

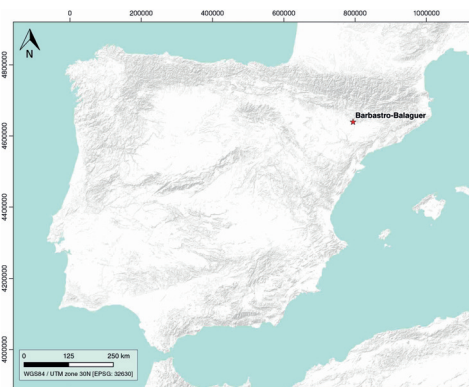
# Barbastro-Balaguer

ID #102

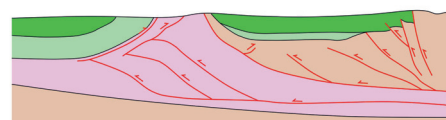
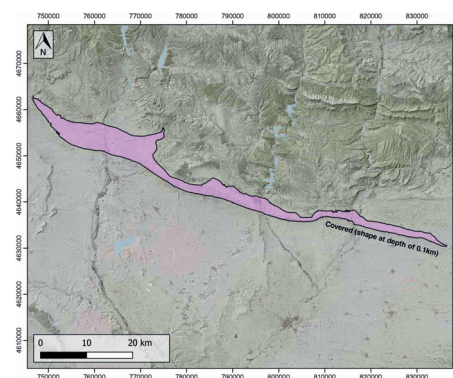
## GENERAL INFORMATION

Structure type	Evaporite-cored anticline
Deformed/Undeformed	Deformed
Geological Setting	Ebro foreland basin, Northern-Central Domain
Outcropping/buried	Partially buried
Evaporite unit/s name	Barbastro Fm.
Evaporite unit/s age	Upper Priabonian-Chatian (Eocene-Oligocene)
Evaporite unit/s origin	Continental
Classif. (Hudec and Jackson, 2009)	Ductile piercement, Thrust piercement
Classif. (Jackson and Talbot, 1986)	Salt anticline
Other comments	Asymmetric geometry: steeply dipping beds in the southern forelimb and a low dip in the northern backlimb. Alpine thrusting stopped approximately 26 Ma ago during the Miocene. From 26 Ma ago to the present, the evaporitic flow towards the anticline core is exclusively due to buoyancy and differential loading.

## LOCATION



## SHAPE AND SUB-SURFACE STRUCTURE



## STRATIGRAPHY AND STRUCTURE

Evaporite unit/s composition	Gypsum-Halite-Anhydrite-Shale
Post-evaporite and pre-kinematic unit/s	-
Syn-kinematic unit/s	Rupelian (Peraltilla Fm., limestones, marly limestones, sandstones and red mudstones); Chattian (Sariñena Fm., sandstones and conglomerates)
Post-kinematic unit/s (or post-evaporite deposition when undeformed)	Pliocene (siltstones, sandstones, conglomerates); Quaternary
Age of evaporite flow or deformation (when deformed)	Lower Oligocene, Oligocene to Miocene
Flow or deforming triggering mechanisms	Alpine compression and thrusting (early stage) and buoyancy and differential loading
Halokinetic structures	Normal faults / anticline-syncline folding

## SUB-SURFACE DATA AVAILABILITY

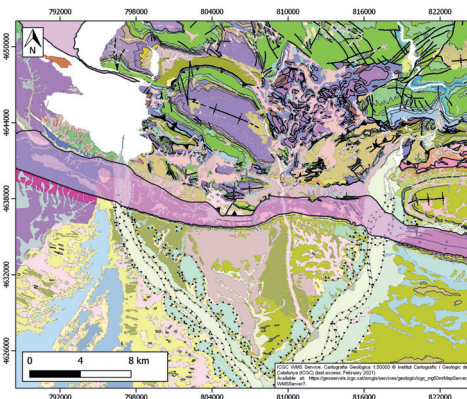
Available borehole data	Yes
Available seismic data	Yes



## MAIN REFERENCES

Stratigraphy	Senz and Zamorano (1992)
Regional Stratigraphy	Santolaria et al. (2020)
Structure	Peña and Pocoví (1988)
Regional Structure	Santolaria et al. (2017)
Gravimetry	Santolaria et al. (2017)
Petrophysics/Paleomagnetism	Oliván et al. (2018)

## GEOLOGY (GEODE IGME)



IBERIAN  
EVAPORITE  
STRUCTURE  
DATABASE