



Analysis of the Cretaceous and Cenozoic successions offshore Namibias

Henning Schulz (1), Harald Stollhofen (1), and Stefan Back (2)

(1) Geozentrum Nordbayern, Universität Erlangen-Nürnberg (henning.schulz@gzn.uni-erlangen.de), (2) Geologisches Institut, RWTH Aachen

Multiple phases of volcanism, uplift and subsidence are recorded after the breakup of the Namibian South Atlantic margin segment – features which are regarded as atypical when compared to published examples of other post-breakup continental margin successions. It is currently not understood whether these geodynamic processes are only of regional or a broader, South Atlantic intercontinental importance.

On the basis of 5000km of high resolution 2D wireline seismic data from offshore northern and central Namibia, regional differences in uplift, subsidence and sedimentation rates of one selected southern South Atlantic margin segment are analysed. The study area is parallel to the Namibian coastline, covering about 45.000 km². Integrated analysis and calibration of seismic data with well-logs and biostratigraphic data of 3 industry wells enables the subdivision of late Cretaceous and Cenozoic strata in seismic stratigraphic units that can be traced over the entire study area. Thicknesses of each seismic subunit are analysed using isopach maps, aiding the identification of variable subsidence and sedimentation trends. A more detailed sequence stratigraphic analysis of selected subbasins is then used to discuss the controls for the observed regional variation of subsidence and sedimentation pattern offshore Namibia.