Occasional Papers of the Geological and Geophysical Institute of Hungary, volume 1

11th Meeting of theCentral European Tectonic Studies Group (CETeG)

18th Meeting of the Czech tectonic Studies Group (ČTS)

HUNTEK-2013

VÁRGESZTES

Villa Park

(Western Hungary, Vértes and Gerecse Hills, Mór wine region)

24-27th April 2013

ABSTRACT BOOK

Editors: László Fodor and Szilvia Kövér

Geological, Geophysical and Space Science Research Group of the

Hungarian Academy of Sciences at Eötvös University

Serial editor – Sorozatszerkesztő
GYULA MAROS

Technikal editor – Műszaki szerkesztő
SZILVIA KÖVÉR

DTP
SZILVIA KÖVÉR

Cover design – Borítóterv
SZILVIA KÖVÉR

Published by the Geological and Geophysical Institute of Hungary –
Kiadja a Magyar Földtani és Geofizikai Intézet

Responsible editor – Felelős kiadó
TAMÁS FANCSIK
director – igazgató

This book has been subsidized by the Committee on Publishing Scientific Books and Periodicals of Hungarian Academy of Sciences
A könyv a Magyar Tudományos Akadémia Könyv- és Folyóiratkiadó Bizottságának támogatásával készült

Please, cite an abstract as: Ait Addi, A., Haas, J., Kövér, Sz., Fodor, L. 2013: Evolution of Jurassic sedimentary and tectonic boundaries in the Central and Eastern High Atlas, Morocco - Occasional Papers of the Geological and Geophysical Institute of Hungary, Vol. 1, 4-5.

ISSN 2064-0293
ISBN 978-963-671-294-5

sion in Latest Miocene and some rejuvenated deformation bands may also suggest this very young deformational event at Andornaktálya.

This research was supported by OTKA 81530.

References:

Antonellini, M.A., Aydin, A. & Pollard, D.D. 1994. Microstructure of deformation bands in porous sandstones at Arches National Park, Utah. Journal of Structural Geology, 16, 941–959.

Aydin, A. 1978. Small faults formed as deformation bands in sandstone. Pure and Applied Geophysics, 116, 913–930.

Fossen, H., Schultz, R., Shipton, Z. & Mair, K. 2007: Deformation bands in sandstone – a review. Journal of the Geological Society, London 164, 755-769. 69.

Schultz, R.A. & Siddharthan, R. 2005. A general framework for the occurrence and faulting of defor

An integrated magnetic susceptibility anisotropy (AMS) and structural geological study on Cenozoic clay rich sediments from the Transdanubian Range

Krisztina Sipos-Benkő1, Emő Márton2, László Fodor3, Mihály Pethe4, András Árpád Sipos5

1-2. Geological and Geophysical Institute of Hungary, Paleomagnetic Laboratory, siposbenko.krisztina@gmail.com, paleo@mfgi.hu
3 Geological Geophysical and Space Science Research Group of the Hungarian Academy of Sciences at Eötvös University, laszlfodor@yahoo.com
4 Eötvös Loránd University, Department of Geophysics and Space Science, mifimester@gmail.com
5 Budapest University of Technology and Economics, Department of Mechanics, Materials & Structures, siposa@eik.bme.hu

Systematic structural measurements and simultaneous measurements of anisotropy of magnetic susceptibiliy (AMS) were carried out on Cenozoic clay rich deposits from the Transdanubian Range, southern part of the Alcapa Unit. The aim was to reconstruct the structural evolution for the studied area and establish the connection of the stress fields and the fabric of the sediments by studying outcrops with both methods. The measurements of AMS revealed dominant foliation with weak lineation for Oligocene and Eocene sediments. The directions of AMS lineation are aligned with the directions of the extension of the oldest deformation phase having affected the given outcrops. This relatively oldest phase is mostly extensional or strike-slip type deformation with NE-SW to NNE-SSW extensional axis. At present we are working on the problem of establishing a statistical relationship between the AMS lineation and direction of the extension calculated from microtectonic measurements

The magnetic fabrics of the studied Late Miocene sediments are foliated without consistent lineations on locality level, which means that they do not reveal any sign of tectonic deformation. However, the brittle structural elements, mainly joints and small-displacement faults without striae, in few late Miocene outcrops indicate more than two stress fields although their direction and character are relatively poorly constrained. All of the localities exhibit pure compression, transpression or a strike-slip stress field (this latest is always the youngest one). This coincide with other independent data (such as morphotectonics, space geodetic data (GPS), recent stress data), which prove the inversion of the Pannonian Basin.

Financial support from Hungarian Scientific Research Fund (project no. OTKA K 105245, 81530) is acknowledged.