

# **Carboniferous transtensional reactivation of Transbrasilian Lineament in northeastern Paraná Basin, SW Mato Grosso State**

<sup>1</sup>LOPES-COELHO, A., <sup>1</sup>PEREIRA, E.

<sup>1</sup>Rio de Janeiro State University, Faculty of Geology, Rio de Janeiro, Brazil

The Permian-Carboniferous Aquidauana and the Devonian Ponta Grossa formations crop out in the southwestern Mato Grosso State in the north of an almost east-west deflection of the Transbrasilian lineament. Both formations are bounded by an unconformity, and in the area the boundary is controlled by two trends of normal faults, with a horizontal component. Although these structures have affected only the Devonian rocks, they also have controlled the later Permian-Carboniferous sedimentation.

Structural-kinematic analyses of these structures delineated a main N60°W trend of the horizontal maximum stress, which may acted on the Transbrasilian Lineament deflection during the compressive phase of the Chánica orogeny. The compressive stresses produced transtension in the area, resulting in some rhombograbens which formed depocenters in the later Permian-Carboniferous sedimentation.