

GEOPHYSICAL SURVEY AT MEMBURY COURT, MEMBURY, EAST DEVON



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Summary

Name of site: Land at Membury Court, Membury, East Devon

Parish: Membury

Grid reference (centres): Field 1 NGR 326478, 104092

Field 2 NGR 326354, 103948

Devon HER number: 11585 (suspected Roman villa)

Date(s) of survey: 12th to 15th July 2010

Author and lead surveyor: Dr Chris Smart (Department of Archaeology, University of Exeter)

Assistant surveyor(s): Dr Ben Pears (Department of Archaeology, University of Exeter)

Site:

The site consists of two fields immediately north of Membury Court, an historic farm complex situated one and a half kilometres northwest of the hamlet of Membury in East Devon. The site occupies a southwest-facing slope overlooking the valley of the River Yarty between 80m and 125m AOD. The fields are believed to contain the traces of a Roman villa, 'excavated' in 1914 by a local vicar. Surface-finds of tegulae and scored flue tiles (Fox 1949) made in the smaller of the two fields nearest to Membury Court provide supporting evidence. Until now, no further targeted investigation to confirm the extent and character of the possible site has been undertaken. The fields are both used for grazing and cropped for hay. A small area within each field had been ploughed and contained a cover-crop of maize.

Geology and soils:

The site is located upon Triassic mudstone of the Branscombe Mustone Formation overlain by deposits of Quaternary Head (Undifferentiated), consisting of clay, silt, sand and gravel (British Geological Survey 2010)

Survey type: Magnetometer (gradiometer) survey

Equipment: Bartington Instruments Ltd. Grad601-2

Configuration: Dual sensor **Area surveyed:** 4.6ha

Grid size: 30m by 30m **Traverse method:** Zig-Zag

Traverse interval: 1m **Sample interval:** 0.25m

The survey and reporting was done in accordance with English Heritage guidelines *Geophysical Survey in Archaeological Field Evaluation* (2008).

Results:

Geophysical survey (magnetometer) of two fields to the north of Membury Court has revealed significant multi-period buried archaeological remains. It is suggested that the features revealed include at least three rectilinear enclosures, a fourth sub-rectangular double-ditched enclosure and the possible foundation trenches of a rectangular building. In the light of previous investigations at the beginning of the 20th century, it is believed that this is likely to be the site of the Roman "villa" excavated by the Reverend Langdon, and that the enclosures are of similar date. Furthermore, it is proposed that the development of the settlement and enclosure complex may have begun in the Late Iron Age. It is also mooted that the magnetic survey may not have revealed the full extent of structural remains. Relict elements of the historic landscape were also observed, and it would appear that the pattern of fields present in the landscape today were once further subdivided. It is concluded that the buried archaeology beneath both fields is of high local and regional significance and it is recommended that approval for ploughing is not given without due consideration for the preservation of archaeological remains *in situ*.

1. INTRODUCTION

This report presents the results of geophysical survey (magnetometer) of land at Membury Court, Membury, East Devon (Figure 1; ST 26364 03803). The site comprises two irregular-shaped fields north of the main farm complex. The survey was undertaken by Dr C. Smart and Dr B. Pears (Department of Archaeology, University of Exeter) between the 12th and 15th July 2010. The survey was commissioned by Mr and Mrs L. Denny of Membury Court Farm in response to a Brief issued by Cressida Whitton, Archaeologist, Devon County Council Historic Environment Service (DCCHEs Ref. Arch/AE/ED 15917). Natural England provided funding for the work. The purpose of the survey was to define the extent, nature and significance of any sub-surface archaeological remains within the two fields, in order to inform appropriate decision and management in response to proposed change of land use as part of an Environmentally Sensitive Area (ESA) scheme.

1.1 Site description

The surveyed area consists of two fields immediately north of Membury Court, an historic farm complex situated one and a half kilometres northwest of the hamlet of Membury in East Devon. Membury is a small parish in the southeast corner of the Blackdown Hills, north of the Roman, and later, medieval small town of Axminster. The historic settlement pattern of this region is characterised by a multitude of small farms dispersed between a number of hamlets and small villages such as Membury and Stockland. It is a rich agricultural landscape dominated by dairying and beef-production with only scant arable cultivation.

The sites stretches across a southwest-facing slope, between 125m and 80m AOD, overlooking the valley of the River Yarty. The upper part of the site slopes gently, reducing to a near-level plateau between the two fields and breaking to a steeper angle approximately half way down the lower field. The level area between the two fields is coincident with the suggested position of the 'villa' site. At this point the ground was noticeably firm underfoot and the grass was stunted compared to that on the surrounding slopes. Discussion with the tenant farmer also revealed that during aeration of the ground using a spiked roller, he had determined a good depth of soil across the fields but noted that there were only shallow soils in this area. What he believed to be near-surface geology could alternatively be derived from any structures that may have stood in this area.

The fields in this area are enclosed by Devon hedge banks with mature deciduous trees growing upon them. The semi-irregular curvilinear morphology of this block of fields may derive from the enclosure of cultivation strips, as suggested in the Devon County Council Historic Landscape Characterisation (<http://gis.devon.gov.uk/basedata/viewer.asp?DCCService=hlc>), although it is possible that the character of the fields is a product of the irregular topography of the undulating valley sides above the River Yarty and a tributary stream that enters it to the west of Membury Court. From here the Yarty valley extends northwards into the Blackdown Hills and south to Axminster. The River Yarty enters the English Channel at Axmouth, 15km downstream.

1.2 Land use

When surveyed both fields were under permanent grass. The grass in Field 1 was approximately 0.3m in length but that in Field 2 had been recently cut and grazed to a short length. A part of the southern end of Field 1 had been ploughed and planted with a cover-crop of maize, as had a small area in the eastern half of Field 2. It had originally been intended to survey these areas but that was not possible.

1.3 Geology and soils

The site is positioned on a tract of Quaternary Head (Undifferentiated), consisting of clay, silt, sand and gravel, overlaying Triassic mudstone of the Branscombe Mudstone Formation. On higher ground to the north of the site, and also across the small tributary valley to the south of Membury Court, the underlying geology changes to Greensand and Chalk overlain by Clay-with-Flints (British Geological Survey 2010).

1.4 Prevailing weather

Weather conditions were mild but with a moderate to strong south-westerly wind and frequent rain showers throughout the period of survey. This weather followed a long period of hot and dry conditions and the ground was dry and firm underfoot.

1.5 Known limiting factors and potential causes of interference

A number of factors may have influenced the clarity of magnetic survey results. A three-cable electricity power line crossed the south-west side of Field 1, into and across the northern edge of Field 2. The boundaries around both fields consisted of substantial Devon hedgebanks, but each had been supplemented by post and barbed wire fencing to the internal face, and in places corrugated metal sheet had been used to fill gaps. A five-bar metal gate separated Fields 1 and 2. Two areas already put under crop, in the east of Field 1 and south of Field 2, were enclosed by electric fencing. Finally, a concrete and iron manhole cover in the northwest tongue of Field 1 may indicate the course of a service pipe.

1.6 Site history and archaeological potential

1.6.1 *Archaeological background*

In 1914 the Reverend F.E.W. Langdon, vicar of Dalwood Parish, is believed to have dug part of a "Roman villa" in a field to the north of Membury Court, although no primary records of his investigation are known (Hoskins 1954). In support of these reports, Roman tegulae and scored flue tiles were collected from the surface of 'Brickfield' in 1948 and given to the Royal Albert Memorial Museum, Exeter (Fox 1949, 88), although these cannot currently be found (Cadbury pers. comm.). In 1957 the site was visited by Stuart Rigold, from the Inspectorate of Ancient Monuments, who was told by the farmer at that time that the site was 'on the top of a little hill looking south', which was 'covered with fragments of tile and stone and the grass is still visibly thin' (letter from Rigold to Lady Fox dated 2/12/57, copy in DCCHER). In 1959 Aileen Fox (subsequently Lady Fox) visited the site as part her work with the Ordnance Survey Archaeology Division (Figure 2). The exact position of the supposed villa was not

known but she remarked that shallow depressions may be the remains of the Reverend's 1914 diggings (DCCHER PRN 11585). 'Brickfield' later became known as 'Culver Croft' and in 1967 a further fragment of possible Roman tile was found in the roots of a fallen tree in the hedgerow of this field by Dawn Walker (DCCHER ST20SE/22), who visited the site after reading in the log book of the parish school that finds from a possible Roman villa had been shown to the children at the beginning of the 20th century. This provides corroborative evidence for Langdon's investigation but unfortunately the whereabouts of the logbooks are not now known.

