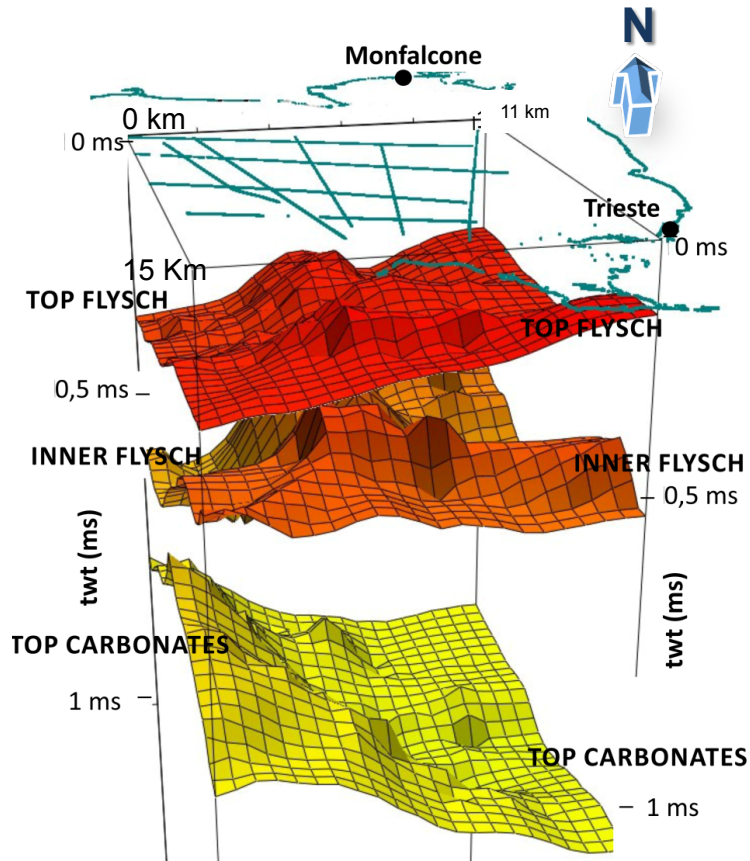
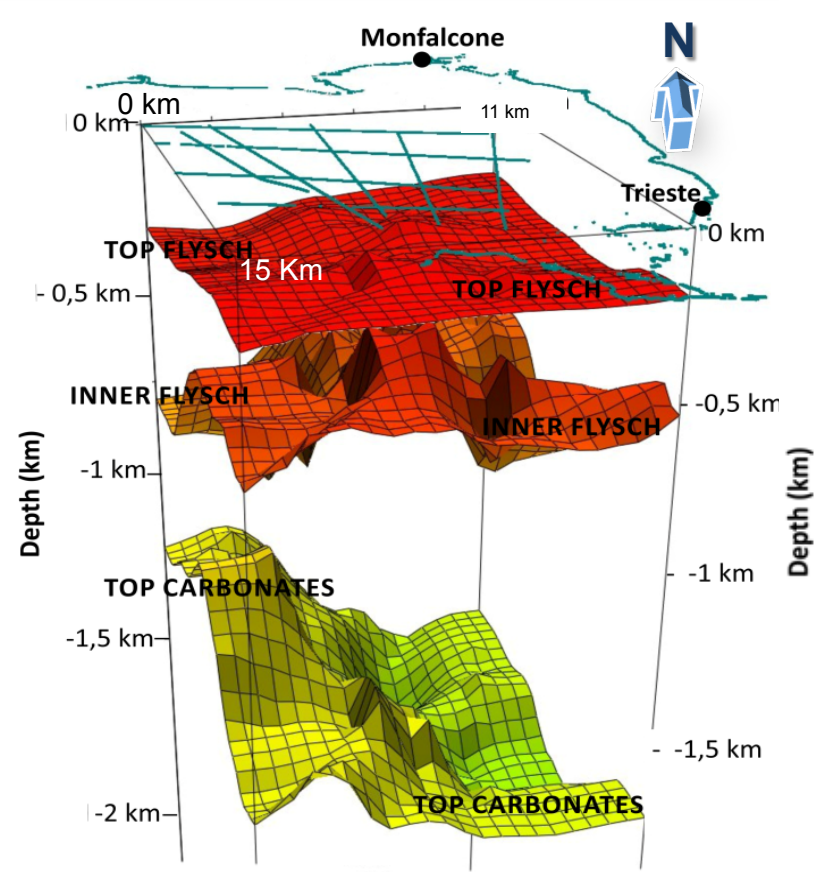


3D Time and Depth Surfaces

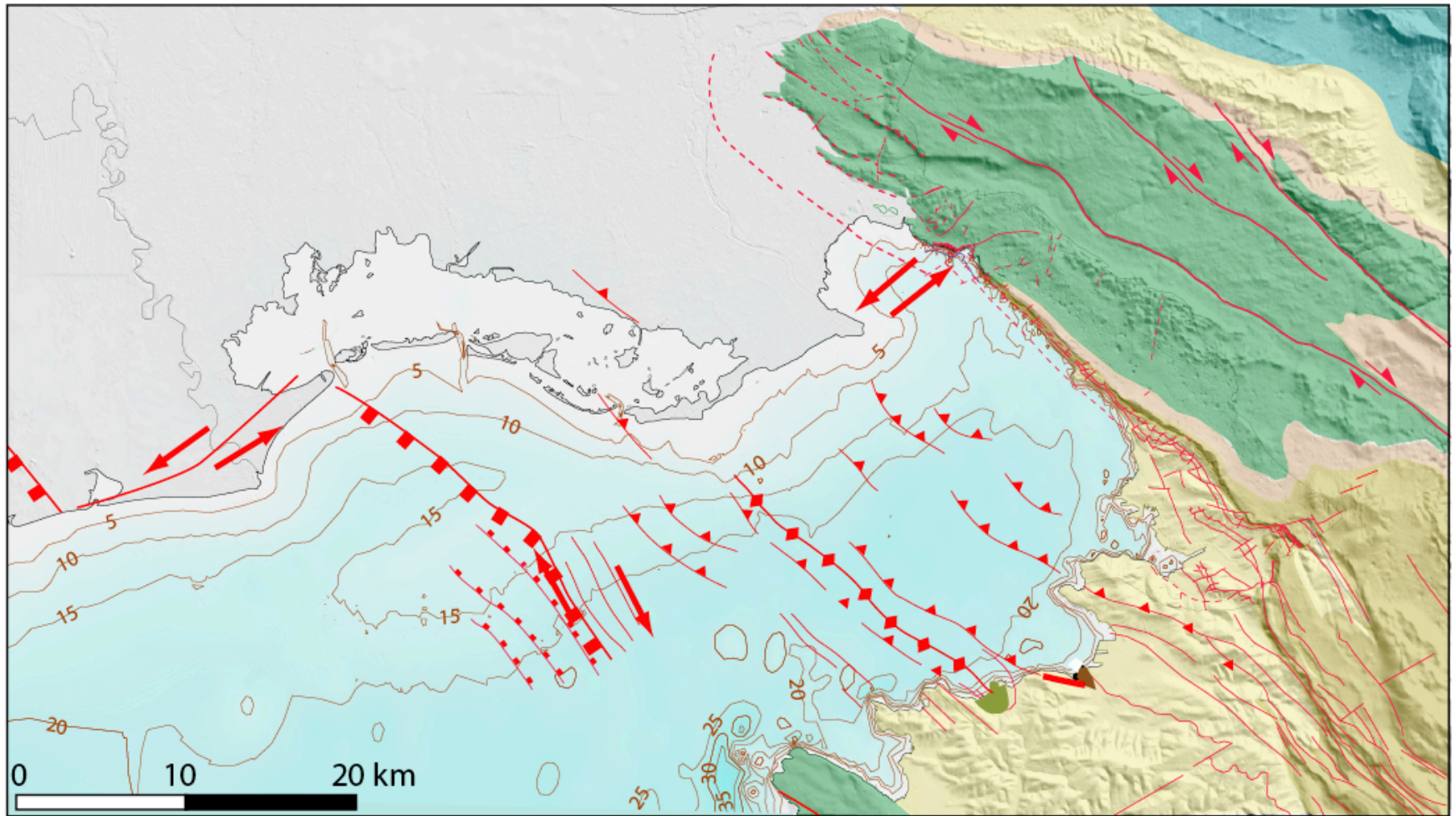
- 3D time surfaces from interpretation of the post-stack time migrated profiles



