

## **NEW GEOCHRONOLOGICAL DATA FOR THE RIO MARIA TTG TERRANE; IMPLICATIONS FOR THE TIME CONSTRAINTS OF THE CRUSTAL FORMATION OF THE CARAJAS PROVINCE, BRAZIL**

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The Rio Maria granite-greenstone terranes (Carajas Metallogenic Province, Amazonian craton), where the oldest rocks of the province occur, is a preserved region in relation to the adjacent shear belt. In this region, U-Pb zircon ages of the granitoids comprised between ca. 2.96 Ga (Arco Verde Tonalite) and 2.87 Ga (dominant granodioritic, trondhjemitic and granitic intrusions). The few data from the neighboring western Tucumã and southern Redenção regions agree with these ages. In the northern part of the province, the gneisses of the regional basement (Xingu Complex) are the ca. 2.85 Ga old. To investigate the extension of the occurrence of these rocks, four new datings were performed by the evaporation method on zircons from trondhjemitic and granites sampled around the Rio Maria region. The rocks show different degree of deformation, and one is discordant in relation to the E-W regional foliation. The ages are comprised between 2.85 and 2.90 Ga (2857 $\pm$ 13 Ma, 2867 $\pm$ 18 Ma, 2870 $\pm$ 5 Ma, and 2900 $\pm$ 21 Ma) and enlarge the domain of occurrence of these granitoids. These results confirm a short but important episode (150 Ma) of the crustal growth in the province.