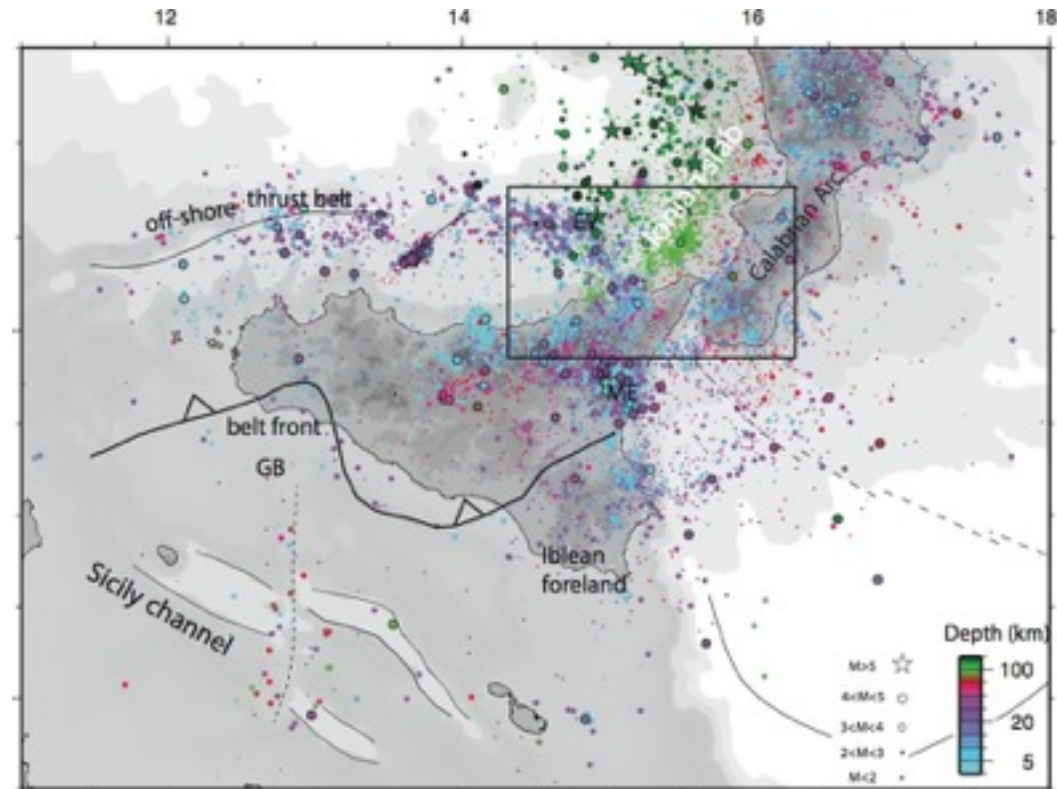
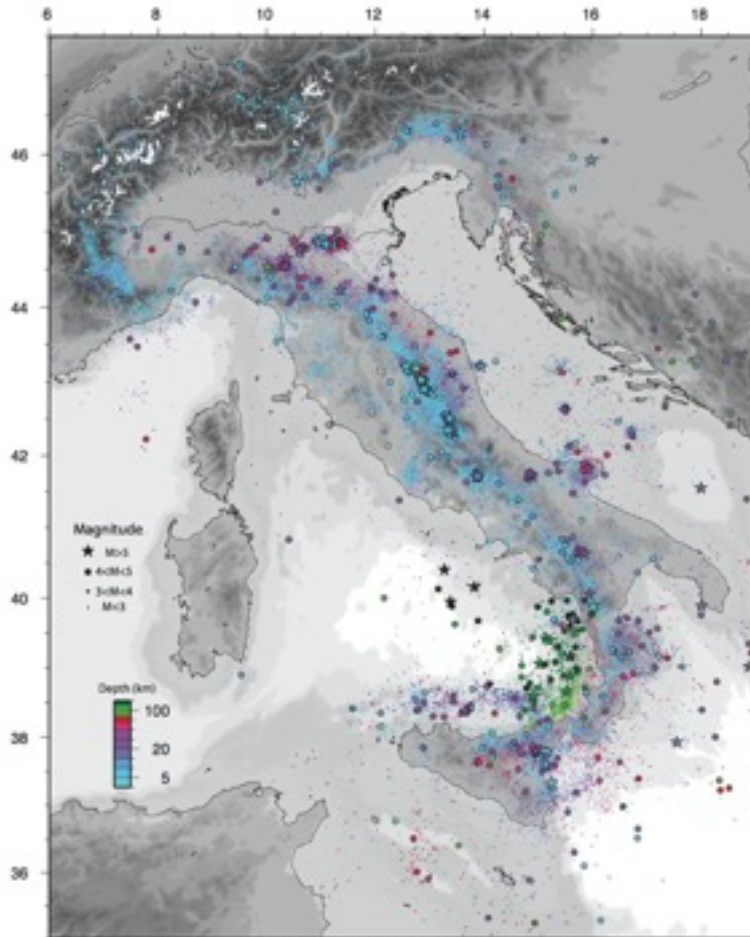


