

at much shallower depths. These deformed geological features were then dated in the laboratory at Dehradun using a technique called Optically Stimulated Luminescence (OSL) (method for carrying Luminescence dating of geological sediments) and data of seismicity and denudation rate reviewed. The combination of field and lab data suggested the region of the Indus Suture Zone (ISZ) has been neo-tectonically active since the last 78000 — 58000 years and a recent earthquake in 2010 of low magnitude 4.0 near the village of Upshi that occurred due to a thrust rupture.

Himalaya were known to be made up of north dipping thrusts like the Main Central Thrust (MCT), the Main Boundary Thrust (MBT), and the Main Frontal Thrust (MFT). As per the established models, all of these thrusts except MFT are locked, and overall