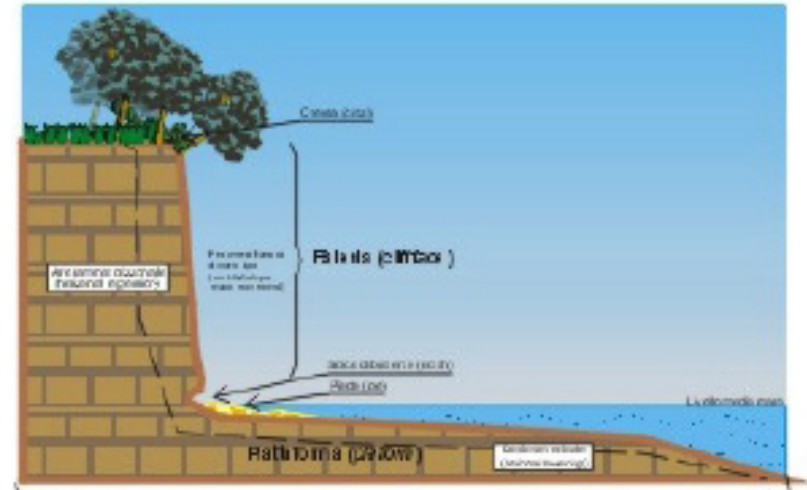
- 3D depth surfaces Time to depth conversion by using interval velocities obtained from MCS data processing in time domain



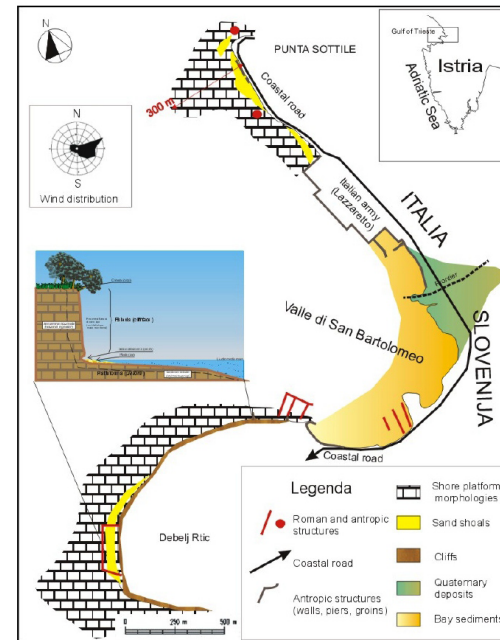
Vertical exaggeration ≈ 15



Terrazzi marini nel flysch

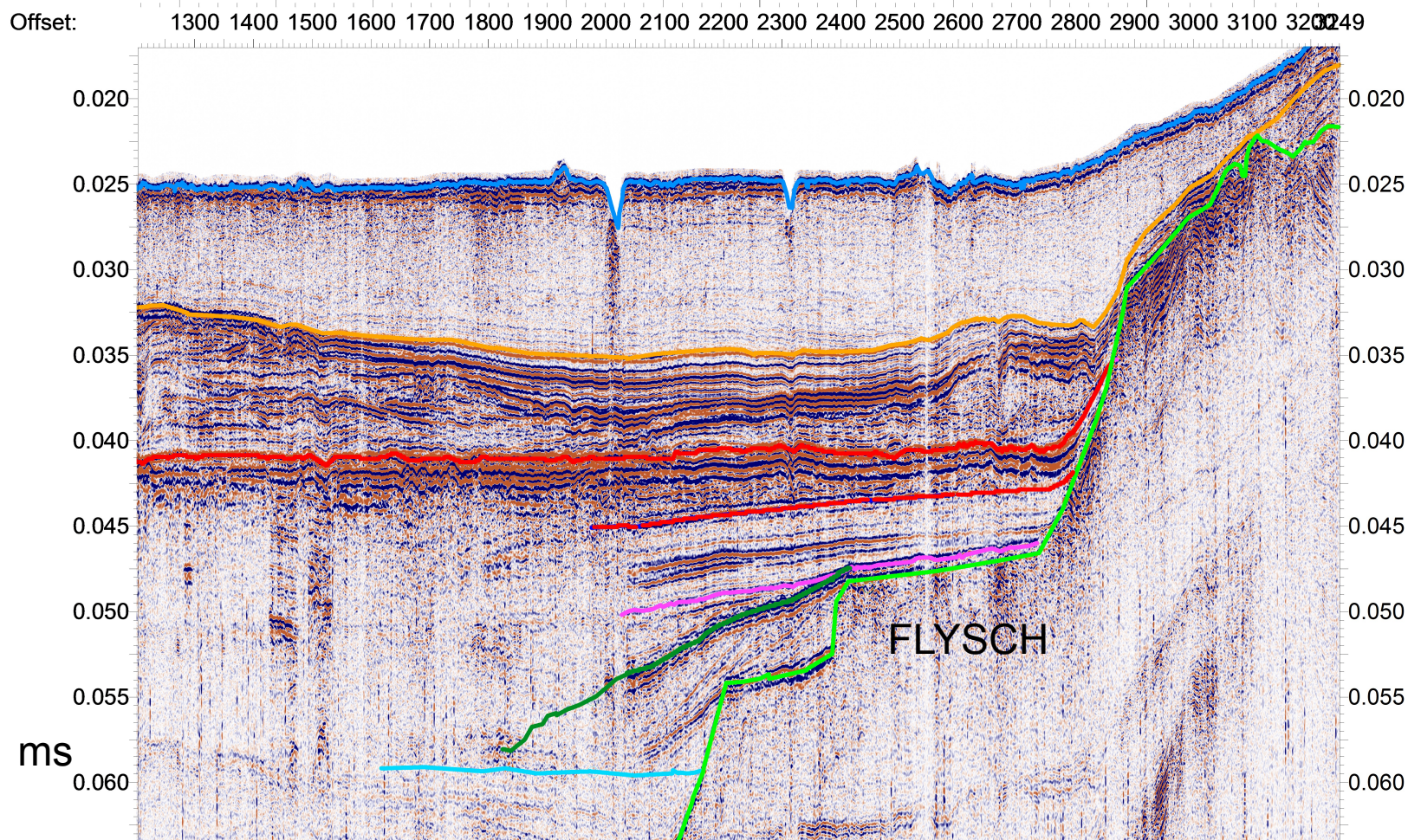


Furlani, 2003



Terrazzi marini nel flysch Tirreniano (probabilmente Mis 5e - 125.000 anni)

subsidenza media di 0,36 mm/anno



Terrazzi marini nel flysch

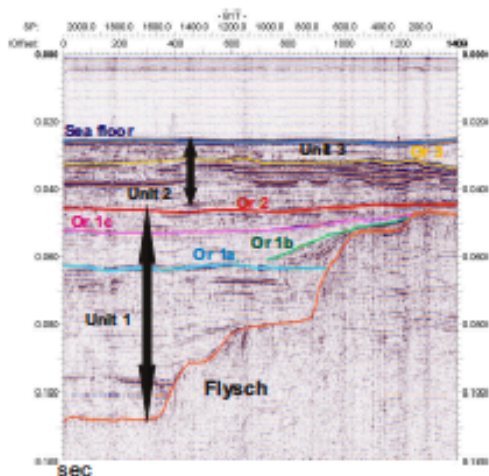


Fig 5. Seismic profile B1T, perpendicular to the coastline near Miramare.

