

STRIKE-SLIP BASINS IN BRAZIL

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A review over sedimentary areas in Brazil unravels a number of basins to which strike-slip regimes can be assigned to their basin-forming mechanism. Records of this type of basin in Brazil are scarce, despite their potential to focalize fluid migration and concentrate ore deposits, including oil and gas. The Piranhas, Água Bonita, Monte do Carmo and Jaibaras basins are associated with the Lineamento Transbrasiliano, a major Late Proterozoic strike-slip shear zone. This transcontinental feature is a well-known site of repeated strike-slip activity throughout the Phanerozoic. The basins are of Late Proterozoic and Early Paleozoic ages and might share a common evolution directly associated with the active past of the shear zone. Perhaps the best-documented strike-slip basin in Brazil is the Barreirinhas Basin located within the Equatorial Atlantic Transtensional Shear Corridor. This important feature was installed along the north-northeastern coast of the country during the Middle Cretaceous. Little doubt remains regarding to the strike-slip nature of the sedimentary basins developed. A compelling amount of evidences, coming from independent geologic and geophysical data sets, allows a clear understanding of predictable basin models. Other candidates to examples of strike-slip related basins in Brazil are a number of small wedge grabens located in the southeastern region of the country, associated with the Late Proterozoic São Paulo Shear Zone. The São Paulo, Taubaté, Resende and Volta Redonda basins are tertiary continental basins. Their origin and development is suggested to be related to locally limited reactivation of strike-slip motion along the ancient shear zone.