ARCHAEOLOGY DATA SERVICE

Version 2018.1

Explanation of metadata terms for Geographical Information Systems files deposited with the ADS

TERM	MEANING	EXAMPLE
ALL SURVEYS		
Survey Name	If your survey has an alternative title to the one provided during the creation of the project metadata, you can add it here..	A geophysical survey of the Battle Field site, Fulford, York, North Yorkshire.
Survey Index	Here you should add the identification number or code used internally for the survey and any related data.	FUL2018
Description	Provide a brief description of the geophysical survey.	
Survey Purpose	Please provide a brief description of the purpose of the geophysical survey.	
Location	If applicable provide a list of locational terms for the geophysical survey. Each term should be accompanied by an identifying type. New identifiers can be added where necessary. Each distinct term should be entered on a new cell/row.	Place: Battle Field Place: Fulford Parish: Fulford District: York County: North Yorkshire British Isles Country: England
Locational Coordinates/Extent	Provide locational grid references for the geophysical survey. These can be a single reference or a series of four forming a bounding box. Select the appropriate reference system LL (Latitude and Longitude) or OSGB (Ordnance Survey Great Britain), and add the numeric coordinates. OSGB coordinates should be expressed numerically with the tile reference (e.g. SE, NX) converted into its numeric equivalent.	LL: 53.962084 -1.0882604 LL: 53.960896 -1.0859201 LL: 53.960367 -1.0882643 LL: 53.961252 -1.0909085
Survey By	The person and/or organisation responsible for carrying out the survey.	Kevin Richardson BB Excavations Ltd Brian Littrell, Backstreet Associates
Copyright Holder	The copyright holder for the survey. This can be either an individual and/or an organisation.	Nick Carter Backstreet Heritage AJ McLean, BB Archaeology
Survey Duration	The start and end date for the survey.	31/Jul/2013 - 02/Aug/2013

TERM	MEANING	EXAMPLE
Solid Geology	Record the base geology for the location where the survey was carried out.	Carboniferous Limestone Boulder Clay Flamborough Chalk
Drift Geology	Provide the overlying drift geology for the place where the survey was carried out	River terrace deposits Glacial till Raised beach and marine deposit
Land Use	Provide the prevailing land use for the area being surveyed.	Arable Mixed Urban Park Churchyard
Survey Type	The technique used to carry out the survey. **N.B.** Please take time to add the correct survey type as some methods require additional metadata which appears at the bottom of the form.	Fluxgate Gradiometer Resistivity
Instrumentation	Include specific information about the type and configuration of the equipment used during the survey	Fluxgate Gradiometer: Bartington Grad 601 - 2 Resistivity Meter: RM85
Area Surveyed	The area of ground covered during the survey.	100m2 1ha 1km
Method of Coverage	Here you should indicate how the survey area was covered and the data acquired: gridded data; line data; non-gridded data; scanning.	
Traverse Separation	The distance between each survey traverse. When a regular grid is created, a series of parallel lines is used to demarcate the walked survey traverses along which data is collected. This should be expressed in metres. **N.B.** For some multi-sensor instruments a distinction between this traverse separation walked and the resulting line separation of the merged data lines from the different instruments should be recorded.	1m 2m
Reading Interval	The distance between each reading a long a traverse. This should be expressed in metres.	0.25m 0.5m 1m
Sampling Position	The exact location where data was recorded,	0.5m in both directions

TERM	MEANING	EXAMPLE
	whether within the grid squares or at grid corners.	from the SW grid corner
Line Sequence	Used to record the way in which the grid was walked, typically this can be in parallel lines always in the same direction (uni-directional), or back and forth (zigzag/ bi-directional). This information is needed when processing the data to de-strip or de-stagger the output from the survey.	uni-directional parallel zigzag bi-directional
Resolution	Used to record the spacing between each data point across the *x* and *y* axis. This information can be the same as the 'Line separation' and 'Reading interval' (see above) but it may be necessary in some instances to record it for individual grids	1.0
Survey Direction	Add the direction in which the first traverse was carried out and where subsequent traverses were located.	SSW NE
Description of File Formats	Any additional information about the file formats your survey utilises.	Description text if needed.
Additional Remarks	Additional remarks that may be important to the reuse the data.	
Language	The language(s) used within the drawing or graphic. Select the required language from the drop-down list. If the language you require does not appear in the in the list, then add the required language manually.	English Welsh German
File names	List the file names relating to this metadata.	grid1.csv, grid2.csv, grid3.csv
Grid Size	When data has been collected using data grids, the size of overall grid must be documented to allow for the correct computation of the data outputs. This should be recorded as a length and width and expressed in metres, hectares, or kilometres. Record the correct measurement system.	100m x 50 metres