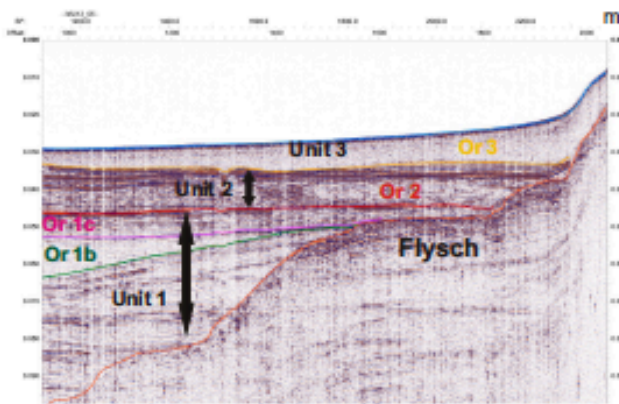


Fig 6. Seismic profile Mu-05, perpendicular to the coastline in front of Punta Sottile foreland

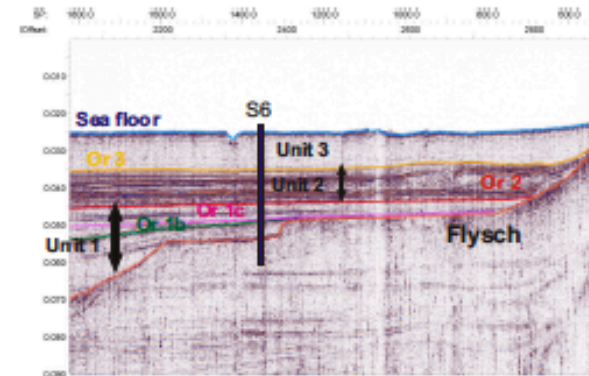


Fig 7. Seismic profile GT13-B16, perpendicular to the coastline near mob VII.

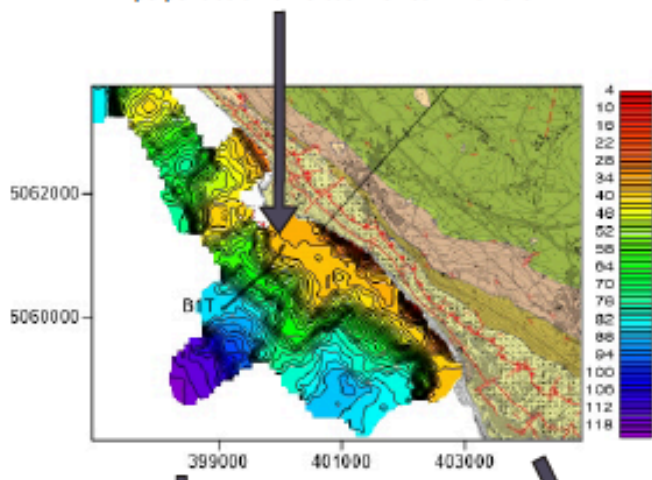
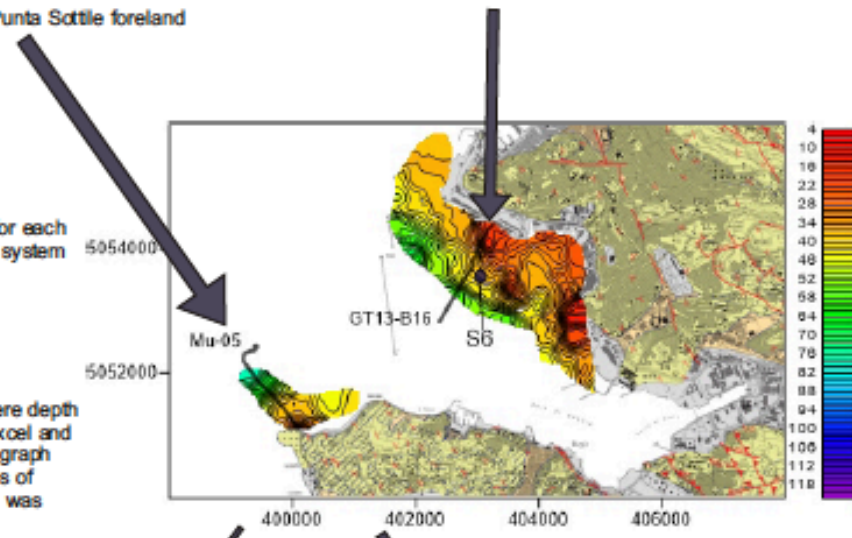
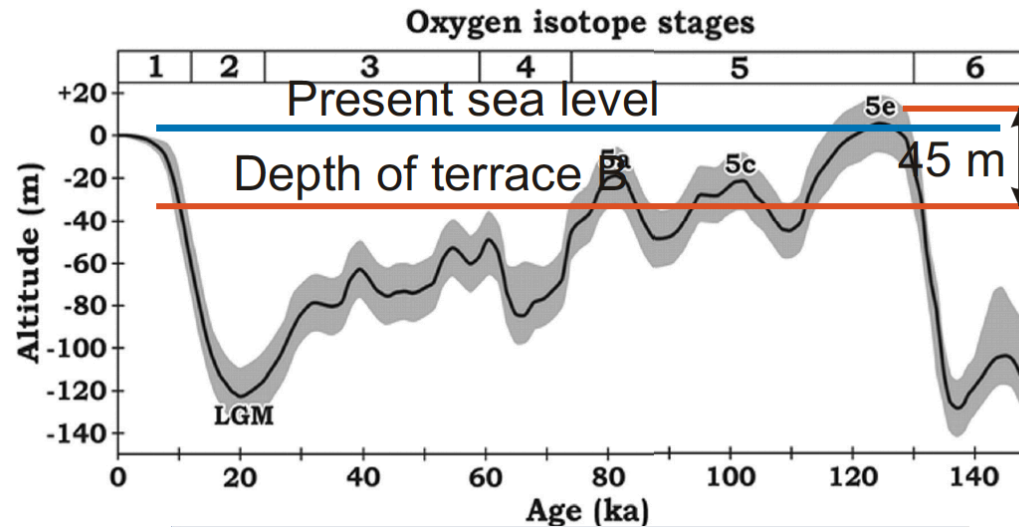


Fig 9. The top Flysch horizon data were interpolated using Surfer software and for each dataset was created a map showing the system of marine terraces.

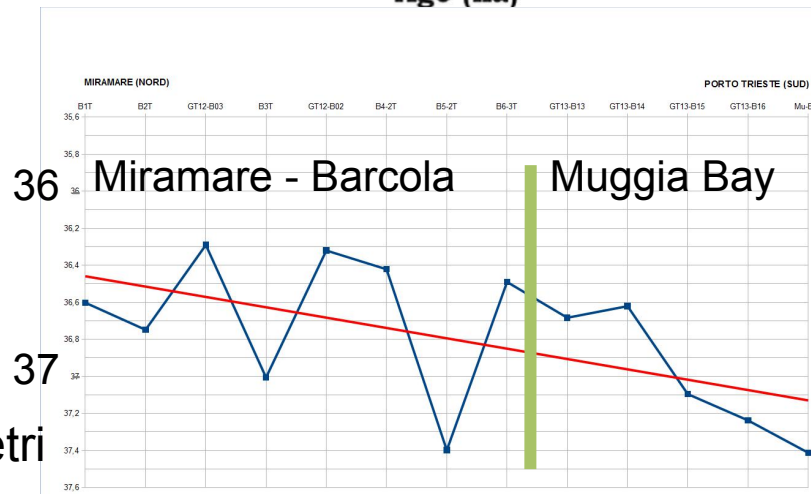
Fig 10. The top Flysch horizon data were depth converted, exported from Kingdom to Excel and for each seismic profile was created a graph showing top Flysch trend. Eleven levels of terraces were identified and each level was classified using alphabetic letters.

