

Neotectonic Structures and their Reflection in the Relief of the Tocantins River Basin

PIRES NETO, A.G. and BARTORELLI, A. Geia Projetos Ambientais, Águas de São Pedro, Brazil; Geoserv, São Paulo, Brazil.

Studies carried out in two areas of the Middle Tocantins Hydrographic Basin, which are characterized by the presence of isolated hills and residual ridges in the domain of extensive areas of gentle and smoothed relief, showed that the erosion has been controlled by neotectonic movement. This activity is related to an east-west shear stress originated by the rotation of the South American Plate westwards.

These movements are responsible for the development of structures, such as bunches of drainage lineaments related to normal, transcurrent and thrust faults in the substratum, manifested in the relief by the presence of scarps, different intensities of river dissection, presence of sills and falls in the river beds, distribution of alluvial deposits, flood plains and terraces, else than other geomorphologic aspects