# The Messina Straits candidate supersites

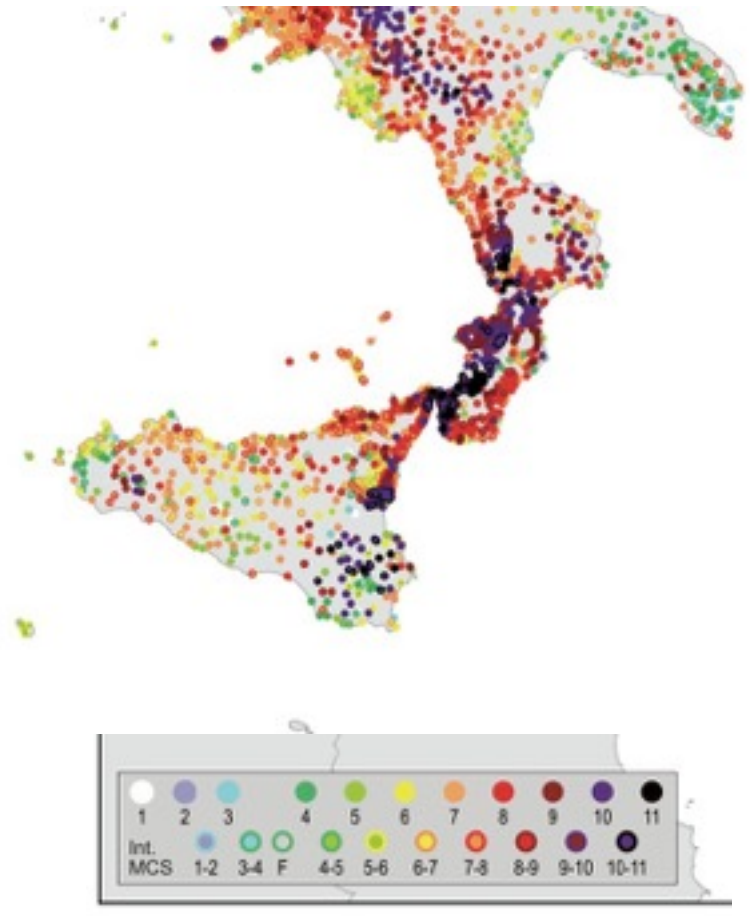


1980-2014 instrumental seismicity

# The Messina Straits candidate supersites

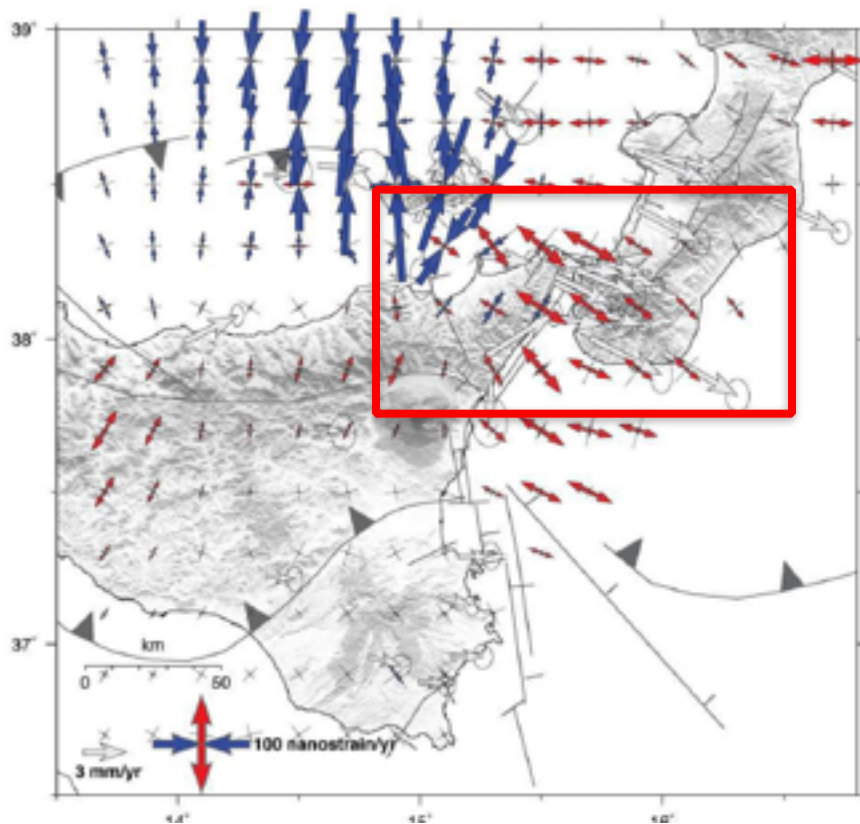
Strong Motivations:

