

3rd International Conference on **Earth Science & Climate Change**

July 28-30, 2014 DoubleTree by Hilton Hotel San Francisco Airport, USA

Fin ordovician events - climatic and tectonic in Ougarta Mountains (SW Algeria): New observations

Hamdidouche Rachid

Université des Sciences et de la technologie Houari Boumediene, Algérie

Basin, mountains or the Ougarta chain is located in the north-western part of the Saharan Platform. This basin was opened at the aploomb of the Pan-African suture between the West African craton and the Pan - African field of the African plate to east. It is organized into two beams oriented NW - SE and separated by Erg Erraoui; the Saoura one at the east and the Daoura one at the west. This region of Algeria is one of the places (if not the only) where Paleozoic outcrops land from the Cambrian to Devonian, continuously and without sedimentary gaps. At the end of the Ordovician, we assist to interaction of two major events. Tectonic one whose indices are numerous (slots levels, slumps, folds and reactivation of old basement faults. The second is represented by a global glaciation that occurs at the end of the Ordovician. It is expressed by deposits of glacial complex (Clay Jebel Serraf also called "argiles micro conglomeratiques", heterogeneous sedimentation represented by red sands deposits within quartz small shot and quartzite blocks). This complex has a variable thickness and is higher in the region of El Kseib where it was deposited there in favor of a glacial paleo valley. It is oriented NW - SE, combined with an ice floor with streaks of same orientation. The redeposited blocks have the same convergence. This argues in favor of the advancement of a glacier mass from SE to NW.

hamdidoucherachid@gmail.com