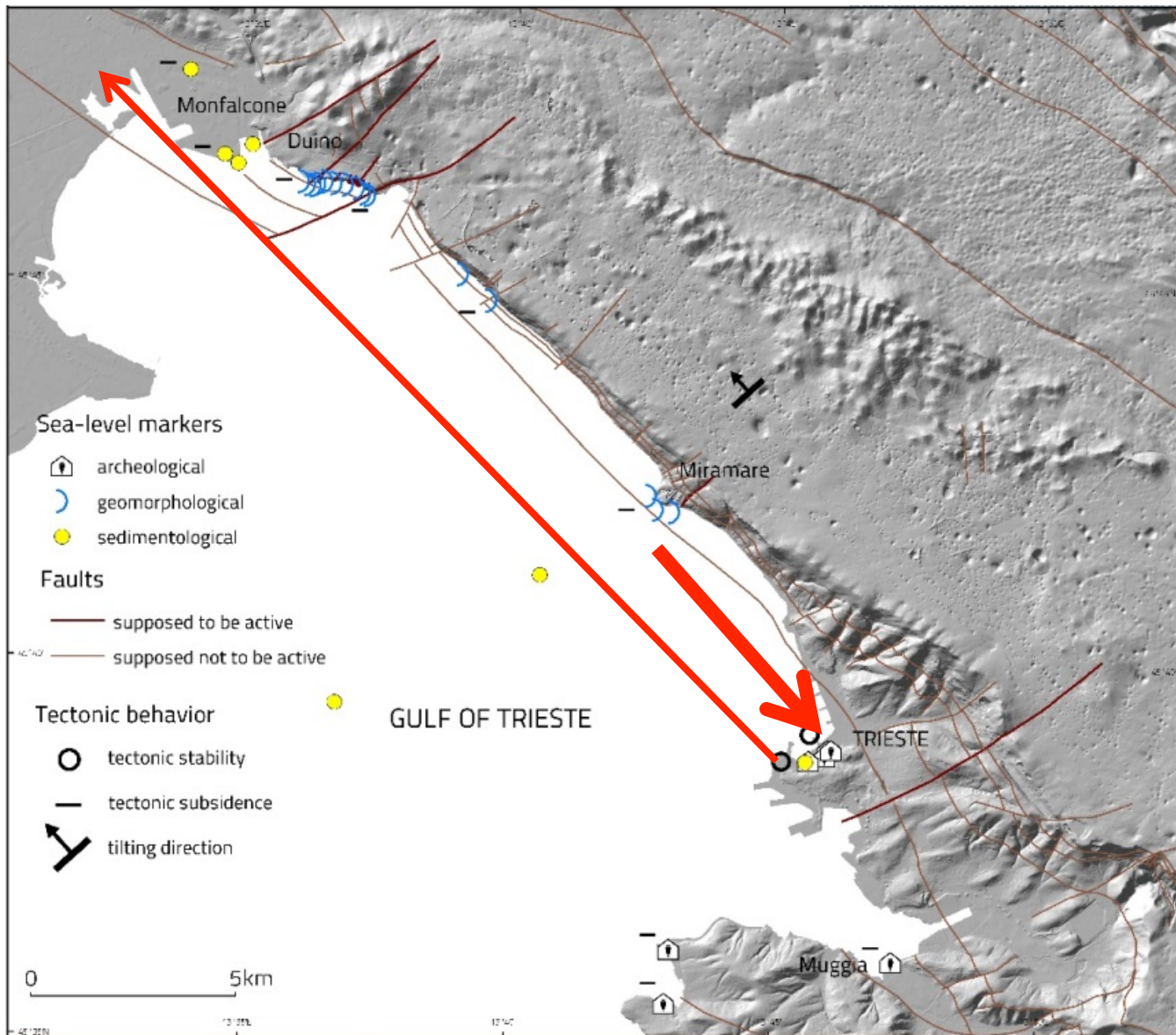


Terrazzi marini nel flysch Tirreniano (probabilmente Mis 5e - 125.000 anni) subsidenza media di 0,36 mm/anno



Profondità
terrazzi
nel flysch
metri





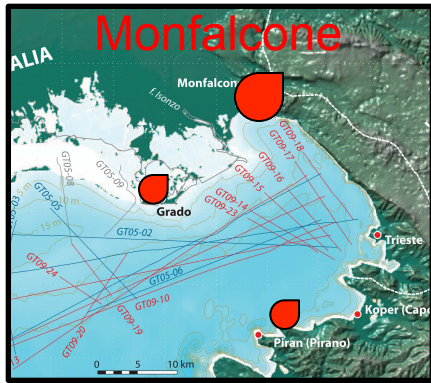
Carta morfo-neotettonica - Biolchi et alii, 2015

La risorsa geotermica



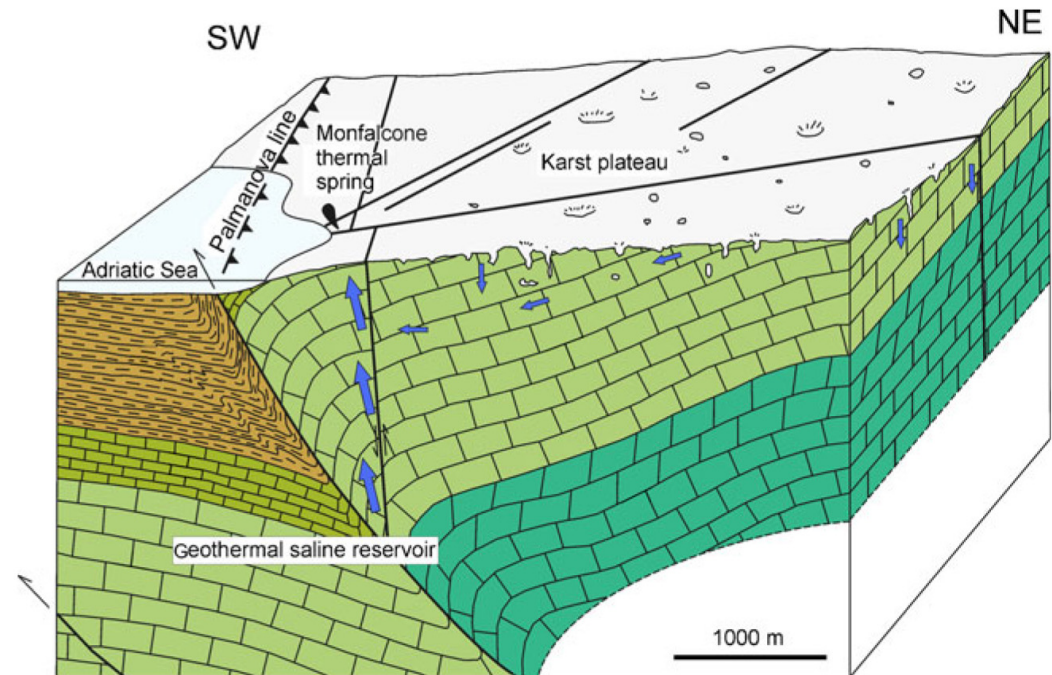
Tavola Peutingeriana (Biblioteca Nazionale di Vienna)
Copia del XII-XIII secolo di un'antica carta romana del IV secolo

