

Comparison of regional geoelectric structure of Himalayan region

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In order to understand the regional tectonics of the Himalayan region, a few geotranssects have been carried out along different transects in India and also in Nepal. The prominent among them are wide band magnetotelluric soundings along Panamik-Leh-Bara-la-chala, Una-Mandi, Siliguri-Gangtok-Lachung, Joshimath-Gaucher in India and also in Central Nepal.

These studies are carried out as a part of deep crustal investigations for better understanding of the seismotectonics of the region. Additionally, several other deep geoelectric studies are

carried out using wide band digital magnetotelluric investigations for geothermal exploration in Puga, Ladakh region, Tapovan-Vishnugad and Lohari-Nag-Pala regions in Uttaranchal, Kullu-Manali-Manikaran, Sutlej Spiti valley regions in Himachal Pradesh. The major geological features in the study region are Munciari, vaikrita thrust and other expressions of main central thrust. These geotranssects have shown anomalous conductive features at mid-lower crustal depths. This feature in relation to the regional tectonics and seismo tectonics of the regions is discussed.