Abstract

The proposition that pediment slope is related to debris-size is shown to be flawed. This notion was examined on 15 traverses on rock-cut pediments in the southern Hijaz region of western Saudi Arabia. Complete particle size analyses of pedisediments were obtained and the moments used for pair-wise comparisons with down pediment changes in pediment slope. It is shown that simple comparisons of standardised regression coefficients are misleading and a formal test is introduced. No general picture emerges with regard to pediment slope-particle size relations for either the coarse or fine particle size fractions. Where particle size changes mirror the rates of pediment slope decline it is often the case that the pediments are cut across weathered granite whose clasts rapidly disintegrate into grus in a down-pediment direction.