TERM	MEANING	EXAMPLE
ELECTRO-MAGNETIC SURVEYS		
Coil Configuration	This field should be used to record the distance of the coils within the instrument used for the electromagnetic survey.	1.5 3.66
Recorded Component	The recorded electromagnetic component needs to be specified.	apparent conductivity apparent susceptibility in-phase quadrature
GROUND PENETRATING RADAR		
Antenna Information	For those surveys using pulse radar systems you should record the centre frequency of the antenna. Those using a stepped FM system, which typically include a multi-element array, should record the range of frequencies used. These should be expressed in MHz	300 MHz 500 MHz 50-150 MHz
Time Delay	The time delay for the recording of the first reflection expressed in seconds.	0.987 s
Time Sampling Resolution	The resolution of the time sampling expressed in seconds.	1.23 s
Time Span	The maximum time span of the recording expressed in seconds.	
Average subsurface velocity	Provide an estimate of the electromagnetic velocity in order allow the conversion of two-way travel times to depth. This should be expressed in m/ns.	10s
Average subsurface note	Average Subsurface Velocity should be accompanied by a statement/note about how it was derived. For example, ground truthing and use of tabulated values, undertaking common midpoint survey (CMP) measurements, a test survey over a target of known depth, the use of reflection hyperbolas or applying migration tests.	0.06 m/ns
MAGNETOMETER		
Magnetic north	For magnetometer surveys it is important to provide the orientation of the coordinate	NE NNE

TERM	MEANING	EXAMPLE
	system/grid in relation to Magnetic North. This is important when processing of data.	
Instrument drift	During any survey the magnetometer may exhibit evidence of a gradual change in its readings. If this is recorded on a regular basis (e.g. after the completion of each grid) it will be possible to process the data in fashion that compensates for this 'drift'. This is typically expressed in n/T.	1.0 0.2
RESISTANCE		
Electrode configuration	Any responses from below ground features are heavily influenced by the configuration of electrodes used. It is therefore important to record this to allow for (re)processing of the data and a thorough (re)interpretation of the results.	Dipole-Dipole Wenner Twin electrode
Electrode spacing	To process the data collected during a survey it is essential that the distance between electrodes is recorded.	0.5 1.2
Multiple configurations	Earth resistance data can be recorded at each measurement location using different electrode configurations by means of a multiplexer. Any information from this sequence should be provided.	
MARITIME SONAR		
Average water velocity	The average water velocity during the survey in m/s.	2 m/s
Sonar frequency	The frequency of the sonar in kHz.	200kHz
Beam width at nadir	An estimate of the beam width gap in degrees at nadir.	40

ARCHAEOLOGY DATA SERVICE

Example of completed metadata sheet for Geophysical files deposited with the ADS

Survey Name	Survey Index	Description	Location		Locational Coordinates/Extent			Period of Creation	
			Type	Term	Coord Type	Easting	Northing	Start Date	End Date
The geophysical survey of Walmgate, York, North Yorkshire.	WALM17		Place	St Denys' Church	OSGB	460714	451581	13/04/2017	14/04/2017
	WALM18		Place	Walmgate				22/05/2018	24/05/2018
			Parish	York	OSGB	460721	451602		
			District	York	OSGB	460741	451591		
			County	North Yorkshire	OSGB	460704	451549		
			British Isles Country	England	OSGB	460688	451575		

Survey By			Copyright holder			Solid Geology	Drift Geology	Land Use	Survey Type
First Name	Last Name	Organisation	First Name	Last Name	Organisation				
Kelly	Rowland				Beyonce Ltd	Triassic Sherwood Sandstone	glaciolacustrine silts and clays	Churchyard	Resistivity
M	Williams	Destiny Archaeology							

Instrumentation		Area Surveyed		Method of Coverage	Traverse Separation	Reading Interval	Sampling Position	Line Sequence	Resolution	Survey Direction	Description of File Formats
Type	Name	Area	Unit								
RM85	Resistivity Meter	50	m2	gridded data	1m	0.25m	0.5m	Parallel	1.0	NNW	Data preserved as .csv files

Additional Remarks	Language	File names	Grid Size		
			Length	Width	Unit
	English	2017_1.csv	10	10	metres
		2017_2.csv	10	5	metres
		2018_1.csv	5	5	metres

RESISTANCE		
Electrode configuration	**Electrode spacing**	**Multiple configurations**
Twin electrode	0.5	