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### **Debris Avalanches and Debris Flows from Source to Sink**

Some of the Earth's largest mass-wasting events are found on passive continental margins. Giant debris avalanches and debris flows can involve hundreds and thousands of cubic kilometres cubed of material, exhibit a wide range of deposit geometries, volumes and areas. Consequentially they have a big impact on the evolution of island flanks and continental margins. The relationships between these landscape processes and form can now be constrained with topographic and offshore seismic and multibeam data. We characterise debris avalanches and debris flows operating on the continental margin in the vicinity of the Canary Islands by using simple geomorphic indices. The most catastrophic events on oceanic islands repeatedly reduce the slope, curvature and topographic roughness of the upper flank region producing distinctive long profiles. In contrast, submarine debris flows appear less catastrophic. They have elongated deposit geometries, affect larger areas of the seafloor and have runouts an order of magnitude longer than debris avalanches. Such observations guide the ongoing development of landscape models for these settings.