Tectonically Active Landscapes

This book explores how mountainous landscapes respond to tectonic deformation.

Tectonically Active Landscapes integrates previously unpublished concepts and ideas with recent articles about hills and streams. Readers will learn which landforms change quickly in response to uplift, which parts of the landscape are slowest to adjust to tectonic perturbations, and which landform characteristics are most useful for describing tectonically active and inactive terrains.

Study areas include diverse landscapes and tectonic settings: seacoasts, soil-mantled hills, and lofty mountains. The humid Southern Alps of New Zealand change quickly because of rapid uplift and erosion. The semiarid Panamint Range of southeastern California has such miniscule annual stream power that tectonic landforms persist for millions of years.

Tectonically Active Landscapes addresses diverse key topics about tectonics and topography. It is essential reading for research geologists and advance-level undergraduate and graduate students in the earth sciences.