

K - AR AGES FOR THE MACAO GRANITES (SE CHINA) AND THE MAGMATIC MIGRATION AT THE YENSHIANIAN TIMES.

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The Macao peninsula and offshore islands the Taipa and Coloane are situated on the SE coast of Asia, not far from the West River (Hsi Chiang). The low lying hills of these region of about 16 km², are predominantly of medium to fine grained granitic rocks intruded by several metric - centimetric dikes of acid (aplite, pegmatite, porphyritic) and intermediate-basic rocks. Petrology and geochemistry indicate the existence of more than one sequence of igneous rocks. The strong tectonic deformation well preserved on the coastal outcrops and quarries is attributable to Yenshianian orogenie. However, the ENE - WSW and NE -SW fracturation could be related with the reactivation of the Shenzhen - Wuhua fault zone since the time of Himalayan orogenie. Isotopic K - Ar data from the most representative granitic facies suggest the existence of two Yenshianianic periods of igneous intrusion: - Jurassic (about 164 Ma), for the granitic rocks of the Macao peninsula and the Taipa island; - Cretacic for the Coloane island granite (about 90 Ma). The data also suggest the magmatic migration southward what is important to compare with other regional data.