

## **TECTONIC CONTROL OF ALKALINE ROCKS OF SOUTHEASTERN SÃO PAULO - BRAZIL**

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This work shows the coincidence between a group of alkaline massifs and a central-type magnetic anomaly with the structural framework found in southeastern São Paulo State - Brazil. The main tectonic arrangement of ENE pre-cambrian faults and shear zones is cut by the phanerozoic NW Guapiara Alignment (GA) fracture zone. The GA was active in the Early Cretaceous, preceding South Atlantic Ocean opening, when a great deal of mafic and less alkaline magmas was produced. Fundamental features - fractures, fault zones and dyke swarms - can be followed in a 350 km long and 20 to 60 km wide zone, through São Paulo State in the N50W direction. Beyond that, it can be inferred only by magnetic lineaments over than 400 km. The Jacupiranga, Juquiá and Pariquera Assu alkaline complexes and the Registro magnetic anomaly occur where GA's deep fractures cut the pre-cambrian structures. The anomaly probably represents another alkaline body covered by quaternary sediments, but its magnetic pattern is similar to the others, suggesting a common tectono-magmatic relationship. The intrusion of large number of dykes in the GA was controlled by a system of narrow NW structures including normal and probably slip faults. In the other hand, few alkaline complexes are associated with single tectonic features. Most occur at the intersection of two main directions, prior the dikes swarms emplacement, but in the Early Cretaceous.