

GRAVIMETRIC AND TECTONIC INTERPRETATION OF THE LA VIRGINIA LAS ANIMAS PROFILE IN SOUTH WESTERN COLOMBIA

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The continental colombian circumpacific region is characterized by a positive gravity anomaly (the Western Colombian Gravity high), provably due to long belt of oceanic rock and by The Western Colombian Mountain range which consist mainly of Cretaceous oceanic rocks. However ,recent results in the northern part of this area suggest that this region is an exotic terrain (Choco Block) with no lithological affinity with South America ,accreted onto the South America during the Middle Miocene. A gravity and a magnetic survey and a geological recognition was made ,between the Towns of La Virginia and Las Animas in the southern hipotetic Choco Block, in order to figure out the continuity or discontinuity of the continental circumpacific region. The results of this study show geological, geomorphological and gravimetric evidences that prove a tectonic limit in the southern boundary of the Choco Block. The above fact along with the recopilation of gravimetric and geological information in Ecuador and Panama suggest the existence of two terrain in the northwestern corner of South America.