

## **STRUCTURAL TRANSECT OF THE WESTERN KOHAT FOLD AND THRUST BELT BETWEEN HANGU AND BASIA KHEL, N.W.F.P., PAKISTAN**

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A structural transect of about 66km length has been constructed along the western Kohat Fold and Thrust Belt to understand structural variations in the outcropping rocks. Along the transect from Hangu in the north to Kurma in the south, the belt is dominated by thin-skinned structures that includes south verging thrust faults, disharmonic shale-cored anticlines, shale-withdrawal synclines and a pop-down. The thin-skinned structures gives way to thick-skinned structures south of Kurma and is confined to a 12 km wide zone named as Zarwam Wrench Zone. This zone is defined by three, sub vertical wrench faults that also involve the crystalline basement. The genesis of these wrench faults is related to the westward underthrusting of Kohat Fold and Thrust Belt underneath the Sulaiman Range along the transpressional boundary known as Kurrum Fault. Orientation of both large and small-scale structures with in the Western Kohat Fold and Thrust Belt indicate that it has undergone an earlier phase of compressional deformation over its major part, superimposed by a later phase of transpressional deformation in the south along Zarwam Wrench Zone.