

STRUCTURAL ANALYSIS IN RADARSAT-1 IMAGES IN BRAZILIAN AMAZON

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The structural interpretation obtained, with RADARSAT-1 stereocopy images, S2 and S7 mode, ascendant, in the Brazilian Amazon, Pardo Range region (State of Pará – Brazil - Carajás Mineral Province). Related to GlobeSAR2 Program in Latin American. The event 1, older, relative the units of the embasament: gneisses and metasediments, na orientation mainly NW-SE in regime oblique compressive with vergence for SW, provoked by a binary sinistral with orientation E-W. For a event 2, relative the units volcanic-plutonics and your sedimentary cover in a tectonic regime transpressive is remarkable the presence of a sinistral binary, with E-W orientation, whose sigma1 dynamic axis is around NW-SE while sigma3 has a NE-SW orientation, both horizontally disposed, the first one transcurrent and the second one compressive. The sigma2 axis is vertical and distensional. As a result from these stresses, ample folds with axis oriented according to N-S were developed on the sedimentary covers, presenting NW-SE sinistral transcurrent faults which account to shear zones, as well as compressive sigmoids of similar orientation forming compressive duplexes. Normal faults have NE-SW orientation. In the event 3, for the units younger plutonics it dominated an distend regime with normal fault. Finally, for a event 4, neotectonic, responsible for the pattern of actual drainage is observed it controls in the Xingu river, with normal fault guided second NE-SW and N-S, and transcurrent sinistral fault with orientation NW-SE. Interesting fact in referred river is the presence of zones of alluvial deposits and zones of rapids and falls, inserted.