The historic landscape surrounding Membury Court consists of semi-irregular fields, some of which have a curving form that appear to follow the direction of the topography. Although these fields have been characterised as 'medieval enclosures based on strip fields' in the Devon County Council Historic Landscape Characterisation (<http://gis.devon.gov.uk/basedata/viewer.asp?DCCService=Hlc>; Turner 2007), their curving morphology may have been determined by the local terrain. They are, however, likely to be of medieval date (*ibid.*; Rippon *et al.* 2006a). Consultation of historic mapping dating from the late 19th century onwards shows that the site has undergone some reorganisation. First Edition Ordnance Survey 6inch mapping, dated 1891 (Figure 3), shows that the site consists of four semi-irregular curvilinear fields. The long-axes of each field runs down-slope, and the curving elements appear to follow the orientation of the contours. This differs from today's landscape in that three of the fields have now been amalgamated. A series of footpaths are indicated, which run north from Membury Court and east-west between West Mill and Furley Farm. Many of the small closes around Membury Court are orchards. Second Edition Ordnance Survey 6inch mapping, dated 1906 (Figure 3), shows that by this time there had been no internal alterations to the arrangement shown on the First Edition. All boundaries appear the same and have undergone no significant alteration. The closes which surround Membury Court remain as orchard. Ordnance Survey 1:10560 1st Imperial Edition mapping of 1963 (Figure 4) shows that the landscape illustrated on late nineteenth century mapping was unchanged. The next available Ordnance Survey mapping is dated 1988, and by this time there has been considerable change. The 1891, 1906 and 1963 mapping showed that the site comprised four fields, but at some point between 1963 and 1988 three fields were agglomerated into a single large and irregular-shaped parcel of land (called Field 2 for the purpose of the survey) through the removal of two sinuous hedgebanks. It appears that no changes have been made to the boundaries of the field nearest to Membury Court (called Field 1 for the purpose of the survey) between 1891 and the present day.

1.6.2 Archaeological potential

Investigation by the Reverend Langdon in 1914, and subsequent identification of surface material, led to the suggestion that beneath the site are the remains of a Roman villa. As such, geophysical survey has the potential to reveal evidence for settlement and enclosure, possibly extensive and of high-status, of Roman date. The anecdotal evidence of the vicar's investigation, and the subsequent recovery of flue and roof tile from the ground surface, suggests that remains of masonry

buildings are present. Prehistoric features, particularly of Late Iron Age date and precursory to Roman phases, may also be revealed. The site of Membury Court itself has considerable antiquity and the present range of buildings includes a 14th-century chapel. It is possible, therefore, that features associated with the medieval settlement may be revealed, included relict elements of the surrounding fieldscape. In summary, geophysical survey has the potential to reveal extensive multi-period archaeological remains.

2. AIMS

The principal aim of the geophysical survey is to define the likely extent, character and significance (local, regional, national or international) of the potential archaeological resource within the area proposed for cultivation as part of a Natural England Environmentally Sensitive Area agreement, and to provide suggestions for archaeological preservation. This survey is only a preliminary assessment and will not provide full and precise characterisation of the site. Final recommendations for appropriate management to protect the archaeological resource will be made by Devon County Council Historic Environment Service to Mr and Mrs Denny and Natural England, based on the results of this work.

3. METHOD

An area of approximately 4.6ha was subject to magnetometer (gradiometer) survey. Magnetometer survey was selected as a proven method of accurately and rapidly detecting archaeological features. The survey was undertaken in accordance with English Heritage guidelines presented in *Geophysical Survey in Archaeological Field Evaluation* (2008).

3.1 Survey Design

Sixty complete and partial 30m by 30m survey grids were set-out in relation to the boundaries of Fields 1 and 2 using a Leica TCR 1200 EDM total station. They were positioned to maximise coverage in the available time. They were set-out on an approximate north-south east-west axis using a hand-held field compass as a guide. The grid corner points were laid with an internal accuracy of +/- 0.05m. The grids in Field 1 and Field 2 were laid independent of each other. The survey grids were located according to the Ordnance Survey National Grid using a Leica System 1200 differential Global Positioning System that has a typical three-dimensional global position accuracy of 10-15mm. National Grid Reference co-ordinates for each of the grid points is given in Appendix 1.

Four permanent datum points, consisting of 0.45m wooden pegs, were located around the site boundary in order to provide a lasting reference from which the position of any archaeological features can be measured in the future. The position of these pegs in relation to the Ordnance Survey National Grid was determined using the same Leica differential GPS. The NGR co-ordinates for these points are given in Table 1, below, and their spatial distribution in relation to the boundaries of Fields 1 and 2 can be seen in Figure 5.

Table 1. National Grid Reference co-ordinates for permanent datum points at Membury Court

Point ID	NGR Easting	NGR Northing
Reference point 1	326392.5083	104004.1338
Reference point 2	326293.8810	103967.6482
Reference point 3	326393.4699	104006.0776
Reference point 4	326525.4230	104995.3666

The magnetic survey was undertaken using a Bartington Instruments Ltd. Grad601-2 dual sensor gradiometer sampling four readings per metre at 1m traverse intervals in the 1nT range. The traverses were sampled in a zig-zag pattern. The direction of the first traverse was east.

3.2 Data Processing

The magnetic survey data was downloaded to an IBM-compatible laptop computer using the Bartington Instruments Ltd proprietary software *Grad-601*. The data was processed using GeoPlot 3.0, written by Geoscan Research. Processed data, which had a maximum range of +/-8nT, was displayed as Absolute values clipped to +/-3nT so to clarify the mid-range anomalies.

The magnetic data presented in Figures 9 and 10 was processed as follows:

Despike: X radius=1, Y radius=1, Threshold=3.0, Spike replacement=mean

Clip: Min=-5, Max=5

Low pass filter: X=1, Y=1, Weighting = Gaussian

Interpolate: Direction=Y, Mode=Expand, Expand method=SinX/X

4. RESULTS and DISCUSSION (Figures 6-11, features labelled on Figure 11)

4.1 Results

Overall, there is little significant magnetic interference deriving from external influences within the area surveyed (power lines, services etc), and therefore the results give a true representation of sub-surface magnetic variation. The magnitude of background readings across Fields 1 and 2 varies between about -0.6 and 0.6nT, providing a clear distinction between natural variation and probable anthropogenic features. The results show an array of buried archaeological features, as well as numerous magnetic irregularities which will be outlined first.

In Field 1 there are two areas of magnetic disturbance, in the north-west corner and roughly central (A). There is no regularity to the variation within these areas and it is likely that the results here denote either geological variation or low-level ground disturbance. There are numerous low magnitude dipolar readings, up to +/- 4.5nT in range, across both fields that represent either weakly ferrous material or thermoremnant debris buried within the soil. There are other high magnitude dipolar readings with a pre-processing magnitude of +/- 3000nT that represent modern ferrous scrap. The stronger of these dipolar readings are marked on Figures 10 and 11. One such anomaly on the north-west edge of Field

2 marks the position of an iron manhole cover. A significant anomaly in the north-east edge of Field 2 derives from a steel five-bar gate close to the edge of the survey area.

