Geophysical Research Abstracts Vol. 17, EGU2015-2293, 2015 EGU General Assembly 2015 © Author(s) 2014. CC Attribution 3.0 License.



## A geodiversity basis for landscape conservation in South Africa

Jasper Knight and Stefan Grab

University of the Witwatersrand, Geography, Archaeology & Environmental Studies, Johannesburg, South Africa (jasper.knight@wits.ac.za)

It is increasingly recognized that the South African landscape exhibits a palimpsest of different geologic and landform assemblages of different ages, and which record at the surface the effects of climate and environmental changes from the late Cretaceous to present. Previous studies have split the country into geomorphic provinces based on large-scale watersheds, uniformity of slope elements within the watersheds, and valley hypsometry. Geology, landforms and their homogeneity or diversity within a single area have not been considered. The existing network of provincial (Provincial Heritage Sites), national (National Parks/Transfrontier Parks), and international (World Heritage Sites, Ramsar sites) landscape conservation measures in South Africa do not explicitly and routinely include site or features of geoheritage or geodiversity interest. This present paper sets out to develop criteria by which landscapes of high geodiversity value can be identified, and provides examples of how these criteria can be applied. The close connection in South Africa between landscape-scale geology and geomorphology, and archaeology and ecosystems, suggests that geodiversity should and can be a key element of all landscape conservation strategies.