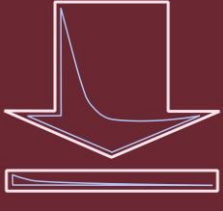


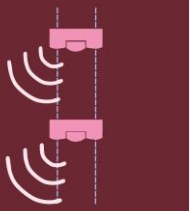
# MAGNETOMETRY DATA COLLECTION

## QUESTIONS TO ASK YOUR PROVIDER:



**FORMAT** Are data available for download in open formats so that I can use them in any software programme I'd like? What formats are available? Are georeferenced gridded and interpolated datasets included?

**DATA CLEANING** Will the data be 'cleaned' before they're made available to me, for example by de-staggering or correcting for drift?



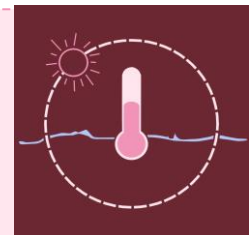
**CONFIGURATION** What is the vertical spacing between sensors? What was the height of instrument from ground?

**RAW DATA** Are the raw data accompanied by a header file that recorded instrument specific parameters? What information is provided so I can reconstruct the original data collection pattern?

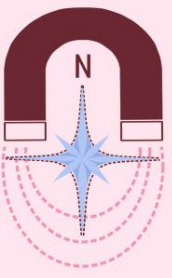


**COLLECTION** What information can be provided about how the data was collected (e.g., instrument-type, instrument configuration, etc.) and processed?

**CALIBRATION** Are any calibration processes followed so that I can better compare these data with other data? Is calibration undertaken to account for variations in measurement throughout the day?



**OWNERSHIP** Who owns the data? who can it be freely shared with? How do any licenses restrict data sharing and reuse?



# MAGNETOMETRY DATA COLLECTION

## COMPLETE METADATA INCLUDES:

- UNIQUE ID** for published dataset (as provided by an open access digital repository)
- INSTRUMENT TYPE** - make and model
- INSTRUMENT CONFIGURATION** coil height and rotation
- DATES AND TIMES/ DURATION** of data collection
- AREA COORDINATES** (X, Y) of data collection
- LOCAL WEATHER** data including information on the weather patterns seen in days and weeks before data was collected
- NOMINAL SPATIAL RESOLUTION** - size of the area represented by 1 pixel
- REFERENCES** to any related data including physical soil samples associated with the collected values
- MEASUREMENT TYPE**
- INSTRUMENT CONFIGURATION**
- RASTER DATA** supplementary, georeferenced version of grid file in image file format represented by colour values (e.g., geotiff, etc.) would be helpful.
- HISTORY** of any processing
- FOR INTERPRETATION DATASETS:** monument type, period and/or SM/Heritage List number

## WHY DOES THIS MATTER TO YOU?

This type of data collection is frequently used to detect archaeological anomalies but can also be useful to you in an agricultural setting. Magnetometry can help you to identify areas of changing soil mineralogy, aiding in the classification of soils and the creation of management zones under certain conditions. It may be useful in saline environments. Good planning and asking for more information about how the data was collected will allow you to use this data, for example in tandem with other forms of soil survey.