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Late Miocene thrust tectonics of the Latin Valley: insights from seismic lines (Central Apennines, Italy)

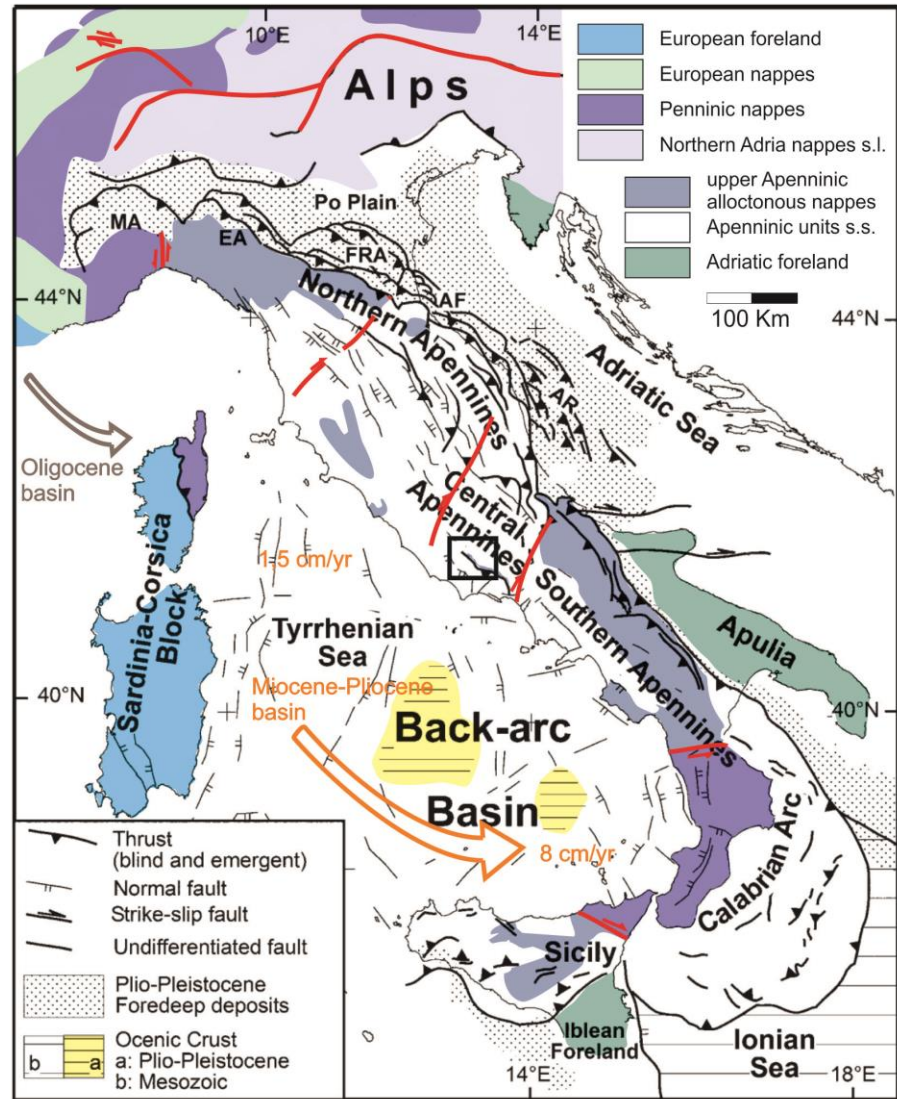
Giuseppe Vico*, Giovanni Luca Cardello**



