

Neoproterozoic terrane collage in the Southern and Central Ribeira Belt, Brazil

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The name *Ribeira Belt* was originally used to refer to a broad belt of deformed crust that strikes subparallel to the southeastern Brazilian coastline. It was originally believed to be Neoproterozoic (Brasiliano – Panafrican), but present investigations indicate that this age is mainly related to the extensive arc-related plutonism and tectonometamorphism that affected its most representative formations, whereas the time of deposition of part of the supracrustal sequence would be significantly older. New interpretations suggest that the whole region is actually an assemblage of distinct tectonic terranes, probably accreted during the Neoproterozoic as a compound terrane, with the late stages associated with a regional dextral transcurrent shear zone system and the oblique collision between the São Francisco, Congo and Paraná cratons. This collage is a complex jigsaw of Mesoproterozoic, Neoproterozoic and late Neoproterozoic terranes.

Among several questions about the evolution of the Ribeira Belt, we deal here with correlations between the supracrustal sequences of its southern and central sectors, and the identification and delimitation of possible tectonic terranes, including the classic controversy of correlation between Açungui and São Roque groups.

Newer U–Pb SHRIMP, Sm–Nd and Rb–Sr analysis, as well major, minor and trace element chemical analysis of these terranes are shown and compared with former data.

A series of laterally disposed NE-trending longitudinal belts is described, from northwest to southeast:

- a probable remnant of an island arc association, constituted by metadolomites with stromatolites, associated with arkosic metasediments, phyllites and metabasites (part of Itaiacoca and São Roque groups), probably of Neoproterozoic (Cryogenian) age
- a domain of a more distal but still neritic carbonatic shelf deposits (Lajeado Subgroup, Água Clara Formation, São Roque Group in the Votorantin region and the carbonatic portion of the Votuverava Group); this is of uncertain age, from Neoproterozoic (Cryogenian) to Mesoproterozoic (Ectasian);
- turbidite and *flysch-like* slump deposits, of late Neoproterozoic (Ediacaran) age (Iporanga Formation, part of the Votuverava Group and Ribeira Subgroup)
- deeper water assemblages associated with metabasic rocks of Mesoproterozoic age (part of the Ribeira Subgroup, Perau Formation, Serra de Itaberaba Group); both MORB-type and immature island arc basalts metabasites occur
- a sequence of pelitic–psammitic schists of medium metamorphic grade and probably early Neoproterozoic (Tonian) age (Embu Complex).
- a Southern Domain of shallow-shelf formations plus basement (Capiru Formation, Setuva Group, Turvo-Cajati Complex) with strong Brasiliano (Neoproterozoic) overprint; they crop out south of the Lancinha Lineament and are in contact with the Gneiss-Migmatitic Complex along low-angle shear zones;
- an old cratonic fragment (Palaeoproterozoic to Archaean) represented by the Luis Alves terrane, which is separated from the later terranes by the Faxinal–Morretes shear zone.