Acque termali: le terme Romane di Monfalcone



Temperatura acqua:
32.6° – 39.8°C

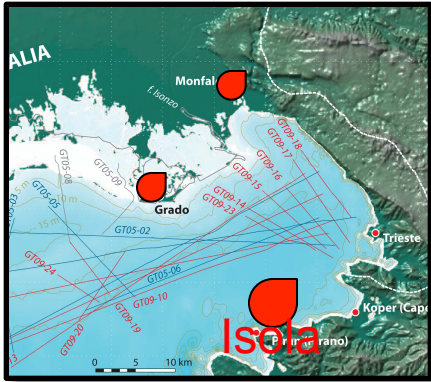
Acque saline mioceniche



Legend

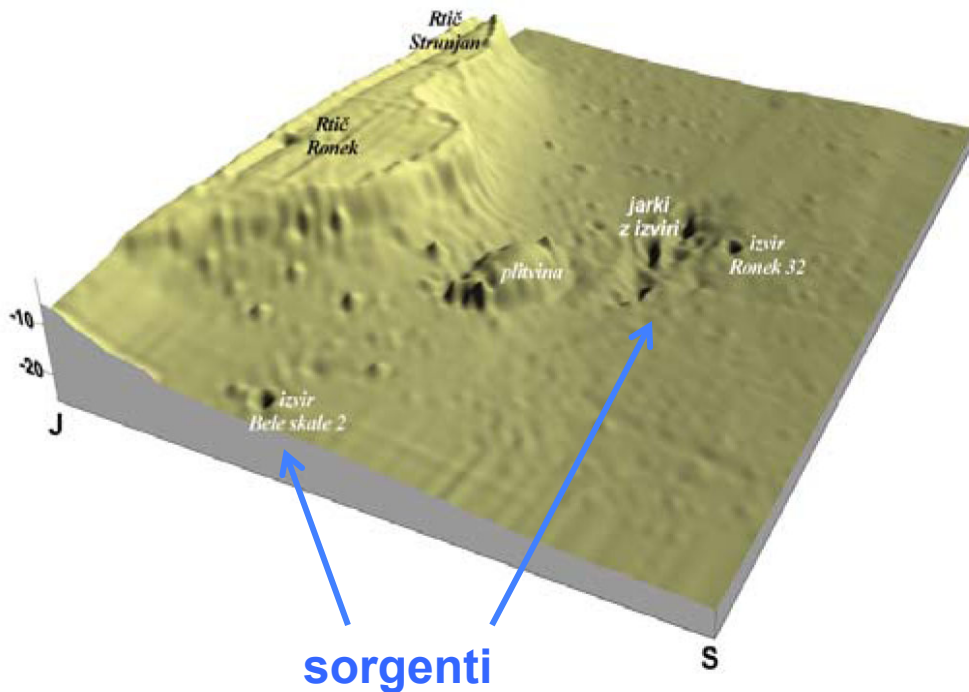
- Palaeogene flysch
- Upper Cretaceous - Palaeogene limestones
- Cretaceous limestones and dolostones
- Jurassic limestones and dolostones

Acque termali: le sorgenti marine di Isola



8 sorgenti marine

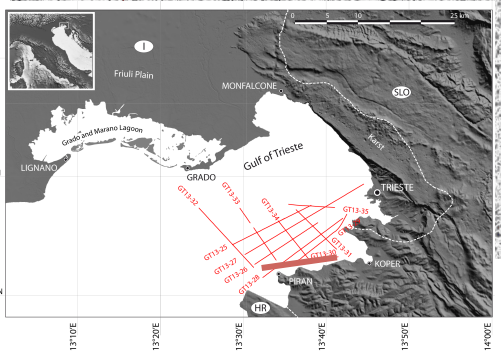
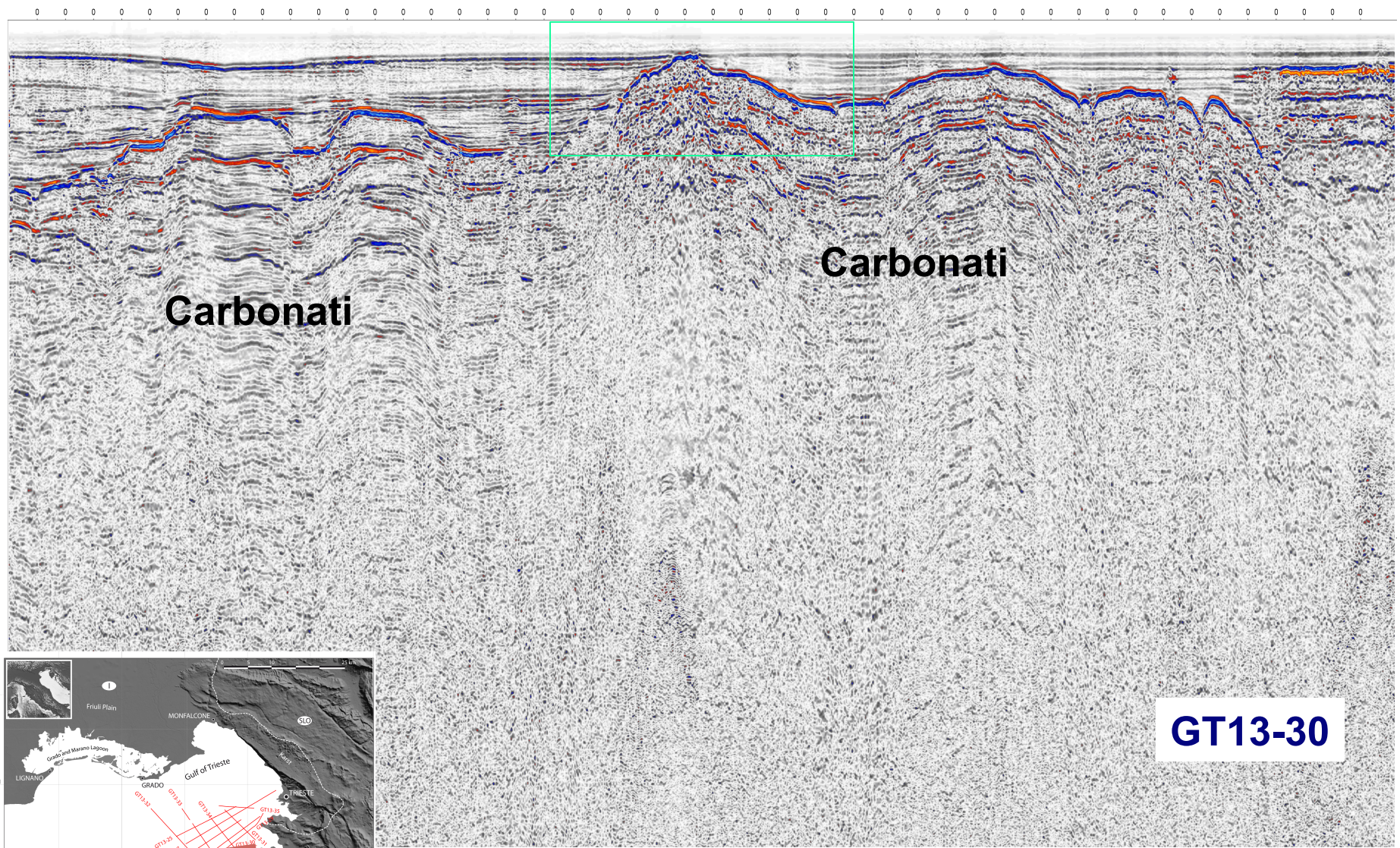
temperatura acqua 22°-30°C



