



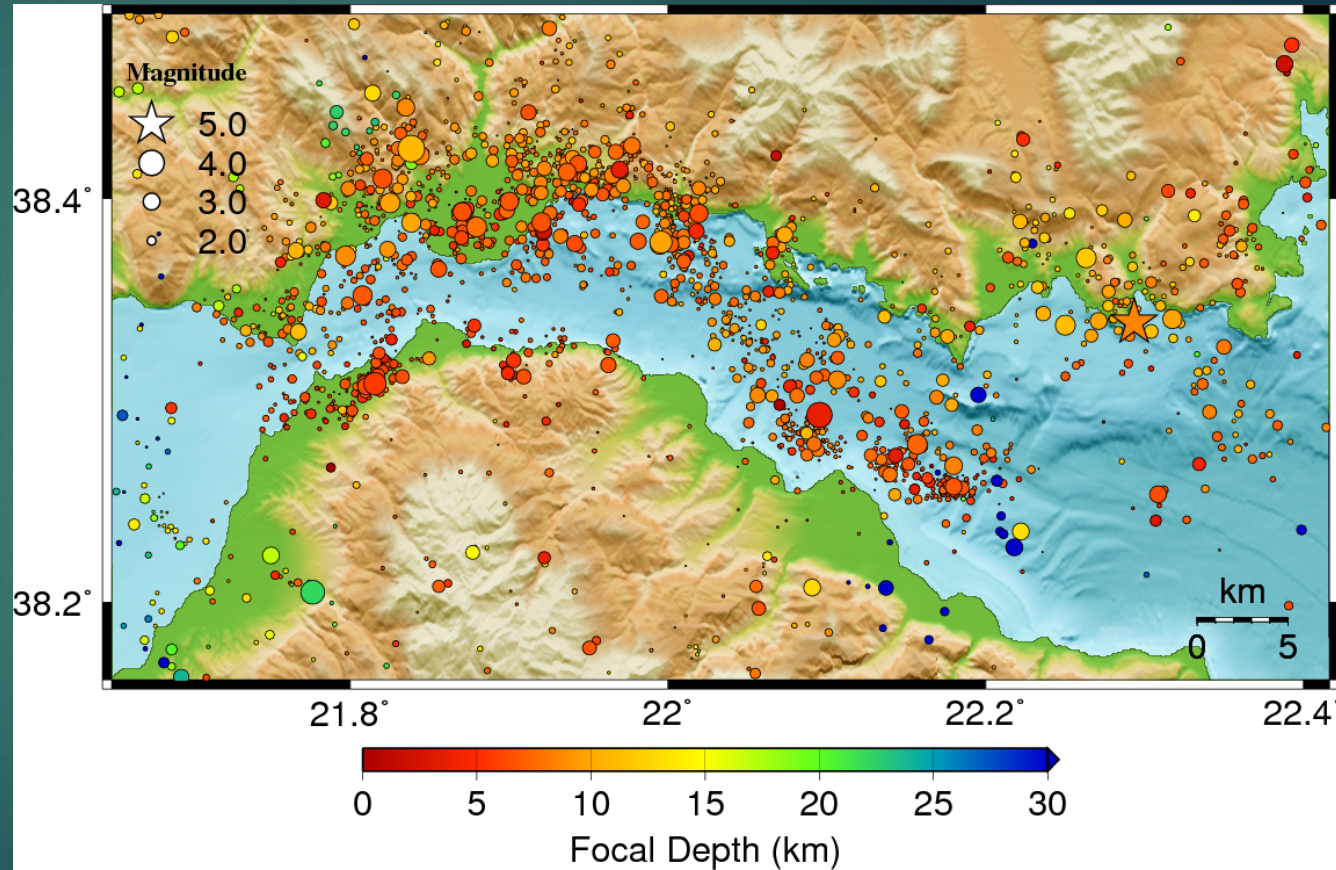
National & Kapodestrian  
Univerisity of Athens

