



11-15 December 2006, Monday - Friday

Moscone Center West, 800 Howard Street

San Francisco, CA, USA

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HR: 09:30h  
AN: **T41E-07 [Abstracts]**  
TI: **Mio-Pliocene Extension in Central, Onshore Greece: Initial Field Investigations in the Aliveri-Kymi Basin, Evia**  
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AB: Recent work in central Greece and the Peloponessus suggests that a transition in extensional style from arc- parallel detachment faults to arc-perpendicular, dominantly high-angle normal faults occurred during late Miocene to Pliocene time. GPS data show that a broad band of active deformation, called the Central Hellenic Shear Zone, currently connects right-lateral shear along the North Anatolian Fault through the Hellenides to the right-lateral Kefalonia transform fault. Miocene and lower Pliocene basins within the Central Hellenic Shear Zone record the transition from arc-parallel extension to approximately east-west trending steep fault systems (such as the structures that bound the Gulf of Corinth) that crosscut the older structures of the Hellenic arc. We present the results of initial field investigations in the easternmost part of the Central Hellenic Shear Zone in central Evia. Here, an early Miocene to Pliocene/Pleistocene nonmarine basin, the Aliveri-Kymi basin, appears to have been formed and deformed by Miocene and Pliocene/Pleistocene extensional faults with low to moderate dip.  
DE: 3040 Plate tectonics (8150, 8155, 8157, 8158)  
DE: 8002 Continental neotectonics (8107)  
DE: 8109 Continental tectonics: extensional (0905)  
DE: 8170 Subduction zone processes (1031, 3060, 3613, 8413)  
SC: Tectonophysics [T]  
MN: 2006 Fall Meeting