Žumer, 2004

W

E



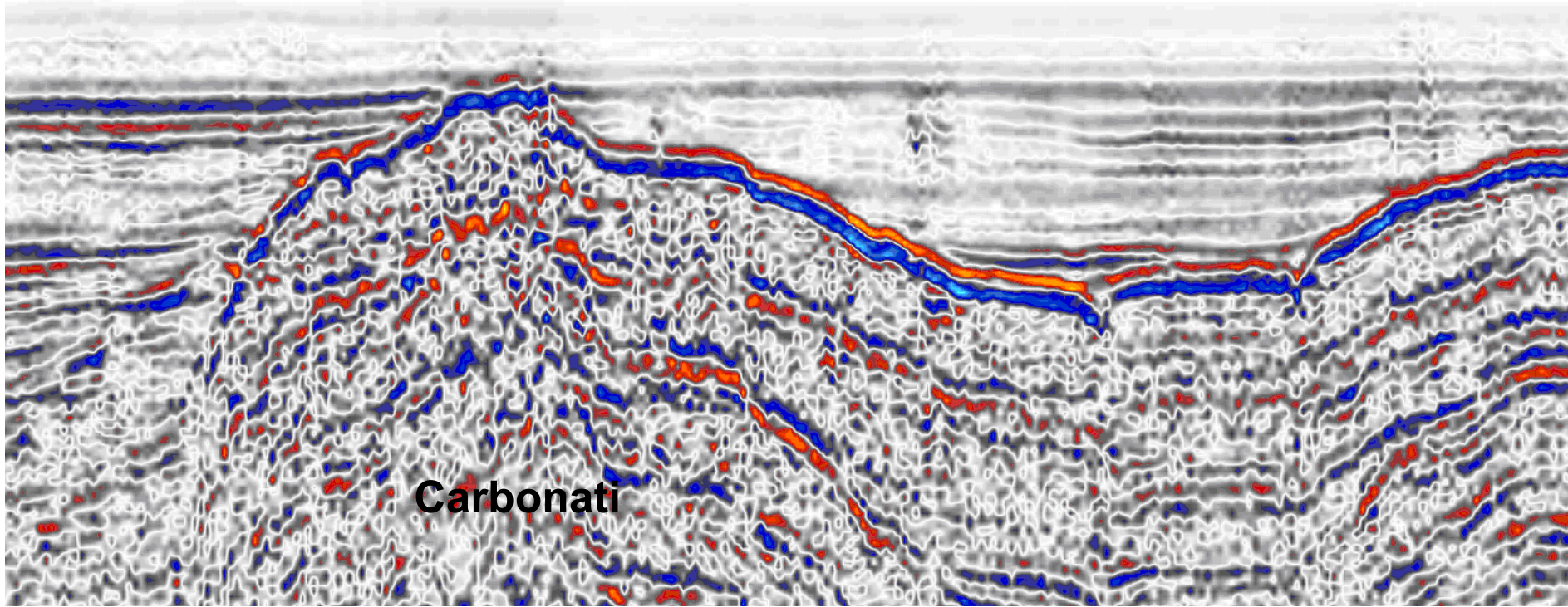
GT13-30

GT13-30

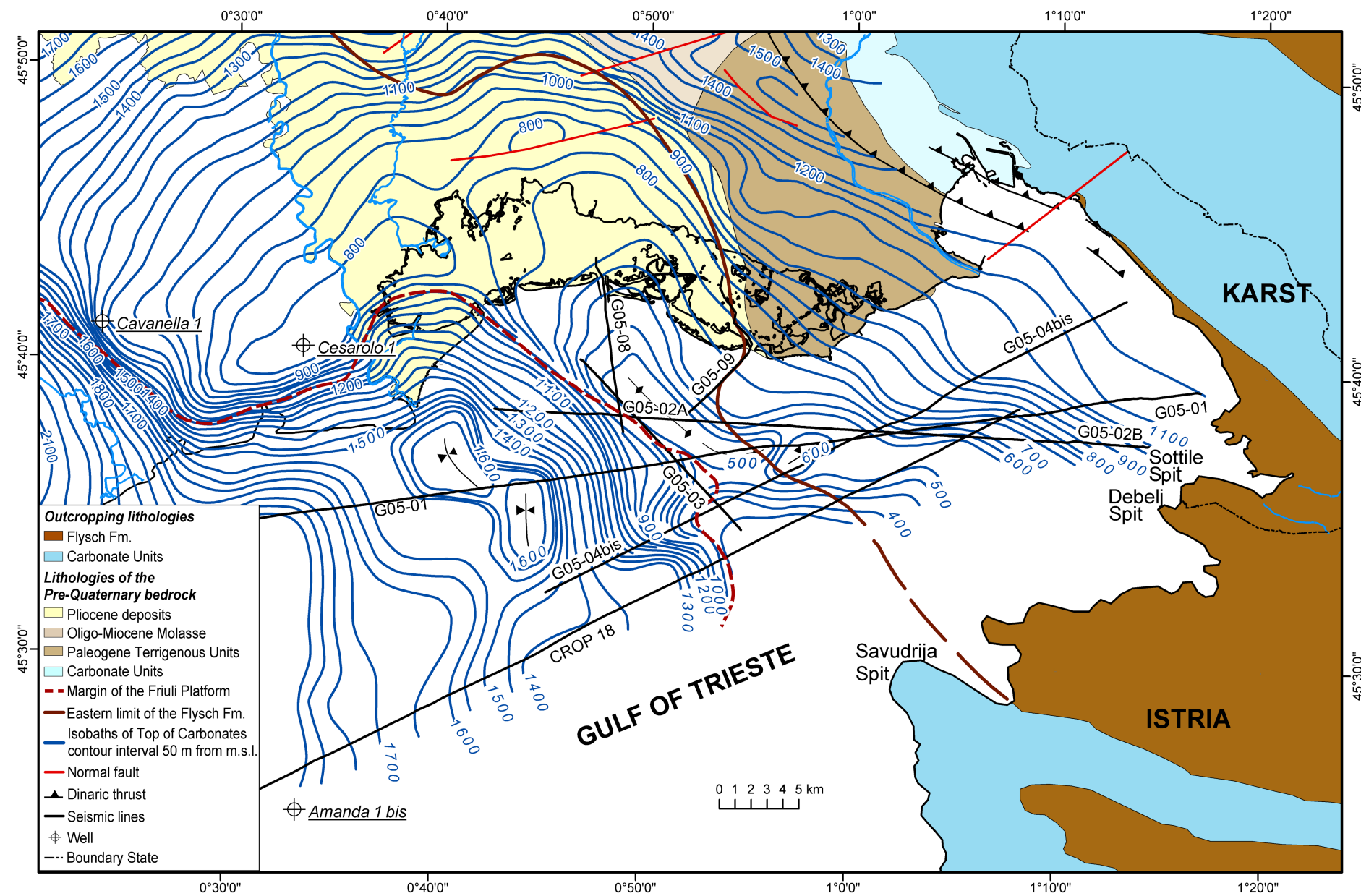
risalite di fluidi

W

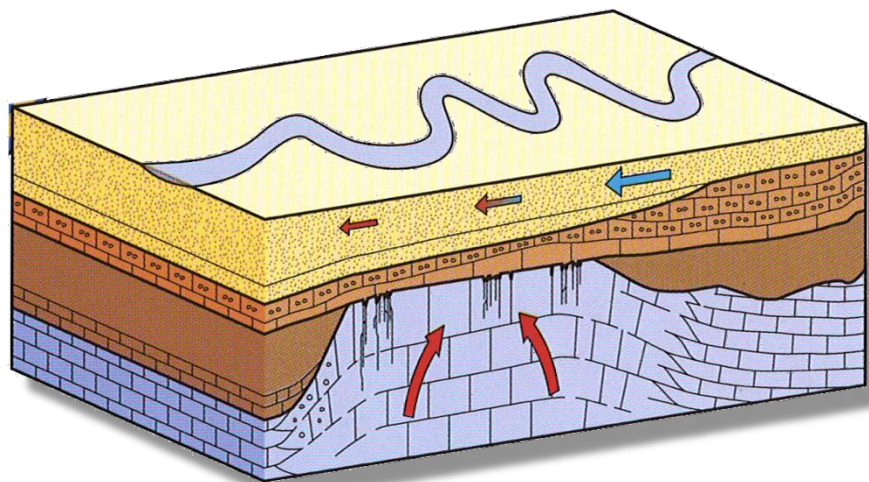
E



Tetto dei carbonati



Acque termali: il pozzo Grado-1



GRADO-1

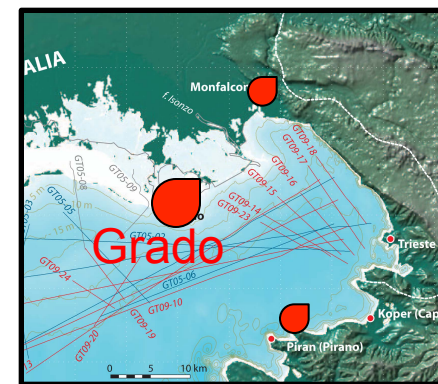
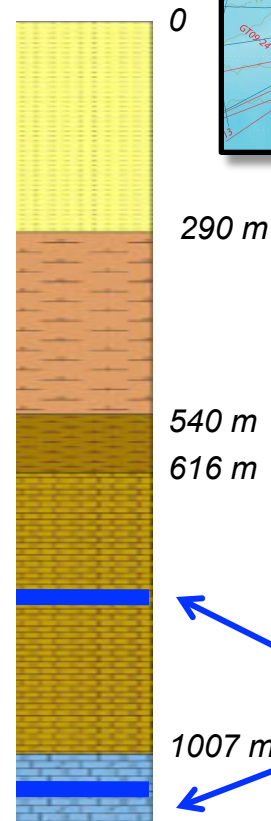
Sedimenti
Plio-Quaternari