i) Large earthquakes (1908) and high seismic hazard

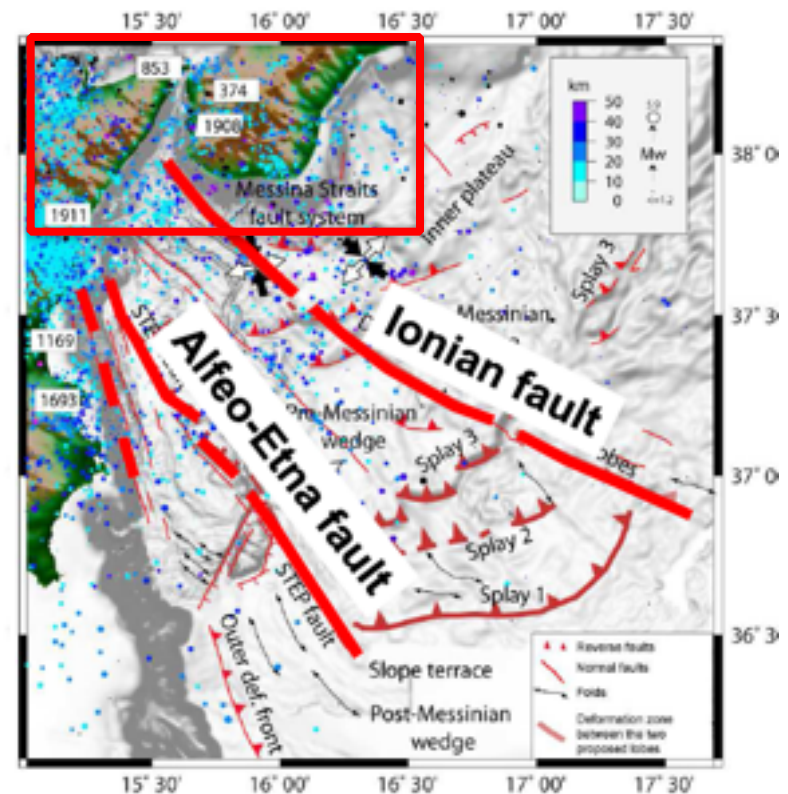


# Strong Motivation:

## ii) Active extension and lithospheric structures



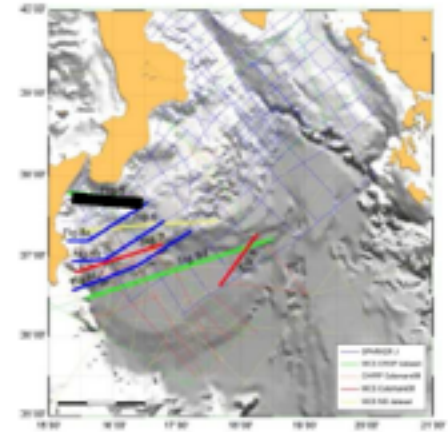
