

## **CONTINENTAL ACCRETION IN CENTRAL ASIA: PALEOZOIC GEOTECTONIC EVOLUTION OF TIANSHAN BELT, XINJIANG, NW CHINA.**

1CHARVET, J., 1LAURENT-CHARVET, S., 2SHU, L.S. and 2LU, H.F. 1U.M.R. 6530, Université d'Orléans, Orléans, France ; 2Earth Sciences Dept, Nanjing University, Nanjing, P.R. of China.

The Tianshan belt played an important role in the Paleozoic construction of Central Asia, as it represents the welding zone between the Tarim and Junggar blocks. It was built by two main tectonic events, namely the late Early Paleozoic collision and the Late Paleozoic one. Regarding the first event, new structural data, including kinematic analysis, allow us to better constrain any model of geodynamic evolution. In the Southern and Central Tianshan, are exposed, from south to north: 1) The Tarim platform; 2) A suture zone marked by ophiolitic melange and HP metamorphic rocks; 3) A continent-based Ordovician-Silurian island arc in Central Tianshan; 4) Relics of a second ophiolitic zone at the northern border of Central Tianshan. Macro and microstructures indicate that the first and major deformation was a large scale northward ductile thrusting, around 400Ma. Tarim-derived olistoliths in the Silurian flysch lead also to consider the Tarim block as the upper plate. The geotectonic model involves a southward subduction beneath the Central Tianshan island arc and the South Tianshan back-arc basin, followed by the collision-accretion of the arc and likely the small Tu-Ha continental blocks against Tarim before deposition of Lower Carboniferous molasse. The second event was also likely characterised by northward thrusting, due to the accretion of the Carboniferous Bogeda continent-based island-arc (North Tianshan) as a piece of the final collision between Tarim and Siberia. Later, the original structures were cut by large east-west trending dextral strike-slip shear zones, active during Late Carboniferous to Early Permian.