# Setting a COST proposal for NFOs & CRL

**NFO meeting @ Postojna November 2019**

# The CRL NFO - Seismicity

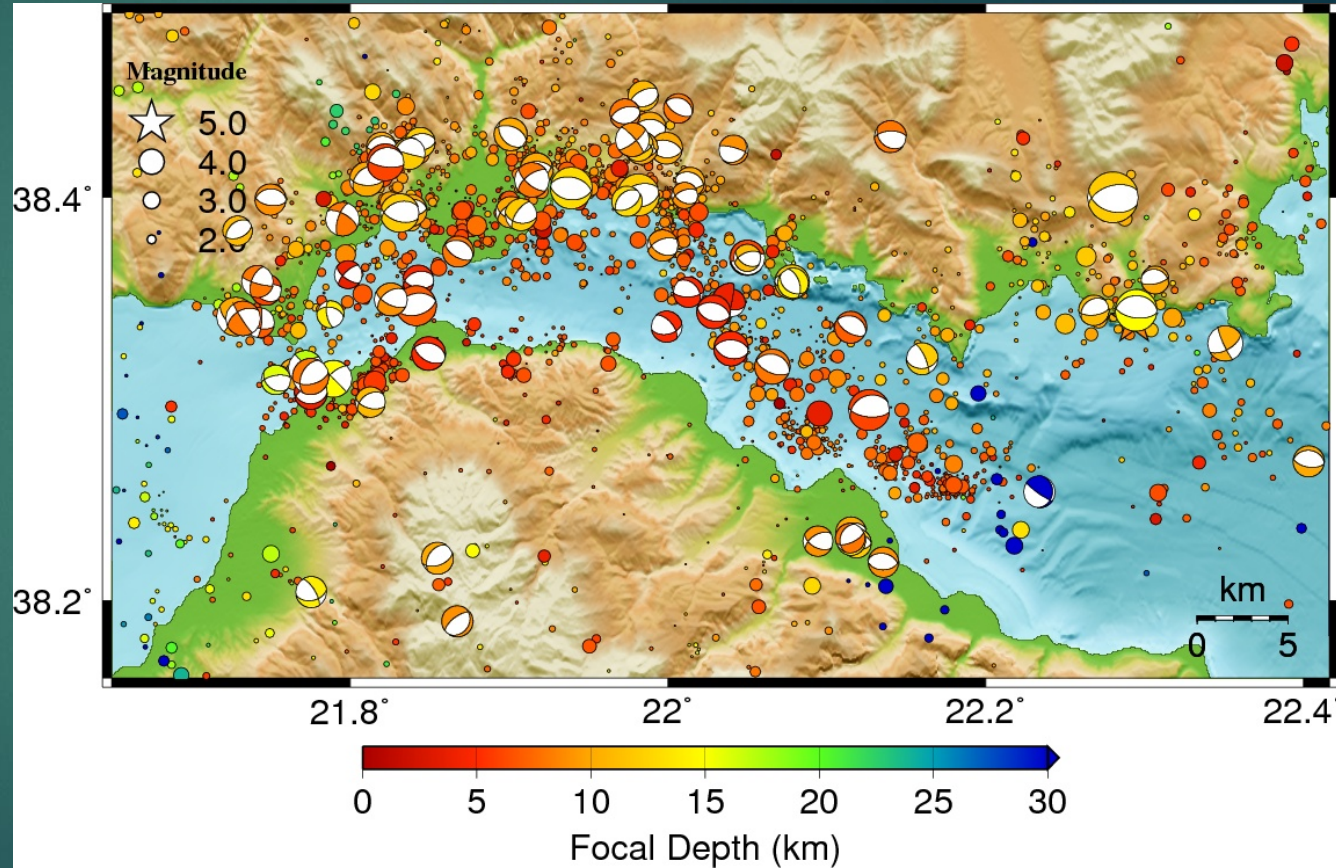
- ▶ Events for the period January 2018 – April 2019
- ▶ Manual locations obtained in daily basis.
- ▶ The largest event is the M=5.2 Itea earthquake that occurred on 30 March 2019.





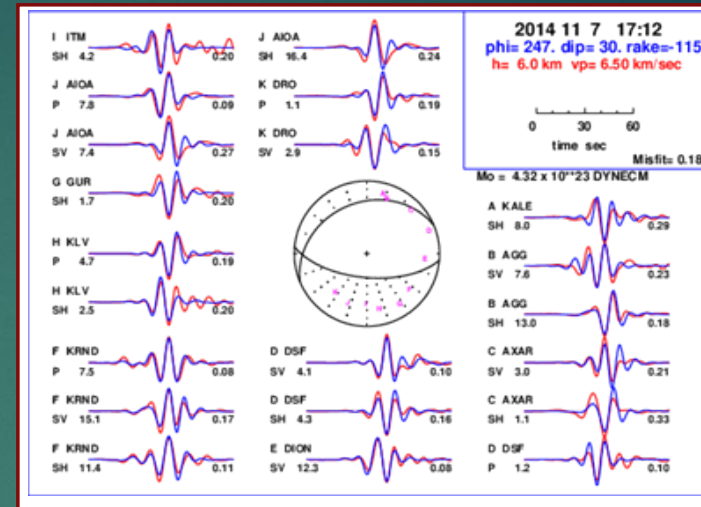
# The CRL NFO – Focal Mechanisms

- ▶ Focal mechanisms for events for the period January 1995–April 2019
- ▶ Fault plane solutions have been determined for more than 70 events with  $M_w \geq 3.5$  in the CRL region
- ▶ The vast majority reveals normal faulting