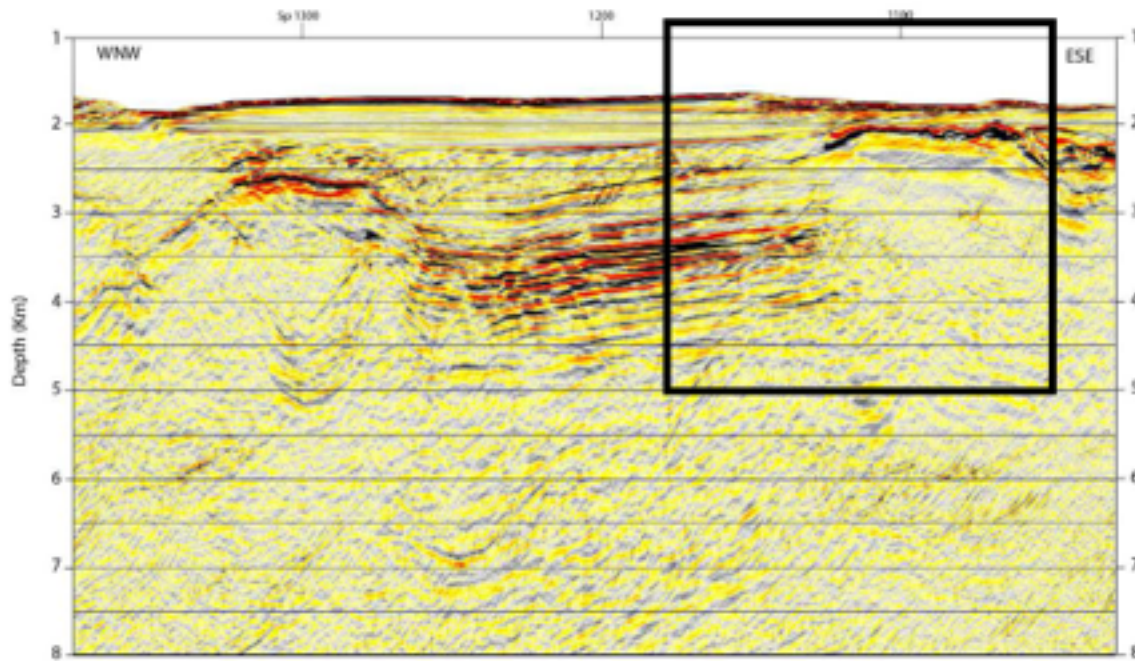
Serpelloni et al. (2010)



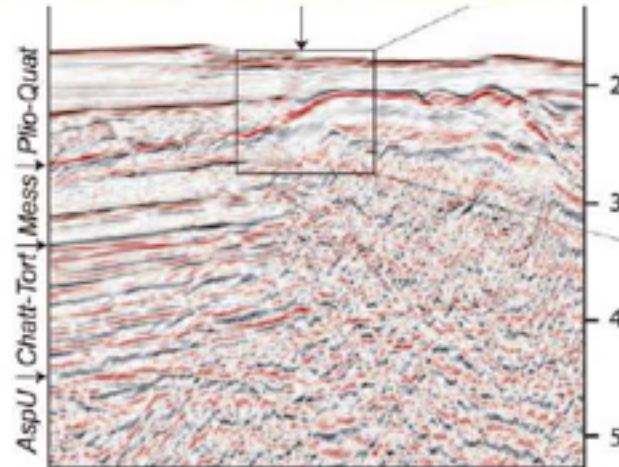
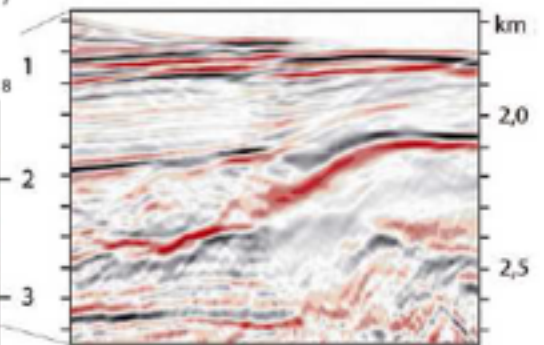
Polonia et al., 2012 NHESS



