

PROGRESSIVE STRAIN AND SIMPLE SHEAR IN THE EASTERN BORDER OF CHILENIA TERRANE. USPALLATA VALLEY. ARGENTINE

J. M. Cortés,

CONICET, Servicio Geológico Nacional, Univ. Nac. de La Plata, Argentina.

The Paleozoic structure developed in the eastern edge of "Chilenia" terrane, next to the suture zone with the Precordillera terrane was studied. Remnants of a thick sedimentary deformed prism was preserved in the Uspallata valley, located between both terranes. During Late Devonian-Early Carbonian "Chanic" Movements a progressive strain and simple shear was developed. The first stage is a western vergence thrust and fold belt. More than seven major thrust sheets and a narrow zone with tectonic imbrication of oceanic lavas were recognized. The subsequent contraction yielded flattened sheets, overturned folds and a generalized boudinage at different scales. The major structure of the last deformation stage is the "Yalguaraz magashear zone" composed by sinistral, northwest trending strike-slip faults. Flexure of previous faults and sheets, boudin rotations and tectonic extrusion of sediments toward the north are related with the Yalguaraz magashear. The deformation sequence and the age of the structures are compatible with the collisional model proposed from the geochemical and stratigraphic data. The regional geometry of the Paleozoic structures and the distribution of the lithological types suggest an indenter irregular margin of the Chilenia terrane at this latitudes.