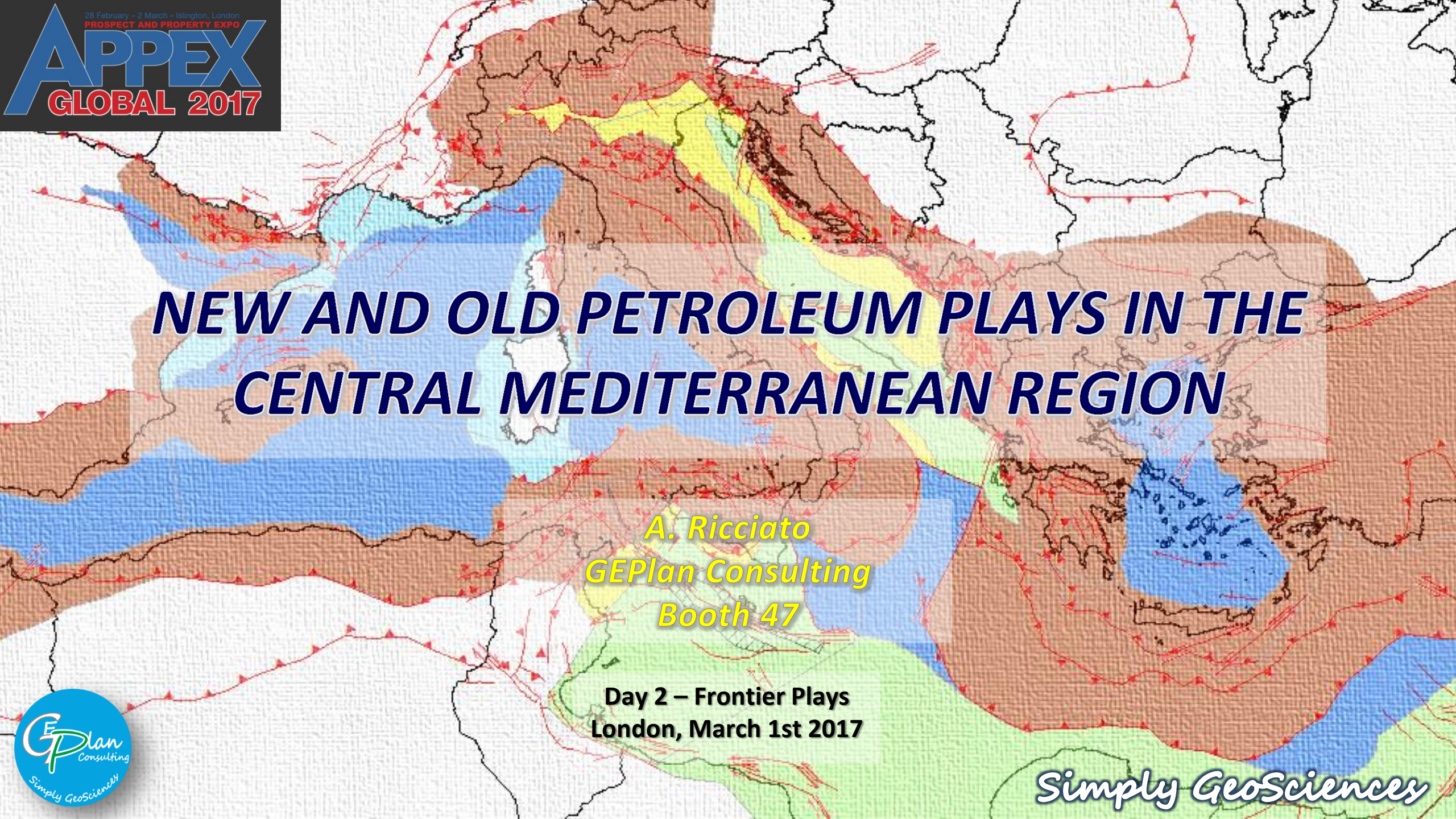
28 February – 2 March • Islington, London
PROSPECT AND PROPERTY EXPO
APPEX GLOBAL 2017



NEW AND OLD PETROLEUM PLAYS IN THE CENTRAL MEDITERRANEAN REGION

A. Ricciato
GEPlan Consulting
Booth 47

Day 2 – Frontier Plays
London, March 1st 2017

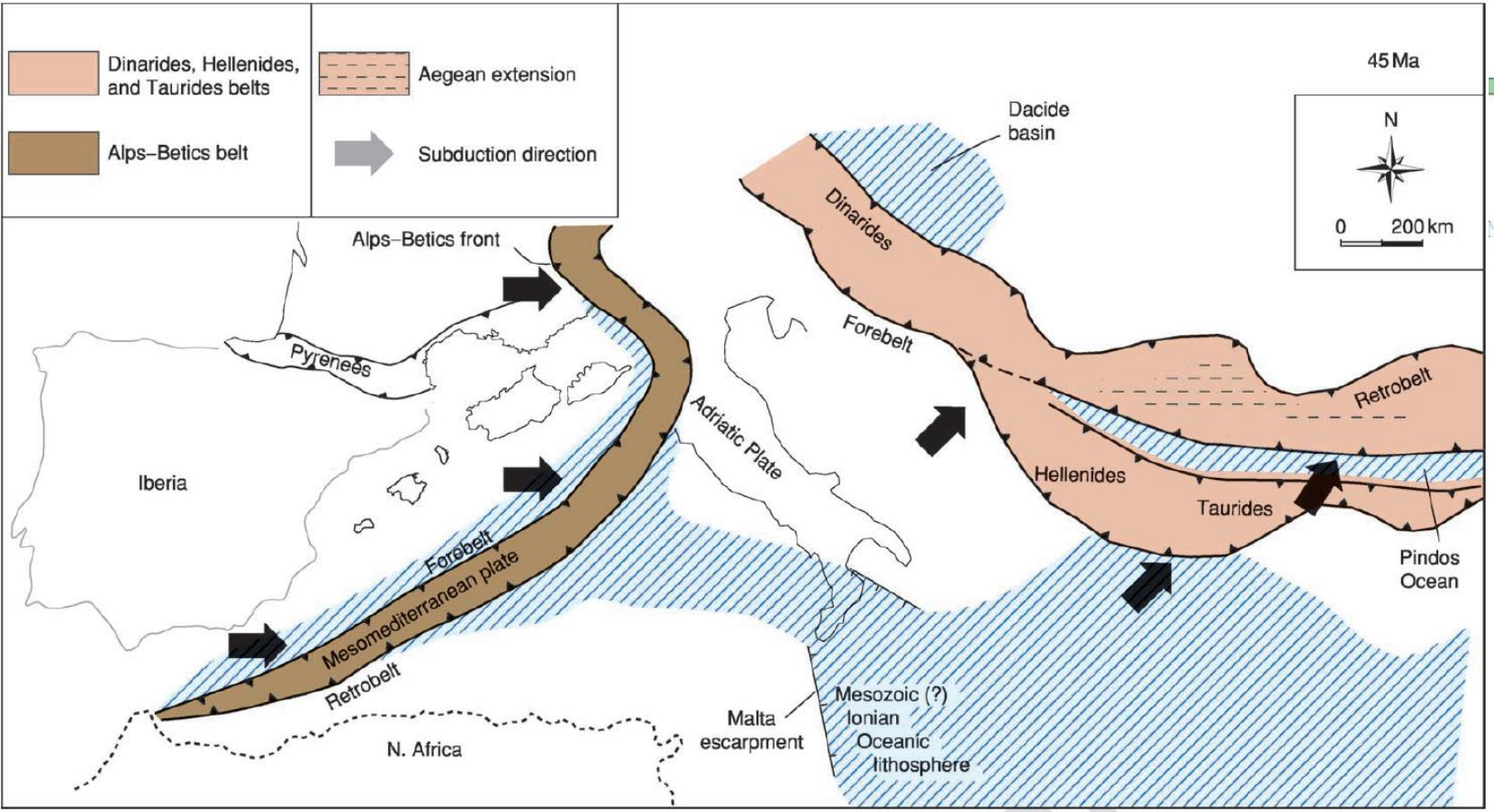
GEPlan Consulting
Simply GeoSciences

Simply GeoSciences

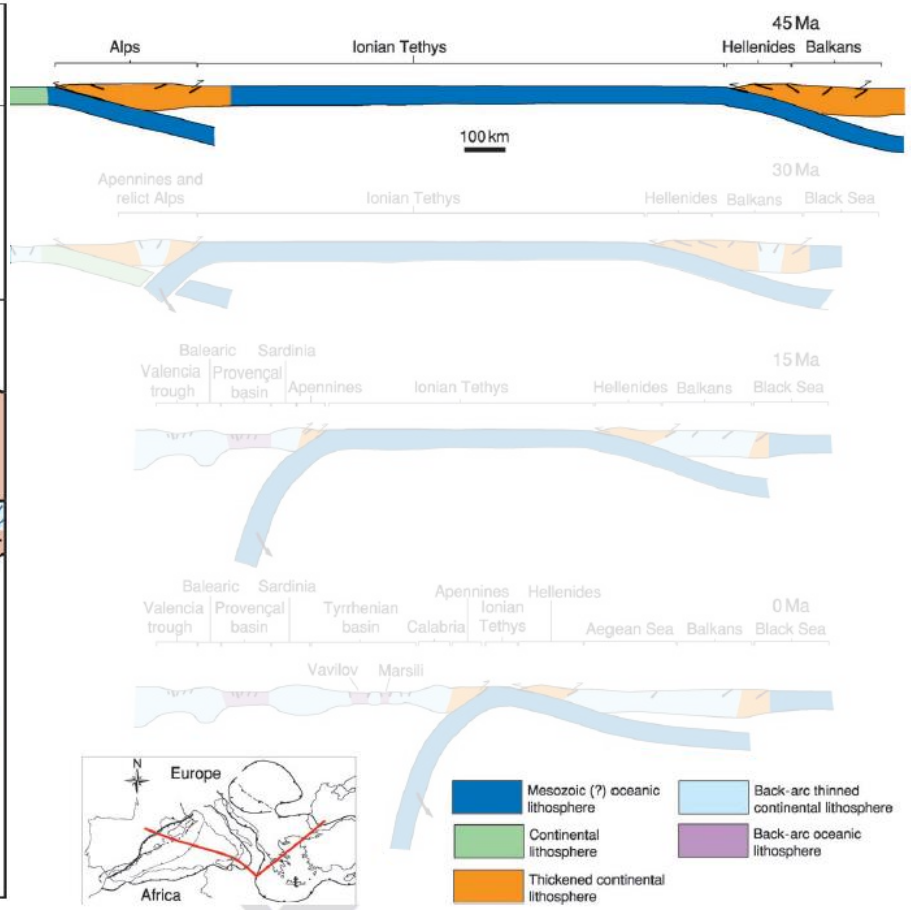
TALK OUTLINE

- REGIONAL FRAMEWORK CENTRAL WESTERN MEDITERRANEAN REGION
- PREVIOUS EXPLORATION ACTIVITY
- HC DISCOVERIES
- REVIEW OF MAIN HC DISCOVERIES IN CENTRAL MEDITERRANEAN
  - PETROLEUM PLAYS CHARACTERISTICS & LESSONS LEARNED
- NEW EXPLORATION POTENTIAL
  - PETROLEUM PLAY CHARACTERISTICS & MAIN RISKS

