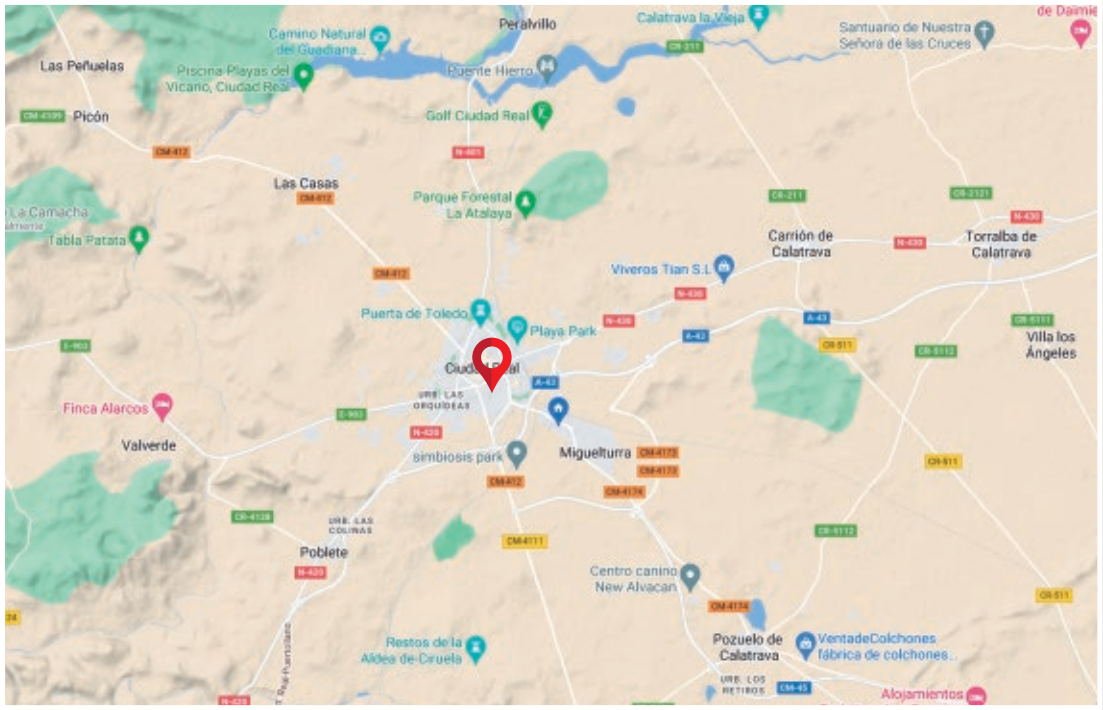
GOOGLE MAPS 38.983323, -3.923742

GEOTURISMO



www.proyectogeoparquevolcanesdecalatrava.es

Ciudad Real
AYUNTAMIENTO

D.L. CR686-2023

PROJECT

CALATRAVA VOLCANOES GEOPARK. CIUDAD REAL

CIUDAD REAL MAARS

Magma

Mercury

Coal

Castilla-La Mancha

GEOPARQUE VOLCANES DE CALATRAVA CIUDAD REAL

DIPUTACIÓN DE CIUDAD REAL

Ciudad Real settles on a magnificent example of several maars, with different morphologies and sizes, superimposed on each other. These are volcanic formations produced by hydromagmatic eruptions in which water, either surface or underground, interacts with a focus of magmatic heat. Successive deposits of variable thickness originate, creating ring-shaped structures (several metres thick) by the sedimentation of materials that are radially displaced at very high speeds and temperatures like "burning clouds" from the centre of the eruption (Fig. 1).

There are at least three maars linked to each other in a cluster, identified with the areas where they are located: Pozuelo de Don Gil (Plaza del Pilar), Los Ángeles, Las Herrerías (University General Hospital), La Cantera and Holgueras.

In the Torreón galleries, the deposits of pyroclastic flows can be observed in detail, i.e. the mixture of materials produced by the eruption made up of gases and fragments of rock from the substratum and magma, transported in the form of a current: "burning cloud". The deposits we see in the Torreón galleries are linked to the maar ring in the Los Ángeles district. There is a clear rhythmic alternation in layered laminae with different degrees of cohesion. These deposits show important deformations with traces of impact caused by volcanic bombs of lavas, limestone blocks, and other rocks of the existing substratum. This type of volcano-sedimentary deposits also gives rise to very varied stratigraphic morphologies, depending on the energy (speed and temperature) of the "burning cloud": laminations, stratifications and cross-laminations, dunes, antidunes, etc. Liquefaction structures and, sometimes, paleoseismites associated with the seismic activity that accompanied the eruptive processes in the maars can even be observed (Fig. 2 and 3).

The layout of the hydromagmatic buildings has conditioned the topography of the urban centre of Ciudad Real: the development of the urban fabric almost perfectly follows the edge of the maars (rondas and some main streets), as well as the location of some emblematic monuments of the city located in the topographically higher parts (Tower of the old Alcázar, or the city wall itself, partially built along the edge of the maars) (Fig. 4).

The details of the Tower of the old Alcazar can be consulted on the Ciudad Real Tourism and Culture website.

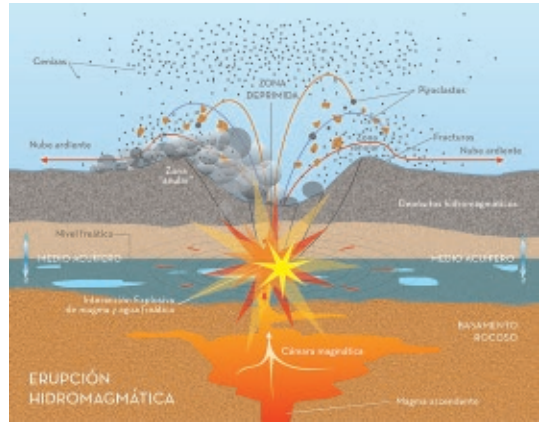


Fig. 1

Arco del Torreón galleries - Fig. 2

Seismites avenue of the sea - Fig. 3

Fig. 4