

Reversal of shear sense in ductile shear zones

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Abstract: Shear sense reversal (SSR) is defined as the deviation of shear sense indicated by shear sense indicators bound along/across a pair of adjacent to nearly/widely separated foliation planes observed in micro- and/or meso scales within shear zones. A review on SSR reveals that it could be due also to structural misinterpretation, or in reality a product of a single- or indeed two shearing events. Reverse shear is unambiguously documented using mineral fish within the Tso Moriri Crystallines and other shear sense indicators within the Zaskar Shear Zone. Exhumation models need to be reassessed in the light of SSR once it is categorized and interpreted.

Keywords: (1) Shear sense reversal; (2) ductile shear zone; (3) tectonics; (4) mineral fish; (5) Himalaya; (6) deformation