The results indicate buried archaeological features distributed across Fields 1 and 2 and these represent various phases of on-site activity. There are a series of curving parallel negative linear anomalies in Field 2, ranging between -0.3 and -0.7nT, which are likely to be stone-filled land drains of late 19th or 20th-century date (B). These features cut through a pair of curving parallel positive linear anomalies, ranging between 2 and 4nT, which must derive from a grubbed-out hedge bank with ditches on either side (C). The morphology and orientation of this feature, and that of the single positive linear anomaly (D) to the east, suggests that these features are components of the historic fieldscape. A series of faint positive linear anomalies in the eastern half of Field 2 (E) are likely to be cultivation marks running along the same alignment as the historic field system.

Whilst the chronology of these historic features is perhaps clear, the phasing of other features is less certain. The following description implies no specific chronological order. There are a series of weak positive linear and possible positive linear anomalies with a magnitude of <0.8nT that are oriented northwest-south east across both fields (F). Whilst these may belong to a similar phase, there is no regularity to the spacing of these ephemeral ditches. There are at least two rectilinear enclosures that straddle the boundary between Fields 1 and 2, defined by positive linear anomalies between 0.8 and 3.9nT in range (G). These enclosures are oriented approximately north-south, east-west, with minimum east-west dimensions of 38m. A further rectilinear enclosure, on a slightly different alignment, is possibly denoted by a pair of weak linear anomalies in the north of Field 1 (H).

To the western side of the hedge bank dividing Fields 1 and 2 are three positive linear anomalies <7.5nT in magnitude. The arrangement of these features suggests the presence of an enclosure or structure measuring approximately 9m by 16m (I). Given the history of investigation at the site, and the identification of a 'villa' by the Reverend Langdon, it is possible that the features denote the foundation trenches (either robbed-out or the masonry perhaps removed by Langdon) of a rectangular building. Unfortunately, there are three significant dipolar anomalies within the same area that mask further detail. The magnitude of these suggests that they are a product of modern ferrous scrap. It is noteworthy that the alignment of this probable building is different to the enclosures (G) described above, but is similar to the ephemeral enclosure (H).

To the south of the possible rectangular building and the rectilinear enclosures is a sub-rectangular enclosure (J) measuring 40m by 38m internally, defined by a strong positive linear anomaly <3.9nT in magnitude. This ditch is surrounded by an intermittent weaker positive linear anomaly between 1.6 and 2.5nT in range, suggesting that the enclosure may be double-ditched. There is a clear entrance to the enclosure on its eastern side, and possible breaks in the north-west and south-west corners may indicate further entrances. The relationship with the rectilinear enclosures is not certain but it would appear that the two systems

converge. It is possible that this may indicate a degree of chronological development within the complex.

Finally, there are a series of positive point anomalies, 3.3nT to 4.6nT in range, which focus on the enclosure complexes within Field 1 and the western part of Field 2. Given the elevation of these features above the background magnetic range, and the proximity to settlement features, it is probable that they represent pits or post holes of archaeological interest. There are also low magnitude weak positive anomalies with readings <1.3nT max (Figure 9 but not interpreted on Figures 10 or 11) that are often diffuse and could represent pits or hollows of archaeological interest, but it is equally plausible that these reflect natural variation or tree disturbance.

4.2 Discussion

Geophysical survey of land to the north of Membury Court, Membury, in East Devon, has revealed a palimpsest of buried archaeological features. The earliest assignable phases relate to a series of enclosures surrounding a probable rectangular building. Geophysical survey cannot prove the date and function of buried archaeological features, but the evidence of the Reverend Langdon's excavations, and subsequent surface artefact collection as outlined above, suggests that occupation and land-use occurred within the Roman period. Similarly, geophysical survey is unable to establish a secure chronology for activity, which would require targeted excavation, but given the purpose of this evaluation exercise it is useful to consider potential phasing within the site.

The density and distribution of magnetic anomalies indicates that the focus of activity was biased towards the lower slopes within Field 1 and the western edge of Field 2. It would appear therefore, that settlement and enclosure took a preferential position along the lower slopes of the Yarty valley, with the higher ground remaining unenclosed. The morphology of the Enclosures G and H sit comfortably within the Roman period, and elements of similar rectilinear enclosures have been recorded in the Exe Valley (Ugnow 2000). The alignments of the two rectilinear enclosure groups (G and H) at Membury Court are slightly different to each other, and it is plausible that this provides evidence for progressive expansion and development of the complex.

It seems conclusive that there was a peak of activity during the Roman period but the sub-rectangular form of Enclosure J may indicate that occupation of the site originated in the Late Iron Age. The rectilinear enclosures appear to respect Enclosure J and abut its outer ditch, indicating that it may represent the primary phase within the overall complex. It is possible to compare this enclosure to the Late Iron Age antecedent phase at the Roman villa site at Holcombe, near Uplyme (Pollard 1974), 10km south of Membury. Here, an enclosure of very similar morphology had dimensions of 33m by 28m internally and was dated to c.20-44 AD. Significantly, the site developed throughout the Roman period to include an elaborate corridor villa that was occupied until the late 4th century. The earlier structural forms of this included two phases of rectangular aisled masonry buildings dated to between the late 2nd and middle of the 3rd century AD. The

dimensions of these phases, the earlier of which measured 7m by 17m, are directly comparable with the rectangular building suggested at Membury.

Further afield, geophysical survey and subsequent excavation at Yarford in western Somerset (Wilkinson *et al.* 2003) revealed an equivalent Late Iron Age double-ditched enclosure with early Roman occupation and the development of a small corridor villa during the late Roman period. The morphology and chronology of both Holcombe and Yarford support the hypothesis that occupation at Membury began during the Late Iron Age, but here the rectangular building identified by the survey does not occupy the same position as the possible early enclosure. It is one scenario that occupation within the enclosure ceased with the construction of the rectangular building and that it was turned over to agricultural use. It must be remembered, however, that magnetic survey is not optimum for identifying structural remains and that buildings within the enclosure may remain undetected. Indeed, magnetic survey of the Yarford enclosure failed to indicate the corridor villa revealed during excavation (*ibid.* 4-5). Whilst it is plausible to draw the conclusion that the rectangular building relates to the Roman "villa", investigated by the Reverend Langdon in 1914, this may be only one part of a larger range of buildings in use during the Roman period. There remains the possibility that evidence for other structures, including masonry foundations and post-holes, have not been detected by the magnetic survey. An earth resistance survey of selected areas, particularly surrounding the rectangular building and within Enclosure J, would certainly help in clarifying this matter.

Without excavation the length of occupation, and final date of abandonment of the ?Late Iron Age/Roman settlement and enclosures, cannot be ascertained. Nevertheless, it is clear that the later historic landscape, and the relict elements of it detected by the survey, were laid out on a different orientation to the underlying Roman complex, which suggests a distinct break between these distinct phases. The survey has demonstrated that elements of the relict historic landscape survive as buried features, and from the extent of geophysical anomalies and detail from historic mapping, it is apparent that the fieldscape was once more fragmented. There may be debate over the origins of the curving fields, and whether they derive from enclosed strip fields or not, but it has been shown that cultivation on the same axis as the long curving parcels has previously occurred. Whether or not this cultivation was associated with the primary origins of the field pattern cannot, however, be discerned.

5. SIGNIFICANCE and RECOMMENDATIONS

5.1 Significance

The magnetic survey has demonstrated the existence of significant archaeological remains within the site. The buried archaeological features detected with this geophysical survey method extend across both fields and are likely to be of multi-period origin. The probable Roman features, which include structural remains of a sizeable rectangular building, are of regional significance. Late Iron Age and Romano-British enclosures associated with small farming

communities are known across Devon but the possibility of a modest villa elevates the site's significance as only a handful are known in Devon, which is traditionally thought to have been lowly Romanised. The distribution of Roman pottery collected through field-walking within Membury parish (for example Devon HER PRN's 64366, 64384, 64375, 64369, 29864), and through excavation of a Roman corn drier on the opposing hill 1km southeast of the site (Tingle 2006), suggests that the Yarty valley, above the Roman small town at Axminster, was probably densely settled and farmed during this period. The site has the potential to add significant understanding to the mechanisms of indigenous Romanisation and, if the settlement was long-lived, to chart the development of a farming community both before and after the Roman period in an area where little on-site investigation has taken place.

