

Development of Thrusts in Garhwal Himalaya

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A review of the structures and geometric relationships recognized in the thrust zones of the Garhwal Himalaya belts are presented. The thrust is defined as constructional reverse fault, a corollary being, thrusts must cut up section in their transport direction, from North to South an array of thrusts which diverge in their transport direction may form by either of two propagation models. These are termed as 'Piggy back' propagation, which is forel and directed and 'overstep' propagation, which is opposed to the thrust surface is termed an 'imbricate stack' and should these surface anatomize upwards a 'duplex' will result, the fault bounded blocks are termed as Schuppen/Horse. A duplex is bounded by higher 'Roof' thrust and lower 'floor' thrust. The intersection of any two-thrust plane is termed a branch line. An classification of the Himalayan thrust have been proposed, on the basis of their relationship to asymmetric fold limbs which they cut, further it has been classified on the basis of Hanging/Footwall of one another.

Attempt has been made to suggest the various stages of development of thrusts in the Himalaya and tectonic model have for thrusting has been prepared.