

Geometrics Knowledgebase

Depth of exploration

In a general sense, the exploration depth of the magnetometer's readings are unlimited. It is certainly sensitive to the Earth's field and this is generated in the Earth's Core, some 5000 km beneath our feet. But for practical purposes, the depth of exploration is determined from survey results by the spatial width of the magnetic field anomaly as observed at the Earth's surface. For discrete objects, the depth of exploration is nominally 1/2 of the width of the magnetic anomaly. This topic is discussed in our Portable Magnetometer Operation Manual. This Manual covers many topics related to survey design and interpretation including exploration depth. As you will see, survey design will have a large influence on the depth of investigation. This manual can be download in the Magnetometer download section of our website.

<http://support.geometrics.com/kb/questions.php?questionid=53>