

A 100 ka Glaciation - deglaciation history of Ladakh : its comparison with sutluj valley and signatures in the alluvial plains of NW India

Abstract:

The proposed research work aims to generate data of Quaternaries of geographically unique and arid Ladakh region and semiarid - fluvio aeolian plain on the margin of the Thar Desert. A chronology of the glaciations–deglaciation events in Ladakh will be developed using sedimentary archives. The relationship between late Quaternary glaciations in Ladakh and drainage landscape evaluation will be established in the northern margin of the Thar desert to test global versus regional climate controls. The impact of Himalayan climate and tectonics on landscape development and drainage disorganization in interfluvium will be studied. As a by-product, the geological aspect of archeological mounds of Harappan civilizations scattered in the interfluvium will also be explored.