Egypt.

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English Summary

The present study offers a no el opportunity to characteri e the structural style and tectonic e olution of the eso oic Shabrawet in erted structure one and its interaction with the northward propagation of the ulf of Sue rift Egypt. ased on the integration of fieldwor detailed surface mapping and subsurface imaging by borehole data and seismic interpretation the geology of Shabrawet area is characteri ed into the northern central and southern structural subareas. The central subarea has e posures of retaceous roc s whereas the northern subarea has the Jurassic/ retaceous subcrop capped by the ligo/ iocene roc s with remar able stratigraphic hiatus probably due to differential erosion or non-deposition of the ower Tertiary- retaceous sediments. The southern subarea represents a SW-dipped gulf-parallel bloc of iddle/ ate Eocene and ligo/ iocene sediments. The structural elements of the Shabrawet area are represented by a group of plunging and double plunging folds of NE-ENE- E-W WNW- trends that are dissected by NE-re erse faults ENE-trending transpressional faults N-S sinistral faults E-W to WNW trending de tral faults and NW-trending normal faults. Structural analysis fault slip data and the constructed subsurface seismic profiles and thic ness maps re eal the tectonic history of the area through a ate retaceous-Eocene transpressional in ersion of E to ENE-e tensional Jurassic border faults. This ENE-in erted Syrian arc structure one played as structural high with non-deposition of Eocene sediments and differential erosion of retaceous sediments. During the ligo- iocene NE-e tension this high-obli ue in erted one terminates the northward propagation of gulf parallel faults and SW- bloc rotation of the northern structural pro ince of the ulf of Sue rift at the southern subarea and the central itter a e. Further westward this ENE-in erted Shabrawet-Abu Sultan intrabasinal Jurrassic half-graben of N- dipping might be structucturally correlatable with the NE- in erted structural belt of ebel aghara in Northern Sinai.

Keywords: In erted structures transpression Syrian Arc tectonics Shabrawet ulf of Sue rifting.