The Brasiliano Cycle of the Médio Coreau Domain, NW of the Borborema Province, Northeast Brazil.

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The Médio Coreau Domain (MCD) of northwestern Borborema Province represents an important Brasiliano Mobile Belt for the correlation between Brazil and Africa, following the assembly of West Gondwana. The basement of the MCD consists by migmatitic to granulitic gneisses with crystallization age of 2.35 and 2.27 Ga with a positive ε_{Nd} values (U-Pb zircon and Sm-Nd whole-rock). Local Mesoproterozoic age are represented by felsic metavolcanic rocks (U-Pb zircon age of 1,78 Ga).

The beginning of Neoproterozoic tectonics is recorded by continental rift sediments of the Martinopole and Ubajara groups. A U-Pb zircon age of 775 Ma from Martinópole Group (metarhyolite) records an episode of active volcanism and sedimentation within the sequence. Around 650 Ma NW thrusting joined terranes of variable metamorphic conditions; the Granja Massif in granulite facies; the Martinopole Group in upper anphibolite to greenschist facies and the; Ubajara group in lower greenschist facies. Late-collisional granite (U-Pb monazite and zircon ages at 590 Ma) constrains the transition between a compressive and transcurrent tectonic regime. Syn-transcurrent granitoids (U-Pb zircon of 574 Ma) emplacement characterize a local transtensional regime. Post-tectonic granite (532 Ma U-Pb in zircon), mark the lower age limit of Brasiliano/Pan-African Orogen in the MCD.