It is clear that a number of curvilinear features within Field 2 derive from the field boundaries that are shown on late 19th century mapping and were removed between 1963 and 1988. The geophysical anomalies correspond to earthworks of these relict boundaries. Some of these anomalies/earthworks can be directly related to the two hedge-lines shown on the historic mapping, but there are others that appear to be integral to this system but that have already disappeared by 1891 when the First Edition Ordnance Survey maps were published. Whilst there is no clear agreement as to the functional origins of this field morphology (enclosed strips versus primary enclosures always held in severalty), it is likely that they were established during the medieval period. The chronological framework of Devon's historic landscapes is of critical interest, and despite programmes of Historic Landscape Characterisation (Turner 2007; Rippon *et al.* 2006a), archaeological and palaeoenvironmental research (for example Rippon *et al.* 2006b.), there are many areas that require investigation. As such, the buried and relict remains of the historic field system should be regarded as a valuable archaeological asset.

5.2 Recommendations

The results of this survey were intended to inform a decision concerning the proposed cultivation of Fields 1 and 2. In light of the results of the survey, and an uncertainty as to the depth of the buried archaeology in Field 1 and the western half of Field 2, it is recommended that approval of ploughing is not considered until sufficient work is undertaken to reveal the extent, character and depth of archaeological features, and thereby determine the potential effects of cultivation. A greater weighting of importance is likely to be given to the area of Roman activity, but it is also urged that due consideration is given to the significance of the buried and relict parts of the medieval landscape. As such, it is recommended that ploughing is not allowed in the eastern half of Field 2 until the archaeological potential and historic importance of these elements is suitably determined.

ACKNOWLEDGEMENTS

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APPENDIX 1: Survey grid corner points

Point ID	NGR Easting	NGR Northing
<i>Field 1 (south-west field)</i>		
01	326302.0172	103897.5982
02	326331.9276	103898.8095
03	326361.8983	103899.9706
04	326391.8573	103901.1594
05	326421.8639	103902.3658
06	326300.8206	103927.6973
07	326330.7191	103928.7953
08	326360.7375	103929.9789
09	326390.7174	103931.1645
10	326420.6846	103932.3552
11	326299.5511	103957.5190
12	326329.5909	103958.7671
13	326359.4460	103959.8258
14	326389.5369	103961.0936
15	326419.5477	103962.2519
16	326298.4195	103987.4725
17	326328.3060	103988.3453
18	326358.1200	103990.0020
19	326388.3160	103991.1300
20	326297.2630	104017.4276
21	326327.2046	104018.6274
22	326357.1731	104019.8795
23	326325.9395	104048.5779
24	326355.8938	104049.8341
25	326354.6192	104079.8137
<i>Field 2 (north-east field)</i>		
26	326441.7673	103991.9433
27	326471.6852	103993.4118
28	326501.6681	103994.9476
29	326410.3267	104020.2386
30	326440.1706	104021.8807
31	326470.1045	104023.2984
32	326500.1587	104024.8626
33	326378.7147	104048.6938
34	326408.8531	104050.2176
35	326438.6063	104051.7326
36	326468.5734	104053.2835
37	326498.5531	104054.9174
38	326377.2794	104078.6333
39	326407.3082	104080.1168
40	326437.1245	104081.7284
41	326467.0974	104083.3549
42	326497.0550	104084.8486
43	326526.9872	104086.3904
44	326556.9077	104087.9460
45	326345.6660	104106.8800
46	326375.6975	104108.5370
47	326405.7594	104110.1359
48	326435.6549	104111.6751
49	326465.5964	104113.2142
50	326495.5225	104114.7487
51	326525.4517	104116.2792
52	326555.3865	104117.7553
53	326585.2248	104119.3751
54	326615.2421	104120.8487
55	326434.0200	104141.5761
56	326464.5384	104144.7803
57	326493.9579	104144.6875
58	326523.8679	104146.2137
59	326553.8085	104147.7320
60	326583.7593	104149.2025
61	326492.4388	104174.5325
62	326522.3436	104176.1532
63	326552.2571	104177.7305
64	326520.8450	104206.1466

