

FORCE 2017 Field trip to the Gulf of Corinth

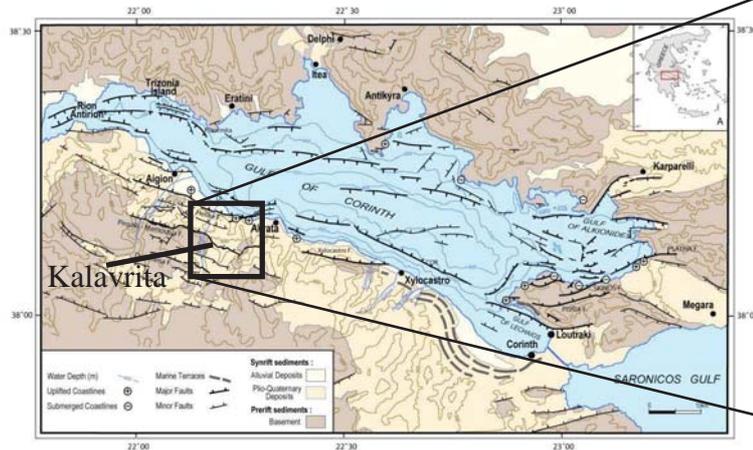
SEDIMENTARY AND STRATIGRAPHY GEOPHYSICAL METHODS STRUCTURAL GEOLOGY

*Rift tectonics vs. sedimentation Fault block scales and geometries Sedimentological variations and architecture
Seismic and subseismic deformation Fault properties and fluid flow Analogues to NCS Seismic Scale Examples*

Location/accomodation: The field trip is located on the southern margin of the Gulf of Corinth basin. Accomodation will be at the Filoxenia Hotel (www.hotelfiloxenia.gr) in the picturesque mountain village of Kalavrita approx. two hours drive from the Athen airport.

AREA OF FOCUS

OUTLINE OF THE CORINTH BASIN (Moretti et al. 2003)



The photo on the left is taken from a field trip stop just above the Kerpini fault, only 2 km to the north-east of Kalavrita. From this location, the Beta fault block is seen towards the west. Mapping of layering is possible and will be undertaken on the field trip, revealing significant “down-to-the-north” faults that offset the blocks pre-rift sedimentary section.

Geology: The Corinth Rift is situated in a back-arc rift configuration set up by the plate tectonic movements between the African and Eurasian plates. Earthquake activity that relates to extensional tectonics is ongoing in this area. Syn-rift Miocene to recent sedimentary sequences rest unconformably on top of Cretaceous and older strongly deformed basement rocks.

The Gulf of Corinth gives excellent exposures of fault blocks and related continental to shallow-marine, pre- and syn-rift deposits. The excursion will demonstrate the complexity of rifted margins with respect to timing of fault movements, nature of unconformities, large and small scale heterogeneities, and the resulting geometries of tectonic and depositional elements. Emphasis will be put on analogies to rift events and geographical locations on the Norwegian Continental Shelf.

Duration: The field trip is tentatively set up to take place in week 42 from Monday 16. to Thursday 19. October.

Program: Monday: travel and introduction; Tuesday: field work; Wednesday: field work; Thursday: return.

Budget: 7500 NOK. Minimum number of participants 8, maximum 15.

Excursion Guide: Einar Sverdrup, Exploration Advisor (MOL Norge).

Other: Air-fare (4000) and diet (3000) to be covered by traveller (estimated costs in brackets). All other costs covered by field trip fee. Recommendation and pricing regarding booking of plane-ticket will be given as soon as dates are set.

How to sign up: Sign up for the field trip using the following link: www.force.org/kalavrita