# THE IONIAN FAULT IN THE MESSINA STRAITS REGION



0 Km

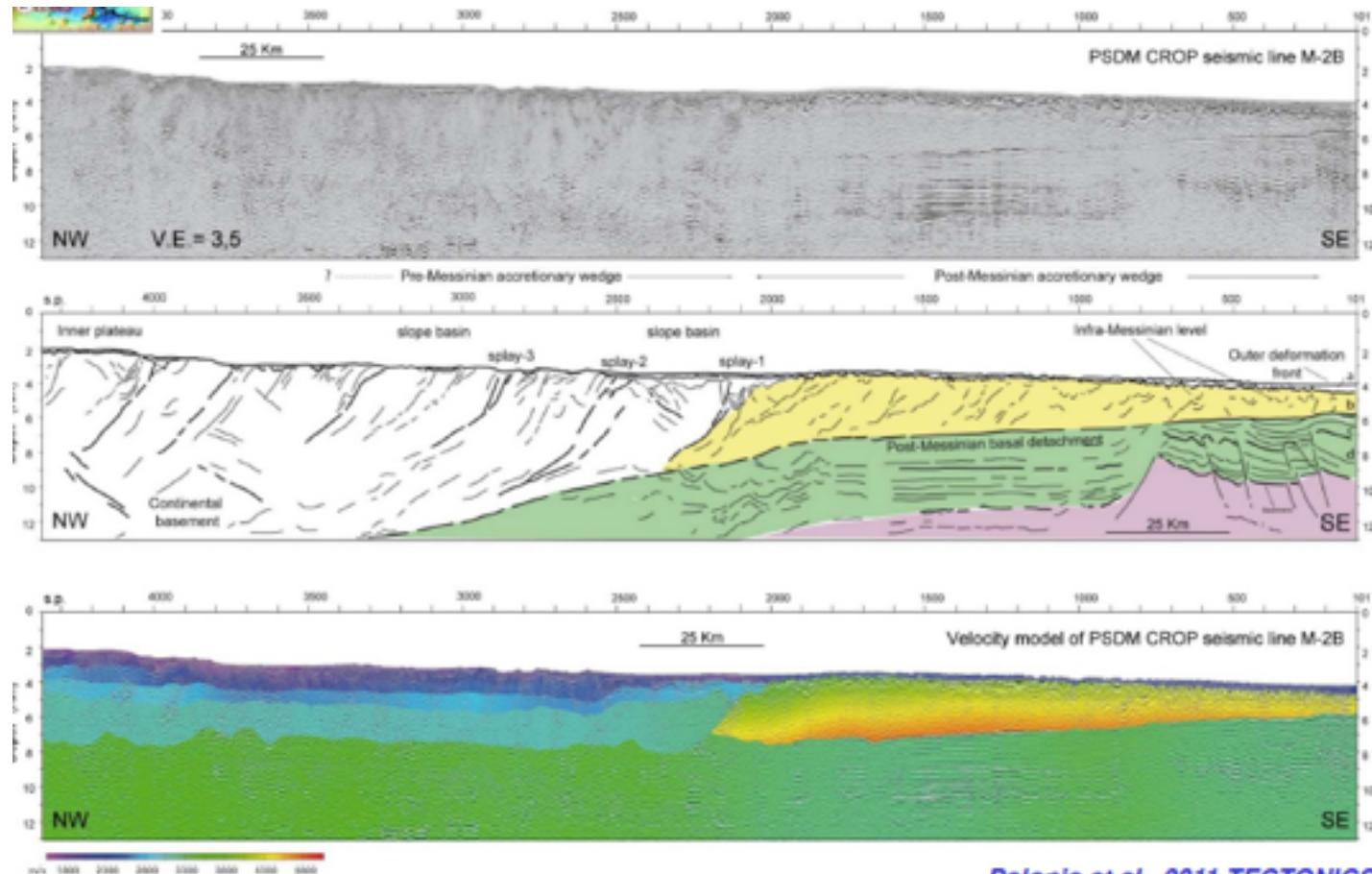


*Polonia et al., 2012 NHESS*

**Is this fault the source of the 1908 earthquake?