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Structure and volcanic history of the Tuxtla Volcanic Field, Veracruz, Mexico.

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The Tuxtla Volcanic Field (TVF) is located in the Mexican State of Veracruz rising in the midst of the western Gulf of Mexico lowlands. It spans an area of approximately 2200 sq km with a volume of 1300 cubic km, and is composed of primitive basanites, alkali basalts, mildly alkaline Hy-normative mugearites and benmoreites, calc-alkaline basalts, and basaltic andesites (Nelson et al., 1995, Contrib Mineral Petrol 122:191,211). These rocks were erupted from five large volcanoes (Cerro El Vigía, San Martín Tuxtla, Santa Marta, Yohuáctapan, San Martín Pajapan, 353 distinct scoria cones and domes, and 42 maars. Due to the composition of its rocks and its distance to the Trans-Mexican volcanic belt, and other volcanic chains to the south, its origin has posed a problem as to its origin. Some researchers argue that it is related to the subduction of the Coco's plate and some others that it is related to the tectonics of the Gulf of México. In this presentation we summarize the information on the chemistry of its rocks, its eruptive history, and more recently obtained data regarding its internal structure and its associated seismicity.