65	326550.7950	104207.7041
66	326519.3434	104235.9916
67	326549.2367	104237.5899

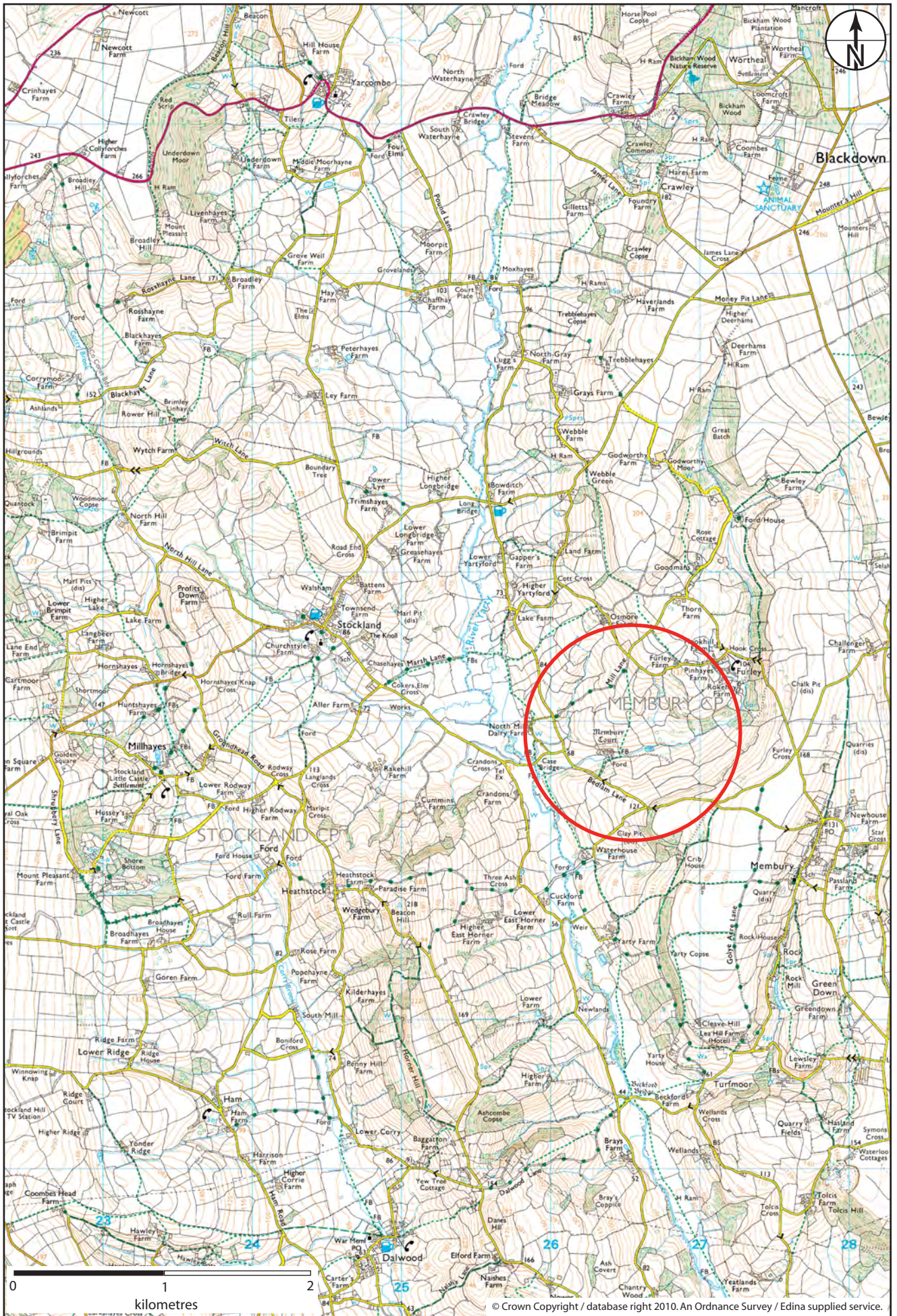
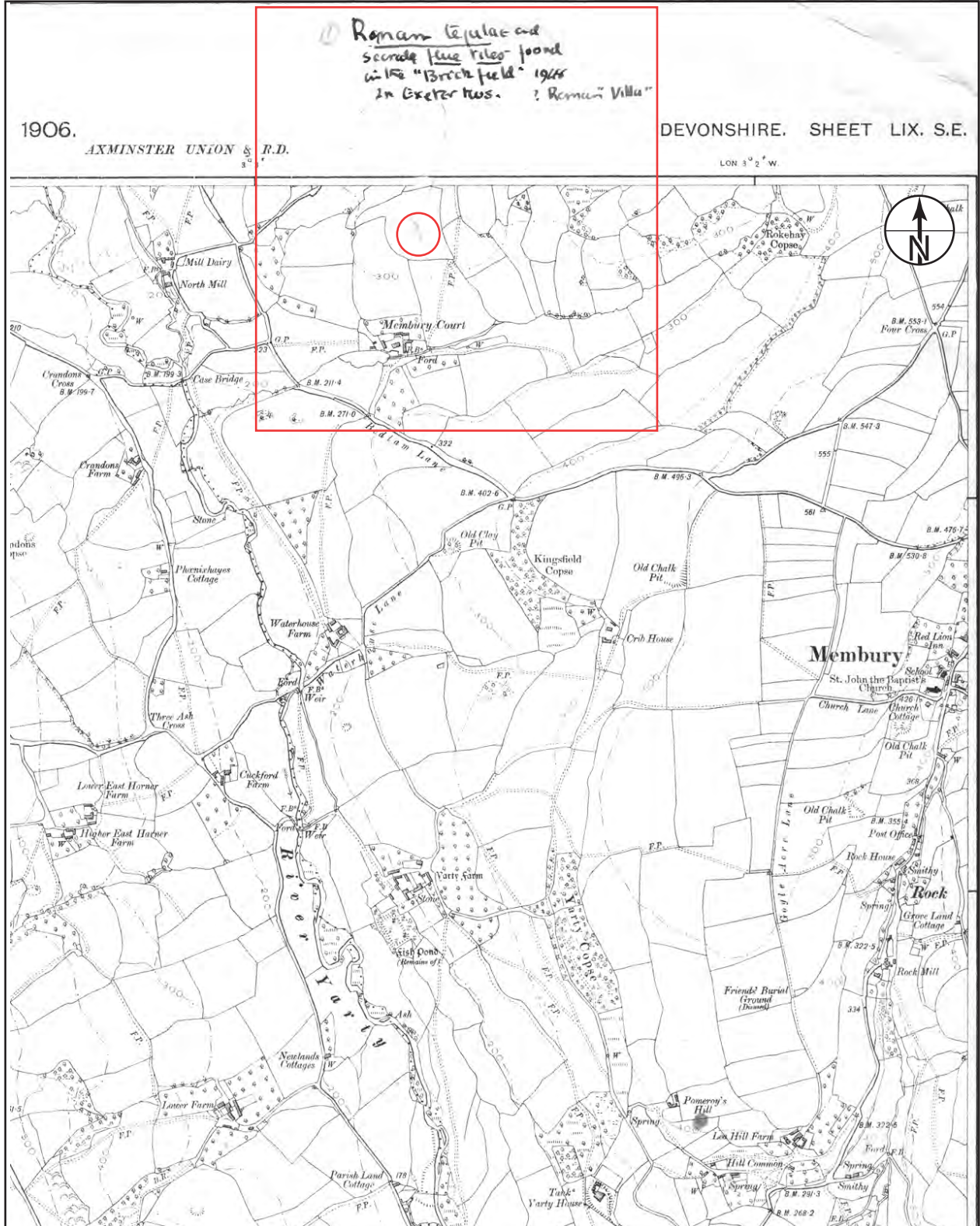


Figure 1. Membury Court location (Ordnance Survey 1:25,000 Explorer Sheet 116).



'Roman tegulae and scored flue tiles found in the "Brick Field" 1948. In Exeter Mus. ? Roman "villa"'

Figure 2. A copy of Lady Fox's Ordnance Survey Second Edition Six Inch 1906 mapping, annotated with archaeological notes.

