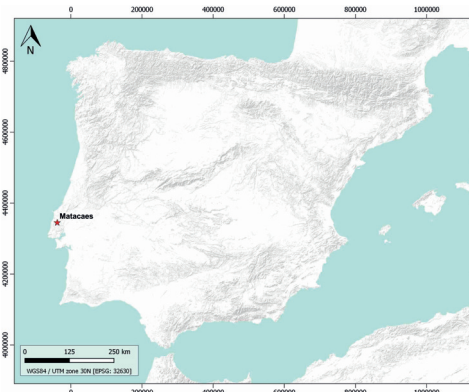


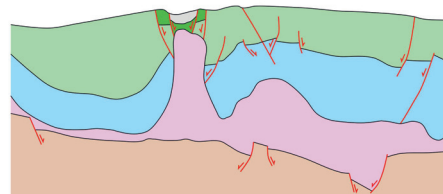
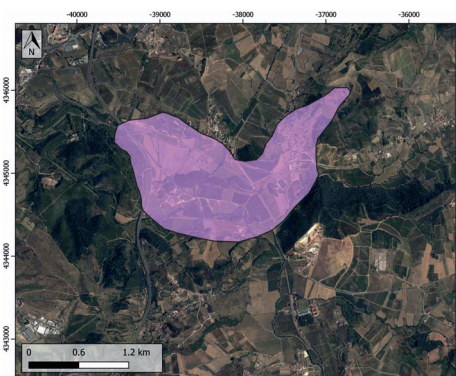
## GENERAL INFORMATION

|                                     |   |
|-------------------------------------|---|
| Structure type                      | Evaporite Diapir  |
| Deformed/Undeformed                 | Deformed  |
| Geological Setting                  | Lusitanian Basin, Central Domain  |
| Outcropping/buried                  | Outcropping   |
| Evaporite unit/s name               | Dagorda Fm.   |
| Evaporite unit/s age                | Late Rhaetian-Hettangian (Upper Triassic-Lower Jurassic)  |
| Evaporite unit/s origin             | Marine  |
| Classif. (Hudec and Jackson, 2009)  | Passive piercement  |
| Classif. (Jackson and Talbot, 1986) | Salt glacier  |
| Other comments                      | Matacães diapir geometry is the result of different tectonic periods (distensive-compressive) that were registered in the Lusitanian Basin, with special relevance to the Miocene compression. In this context, the Matacaes Diapir has intermediary features between a salt glacier and a "salt tongue". |

## LOCATION



## SHAPE AND SUB-SURFACE STRUCTURE



## STRATIGRAPHY AND STRUCTURE

|  |  |
|--|--|
| Evaporite unit/s composition   | Gypsum-Marlstone-Halite-Dolomite-Shales  |
| Syn-kinematic unit/s   | Oxfordian-Kimmeridgian (Alcobaça Fm., marlstones and limestones) ; Tithonian (Lourinha-Boa Viagem Fm., sandstones, claystones and conglomerates) ; Berriasian-Aptian (Torres Vedras Fm., sandstones and claystones) ; Late Cretaceous-Miocene (Grés Superiores-Gândara Fm., sandstones and claystones) |
| Post-evaporite and pre-kinematic unit/s                              | Early-Middle Jurassic (Brenha Fm., marlstones, limestones and marly limestones)  |
| Post-kinematic unit/s (or post-evaporite deposition when undeformed) | Late Miocene (Moreia Fm.) ; Pliocene ; Quaternary  |
| Age of evaporite flow or deformation (when deformed)                 | late Cretaceous to Miocene, Upper Jurassic to Lower Cretaceous   |
| Flow or deforming triggering mechanisms                              | Extension and Late Jurassic-Early Cretaceous rifting and Alpine compression (inversion)  |
| Halokinetic structures   | Syncline-Anticline folding / normal faults / thrust faults   |

## SUB-SURFACE DATA AVAILABILITY

|                         |    |
|-------------------------|----|
| Available borehole data | No |
| Available seismic data  | No |



## MAIN REFERENCES

|                             |                            |
|-----------------------------|----------------------------|
| Stratigraphy                | Miranda et al. (2010)      |
| Regional Stratigraphy       | Davison and Barreto (2020) |
| Structure                   | Miranda et al. (2010)      |
| Regional Structure          | Pimentel et al. (2016)     |
| Gravimetry                  | Miranda et al. (2010)      |
| Petrophysics/Paleomagnetism | Sêco et al (2019)          |

## GEOLOGY (GEODE IGME)

