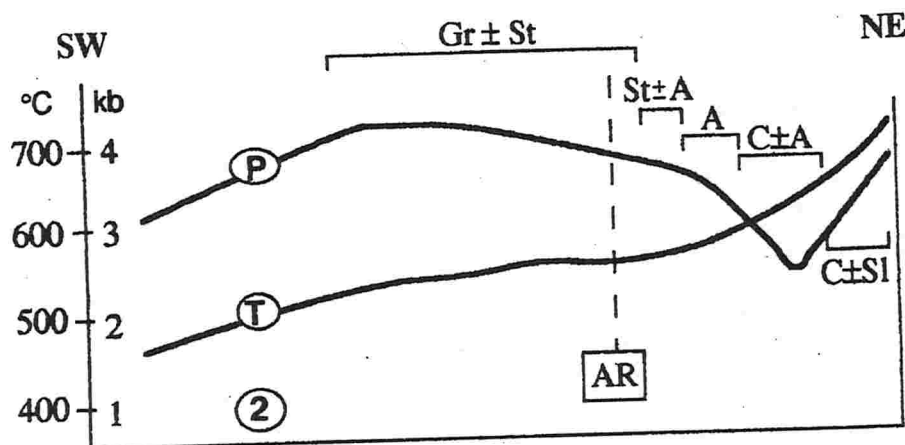
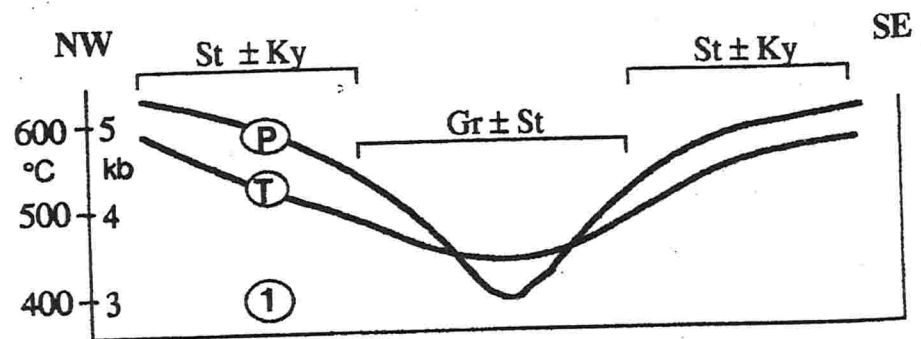




Minerais indicados: Gr, granada; St, estauroлита; Ky, cianita; A, andaluzita; C, cordierita e Sl, sillimanita

AR Localização aproximada da cidade de Araçuaí

Figura 2 - Trajetórias de temperatura (°C) e pressão (kb) durante a cristalização das associações minerais sin-cinemáticas à xistosidade principal da Formação Salinas, ilustradas com base em resultados da aplicação do geotermômetro granada-biotita e geobarômetro granada-plagioclásio (dados e referência em Costa 1987 e pedrosa-Soares 1995). os alinhamentos gerais 1 e 2 estão indicados na Figura 1.

THE NEOPROTEROZOIC BRAZILIDES COLLAGE IN THE SOUTHERN SOUTH AMERICAN PLATFORM

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INTRODUCTION

This expanded abstract is an exercise on the Plate Tectonics of Precambrian shield regions, the latest in a series of exercises at different scales on the southern South American platform (fig. 1) that I have been working on since 1982 (see Fragoso Cesar, 1991, 1993; Fragoso Cesar *et al.*, 1995).

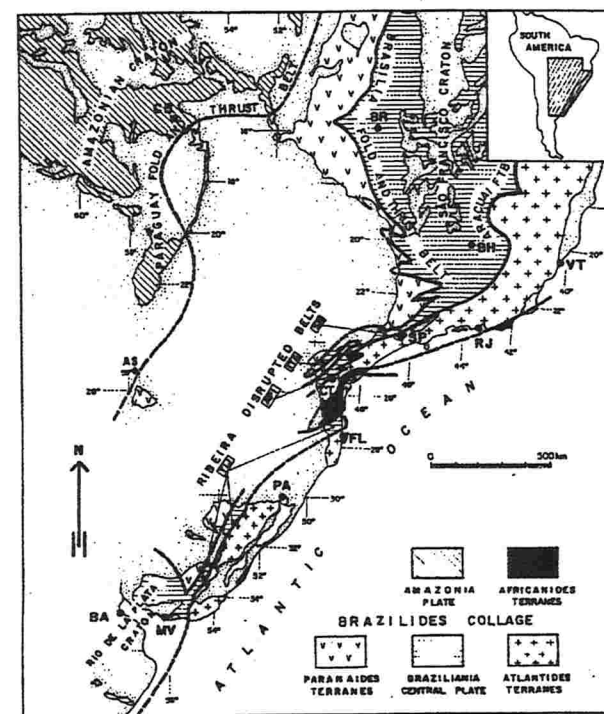


Figura 1 - Schematic tectonic sketch of the southern South American platform basement. The Ribeira disrupted belts are formed by Tijucas (TIJ), Apiaí (API), Itaiococa (ITA) and São Roque (SR) belts. Major cities: BR- Brasília, CB- Cuiabá, BH- Belo Horizonte, VT- Vitória, RJ- Rio de Janeiro, SP- São Paulo, CT- Curitiba, FL- Florianópolis, PA- Porto Alegre, MV- Montevideo, BA- Buenos Aires, AS- Assunción.

