Deformation Since Miocene epoch and Analysis of Oiliness of Piyaman Structure in the Piedmont of West Kunlun Mountain

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Fault-bend fold or fault-bending anticline forms at the juncture of overthrust, which is the main mechanism in many compressional deformation area. Through geological structure profile across mountain and basin in field, with structural explanation of seismic profiles, this paper uses the newest concepts and methods, such as fault-related fold theories about fault fold, piggyback thrust system, structural triangular zone, stereographic projection and balanced geological sections technique modeling, to parse subtly Piyaman struture in the piedmont of West Kunlun mountain in Geometry and Kinematics. It believes that this structural belt lies in the frontal zone of the Hetian nappe, and its vertical variability shows three layer construction: big scale allochthonous systemic fault-bending anticline in shallow structural layers, para in-situ systemic Paleozoic duplex structure in the middle structural layers and in-situ systemic weak deformation zone or imbricate in deep structural layers. The paper also detailedly analyze the growth structure in the Piyaman structure by several classical seismic profiles and make sure deformation tectonic pattern in this region, deformation mechanism and the time of tectonic stereotype. Using balanced geological section technique to imitate its formation and evolution progresses, I estimate the napped distance of the Piyaman structure since Miocene epoch, i.e. shortening distance of profile and longitudinal thickening distance, based on the estimated results, we analyze the geological significance of indicator to the uplift of the West Kunlun Mountain orogenic belt.

Based on the deep analysis of vertical variability's characteristics of the Piyaman struture, this paper discusses the significance to oil-gas exploration for double thrustal structure and studies on oil source, reservoir, cap rock and their assemblage, its critical trap types and potential for oil and gas exploration.

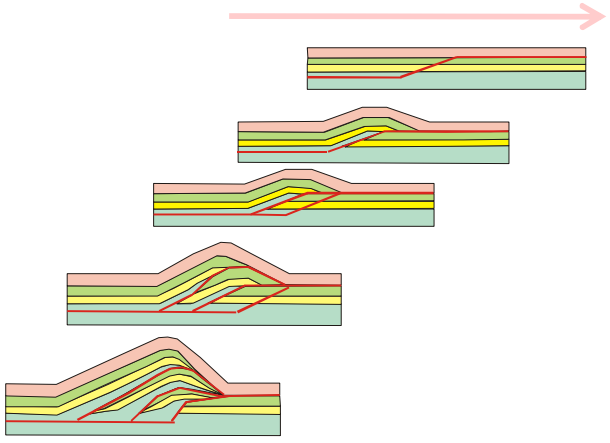

Fig.1

次回のお知らせ

＊今学期のセミナーは本日で終了です。

連絡先

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