GROUND MAGNETIC MEASUREMENT SYSTEM TITAN

The main objective is the study of the magnetic signature of terrestrial analogues with the ultimate aim of understanding the processes of planetary crust formation. The ground magnetic measurement system TITAN is equipped with two vector magnetic sensors attached to a boom that can be carried on foot thanks to a tight-fitting harness on the back. Another line of research in magnetic campaigns is to evaluate the geological process of formation of high-energy planetary craters and to be able to classify them according to their origin through their magnetic signature.
The advantages of this measurement system are the following:

Measurement of vector magnetic signature of geological structures to improve conclusions about the structure and arrangement of the magnetic carriers of rocks in the soil and subsoil.
Regarding the scope of activities, the magnetic signature is a remote, non-invasive and environmentally friendly tool.

The Space Magnetism Area has performed several campaigns of magnetic measurements on foot using the TITAN system in various areas of geological interest, including volcanic areas of Cabo de Gata in Almería, Cerro Gordo in the Province of Ciudad Real and Lanzarote island.