



## **Geomorphic Aspects of Southern African Dryland Soils**

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Southern African drylands are host to stable land surfaces with limited denudation rates. The resulting soils manifest long term weathering processes, including leaching, collapse and precipitation of calcium carbonate as is the case in the semi-arid Kalahari. Despite the thickness of some of the Kalahari soils and sands, they are furthermore depicting a range of neotectonic land forms and processes, associated with the contemporary rifting of the southern African continent. This is particularly apparent in satellite imagery and digital elevation data that can be used to examine regional scale surface characteristics. Southern Africa is also home to significant global and regional scale dust sources, which are mostly associated with inland basins and playas. Plumes of dust emitted from playas are able to impact upon downwind soil quality. This can be observed in the both the western Makgadikgadi as well as the Central Namib gravel plain. In the Namib playa dust contributes to the accumulation of gravel plain fines, leaching and massive pedogenic gypsum accumulations. It is apparent that Southern African dryland soils are home to aeolian inputs, host extensive duricrusts and depict neotectonic movement which should be of interest to the wider earth science community.