REGIONAL FRAMEWORK CENTRAL WESTERN MEDITERRANEAN – 45 My

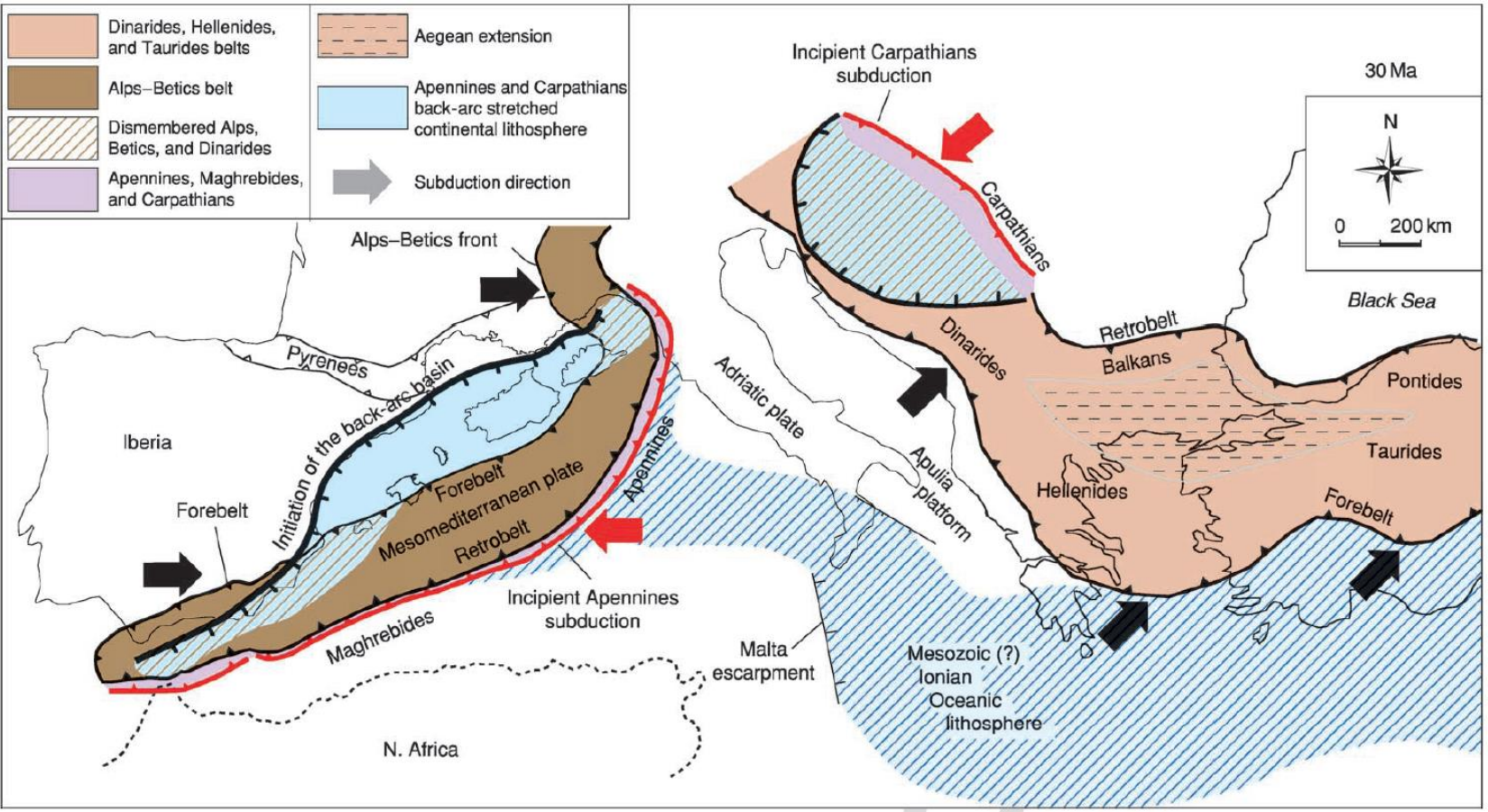


Doglioni and Carminati, 2004

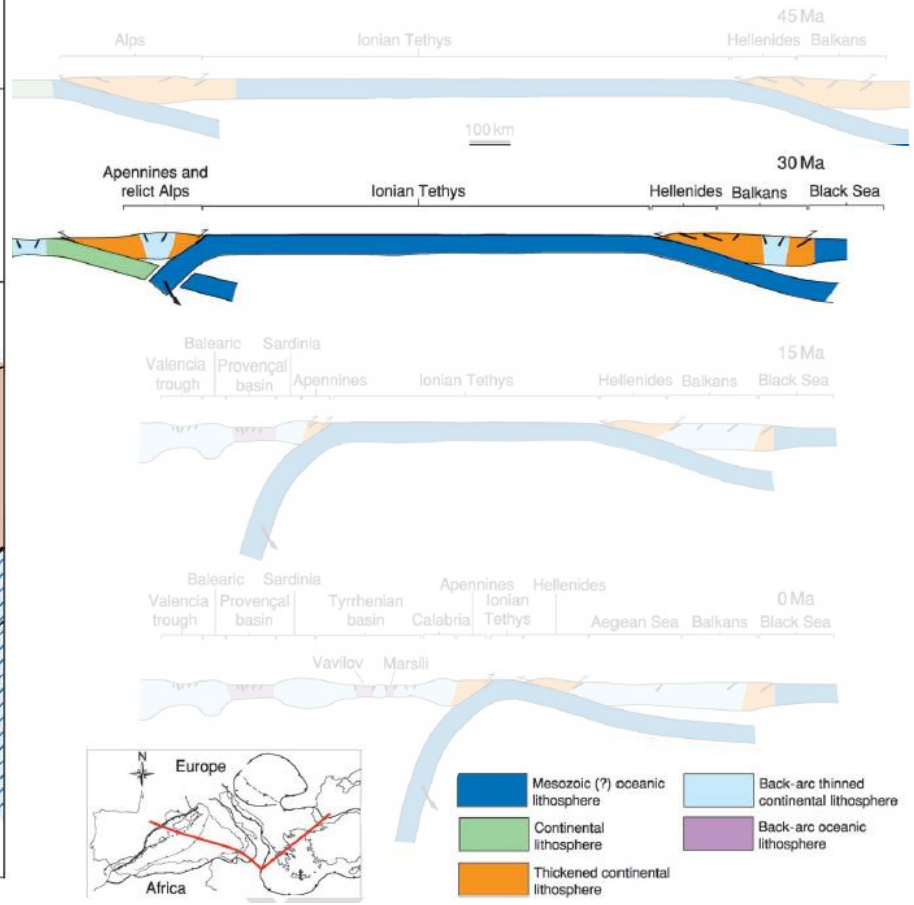


Doglioni and Carminati, 2004

REGIONAL FRAMEWORK CENTRAL WESTERN MEDITERRANEAN – 30 My

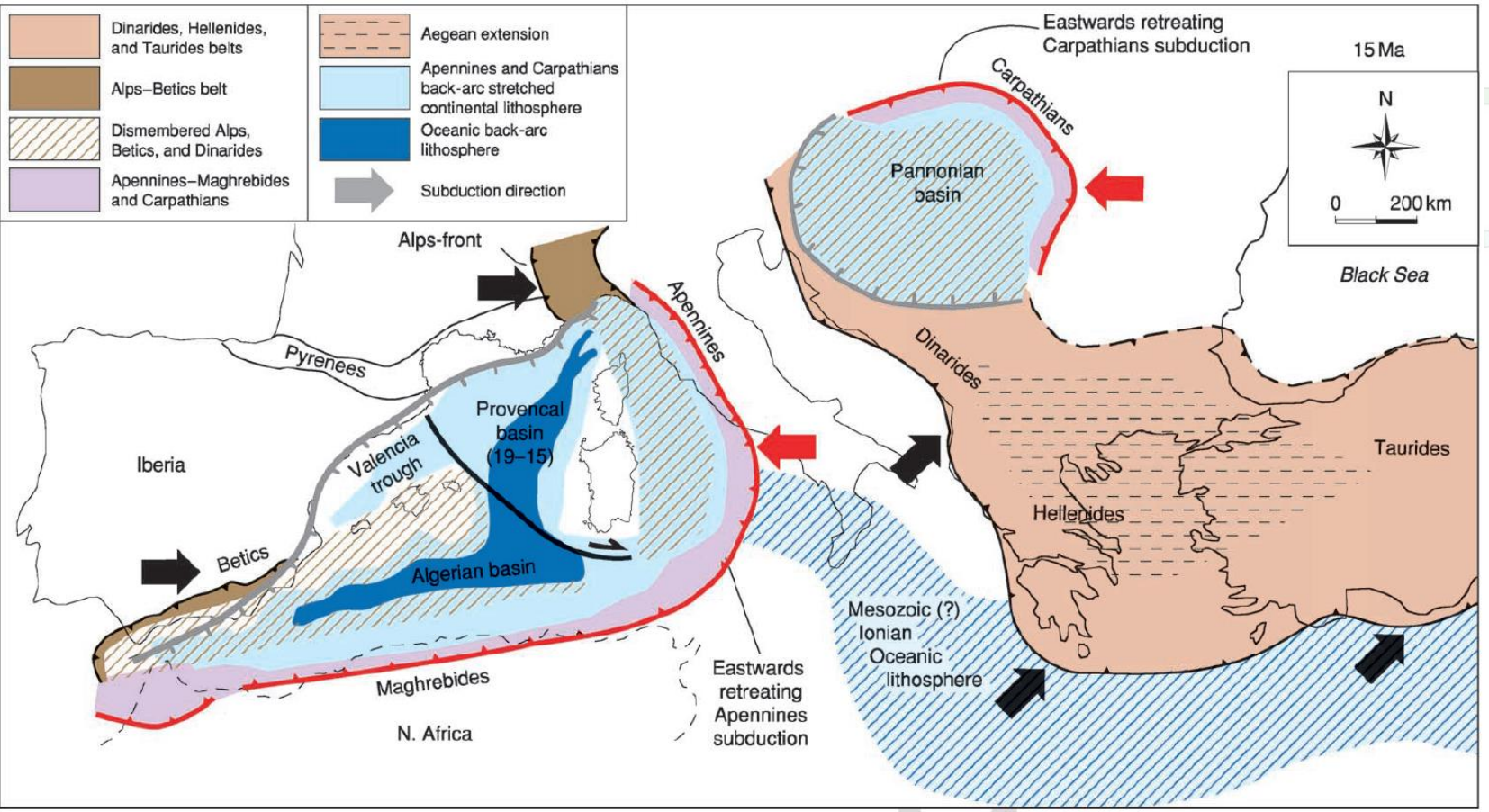


Doglioni and Carminati, 2004



Doglioni and Carminati, 2004

REGIONAL FRAMEWORK CENTRAL WESTERN MEDITERRANEAN – 15 My



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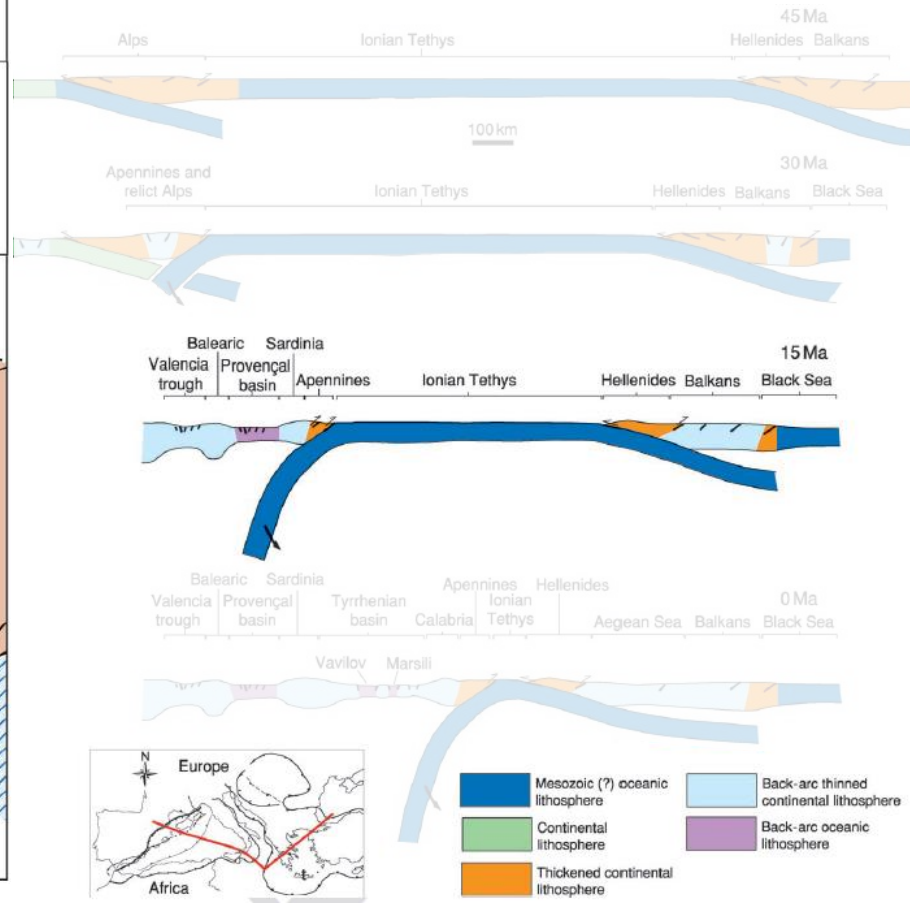
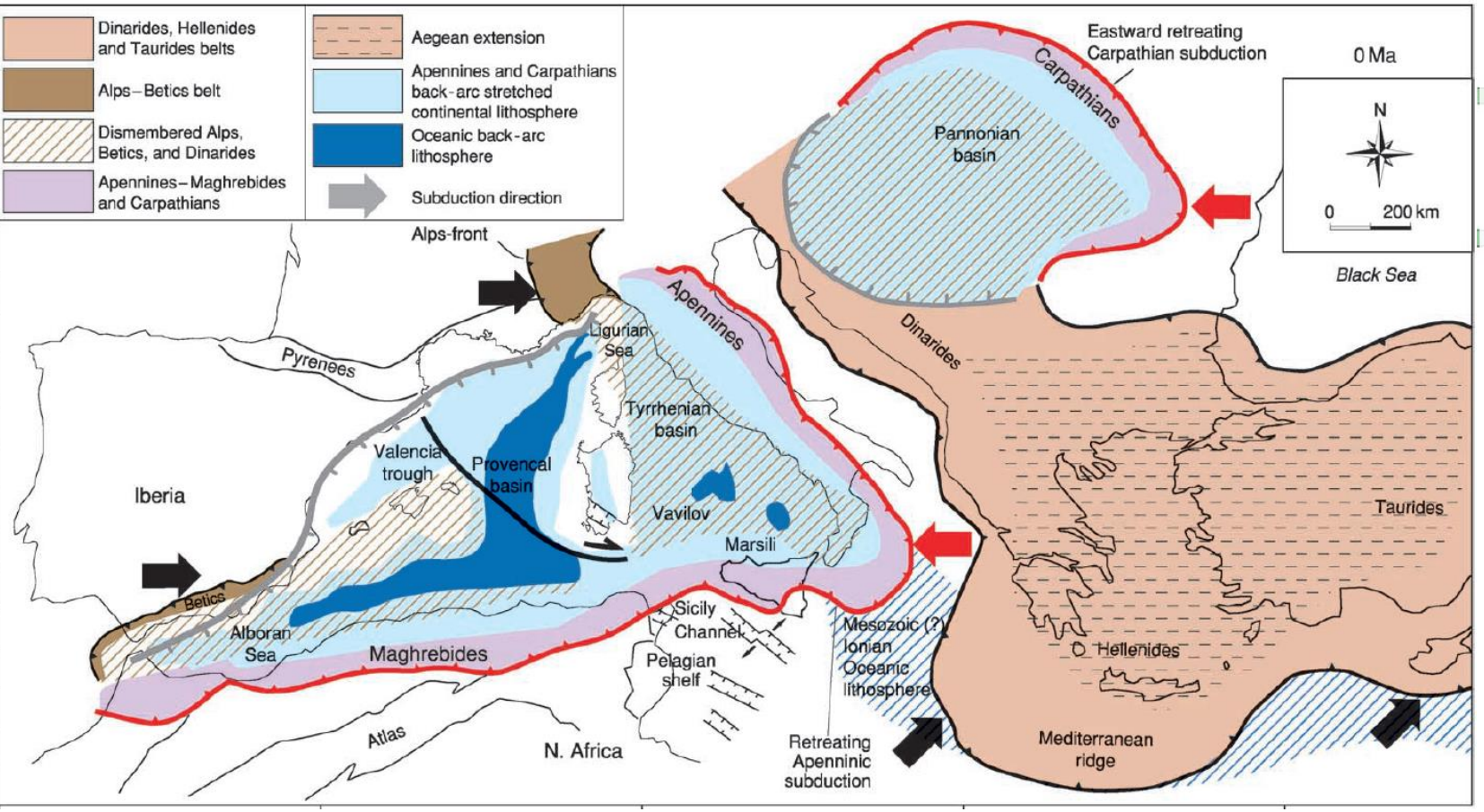
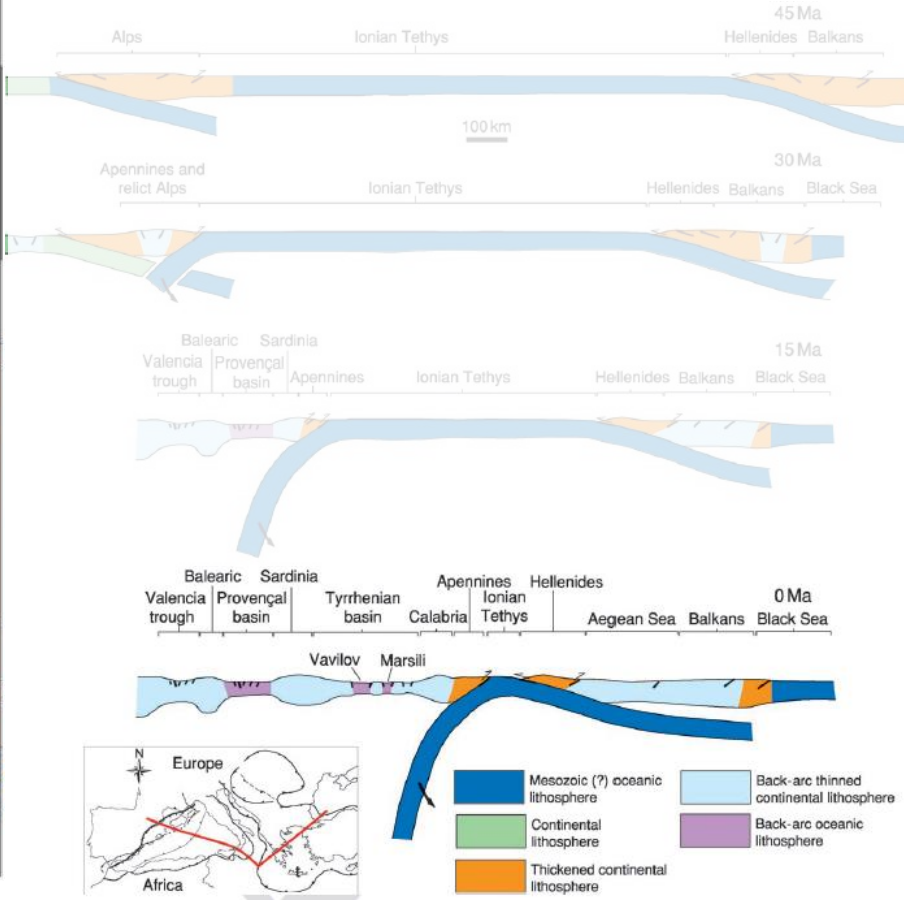