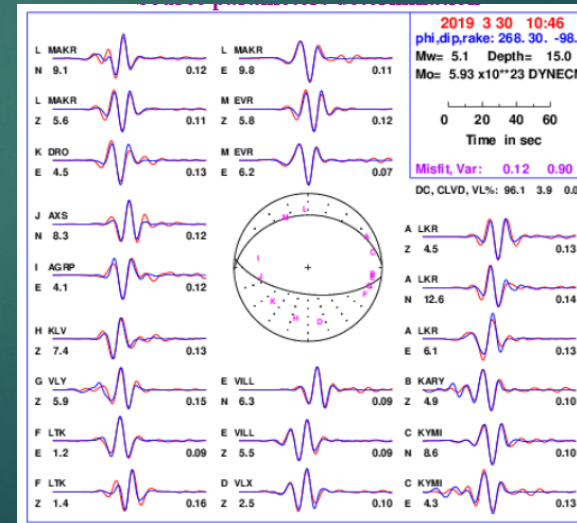


# The CRL NFO – Focal Mechanisms

Aigio (2014) –  $M=5.0$

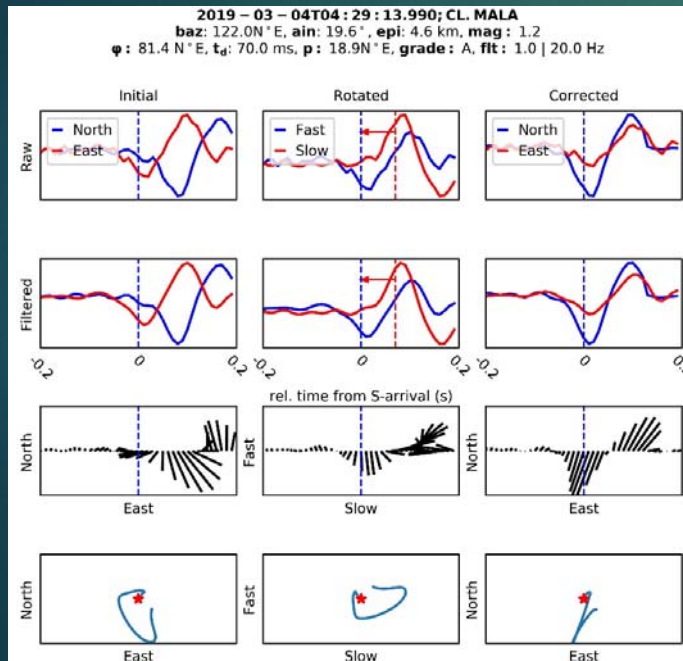


Itea (2019) –  $M=5.2$

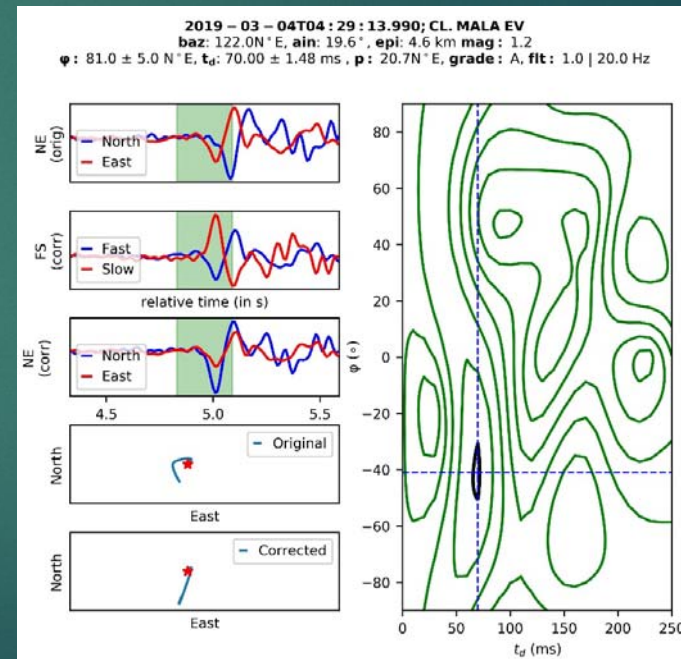


# CRL NFO – Seismic Anisotropy

The Pytheas Software is an open-source algorithm, freely available at Github. Pytheas was inspired by the analysis of the CRL NFO data. It offers a complete solution that integrates manual and (partially or fully) automatic methods for shear-wave splitting analysis. Pytheas offers the implementation of the following methods: (a) Visual inspection of polarigrams and hodograms (manual), (b) Rotation-Correlation (semi-automatic), (c) Eigenvalue (semi-automatic) and (d) Minimum Energy (semi-automatic). Moreover, it automates the last three operations by using Cluster Analysis. Pytheas (Version 0.1.0, April 2019) can be accessed through its dedicated repository in GitHub (<https://www.github.com/isingos/pytheas-splitting>)



Summary plot of the analysis with the Manual (MAN) method



Summary plot of the analysis with the Eigenvalue (EV) method