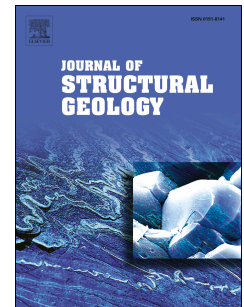


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Deformation and Fluid Flow in the Huab Basin and Etendeka Plateau, NW Namibia

Eric Salomon ^{a,*}, Daniel Koehn ^b, Cees Passchier ^a, Peter Chung ^b, Tobias Häger ^a, Aron
Salvona ^b, Jennifer Davis ^b

^a*Institut für Geowissenschaften, Johannes Gutenberg-Universität Mainz, Johann-Joachim-
Becher Weg 21, 55128 Mainz, Germany; salomon@uni-mainz.de, cpasschi@uni-mainz.de,
tobias.haeger@uni-mainz.de*

^b*School of Geographical and Earth Sciences, University of Glasgow, Glasgow, G12 8QQ,
United Kingdom; daniel.koehn@glasgow.ac.uk, peter.chung@glasgow.ac.uk,
aronsalvona@googlemail.com, jennifer.davis@gmail*

*Corresponding author: Eric Salomon, Institut für Geowissenschaften, Johannes
Gutenberg-Universität Mainz, Johann-Joachim-Becher Weg 21, 55128 Mainz, Germany,
salomon@uni-mainz.de, +49 (0)6131 3920293

Abstract

The Lower Cretaceous Twyfelfontein sandstone formation in the Huab Basin in NW
Namibia shows the effects of volcanic activity on a potential reservoir rock. The formation was
covered by the Paraná-Etendeka Large Igneous Province shortly before or during the onset of
South-Atlantic rifting. Deformation bands found in the sandstone trend mostly parallel to the
continental passive margin and must have formed during the extrusion of the overlying volcanic
rocks, indicating that their formation is related to South-Atlantic rifting. 2D-image porosity
analysis of deformation bands reveals significant porosity reduction from host rock to band of up
to 70 %. Cementation of the sandstone, linked to advective hydrothermal flow during volcanic

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