Doglioni and Carminati, 2004

REGIONAL FRAMEWORK CENTRAL WESTERN MEDITERRANEAN – 0 My

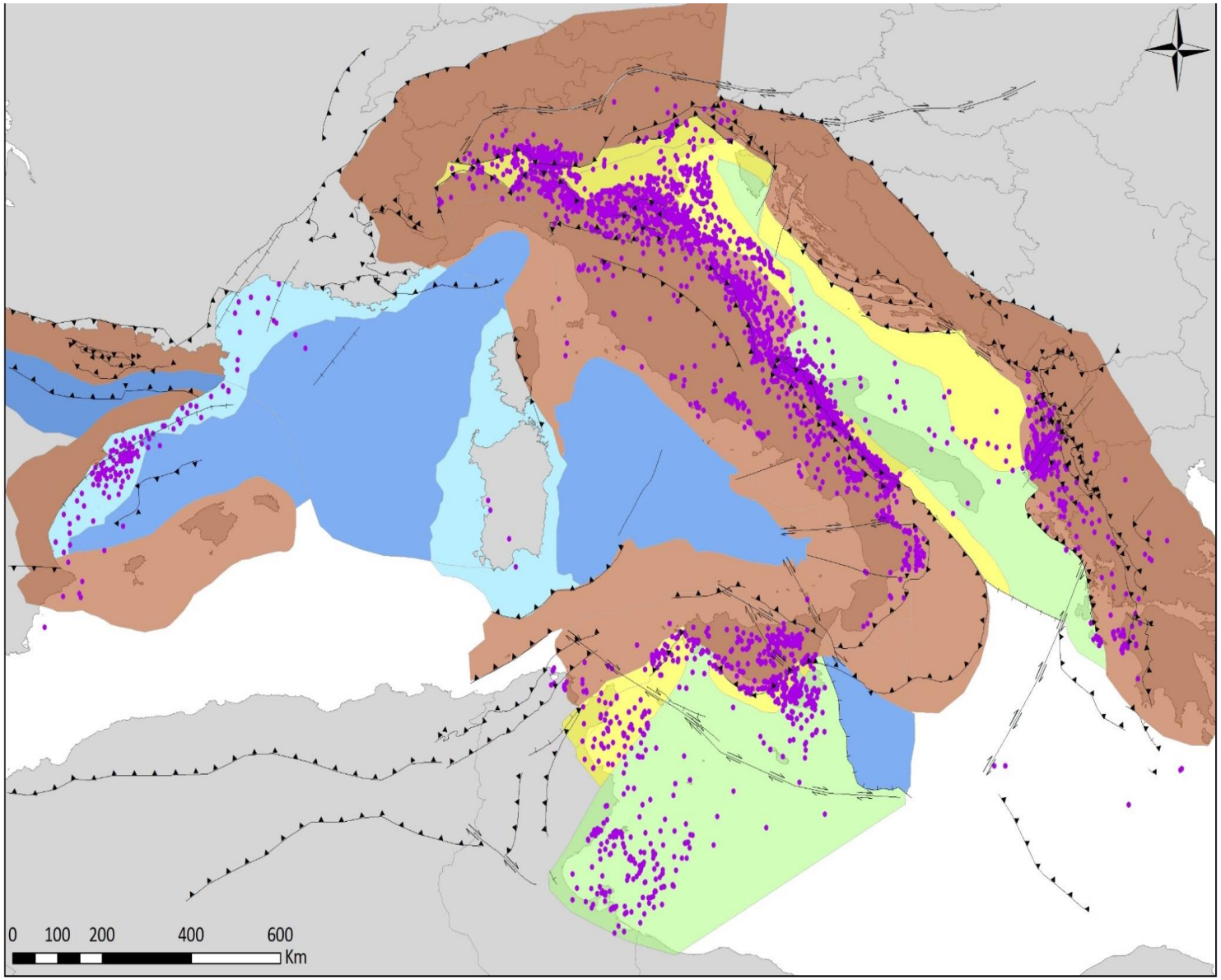


Doglioni and Carminati, 2004

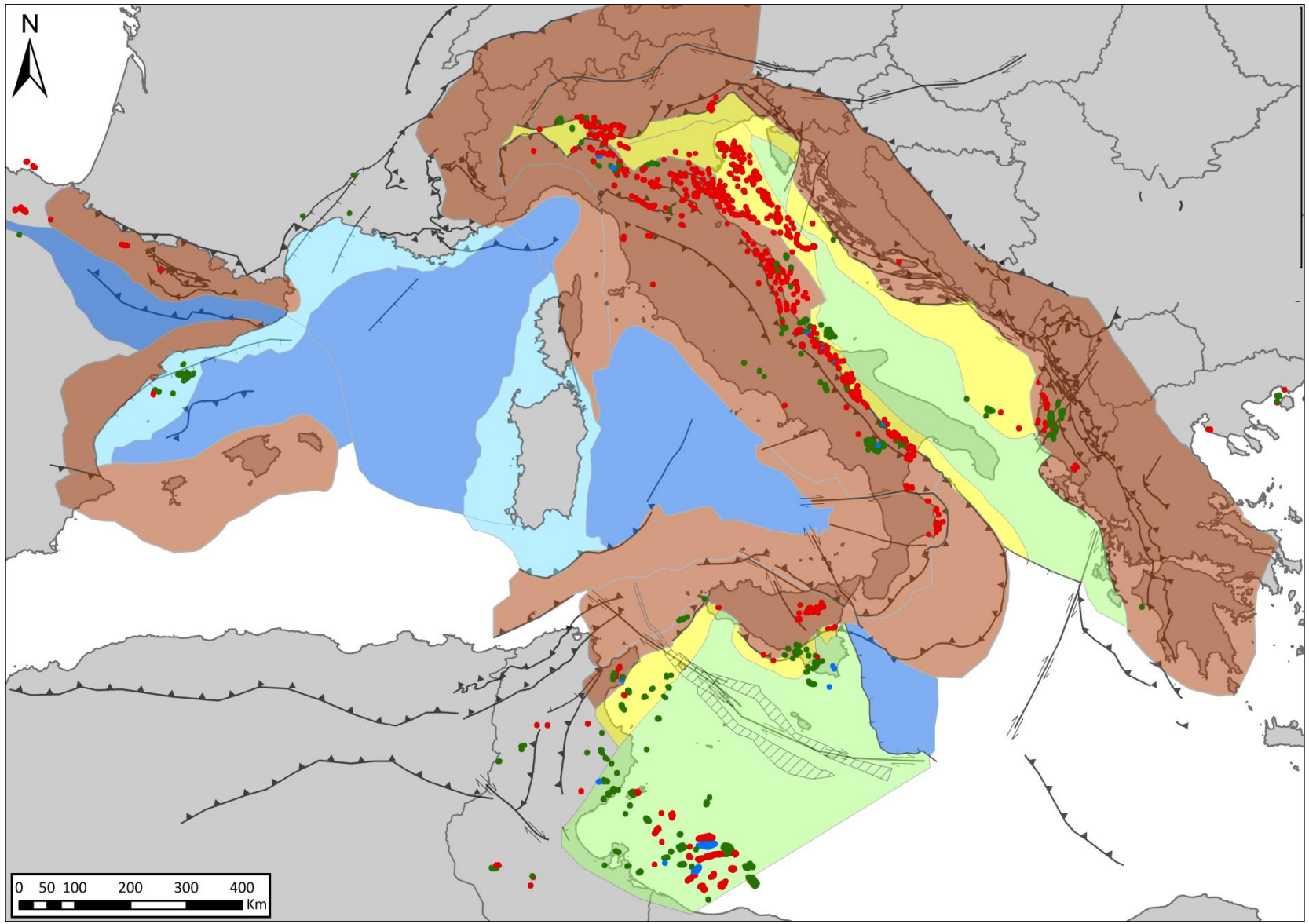


Doglioni and Carminati, 2004

PREVIOUS EXPLORATION ACTIVITY



HC DISCOVERIES



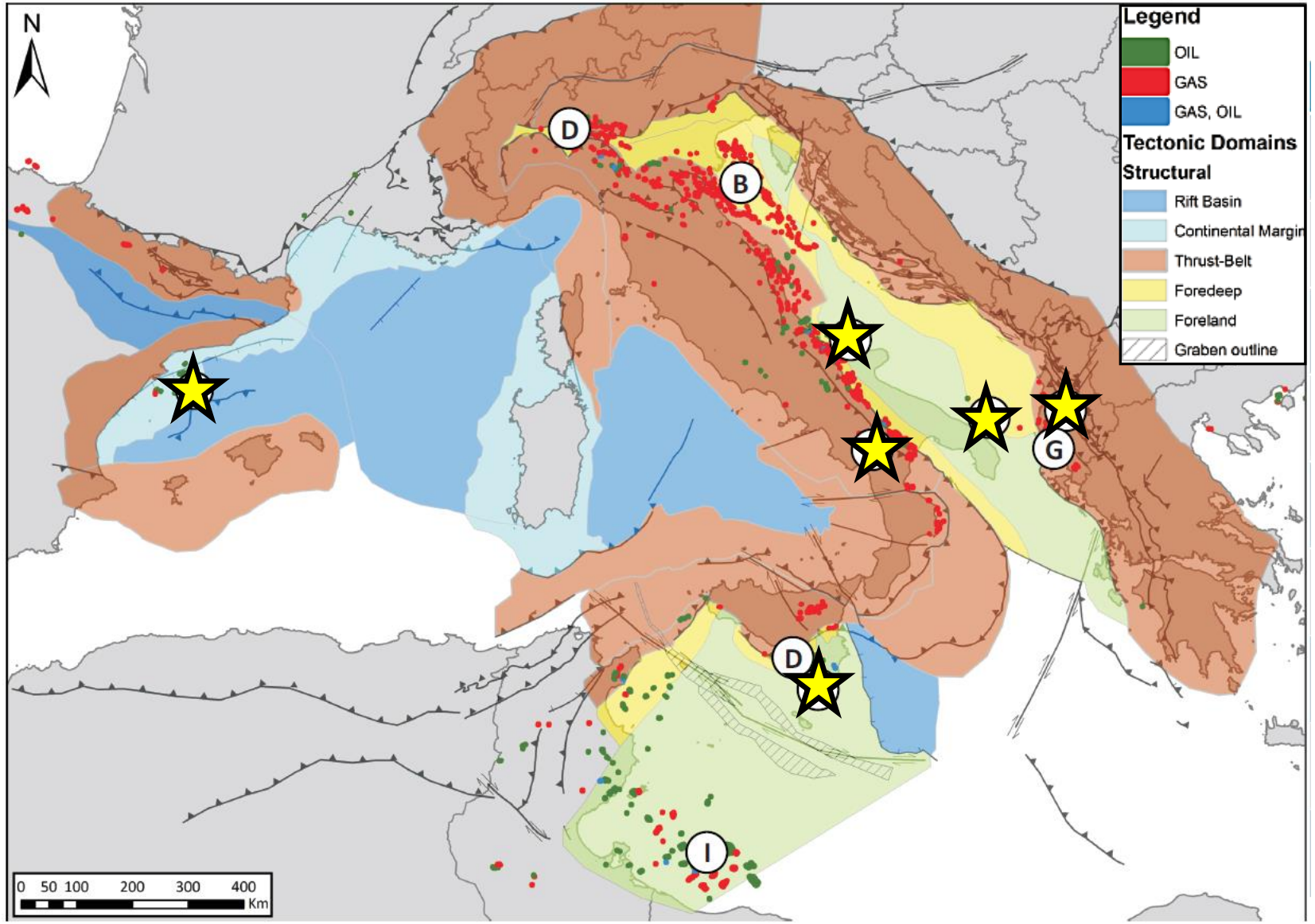
Legend

- GAS, OIL
- GAS
- OIL

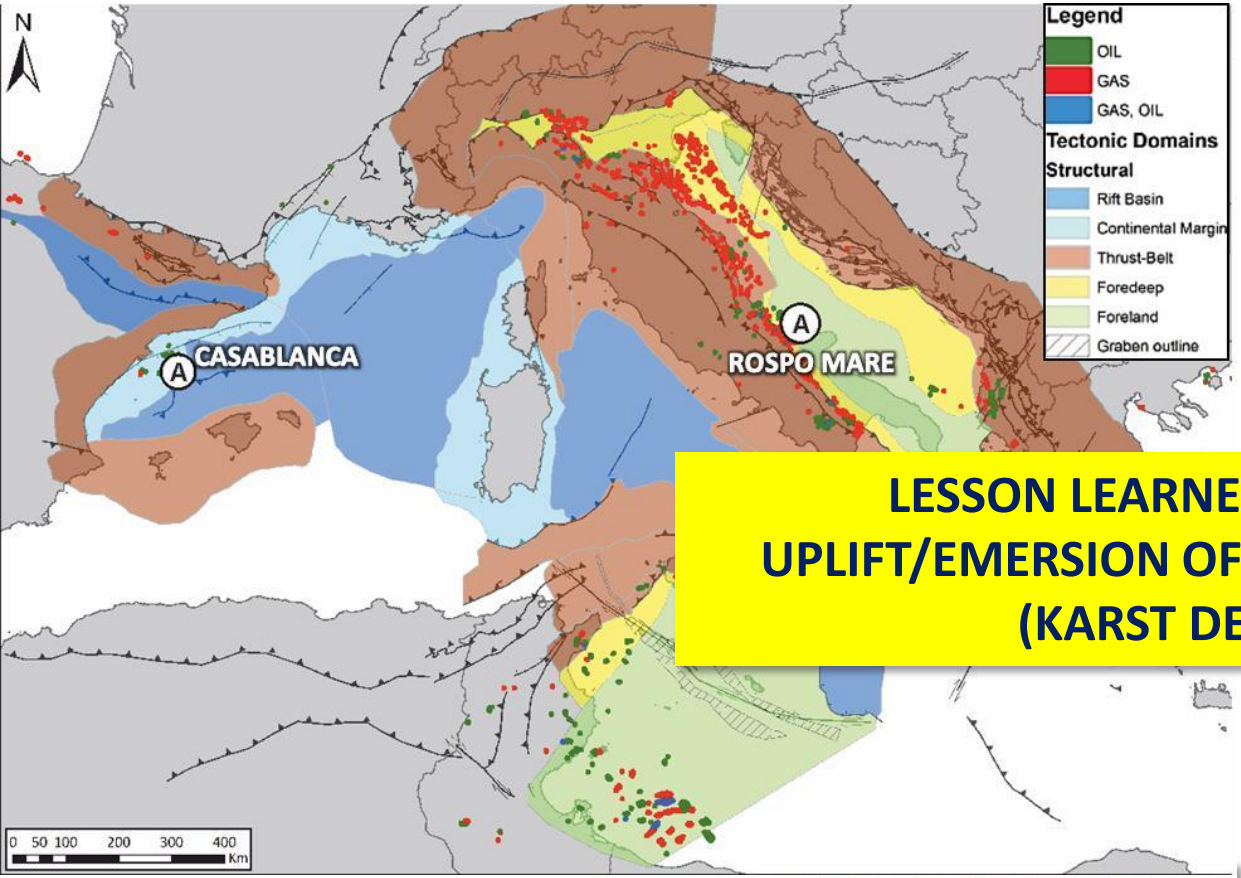