As a first approximation, two types of region were recognized: (i) one affected by Neoproterozoic subduction-related magmatism (NSRM) and (ii) the other unaffected by NSRM. In the first case, two complexes of composite terranes are identified. The **Paranaides** and the **Atlantides terranes**. In the second, three regions are important: the **Amazonia** and **Brazilian central plates** and the **Africanides terranes**. This last mentioned terranes comprise the Luis Alves and the Cabo Frio terranes whereas possible outcrops of the **Congo plate** along the Brazilian coastline (Kaul, 1979; Heilbron *et al.*; 1982; Zimbres *et al.*; 1990), as summarized by Fragoso Cesar *et al.* (1995), and not discussed any further here.

As a second approximation, I have utilized the same criterion for the Mesoproterozoic. Regions affected by mesoproterozoic subduction related magmatism (MSRM) dominate SW Amazonia, with manifestations of diverse subduction and collision events (*see* Teixeira *et al.*, 1989; Saes & Fragoso Cesar, in this congress). In the other regions (Brazilian plate and Paranaides and Atlantides terranes), MSRM is absent or possibly represented by questionable, restricted occurrences. In these regions the mesoproterozoic was apparently distensive, with rift-related magmatism and development of cratonic covers and passive margins. These regions are here grouped into a major tectonic unit: **The Brazilides Collage**

THE BRAZILIDES COLLAGE

This tectonic unit is composite of two groups of composite terranes, with neoproterozoic superposed subduction related magmatic arcs, the Paranaides and Atlantides terranes, brought together by thrust and transcurrent faults with the Brazilian Central Plate (fig. 1).

The **Brazilian Central Plate** comprises diverse exposures partly disrupted reflecting the collisional events that affected its borders (Fragoso Cesar *et al.*, 1995). This plate is preserved in two cratonic regions (the **São Francisco** and the **Rio de La Plata cratons**) each with its Meso and Neoproterozoic covers affected by collision with the adjacent terranes, which created the **Brasília** and **Araçuaí fold and thrust belts** (*see* Fuck *et al.*, 1993) and the **Ribeira disrupted belts** (fig. 1), a redefinition of the Ribeira folded belt of Hasui *et al.* (1975).

Both the Paranaides and Atlantides terranes contain continental blocks affected by neoproterozoic superposed cordilleran-type arcs (*see* Fragoso Cesar, 1991; Demange *et al.*, 1991; Machado & Demange, 1994, Machado *et al.*, in this congress; Reis Neto, 1994; Campos Neto & Figueiredo, 1995). But, till now, only the Paranaides terranes have revealed evidence of Neoproterozoic intraoceanic island arcs, developed between 940-700Ma (*see* Fragoso Cesar, 1990, 1991; Pimentel & Fuck, 1992, 1994).

The long-lived Neoproterozoic subduction-related magmatism in the Paranaides (940-550Ma) and in the Atlantides (850-550Ma) terranes suggests that the Brazilian Central Plate was bordered by two large oceans, the **Adamastor ocean** (Hartnady *et al.*, 1985) to the east, and the **Charrua ocean** (Fragoso Cesar, 1990, 1991) to the west.

If the final consumption of the Charrua ocean was related to the collision with the Amazonia Plate, and the deformation of the amazonian **Paraguay fold and thrust belt**, a great problem then arises: according to recent paleogeographic, geochronologic and paleontological studies in this belt, the age of the preceding Paraguay passive margin was Vendian, around 600Ma (*see* Boggiani *et al.*, in press). In this case, the Amazonia plate would have separated from Rodinia only at this time and closed the Charrua ocean.

Finally, considering the Meso- and Neoproterozoic evolution of the Amazonia plate and the Brazilides collage, I conclude that the tectonic units of the Brazilides collage, did not participate in the Rodinian Supercontinent. On the contrary, its evolution was "anti-Rodinian": during the Mesoproterozoic the Rodinia is a core of terrane accretion, and in the Brazilides only rifting events occurred; on other side, during the Neoproterozoic superposed magmatic arcs and collision events affected and formed the Brazilides collage whereas in Rodinia only rifting events occurred.

POSSÍVEIS CORRELAÇÕES ENTRE BACIAS PROTEROZÓICAS A SUL E SUDESTE DO CRATON DO SÃO FRANCISCO, MINAS GERAIS

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As seqüências deposicionais proterozóicas nas regiões consideradas registram o preenchimento de bacias intracontinentais e de margem passiva. As bacias mais antigas, do Espinhaço (BE) (Dominguez, 1993) e São João del Rei (BSJR) (Fig. 1), se formaram acima de embasamento continental, cujas idades mais novas (2.0-1.8 Ga), são atribuídas ao evento Transamazônico. Na BSJR, as sucessões transgressivas plataformas basais estão separadas por discordâncias intraformacionais. Para o topo são substituídas por depósitos litorâneos/lagunares que passam a fluviais entrelaçados (com fragmentos dos quartzitos basais), mostrando a gradual continentalização da bacia. Já na base da BE a continentalização resulta de quatro