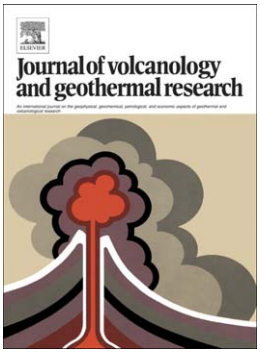

The Bero Volcanic Complex: Extension of the Paraná-Etendeka Igneous Province into SW Angola

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The Bero Volcanic Complex: Extension of the Paraná-Etendeka Igneous Province into SW Angola.

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Abstract

An extension of the Etendeka-Paraná Igneous Province into SW Angola occurs as minor basalt lavas, intrusive gabbro sheets, minor mafic dykes and thick sheets and lava flows (with minor pyroclastics) of quartz latite composition This suite crops out along the eastern margin of the Cretaceous Namibe Basin in SW Angola. The quartz latites from one locality have been referred to informally as the Giraul volcanics but the name 'Giraul' has previously been used for Cretaceous conglomerates. We propose the name Bero Volcanic Complex for this suite of intrusive and extrusive rocks on the basis that the full compositional range of this diverse suite crops out along the Rio Bero. Major and trace element compositions and Sr-, Nd-, and Pb-isotopic compositions indicate that the basalts and gabbros are equivalent to the high-Ti Khumib/Urubici and Pitanga types from the Etendeka and Paraná. The basalts underlie the quartz latites which are cut by mafic dykes some of which are compositionally equivalent to the Paranapanema lavas in the Paraná. Five different geochemical types of high-Ti quartz latite are recognised amongst the silicic volcanics, 3 of which have very close geochemical affinities to the Ventura, Sarusas, and Khoraseb types of the northern Etendeka. Their relative stratigraphic position in the Bero volcanic sequence is the same as in the Etendeka sequence and extend significantly the area over which these types were erupted. The two remaining types, Chinguau and High-Nb are not known from either the Etendeka or the Paraná provinces.