**

# Strong Motivation:

## iii) Still active compressional front

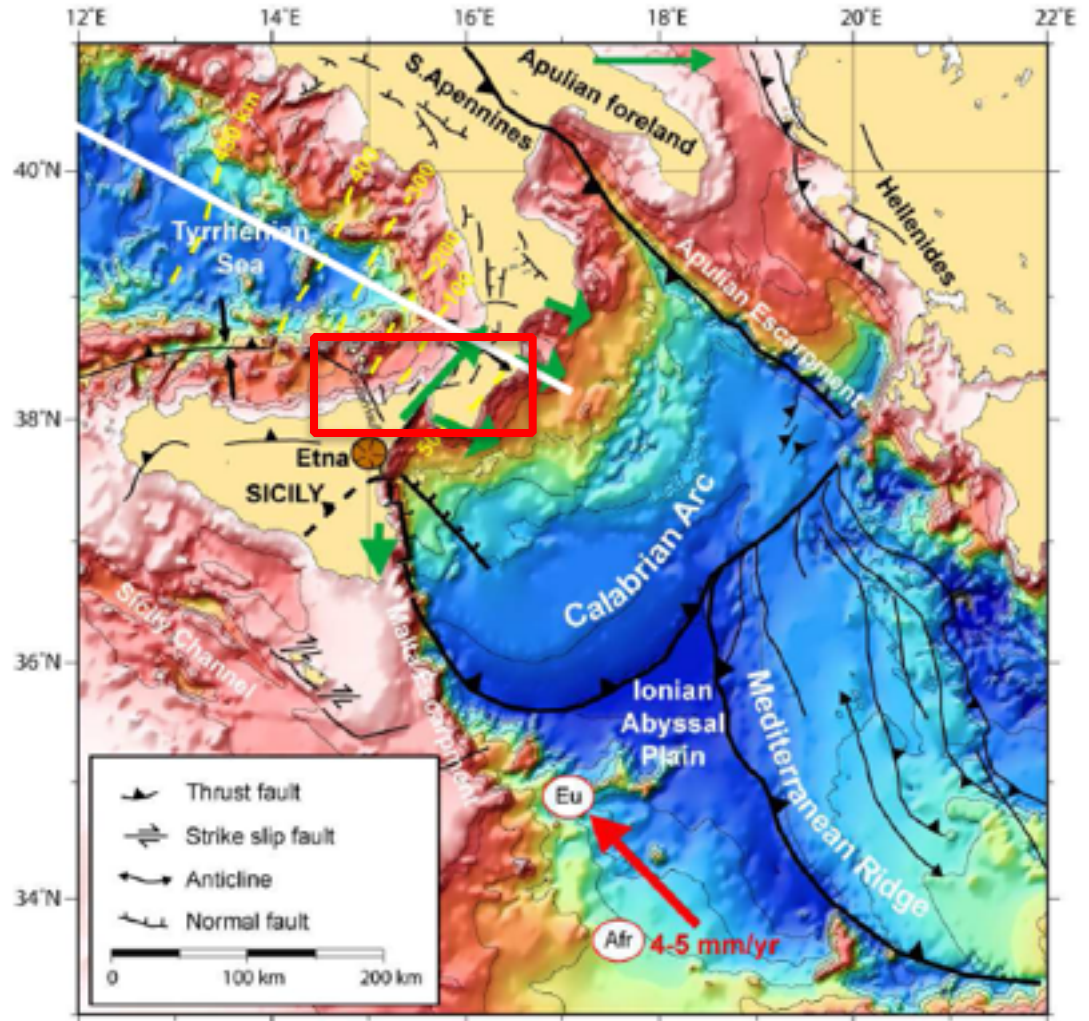
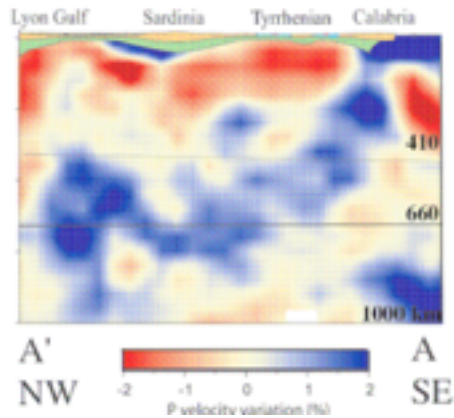