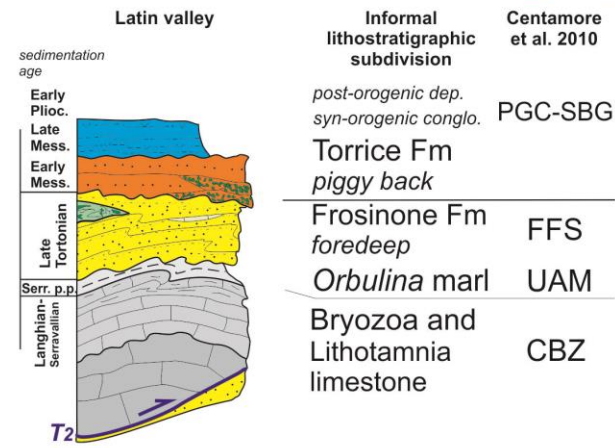
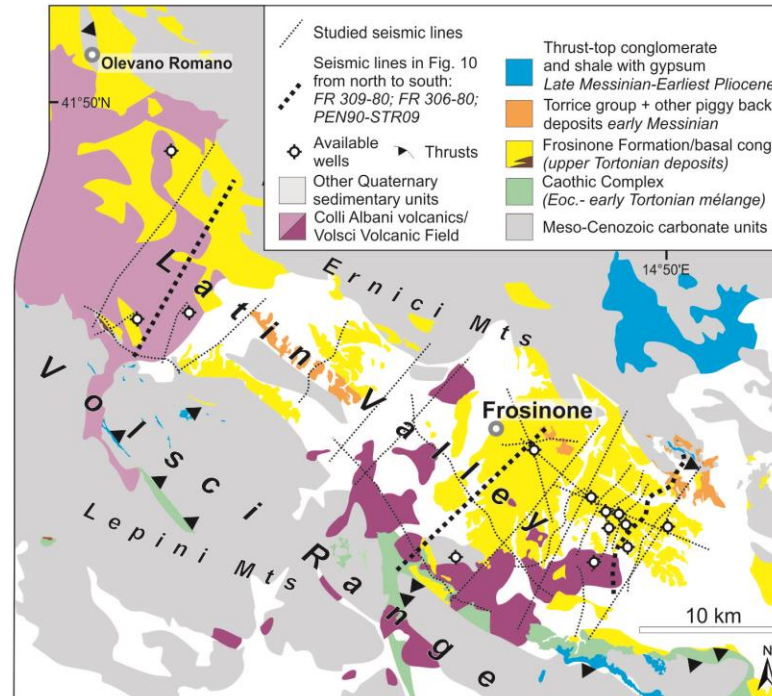
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Area of Interest – Latin Valley (Central Apennines)



Scrocca et al. 2005 modified

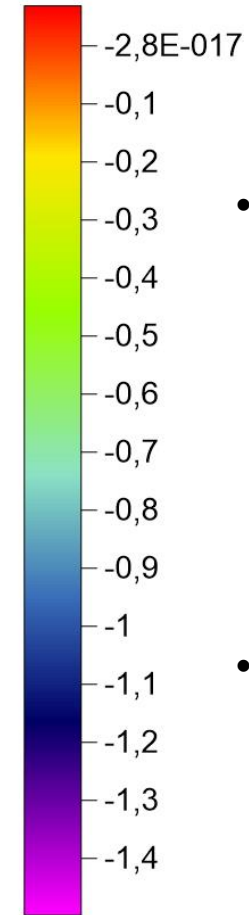
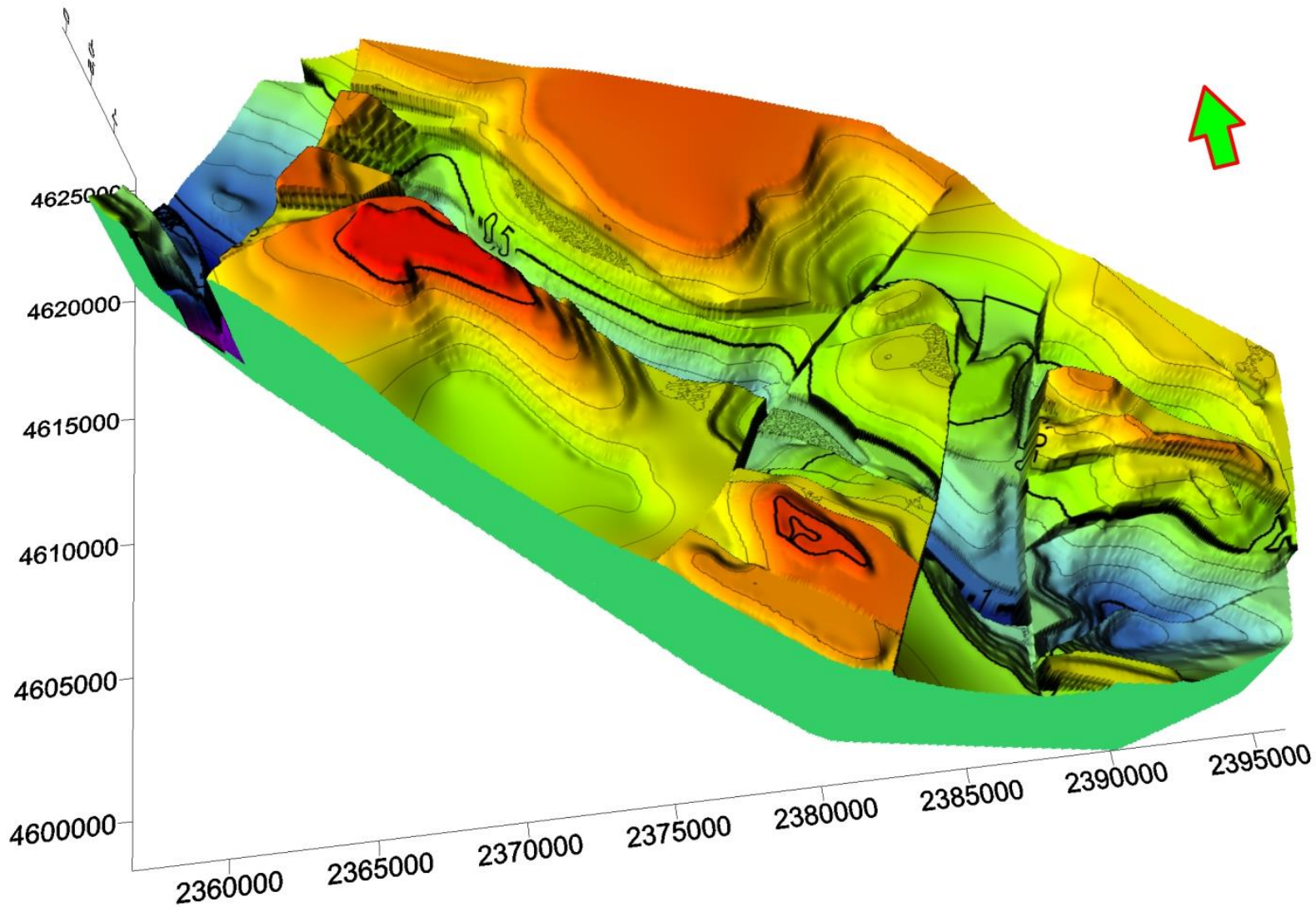