Tectonic Domains

- Rift Basin
- Continental Margin
- Thrust-Belt
- Foreland
- Foredeep

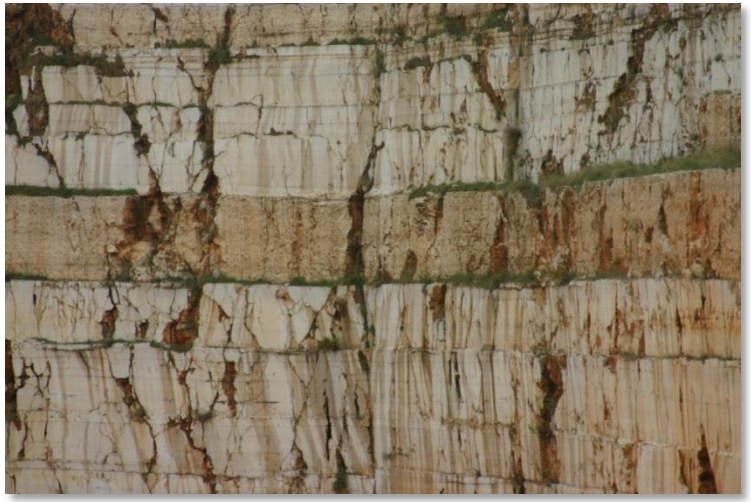
MAIN HC DISCOVERIES



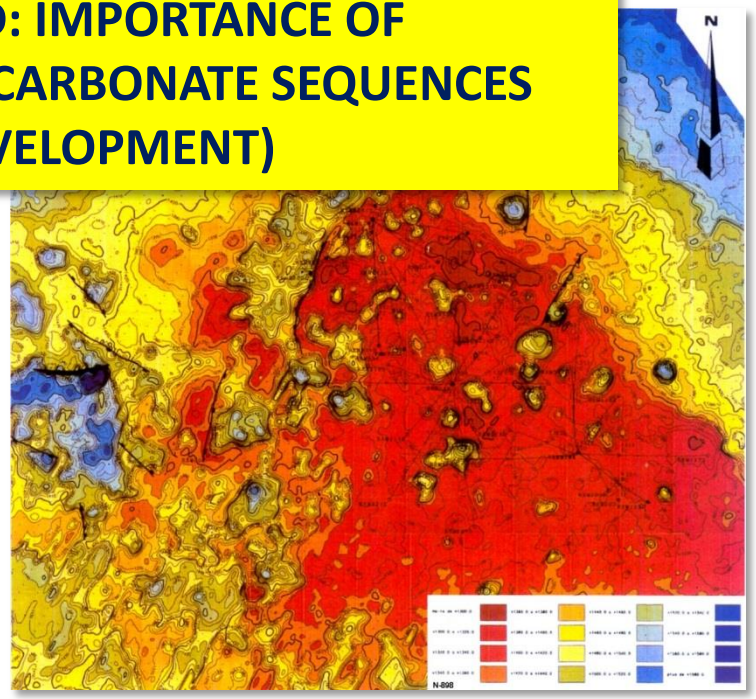
CASABLANCA AND ROSPO MARE



APRICENA OUTCROP ANALOGUE



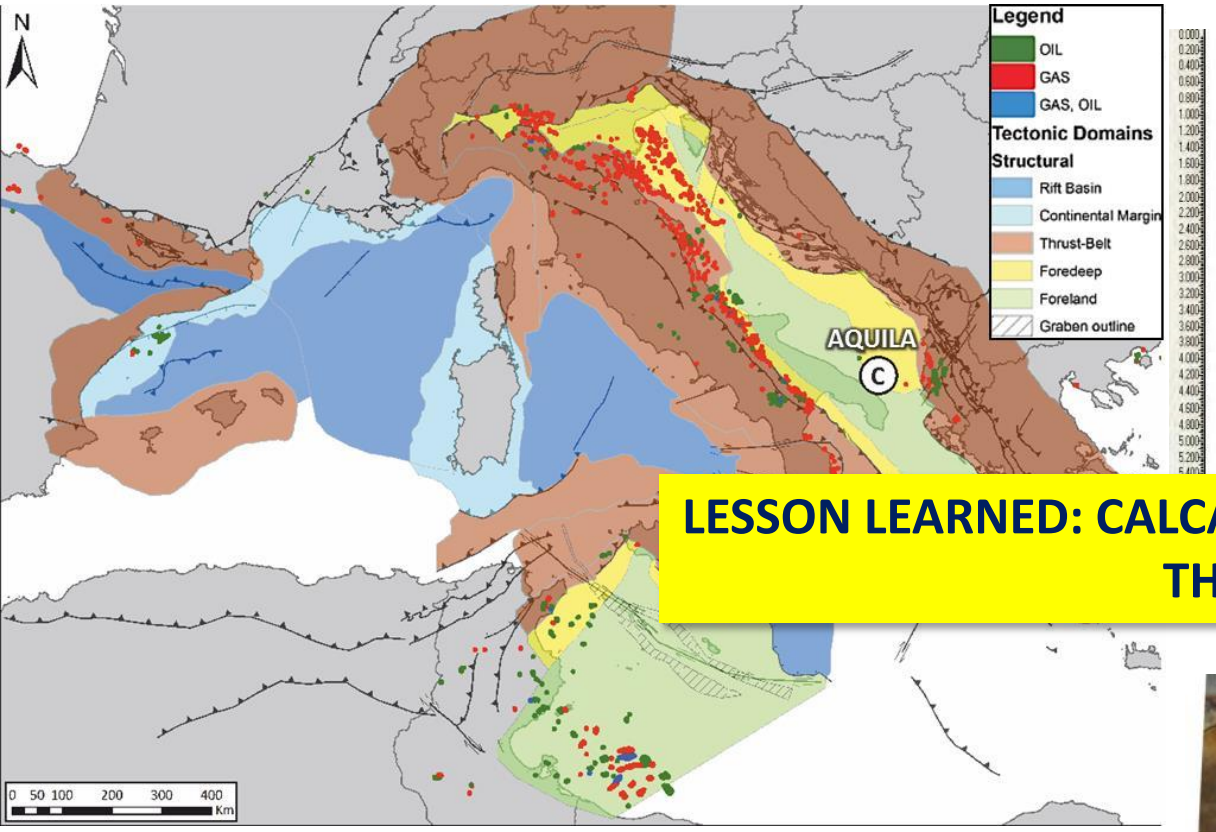
LESSON LEARNED: IMPORTANCE OF UPLIFT/EMERSION OF CARBONATE SEQUENCES (KARST DEVELOPMENT)

