Geophysical Research Abstracts
Vol. 15, EGU2013-13315, 2013
EGU General Assembly 2013

Detrital thermochronology in Tajikistan

Adam Szulc
Institute of Geology, TU Bergakademie Freiberg, Freiberg, Germany (adamszulc@hotmail.com)

The Tajik Depression contains an up to 10 km thick succession of pre- and syn-tectonic sediments that span the Early Cretaceous to Pliocene. These
contain a record of exhumation and deformation in the Pamir hinterland. We present results of detrital geo/thermochronology that shed light on the evolution of sediment pathways and source area exhumation. Focusing on continuously exposed sections, we have conducted extensive sampling across the basin. These samples have yielded zircons, apatites, and white micas that were analysed by a combination of U/Pb, fission-track, and Ar-Ar. The resultant age data can be compared with a wealth of previous work on hinterland source rocks to determine sediment provenance.