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Thermal history and evolution of the South Atlantic passive continental margin in northern Namibia

Daniel Menges, Markus Karl, and Ulrich Anton Glasmacher
Germany (daniel.menges@geow.uni-heidelberg.de)

From Permo-Carboniferous to Mid Jurassic northern Namibia was affected by deep erosion of the Damara Orogen, Permo-Triassic collisional processes along the southern margin of Gondwana and eastern margin of Africa (Coward and Daly 1984, Daly et al. 1991), and the deposition of the Nama Group sediments and the Karoo megasequence. The lithostratigraphic units consist of Proterozoic and Cambrian metamorphosed rocks with ages of 534 (7) Ma to 481 (25) Ma (Miller 1983, Haack 1983), as well as Mesozoic sedimentary and igneous rocks. The Early Jurassic Karoo flood basalt lavas erupted rapidly at 183 (1) Ma (Duncan et al. 1997). The Early Cretaceous Paraná-Etendeka flood basalts (132 (1) Ma) and mafic dike swarms mark the rift stage of the opening of the South Atlantic (Renne et al. 1992, Milner et al. 1995, Stewart et al. 1996, Turner et al. 1996).
The "passive" continental margin in northern Namibia is a perfect location to quantify exhumation and uplift rates, model the long-term landscape evolution and provide information on the influence of mantle processes on a longer time scale. The poster will provide first information on the long-term landscape evolution and thermochronological data.

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