Geological sketch map of Italy (on the left); sketched geological map of the northern Volsci Range and Latin Valley with the location of the studied wells, seismic lines (on the right); Simplified stratigraphic columns of the Latin Valley, correlated to the official cartography (Centamore et al., 2010). Messinian stratigraphic relationships are inspired to the work of Pasquali et al. (2007).



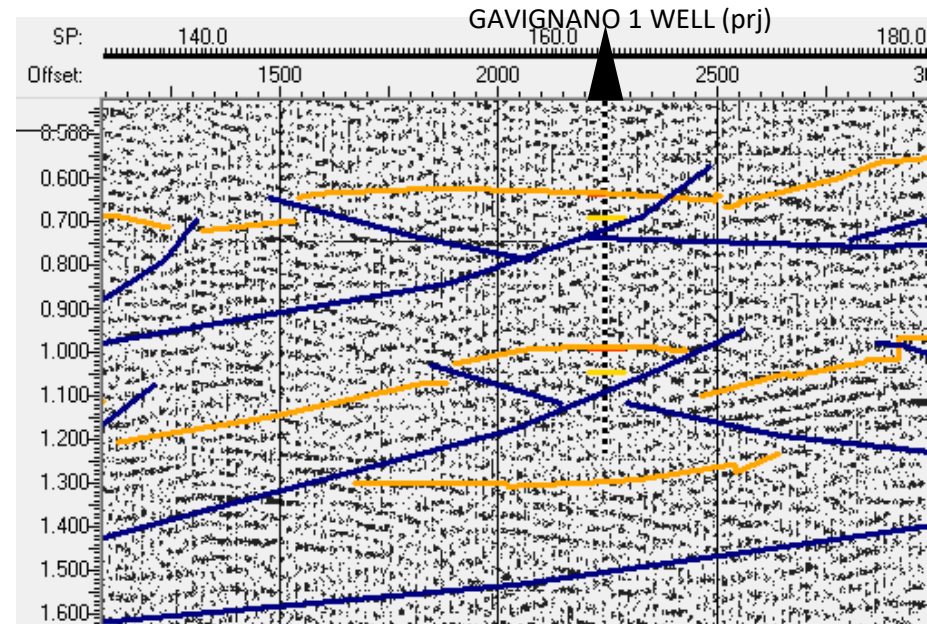
Structural overview of the Volsci Range front respectively from top to bottom representing the northern, central and southern sectors of the study area