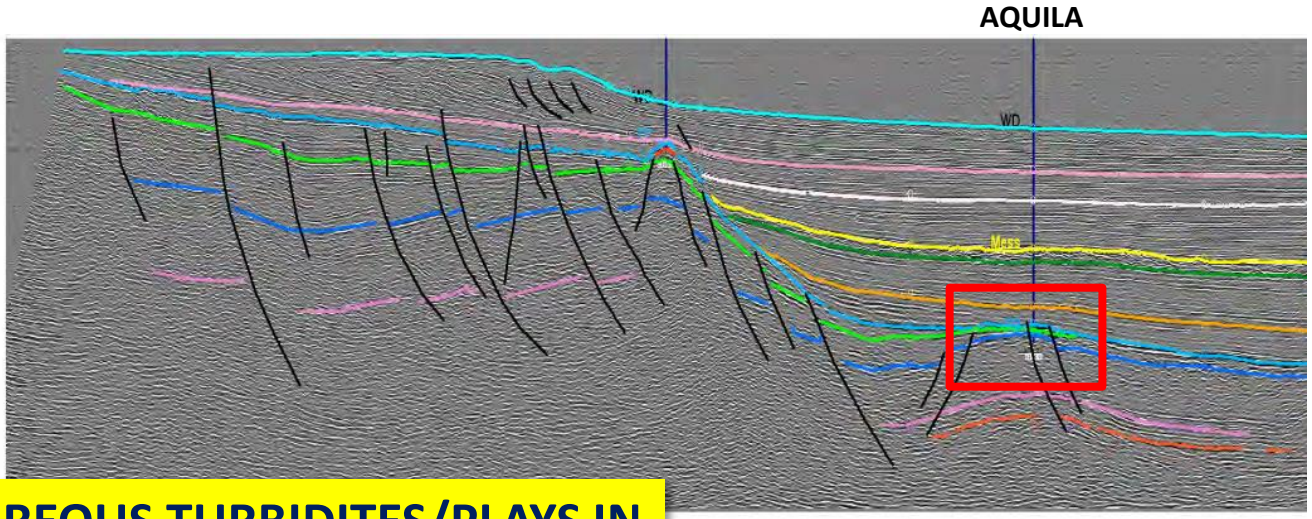


- **SOURCE**: TRIASSIC EVAPORITIC SEQUENCE AND UPPER JURASSIC ANOXIC ARGILLACEOUS MUDSTONE
- **RESERVOIR**: SHALLOW WATER KARSTIFIED MESOZOIC CARBONATES
- **SEALS:** MIOCENE & PLIOCENE POST-RIFT AND FOREDEEP SEQUENCE
- **HC:** OIL

CASABLANCA PLUG

AQUILA

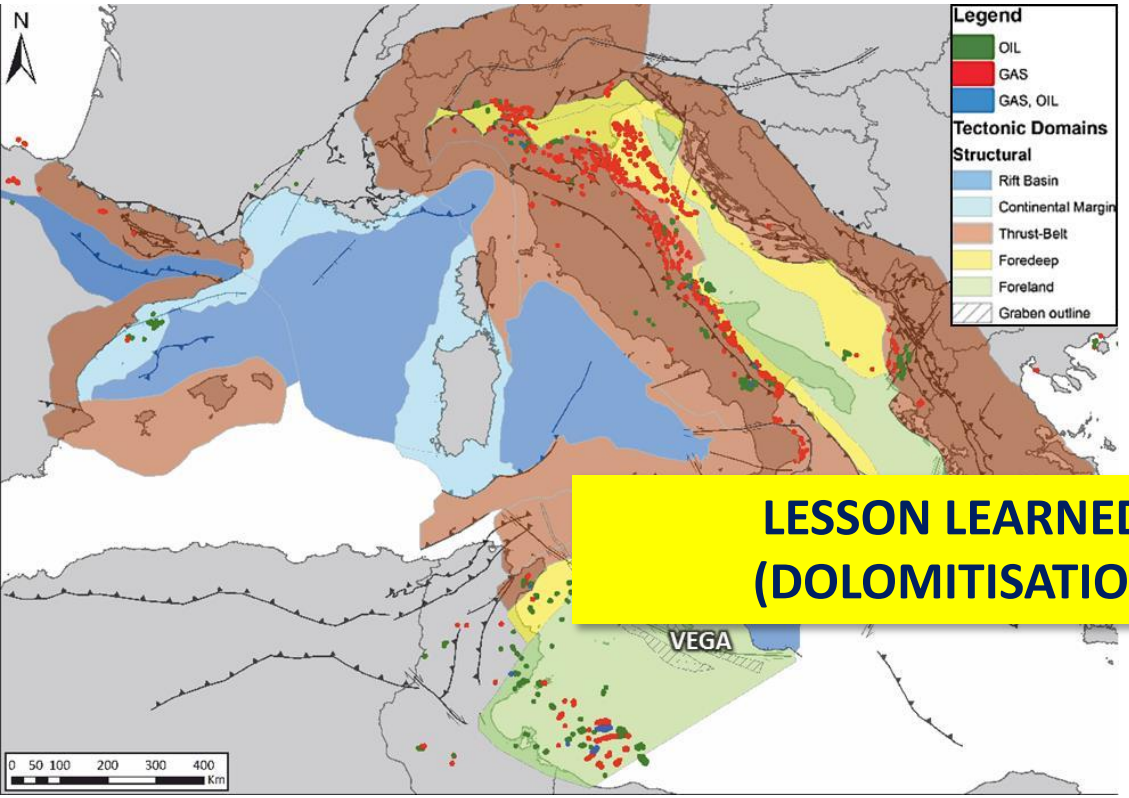


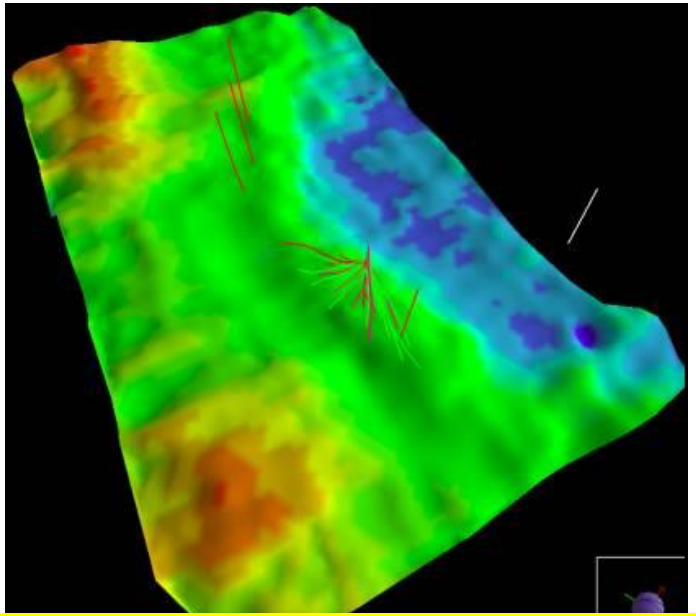


LESSON LEARNED: CALCAREOUS TURBIDITES/PLAYS IN THE BASIN

- **SOURCE**: LOWER JURASSIC ANOXIC SHALE
- **RESERVOIR**: MESOZOIC CARBONATE TURBIDITES
- **SEALS:** PLIO-PLEISTOCENE FOREDEEP SHALE
- **HC:** OIL

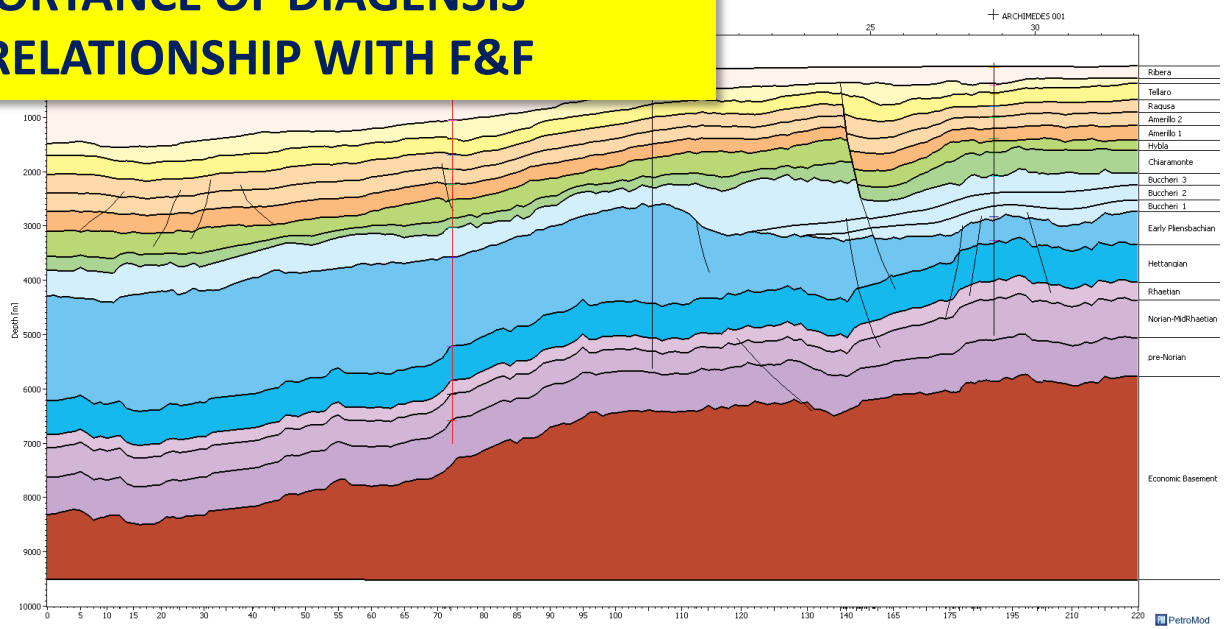
VEGA





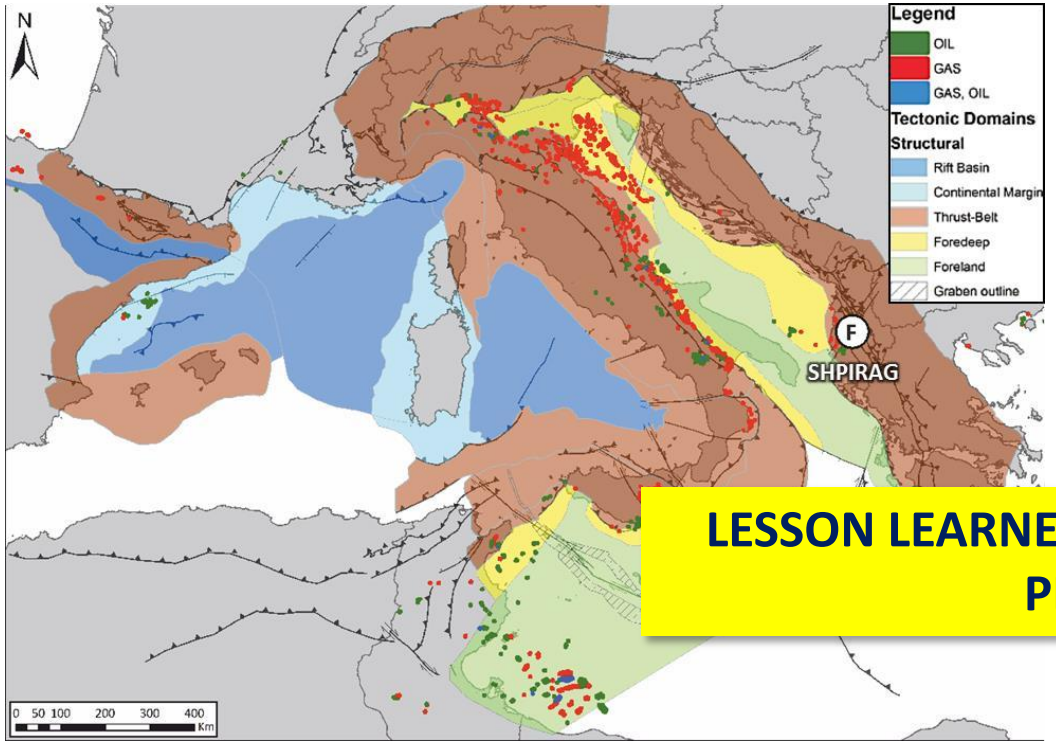
- **SOURCE**: DEEPWATER ANOXIC CARBONATES
- **RESERVOIR**: JURASSIC CARBONATE PLATFORM MARGIN (DOLOMITISATION, KARST AND FRACTURING)
- **SEALS**: JURASSIC DEEP WATER CARBONATES
- **HC**: OIL

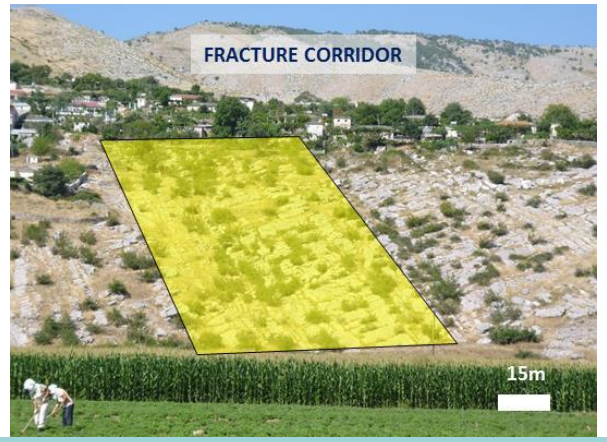
LESSON LEARNED: IMPORTANCE OF DIAGENSIS (DOLOMITISATION) & RELATIONSHIP WITH F&F



