

THE MANTIQUEIRA PROVINCE

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The Mantiqueira Province is a Neoproterozoic orogenic system located in southeastern and southern Brazil. It comprises the Araçuaí, Ribeira, southern Brasília, Dom Feliciano and São Gabriel orogens, located from the south of Bahia State to Rio Grande do Sul State.

The Mantiqueira Province developed during the Neoproterozoic Brasiliiano-Pan African Orogeny that resulted in the amalgamation of Western Gondwana Paleocontinent. The following tectono-stratigraphic subdivision was adopted for describing each orogen: a) Basement rocks older than 1.7 Ga, b) Paleoproterozoic to Mesoproterozoic intracratonic successions, c) Neoproterozoic passive margin successions, d) Magmatic arcs of intraoceanic and active continental margin settings (790 Ma to 585 Ma), e) syn-collisional granitoids, related to different collisional episodes, f) late orogenic sedimentary successions and related bimodal magmatism.

The Neoproterozoic orogenic evolution started with the diachronic consumption of the Goianides and Adamastor oceans, located at the western and eastern sides of the São Francisco paleocontinent. Subduction generated magmatic arc suites and was followed by arc-continent and continent-continent collisions. The collisional episodes were diachronic in the province; the oldest are recorded in the Apiaí-Guaxupé Terrane (*ca.* 790 Ma) and São Gabriel Orogen (*ca.* 700 Ma). They were followed by collisions in the southern Brasília Orogen, in the Apiaí-Guaxupé Terrane (*ca.* 630-610 Ma) and in the Dom Feliciano Orogen (*ca.* 600 Ma). Then collision occurred in the Ribeira and Araçuaí orogens in the period between 580 Ma and 520 Ma. Finally, the tectonic collapse of the orogens of the Mantiqueira Province took place in Cambrian to Ordovician times (510-480 Ma).