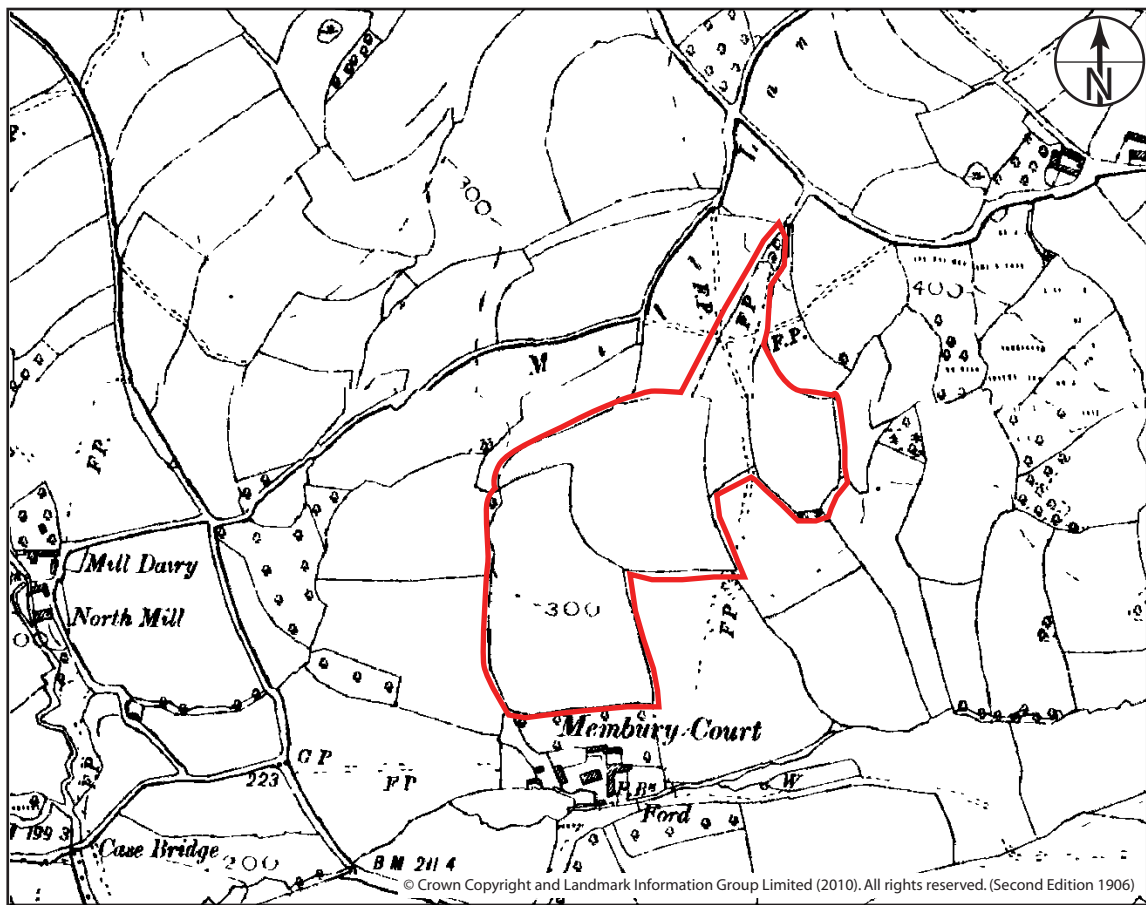
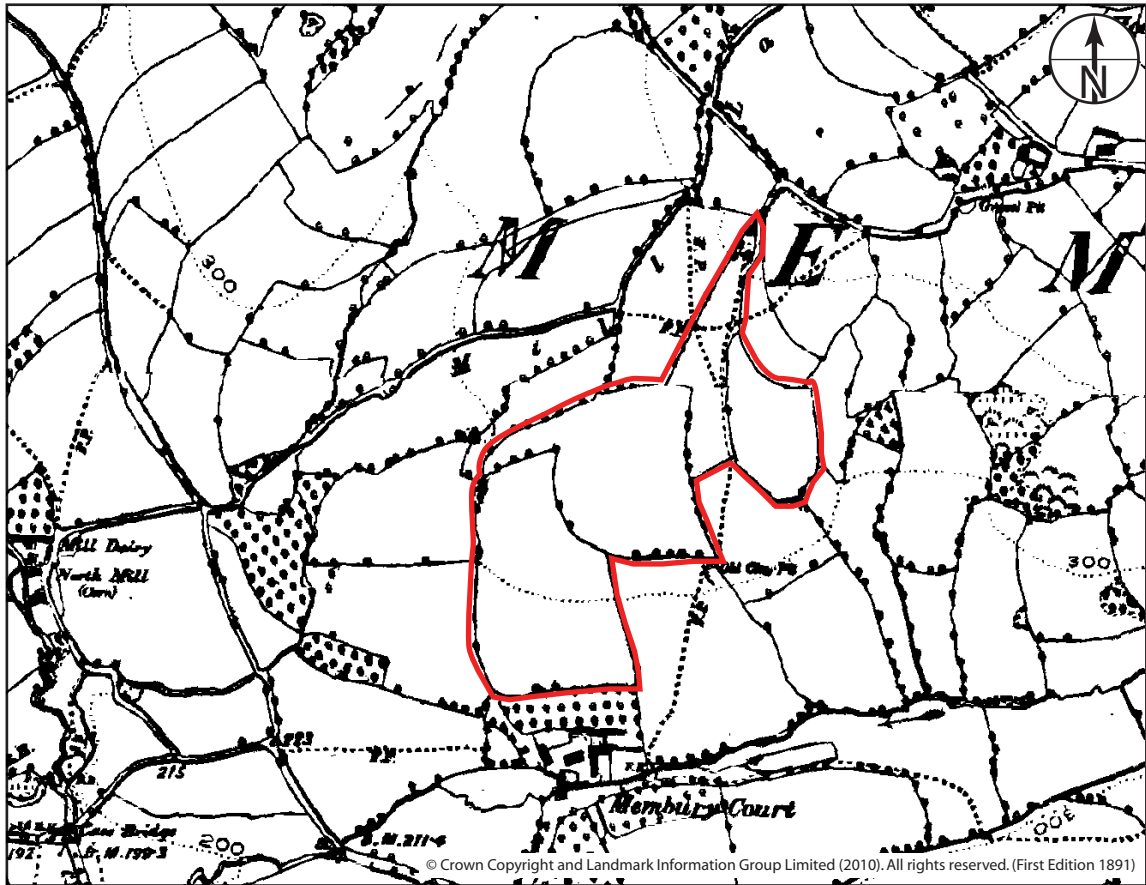


Figure 3. Ordnance Survey First Edition Six Inch, 1891 (top) and Second Edition Six Inch, 1906 (bottom) mapping.