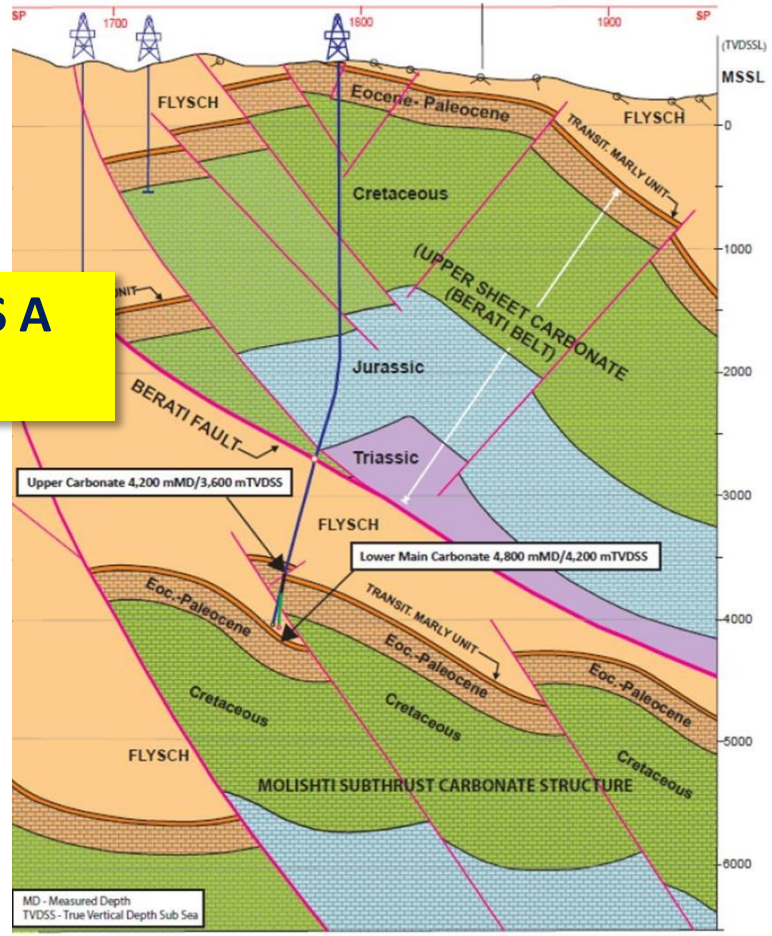
SHPIRAG

- **SOURCE:** LOWER JURASSIC ANOXIC SHALE
- **RESERVOIR:** CRETACEOUS AND TERTIARY DEEP WATER FRACTURED CARBONATES
- **SEALS:** TERTIARY FLYSCH
- **HC:** OIL

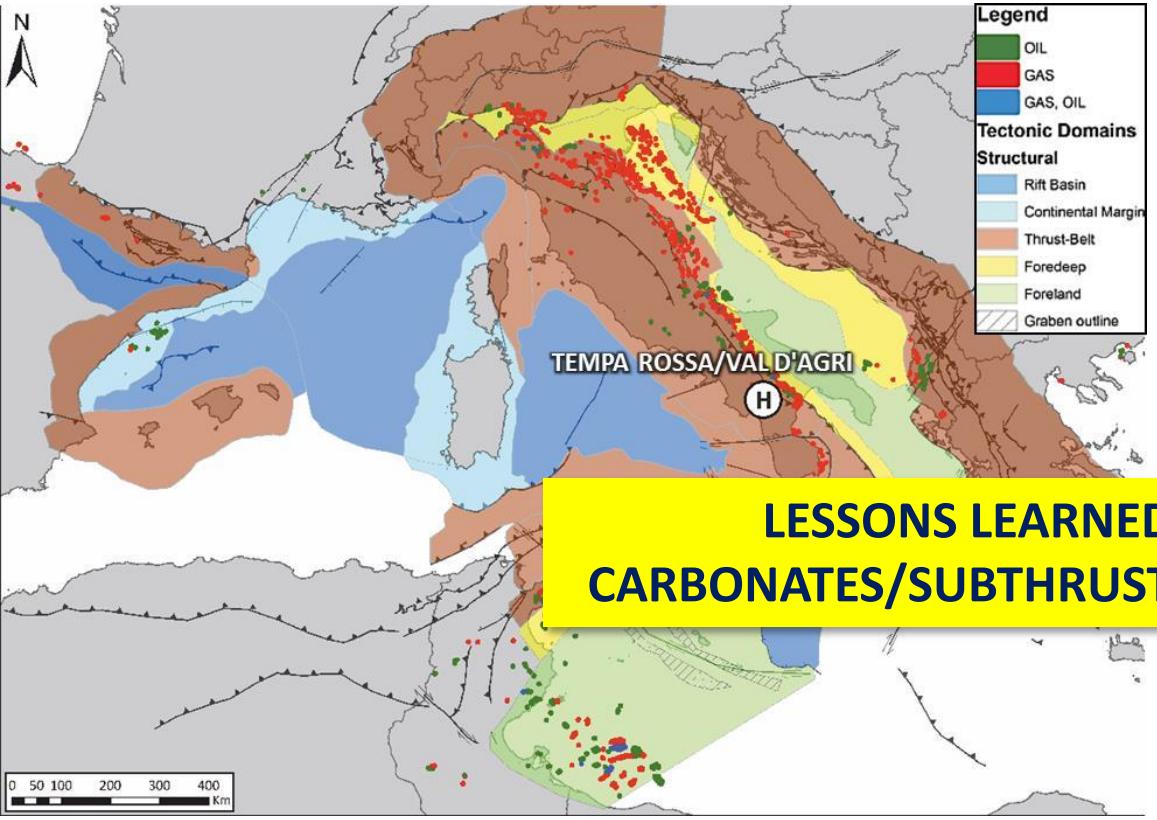


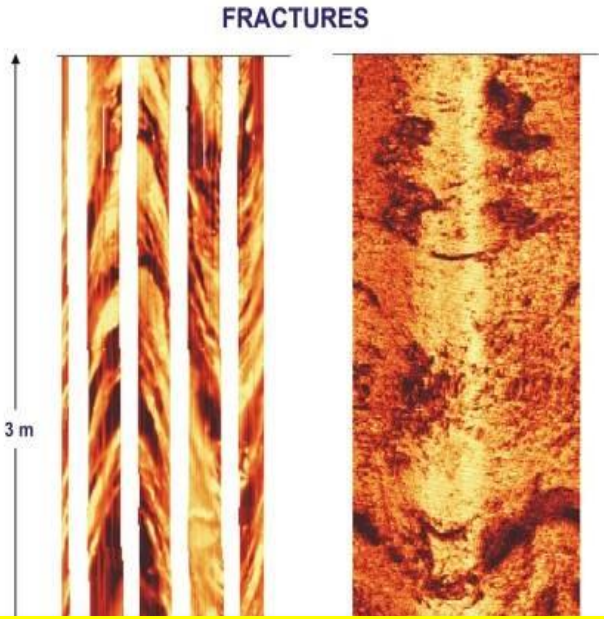


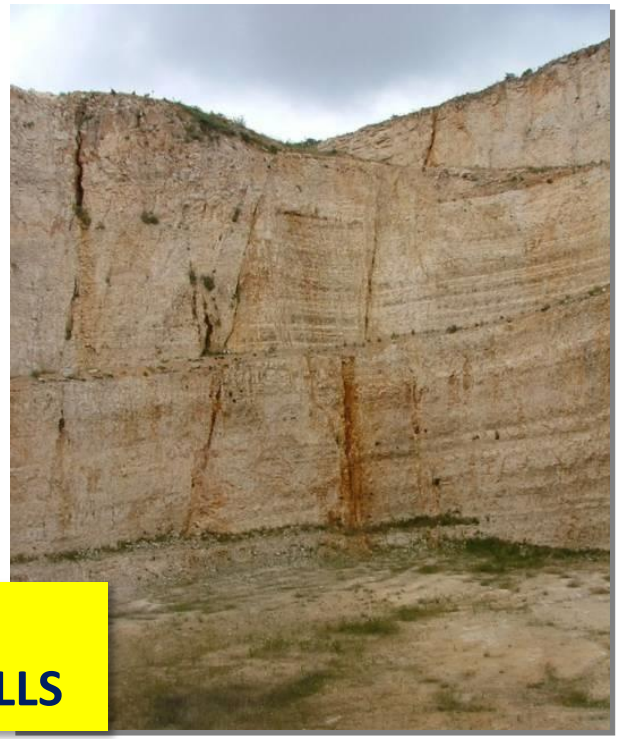
LESSON LEARNED: TIGHT BASINAL CARBONATES A PLAY (IF FRACTURED)



