

## NEOTECTONIC ASPECTS ON THE GEOMORPHOLOGIC EVOLUTION OF THE NTEM INTERIOR DELTA, SW CAMEROON.

J. EISENBERG<sup>1</sup>

<sup>1</sup> Institute of Physical Geography, University of Frankfurt, Senckenberganlage 36, 60325 Frankfurt am Main, Germany, T +49(0)69/798-24936, F +49(0)69/798-24718, [j.eisenberg@em.uni-frankfurt.de](mailto:j.eisenberg@em.uni-frankfurt.de)

J. RUNGE<sup>1, 2</sup>

Institute of Physical Geography, University of Frankfurt, Senckenberganlage 36, 60325 Frankfurt am Main, Germany, T +49(0)69/798-24936, F +49(0)69/798-24718; <sup>2</sup>ZIAF, Zentrum für Interdisziplinäre Afrikaforschung (Center for interdisciplinary research on Africa), University of Frankfurt, Grüneburgplatz 1, 60323 Frankfurt am Main; [j.runge@em.uni-frankfurt.de](mailto:j.runge@em.uni-frankfurt.de)

### ABSTRACT

Within the framework of the DFG research group 510 „Ecological and cultural change in West and Central Africa“ in the subproject ReSaKo (rainforest-savanna-contact) suitable sediment traps for palaeoenvironmentally oriented sedimentologic and stratigraphic research in the tropical rainforest were investigated by means of remote sensing (Landsat7-ETM+) and interpretation of topographic and geologic maps. In the catchment of the River Ntem on the north-western marginal swell of the Congo craton an interior delta (210 km<sup>2</sup>) was identified. It is located on a peneplain step, which bents towards the Atlantic and separates two peneplain levels of different age. These resulted from two phases of uplift and planation during different periods in earth-history. The upper level, named the ‘surface intérieur’ by SEGALEN (1967), is assigned to the Younger Eocene (surface Africaine I), the lower level, the ‘surface cotière’ to the beginning Miocene (surface Africaine II). The Ntem crosses the step by numerous waterfalls. It is assumed that the interior delta was formed during the late Tertiary along neotectonically remobilized Precambrian structures. The course of the river inside the interior delta clearly follows the geologically set-up structures. A NNE-SSW and a ENE-WSW strike direction is predominant. The former is represented by deep incisions, the latter by shallow steps. Those divide the interior delta in several subdivisions probably based on a step fault. This structural pattern induced the formation of a subdivided ‘sediment trap’. Longer dry seasons than the recent ones in connection with strong tectonic uplift probably prevailed lacustrine conditions and adherent alluvial sediments suitable for stratigraphic research in the study area. Iron-manganese-oxide mantled gravel-layers give evidence to the younger geomorphic evolution. The gravels consist of quartz and quartzites. At some locations there are also rock fragments in the gravel body, which are enclosed in its matrix. In the presentation, the geomorphologic shape of the interior delta is presented and placed into its long-term morphological evolution.

Key words: neotectonics, intra plate tectonics, lineament interpretation

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