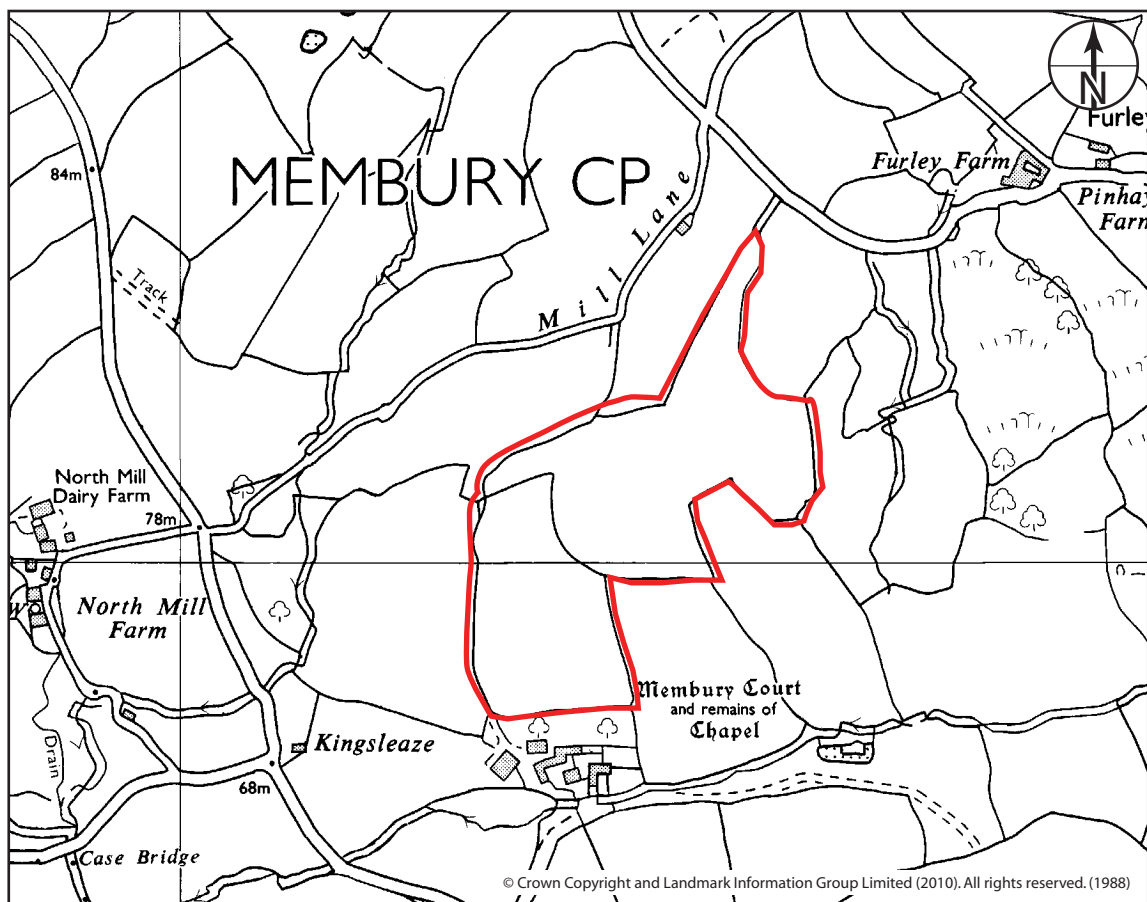
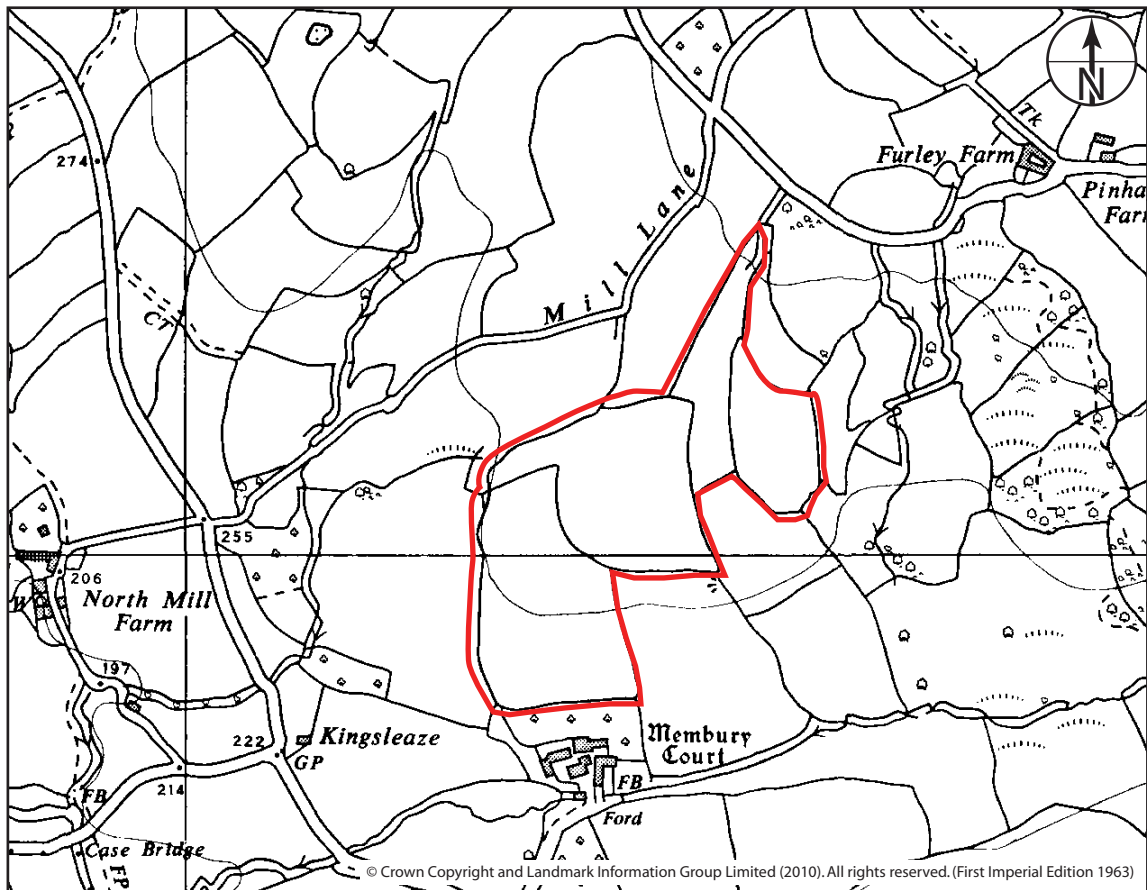
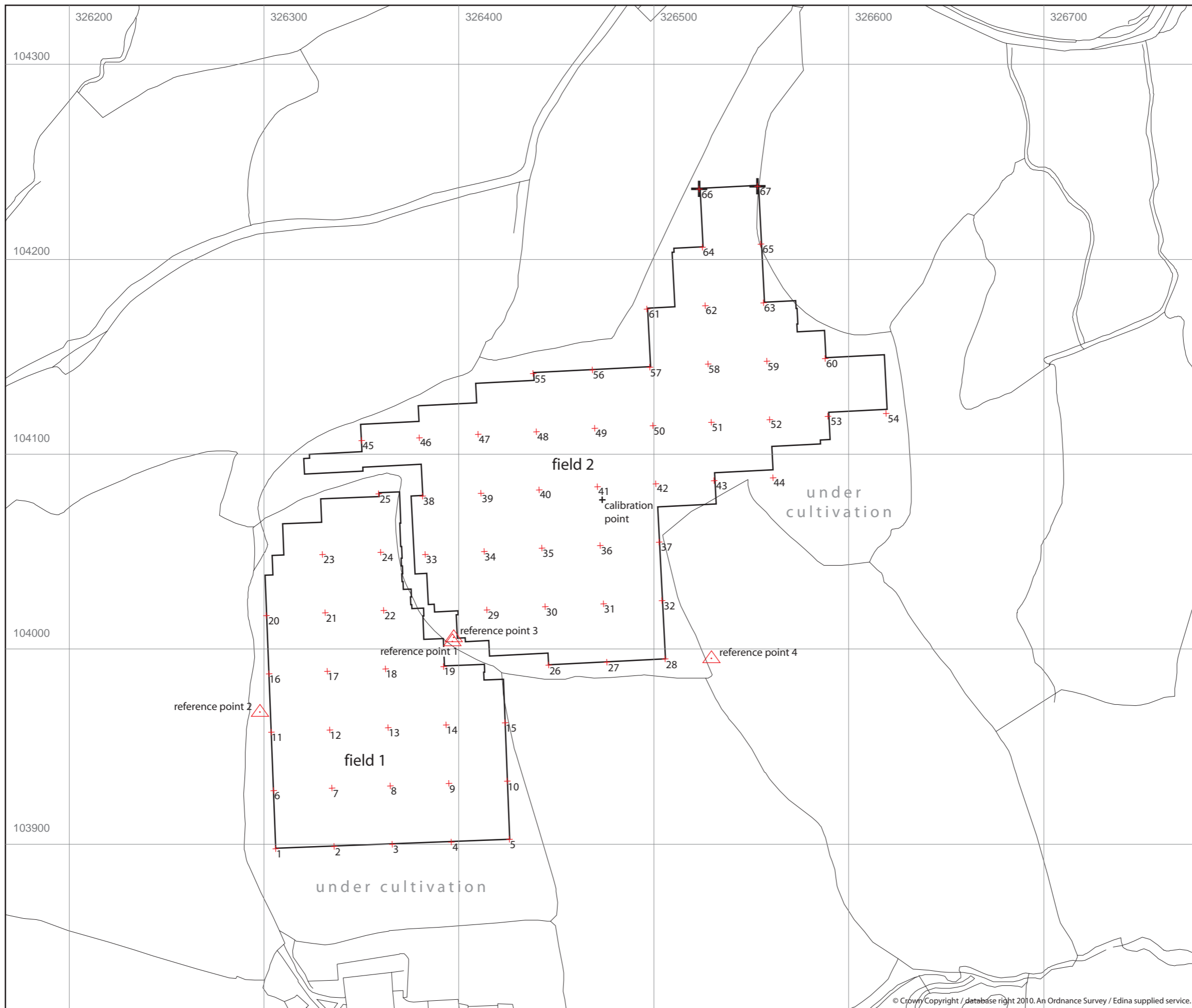






Figure 4. Ordnance Survey First Imperial Edition 1:10,560, 1963 (top) and Modern Edition 1:10,560, 1988 (bottom) mapping.