# The Messina Straits candidate supersites

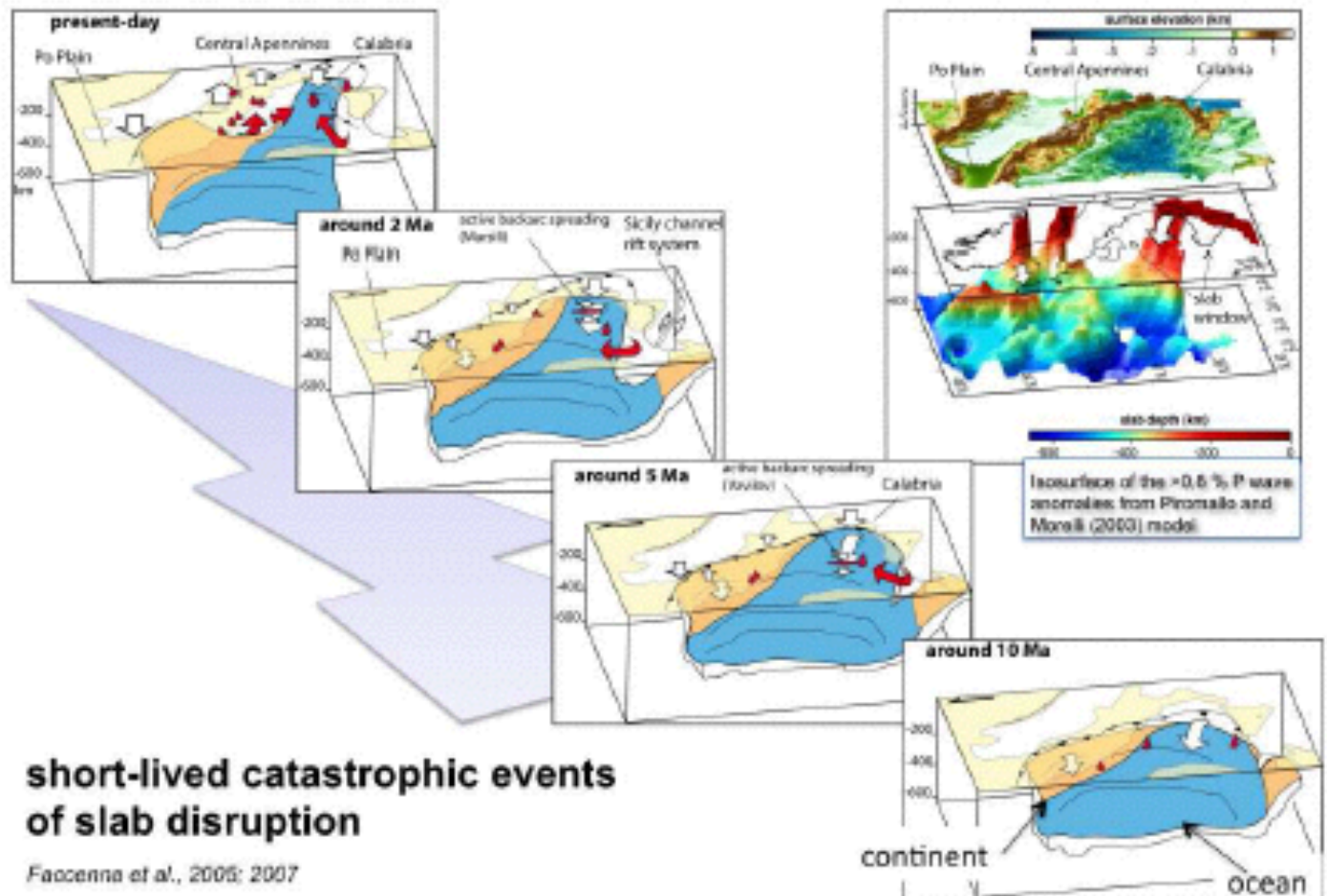
Strong Motivation:

