

Tectono-stratigraphic compartmentation of the central sector of the Borborema Province, Northeast Brazil

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The evolution of the central sector of the Borborema Province was characterised after the collage of tectono-stratigraphic terranes during the Mesoproterozoic (Cariris Velhos/Grenville), followed in the Neoproterozoic (Brasiliano/Pan-African), by the reworking and dispersion of these collages. This sector comprises part of the External and Transverse Zone domains, encompassing seven tectono-stratigraphic domains (Piancó-Alto Brígida, Alto Pajeú, Alto Moxotó, Rio Capibaribe, Pernambuco-Alagoas, Canindé-Marancó, and Segipano) with boundaries marked by transcurrent shear zones (Fernandes Vieira, Congo/Cruzeiro do Nordeste and Pernambuco), contractional zones with oblique components (Serra de Jabitacá Nappe and Jacaré dos Homens) or stitched by Neoproterozoic granitoids (limit between Pernambuco-Alagoas and Canindé-Marancó terranes). The older units are of Archaean-Paleoproterozoic age, as in the Jirau do Ponciano Dome zone, and Floresta and Pão de Açúcar complexes. Plutonism about 1.5Ga old, characterised in the Rio Capibaribe Terrane (Serra de Taquaritinga Suite), with probable correlatives in the Pernambuco-Alagoas Terrane, corresponds to Mesoproterozoic anorogenic magmatism. The gabbro-anorthositic Malhada Vermelha Suite may be of this age or older. Supracrustal sequences, as well as syntectonic metaplutonic rocks, were deposited and emplaced in the end of the Mesoproterozoic (Cariris Velhos Event). After this time, there occurred the deposition of Neoproterozoic metasediments, ending with the emplacement of Brasiliano/Pan African magmatism.