Loulé

ID #138

SUMARIZED INDEX CARD

Downloaded from Iberian Evaporite Structure DataBase

GENERAL INFORMATION

Structure type	Evaporite Diapir
Deformed/Undeformed	Deformed
Geological Setting	Algarve Basin, Central Domain
Outcropping/buried	Partially buried
Evaporite unit/s name	Hettangian Evaporites Unit
Evaporite unit/s age	Hettangian (Lower Jurassic)
Evaporite unit/s origin	Marine
Classif. (Hudec and Jackson, 2009)	Passive piercement
Classif. (Jackson and Talbot, 1986)	Salt wall
Other comments	Espiche, Loulé, Albufeira, and Faro diapirs are associated with the main E–W-striking extensional faults. A detailed map of the mining galleries within the Loulé diapir can be found in Davidson et al. (2016).

STRATIGRAPHY AND STRUCTURE

Evaporite unit/s composition	Halite
Syn-kinematic unit/s	Early Jurassic (dolostones and limestones) ; Callovian (yellow marls and limestones) ; Oxfordian (limestones and marly limestones intercalation) ; Kimmeridgian (limestones and dolostones) ; Tithonian (limestones) Lower Cretaceous (limestones, marlstones, conglomerates and sandstones)
Post-evaporite and pre-kinematic unit/s	-
Post-kinematic unit/s (or post-evaporite desposition when undeformed)	Pliocene and Quaternary (alluvial and colluvial detrital deposits)
Age of evaporite flow or deformation (when deformed)	Lower Jurassic to Upper Cretaceous, Oligocene to Miocene
Flow or deforming triggering mechanisms	Extensional regime in the Algarve basin (main stage) Alpine compression (reactivation stage)
Halokinetic structures	Syncline-Anticline folding / thrust faults / halite recrystallization veins / progressive unconformities

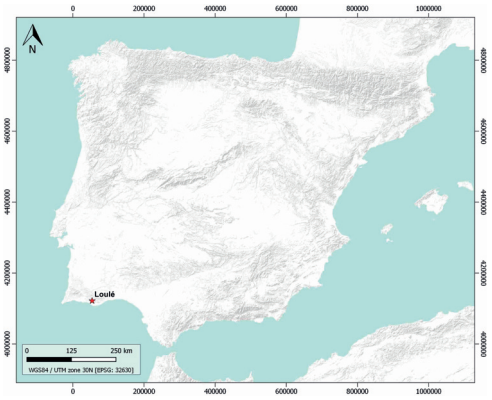
SUB-SURFACE DATA AVAILABILITY

Available borehole data	No
Available seismic data	Yes

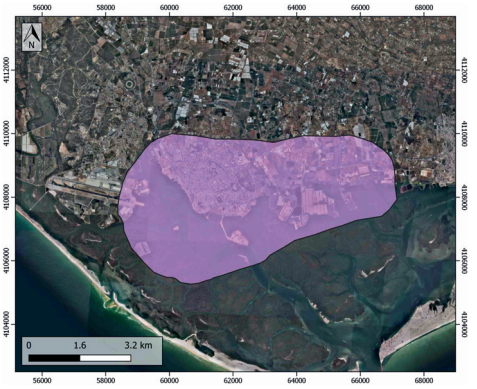
MAIN REFERENCES

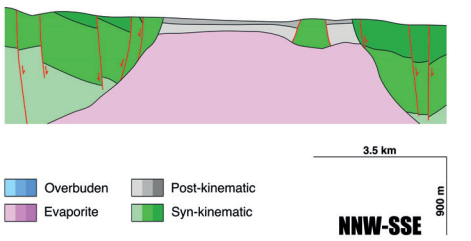
Stratigraphy	Davison et al. (2017)
Regional Stratigraphy	Ramos et al. (2017)
Structure	Davison et al. (2017)
Regional Structure	Llave et al. (2001)
Gravimetry	Ayala et al. (2016)
Petrophysics/Paleomagnetics	Machek et al. (2014)

LOCATION

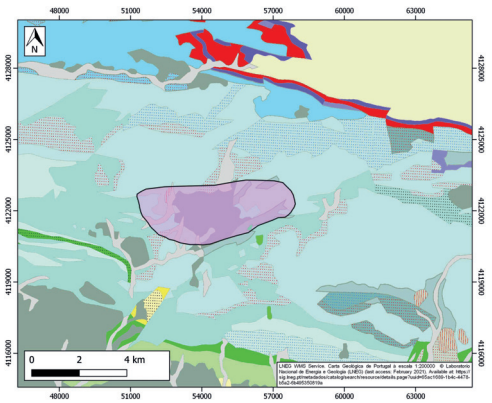


SHAPE AND SUB-SURFACE STRUCTURE





GEOLOGY (GEODE IGME)



IBERIAN EVAPORITE STRUCTURE DATABASE