Molassa
Miocenica

Flysch
Eocenico

Calcarei del
Paleocene –
Eocene Inferiore

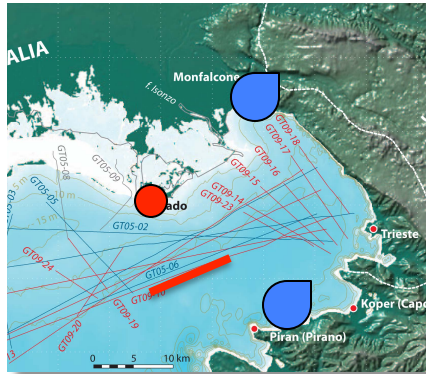
Calcarei
Cretacici



sistemi di fratture
con acqua
salmastra a 44°C

Della Vedova et al., 2008
Cimolino et al., 2010

Cimolino et al., 2010
Sedimenti Plio-Quaternari



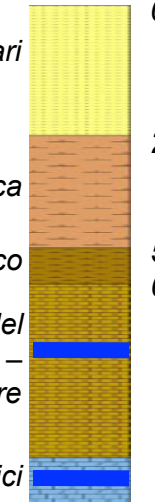
Molassa Miocenica

Flysch Eocenico

Carbonati del
Paleocene –
Eocene Inferiore

Carbonati Cretacici

GRADO-1



0

290 m

540 m

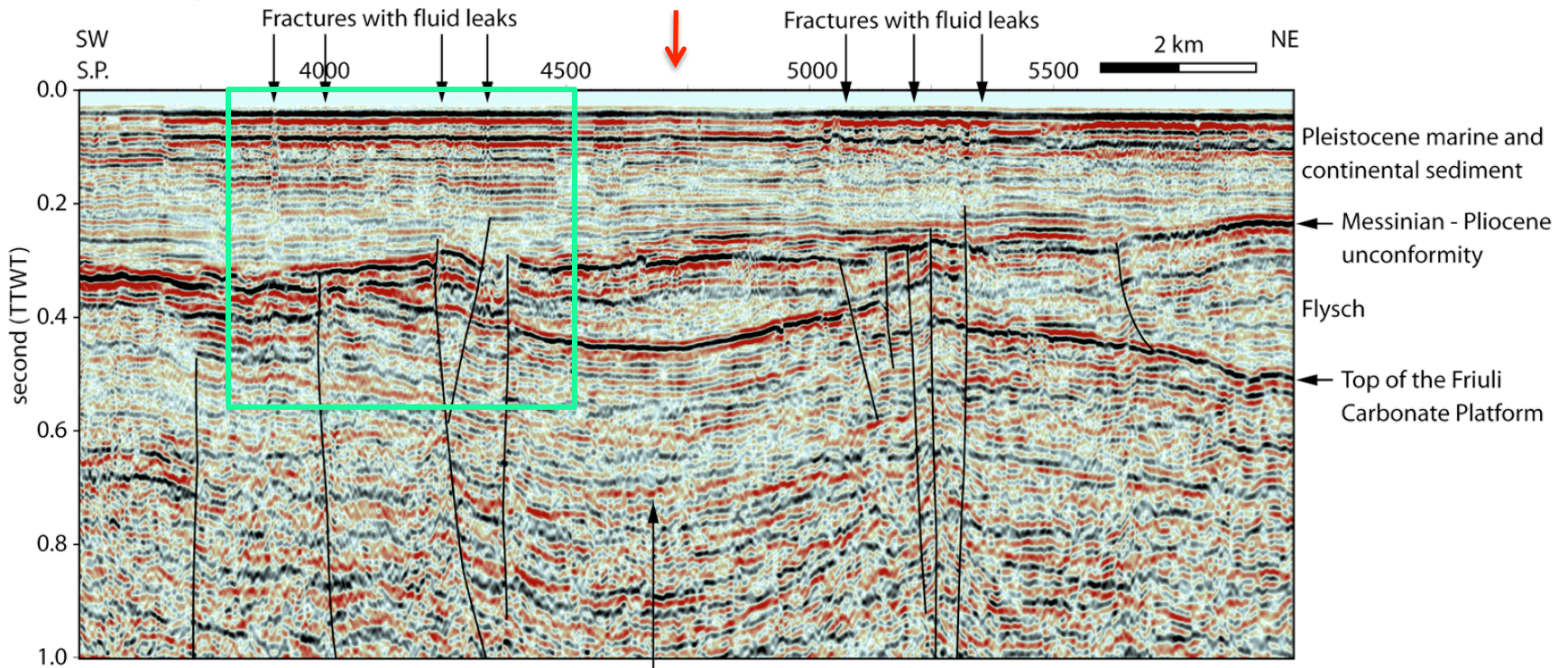
616 m

1007 m