TEMPA ROSSA/VAL D'AGRI

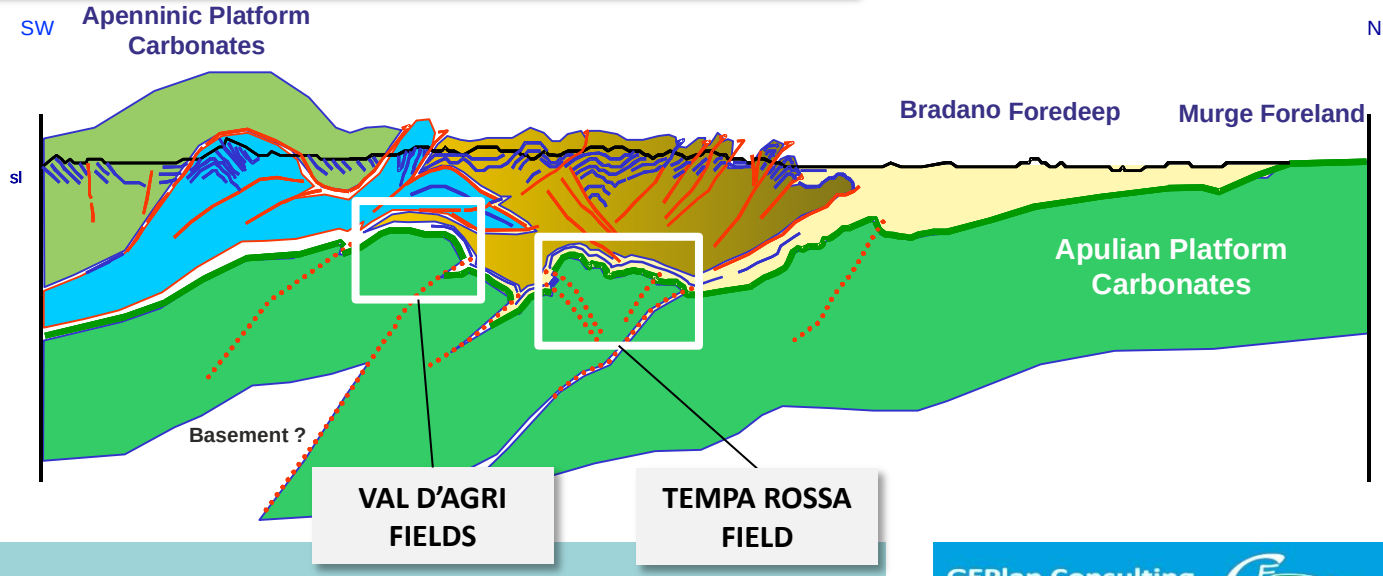




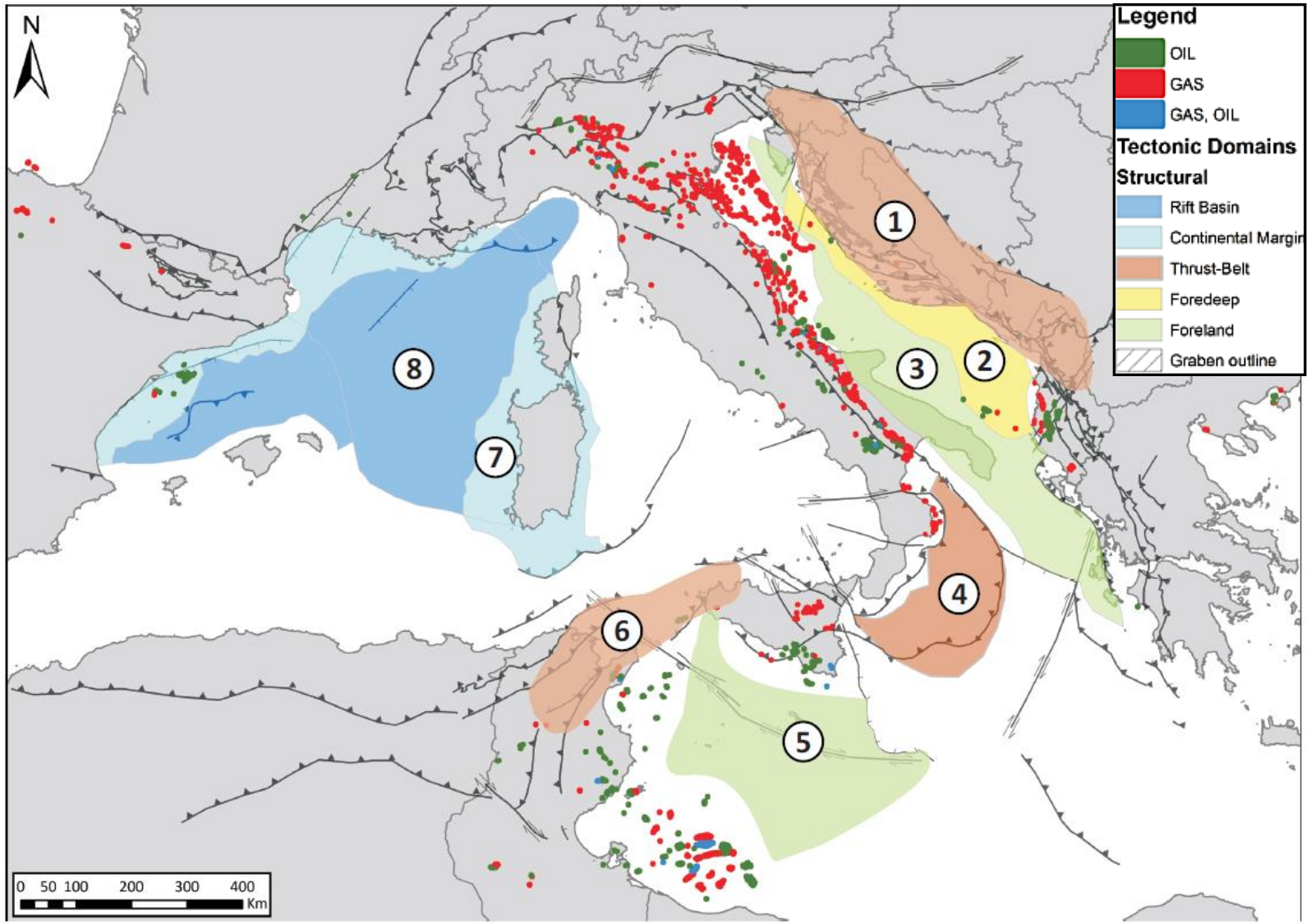


LESSONS LEARNED: IMPACT OF FRACTURES ON CARBONATES/SUBTHRUST PLAYS; HOW TO INCREASE PI WELLS

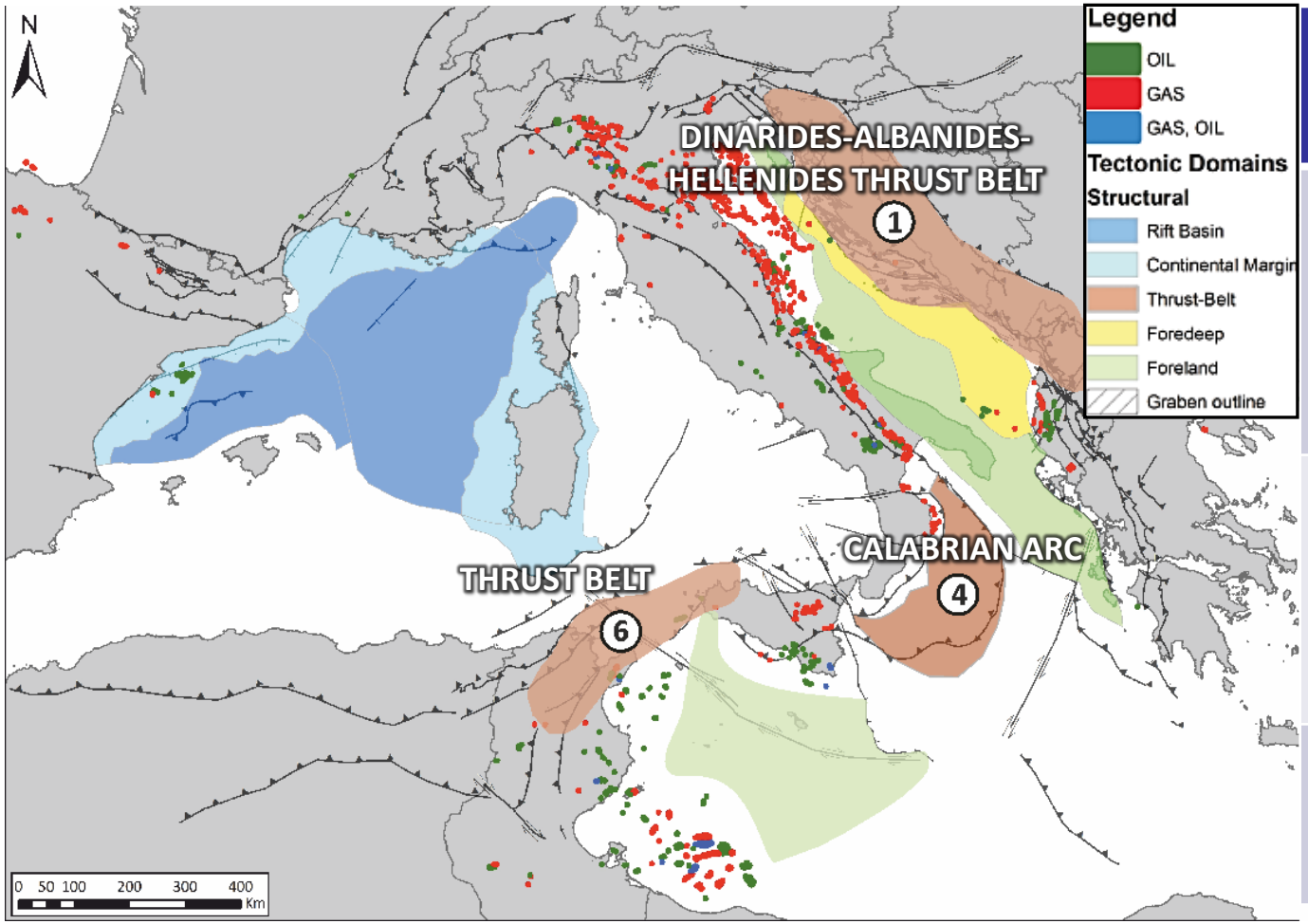
- **SOURCE:** CRETACEOUS SHALLOW WATER INTRAPLATFORM CARBONATES
- **RESERVOIR:** CRETACEOUS SHALLOW WATER FRACTURED CARBONATES
- **SEALS:** PLIOCENE FOREDEEP SHALE
- **HC:** OIL



NEW EXPLORATION POTENTIAL

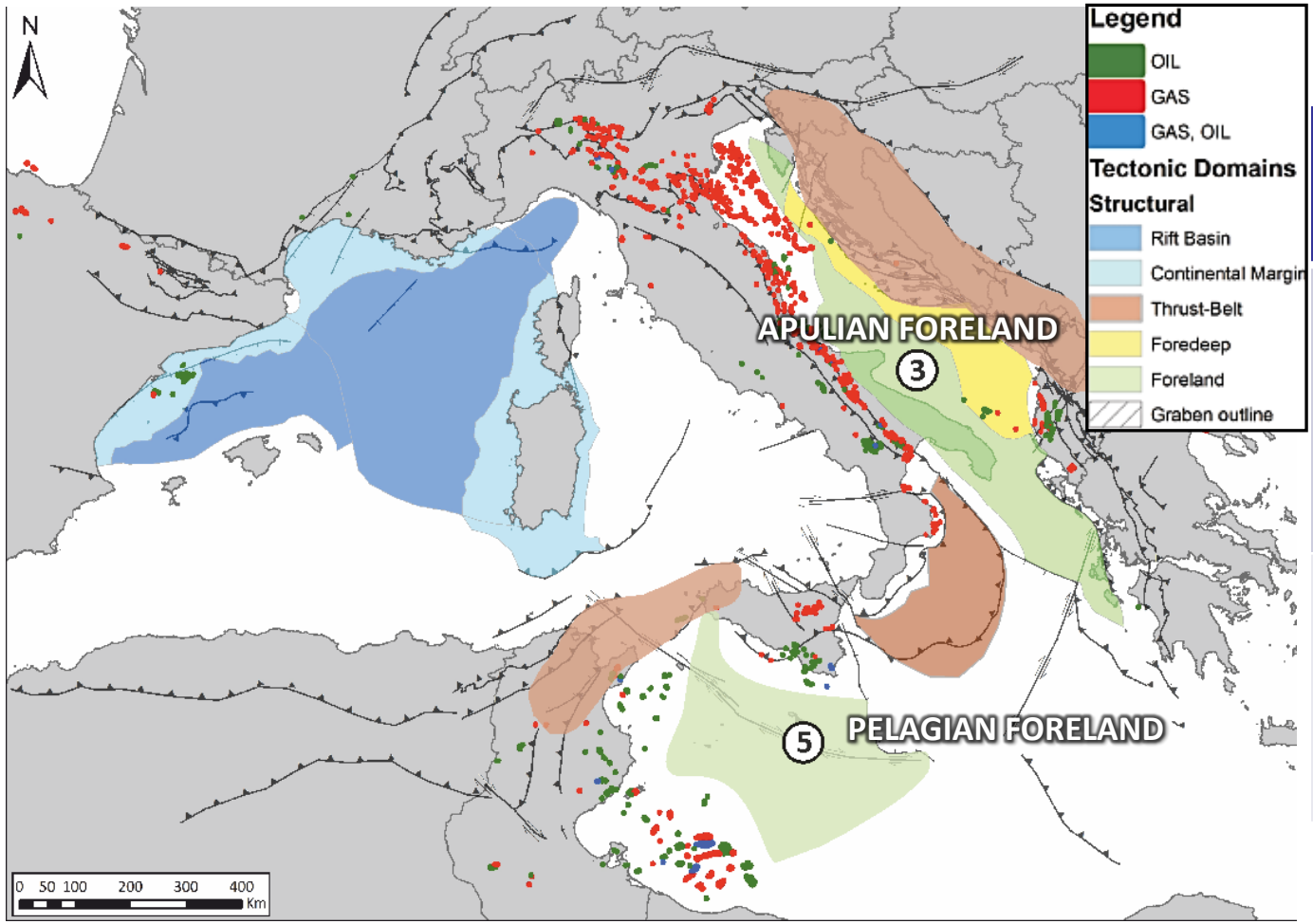


THRUST BELT PLAY



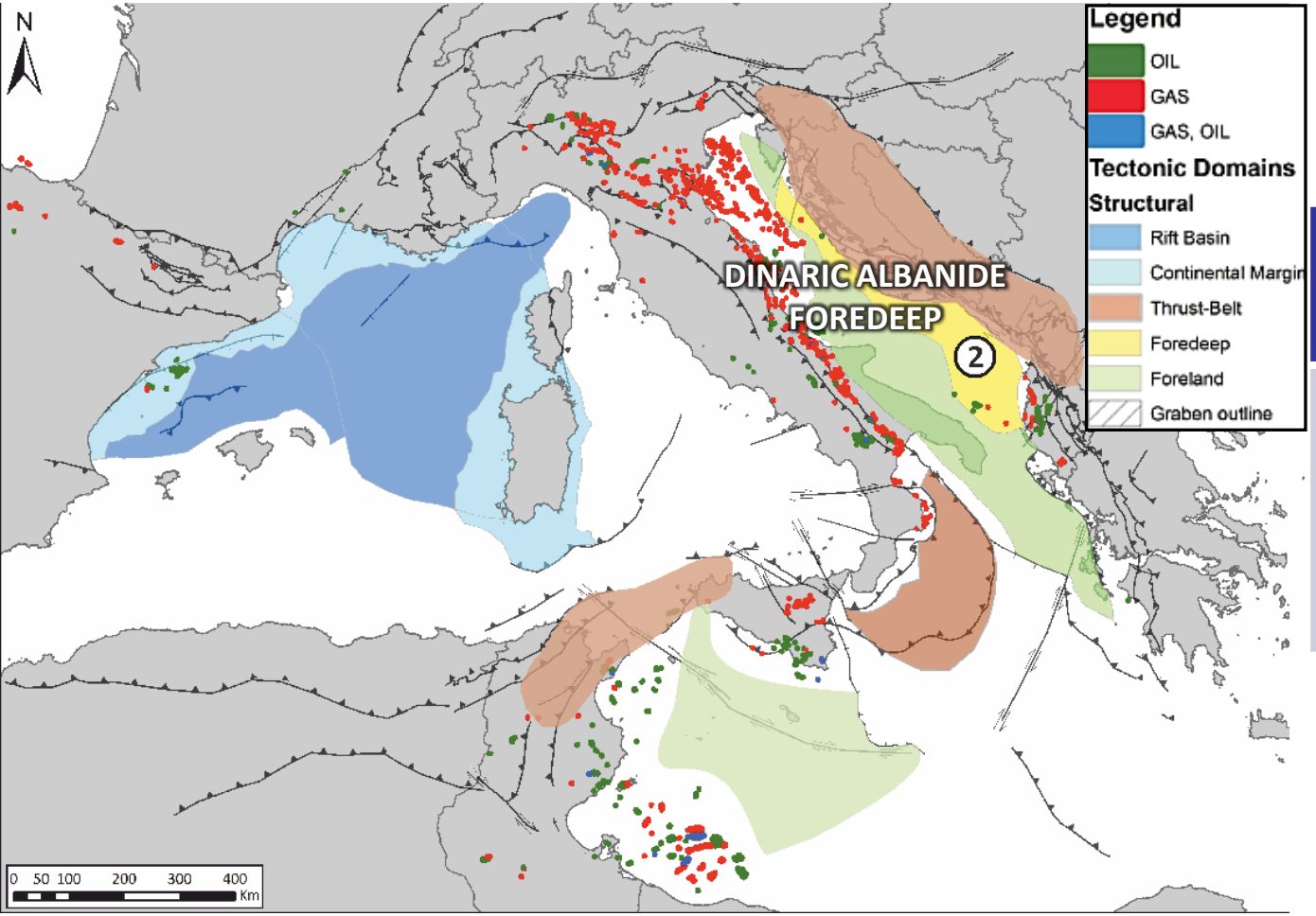
PLAY	TECTONIC DOMAIN	SOURCE	RESERVOIR	MAIN RISKS
1	DINARIDES-ALBANIDES-HELLENIDES THRUST BELT	LOWER JURASSIC ANOXIC SHALE CRETACEOUS SHALLOW WATER INTRAPLATFORM CARBONATES	CRETACEOUS AND TERTIARY DEEP WATER FRACTURED CARBONATES	SOURCE ROCK DISTRIBUTION (INTRALATFOMR BASINS), EFFICIENT SEAL, HC GENERATION, COMPLEX GEOLOGY DRILLING
4	CALABRIAN ARC	?	MIOCENE/PLIOCENE DISTAL TURBIDITE	SOURCE ROCK PRESENCE AND MATURITY, RESERVOIR QUALITY, HEAT FLOW, FAULT SEALING, COMPLEX GEOLOGY, DEEPWATER
6	THRUST BELT	LOWER CRETACEOUS?	FRACTURED & BIOCLASTIC CARBONATES	COMPLEX STRUCTURAL STYLE, SOURCE ROCK PRESENCE, VOLCANISM, DEEPWATER