iv) Slab retreat and unique geodynamic



# Strong Motivations:

- v) Slab terminus and edge slab effects, including volcanism

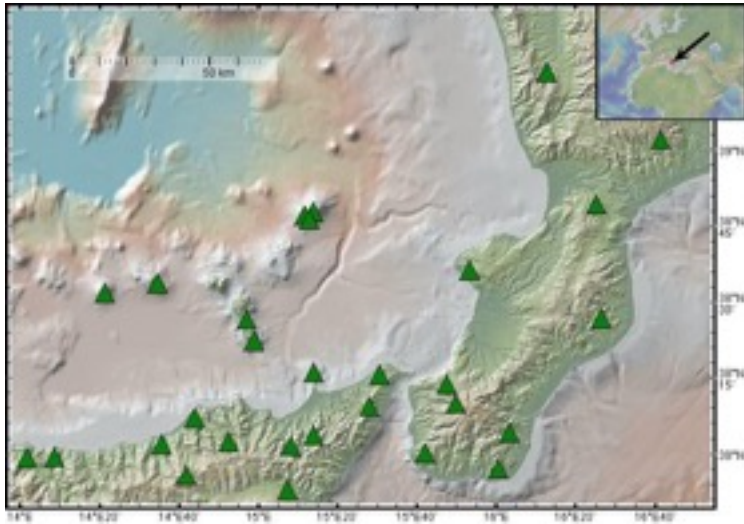


**short-lived catastrophic events  
of slab disruption**

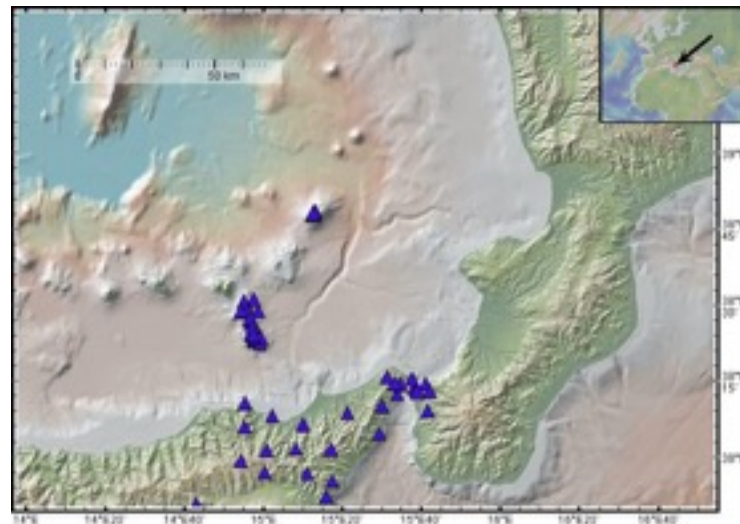
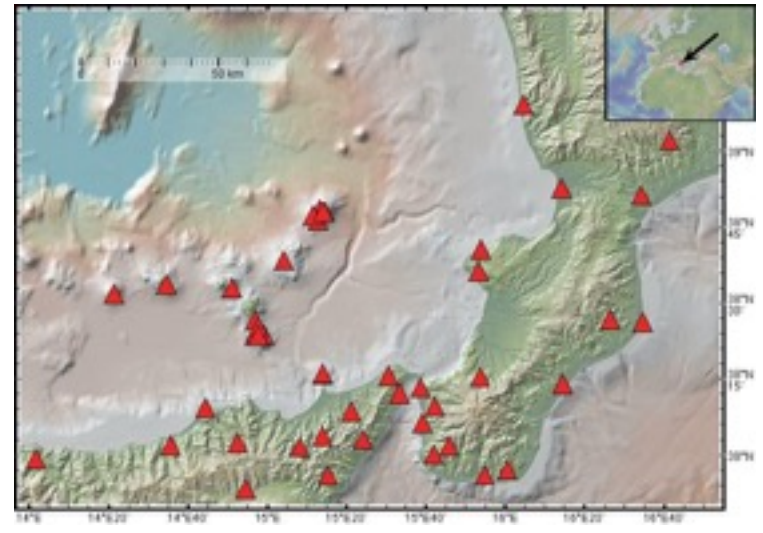
*Faccenna et al., 2005; 2007*

# Infrastructures at INGV: In Situ Data Permanent Seismic and GPS net

Broadband seismic network (INGV)



GPS network (INGV)



Local GPS sites



# Infrastructures at INGV: data from temporary seismic experiments

