

## Morphometric analysis of slope forms in Japanese mountains using 50m-DEMs

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Slope forms in Japanese mountains are investigated using 50m-DEMs. The mountains can be classified into 2 types according to altitudinal changes in slope forms. A-type mountains have 3 altitudinal zones with different geomorphological characteristics. In the middle part of them, the mean slope angle increases with altitude, but the modal slope angle is around 35 degrees regardless of altitude. B-type mountains do not have such altitudinal zones and have lower slope angles (15 to 20 degrees). These types of Japanese mountains correspond to relief energy. Mean relief energy of A-type mountains is more than 350 m and that of B-type mountains is less than 350 m. The constant modal slope angle of A-type mountains suggests that there is a threshold slope angle for accelerated bedrock erosion.