sistemi di fratture con
acqua salmastra a 44°C

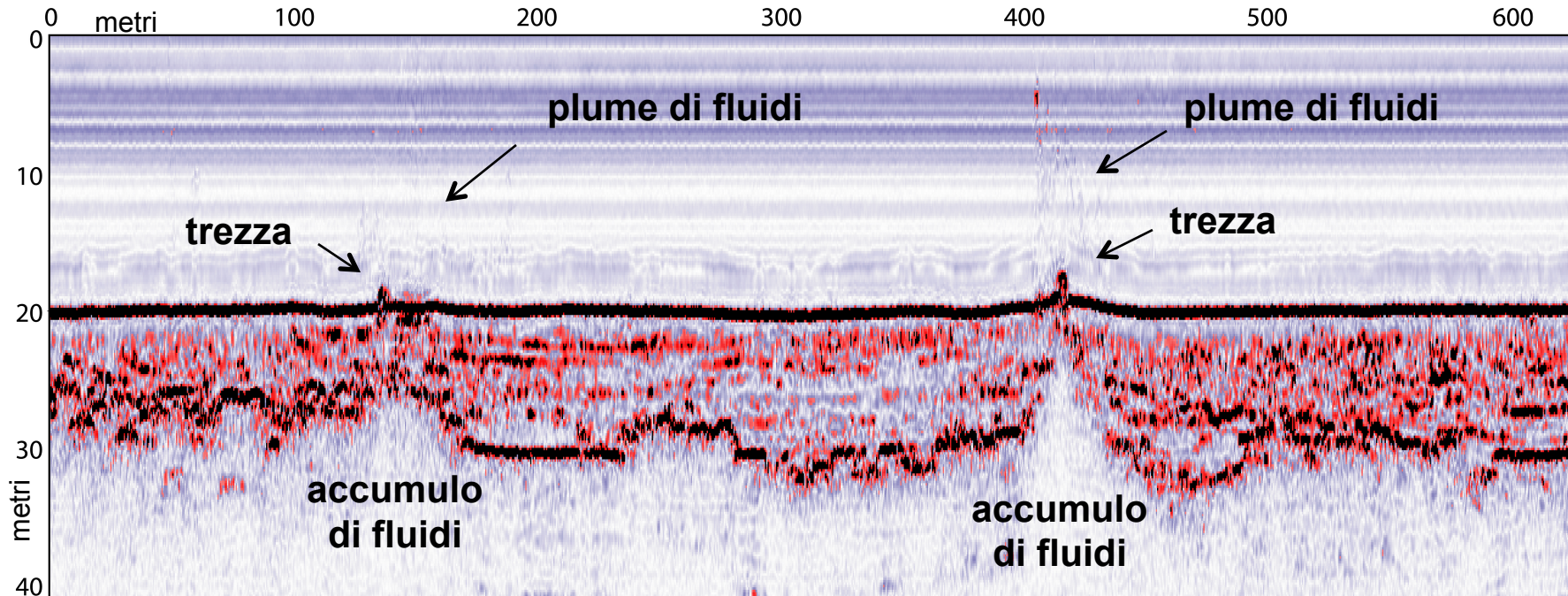
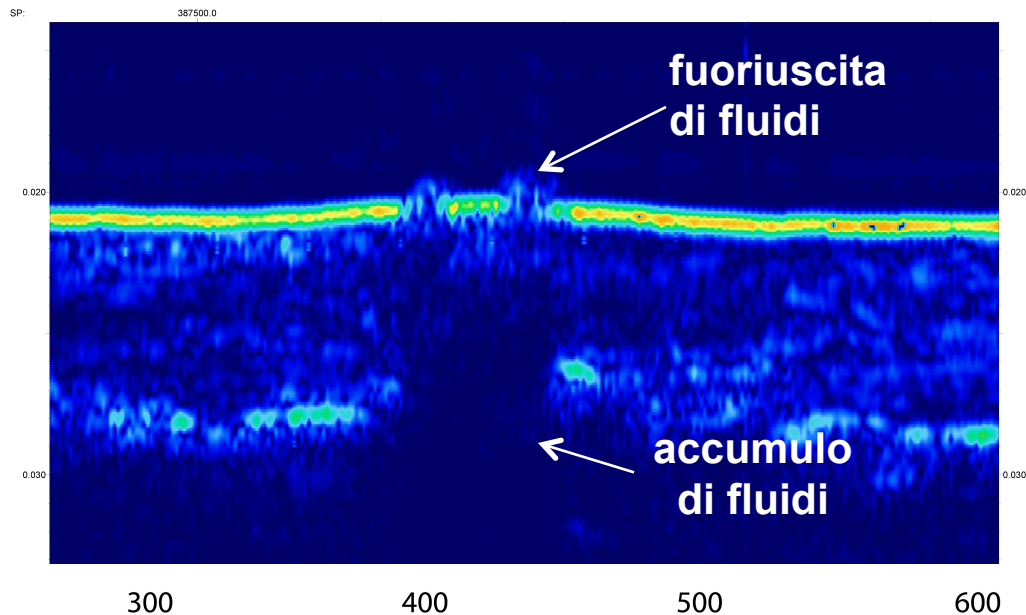
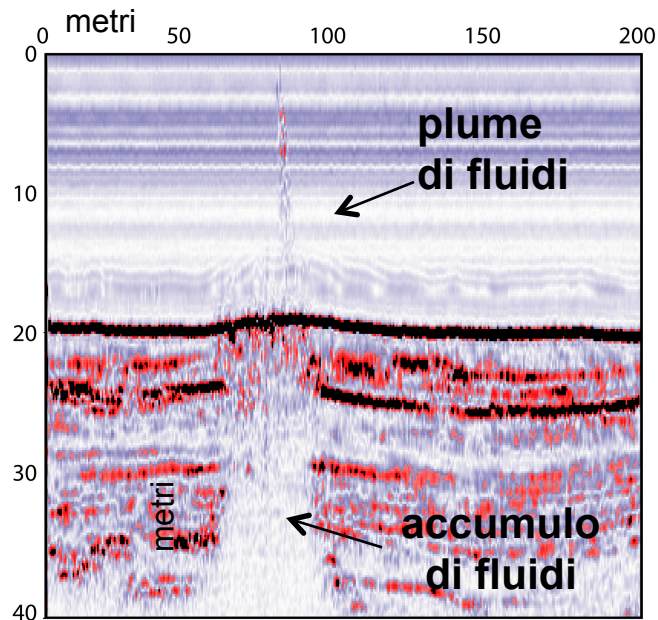


GT09-10 migrated



Intraplatform Paleogene? carbonate basin

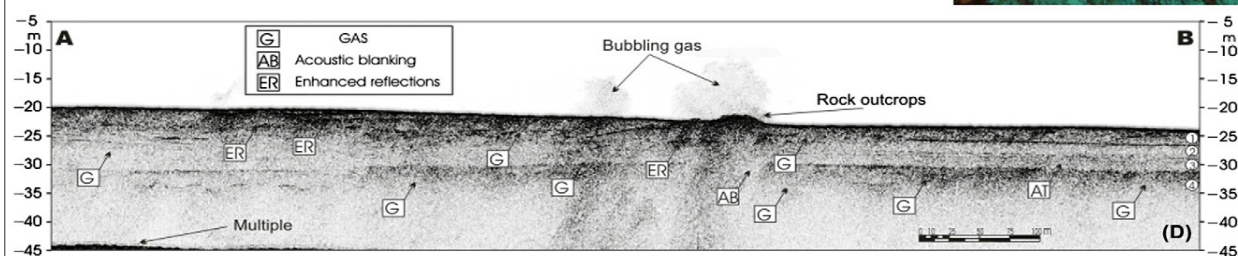
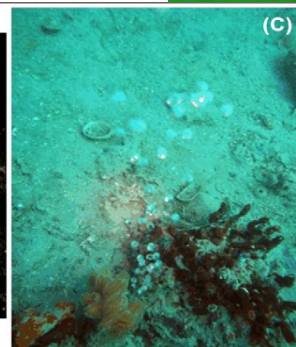
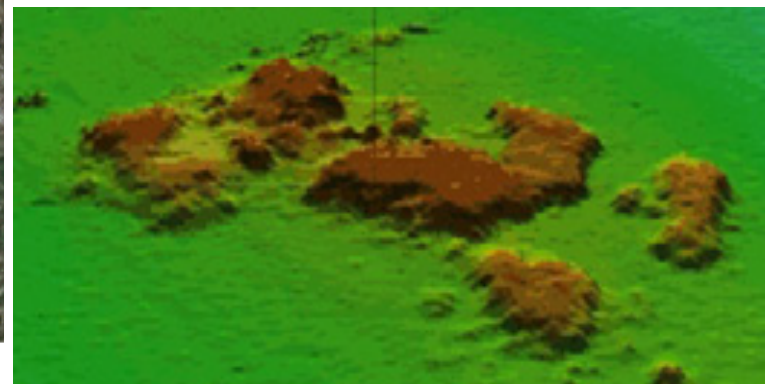
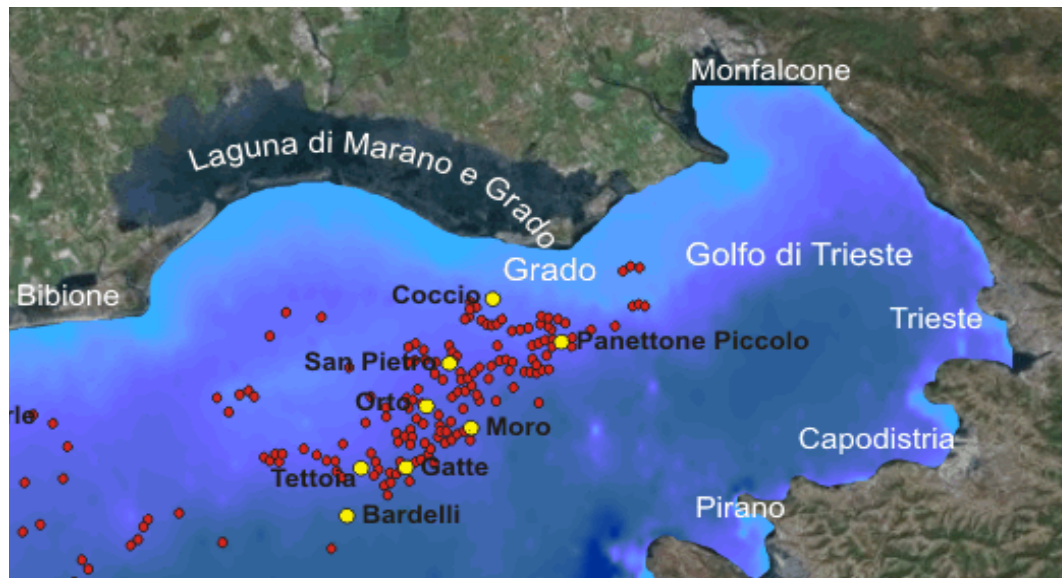
Fuoriuscite di fluidi



Le trezze

affioramenti carbonatici
metano-derivati

emissioni di fluidi
di cui 80-85 % metano





FINE