FORELAND



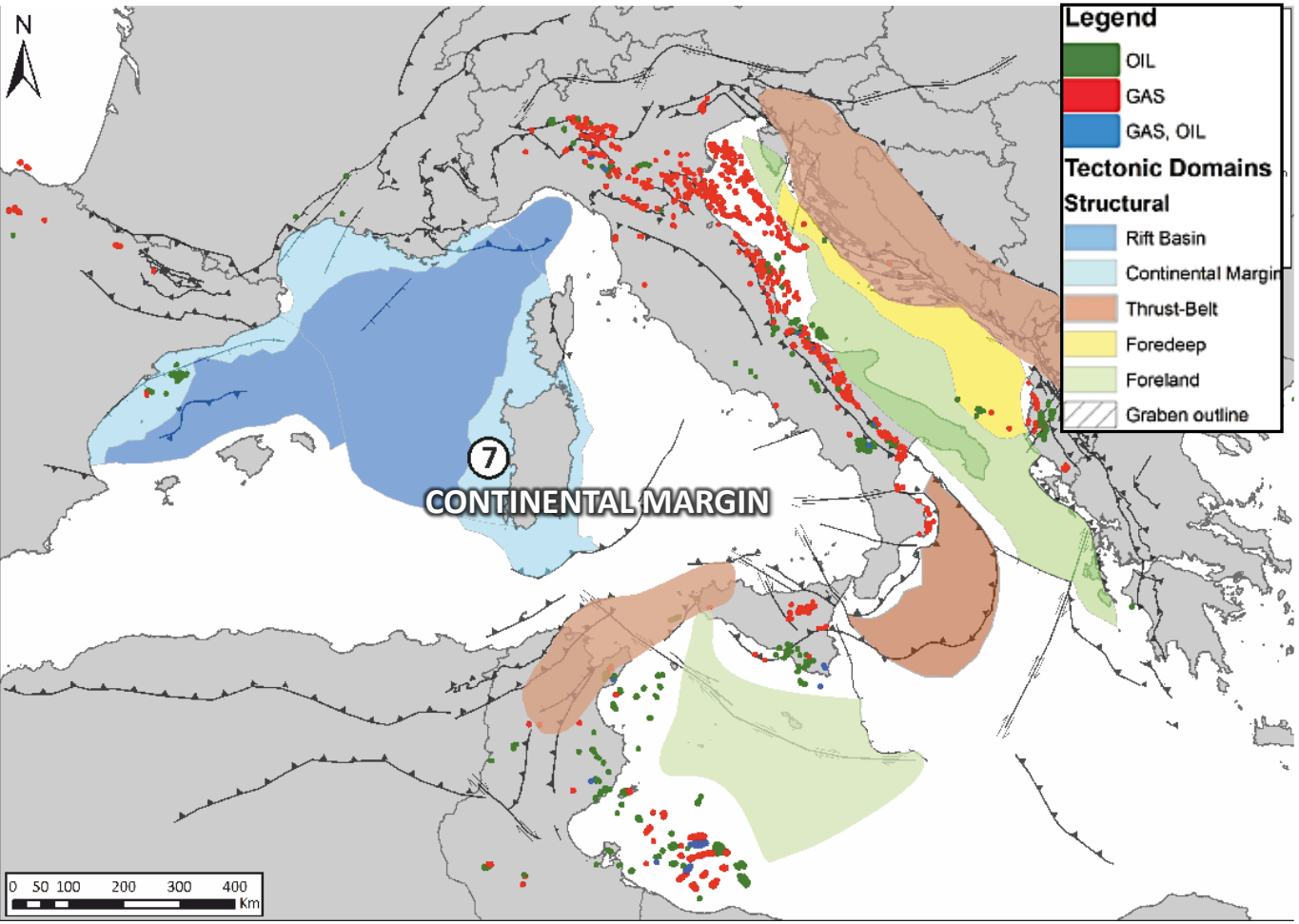
PLAY	TECTONIC DOMAIN	SOURCE	RESERVOIR	MAIN RISKS
3	APULIAN FORELAND	TRIASSIC EVAPORITIC SEQUENCE AND UPPER JURASSIC ANOXIC ARGILLACEOUS MUDSTONE	PLIO-PLEISTOCENE FOREDEEP SHALE	SOURCE ROCK PRESENCE AND MATURITY, RESERVOIR QUALITY, STRUCTURE
5	PELAGIAN FORELAND	DEEPWATER ANOXIC CARBONATES EOCENE PELAGIC LIMESTONE	EOCENE SEDIMENTS	SOURCE ROCK PRESENCE AND MATURITY, FAULT SEALING

FOREDEEP



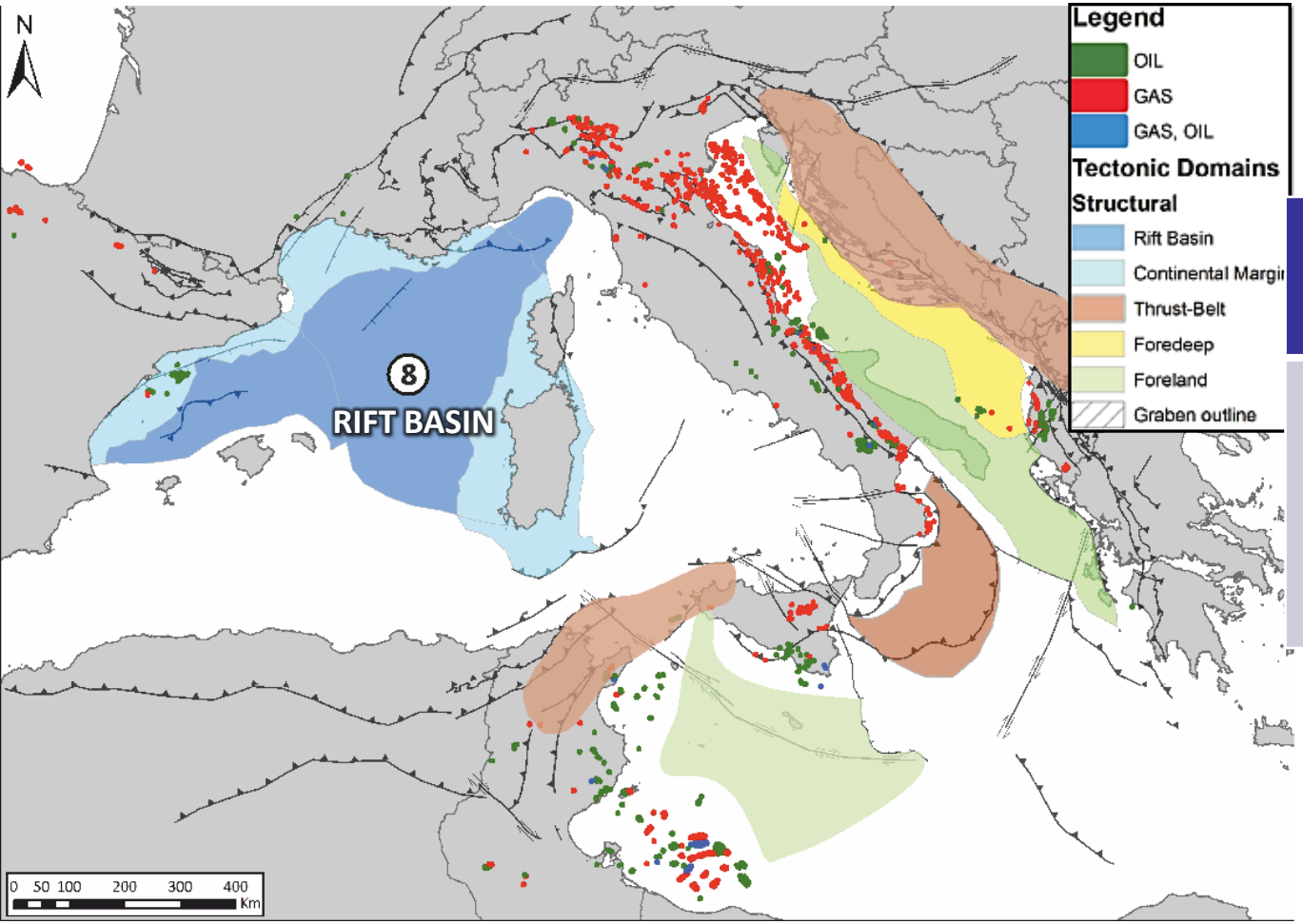
PLAY	TECTONIC DOMAIN	SOURCE	RESERVOIR	MAIN RISKS
2	DINARIC-ALBANIDE FOREDEEP	INTRAFORMATION FOREDEEP SHALE	TERTIARY FOREDEEP SANDSTONE	RESERVOIR QUALITY AND DISTRIBUTION, HEAT FLOW, DEEPWATER

CONTINENTAL MARGIN



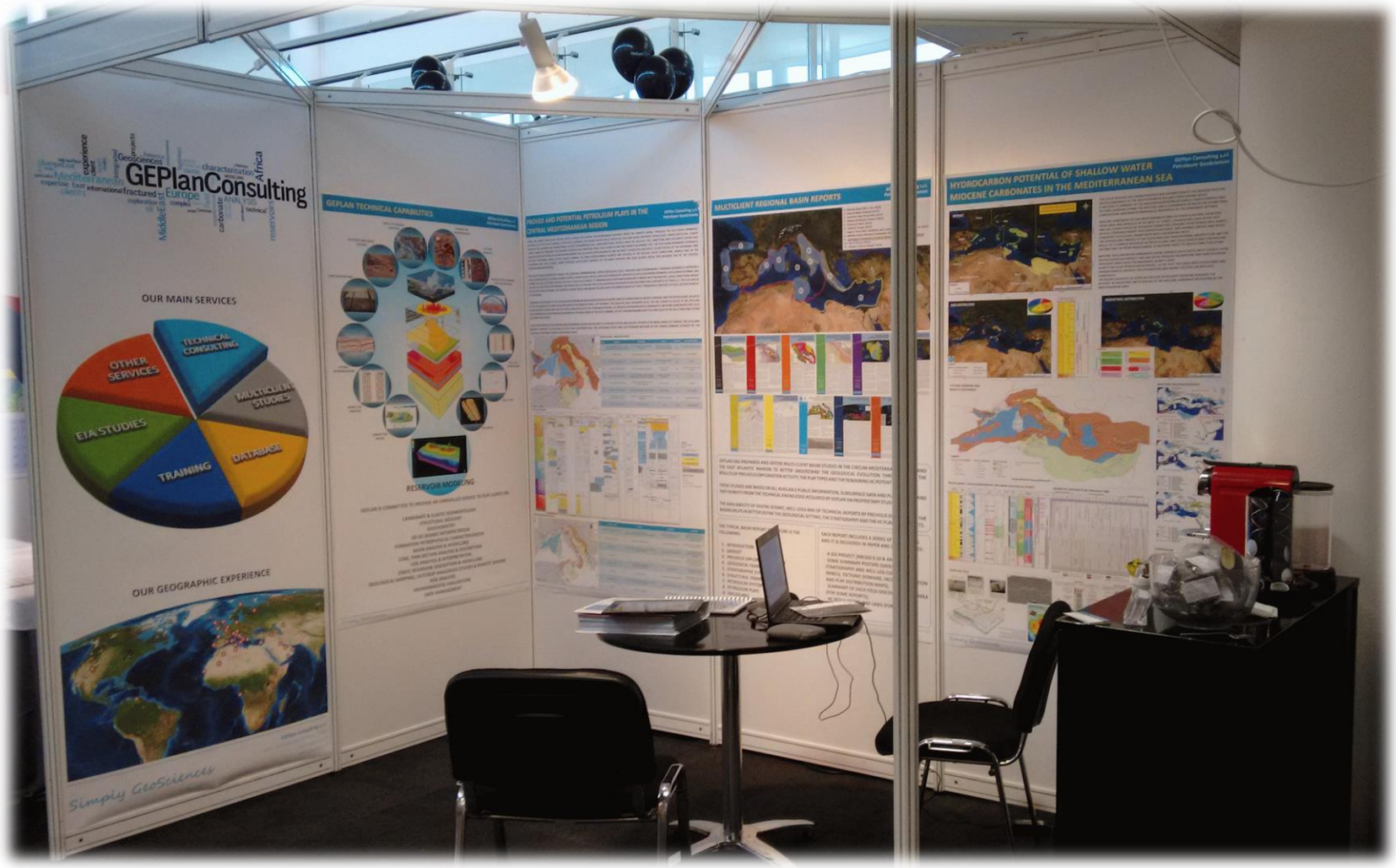
PLAY	TECTONIC DOMAIN	SOURCE	RESERVOIR	MAIN RISKS
7	CONTINENTAL MARGIN	TRIASSIC EVAPORITIC SEQUENCE AND UPPER JURASSIC ANOXIC ARGILLACEOUS MUDSTONE	MESOZOIC CARBONATE TILTED BLOCKS	SOURCE ROCK PRESENCE, RESERVOIR PRESENCE AND QUALITY

RIFT BASIN



PLAY	TECTONIC DOMAIN	SOURCE	RESERVOIR	MAIN RISKS
8	RIFT BASIN	PRE-SYN RIFT SEQUENCES	POST-RIFT SEQUENCES	UNPROVED PETROLEUM SYSTEMS, ULTRA DEEP WATER

THANK YOU!



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