

Particle size spectra of some Saudi Arabian pediments

Abstract

Particle size studies of the veneer of sediments covering rock-cut pediments have been undertaken in the central Hijaz region of western Saudi Arabia. The results show that the sediments are strongly bimodal. The construction of grain size spectra diagrams reveal that the coarse mode becomes finer down the pediment slope while the fine mode remains constant at about 3–3.5 phi. An examination of individual grains in this fine modal class show them to be sub-angular and mineralogically diverse. It is argued that this sub-angular component is a fine sandy grus derived from the weathered granitic bedrock and not from an aeolian input which has blown on to the pediment surface.