3D view of TWT map of the Top Miocene platform

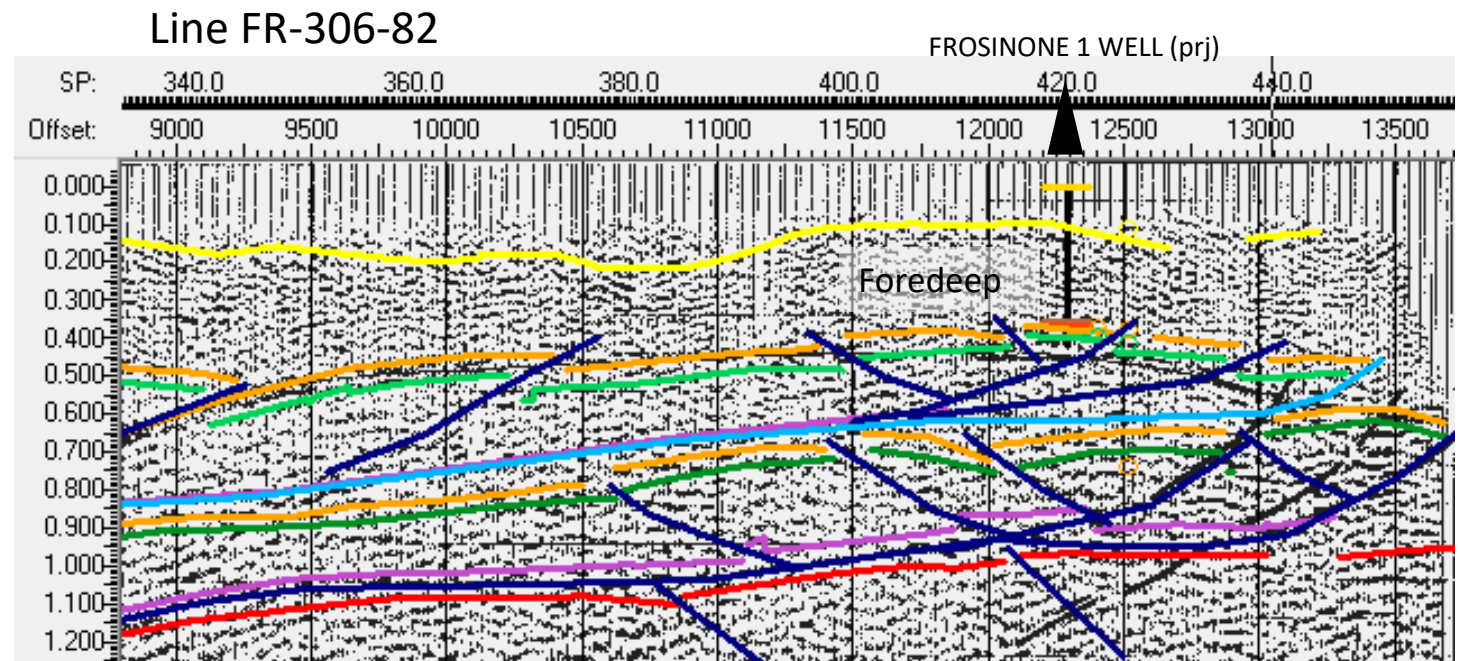
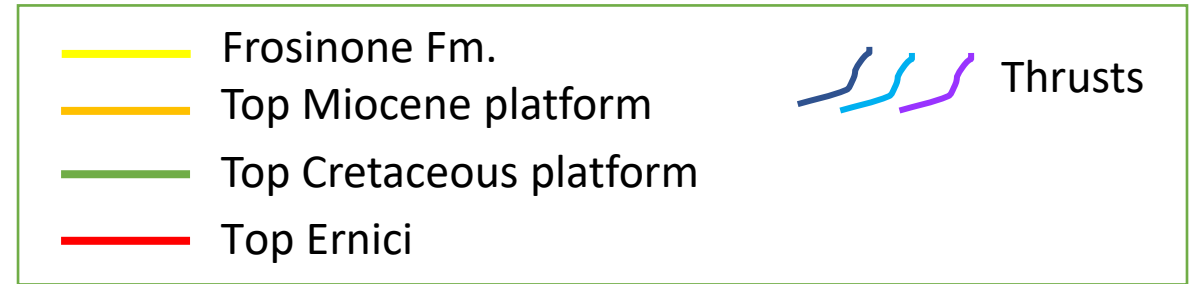


- Grid was built and modified from literature data available in VIDEPI database website, after collecting several information.
- This is step 0 before starting with the interpretation of seismic data.

Sketches from seismic interpretation



Line FR-309-80



References

- Centamore, E., Di Manna, P., & Rossi, D. (2007). Kinematic evolution of the Volsci Range: a new overview. *BOLLETTINO-SOCIETA GEOLOGICA ITALIANA*, 126(2), 159.
- PASQUALI, V. (2007). I depositi tardo-orogenici della Valle Latina meridionale: stratigrafia e implicazioni cinematiche per l'evoluzione dell'Appennino centrale. *Bollettino della Società geologica italiana*, 126(1), 101-118.
- Scrocca, D., Carminati, E., & Doglioni, C. (2005). Deep structure of the southern Apennines, Italy: Thin-skinned or thick-skinned?. *Tectonics*, 24(3).
- ViDEPI. (On-line). Progetto ViDEPI-Visibilità Dati Esplorazione Petrolifera in Italia. © 2009-2010-Ministero dello Sviluppo Economico UNMIG–Soc. Geol. It.-Assomineraria. On-line database. <http://unmig.mise.gov.it/deposito/videpi>