Prome Embayment,Pyay-Delta Basin to Rakhine Shelf

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ABSTRACT

The first popular term of Prome Embayment (old days as Prome for Pyay) for the entire Pyay Basin was introduced with the geological traverse records of marine shale succession at Pyay Tertiary outcrops. Pyay Basin Trough begins in a parallel position east of the large Central or Minbu Graben hanging in a higher position and steps across Poppa to the Shinmataung uplift trend. Quarternary physiographic tracts are left at Monywa east and Taungdwingyi synclines. Miocene-Oligocene outcrops on the southern plunge after 20 degrees latitude - Mindegyi cross arch .The Neogene Pyay Basin trough configuration was totally lost due to Oligocene uplift on the opposite bank of Ayerwaddy River. Previous low fold seismic lines were not done due lack of any fold exposure. Singbaungwe gravity anomaly accompanying outcrop gradually rise over to 20 degrees arch parallel to prospective trends of Mindegyi and Chaungtha-Tagaing fold trends. Here, all Oligocene-Miocene folds are terminated by E-W strike-slip faults with continuation of Eocene exposed flank on the west. Southward, Miocene core outcrops dominate at the folding trend. With repeated faulting and three places of volcanic outcrops, the basinal configuration succession reveal monoclonal flank onlappiing with shallow volcanics beneath. The presence of monoclinal outcrop of Oligocene gave us some hint of a thick succession of prospective carbonate plays existing below. Prior to three prospective trends in the region, the largest onland 3D seismic surveys are running in that area by respective concession owners. DEM satellite maps indicate Natmi, Pyaye, and Padaukpin folds are shifted, compartmentalized by E-W faults. The relation of Natmi plunge and because of Ayerwaddy River bending, the plunge of Pyay disappears to the north. Pyay Basin has a long history of N-S rifting, and the fault trends on both eastern Bago and western Rakhine ranges expose the fault trends and the furrow of alluvial filling. After Pyalo plunge, the Pyay Basin trough narrows but is deepest at it northernmost end.