# The Proterozoic terranes of southwest Amazonian Craton, Rondônia State, Brazil

SCANDOLARA, J., AMORIM, J., RIZZOTTO, G., QUADROS, M. and BAHIA, R. Geological Survey of Brazil-CPRM, Porto Velho, Brazil.

The Proterozoic tectono-stratigraphy of the Rondônia State, southwest Amazonian Craton, comprises the Jamari, Roosevelt and Nova Brasilandia terranes. The *Jamari Terrane*, in the center-north and northwest of the state, consists of psamo-pelitic migmatized gneisses, calcsilicate rocks, amphibolites, minor tonalitic/dioritic orthogneisses and intrusive rapakivi-type granitoids. The D1 deformation was imposed by a $N10^0/15^0E$ regional stress. Pb/Pb isotopic data on detrital zircons of paragneisses have a minimum age of deformation ranging from 1.62 to 1.70Ga. A D2 tangential event with a $N50^0/60^0E$ compressive stress, superimpose the D1. U/Pb data on tonalitic orthogneisses indicated crystallization ages from 1.75 to 1.73Ga, with TDM range ages from 2.20 to 2.06Ga (Nd between -1.49 and + 0.14). The *Roosevelt Terrane*, in the northeast sector, consists of a metavolcanic-sedimentary sequence, intrusive granitoids and minor deformed sedimentary cover rocks. These rocks, excepting the covers, were deformed under low grade conditions by E-W/SW-NE sinistral transcurrence. U/Pb SHRIMP data on meta-dacite yielded an age at 1.74Ga. The *Nova Brasilandia Terrane* consists of a mafic meta-plutonic sedimentary sequence and subordinate meta-volcanic rocks. Meta-gabbro sills have Nd +3 and +5. U/Pb ages of granitoids are 1.11Ga and 1.05Ga for the syn-tectonic and late- to post-tectonic granitoids. The latter granitoids have TDM values of 1.54Ga (Nd -0.4). Paragneisses gave TDM ages between 1.8 and 1.9Ga (Nd between -2.5 and 3.8), suggesting continental crust as source. The $N50^0E$ with NW-SE sinistral transpressive component and SW to NE tectonic transport followed by E-W sinistral transcurrences.