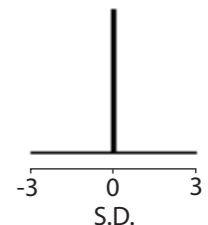
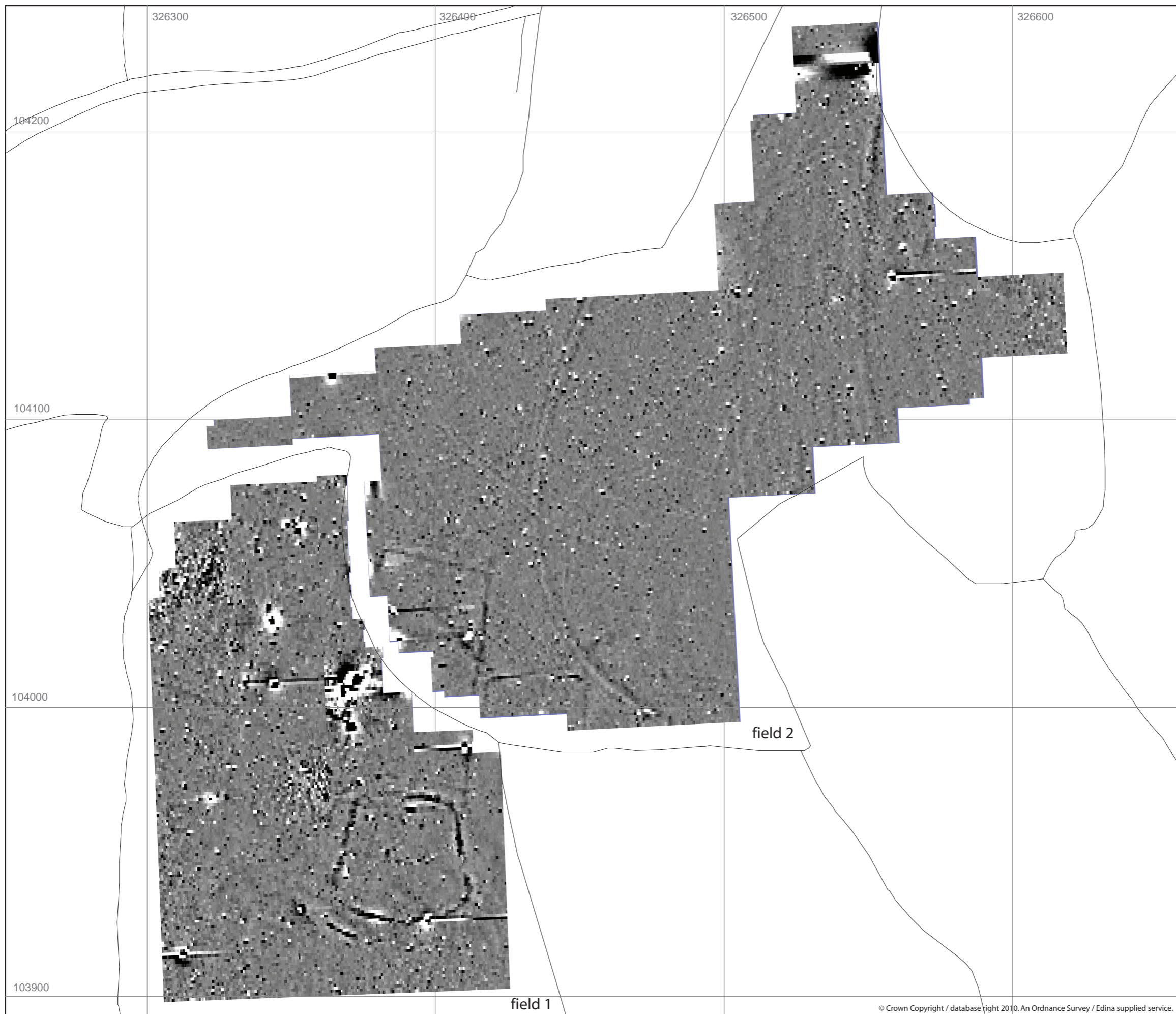


-  survey area
-  survey grid corner point
-  permanent reference peg

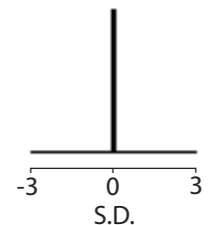
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SITE NAME	Membury Court, Membury, East Devon	SCALE	1: 2000	
DATES	12/07/10 - 15/07/10	TITLE	Figure 5. Location of survey area in Fields 1 and 2, showing grid point numbers and permanent reference points	

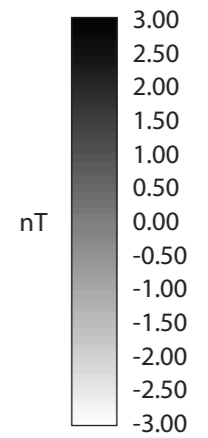




Field 1




Field 2

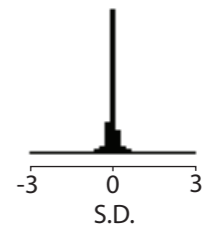
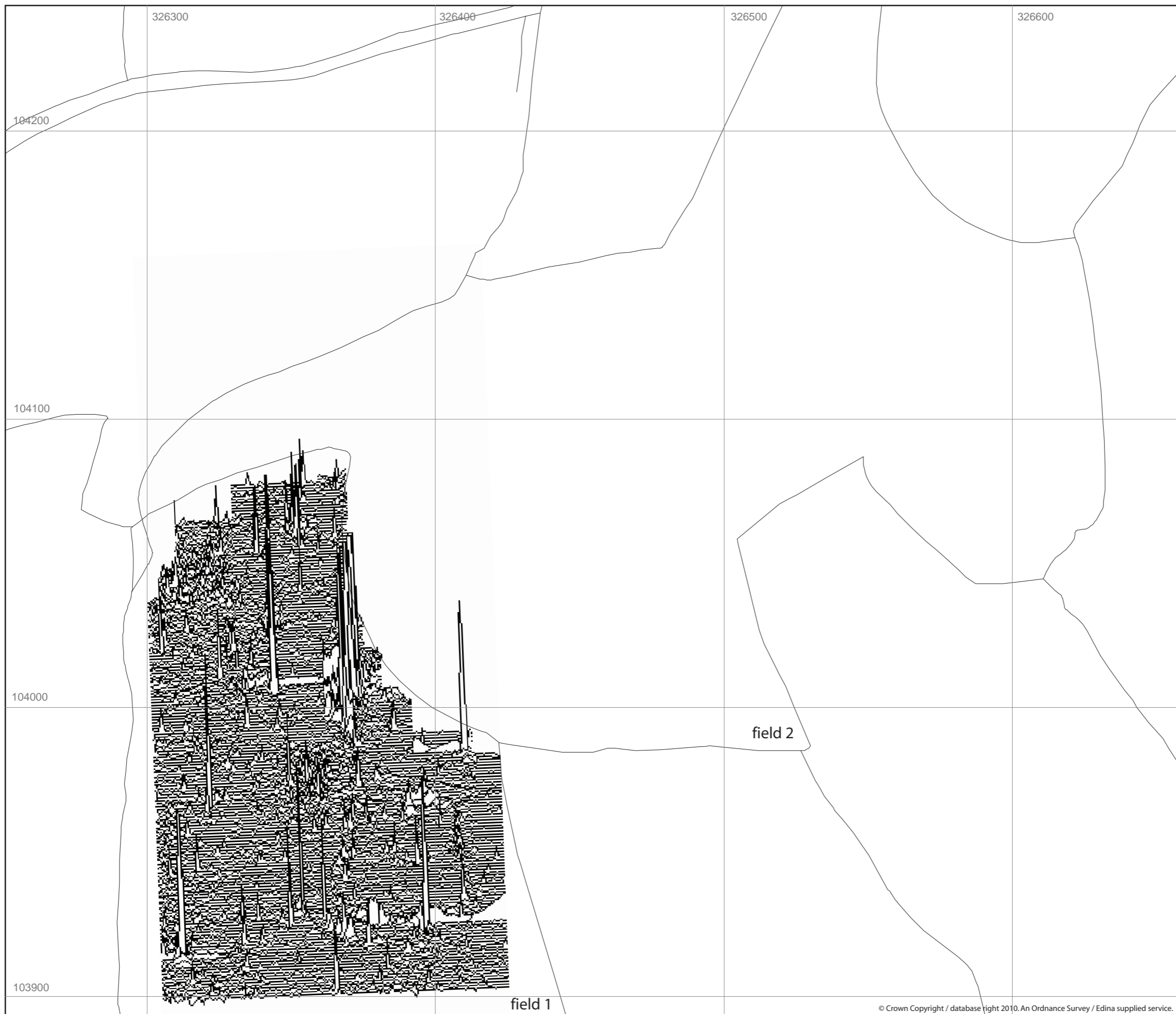


Processing:
The data presented here is raw, with the exception that it has been subject to zero mean traverse, (least mean fit = on, grids = all).

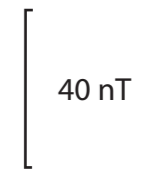


SITE NAME	Membury Court, Membury, East Devon	SCALE	1: 1333	0  100 metres
DATES	12/07/10 - 15/07/10	TITLE	Figure 6. Greyscale shade plot of raw data in Fields 1 and 2	

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Field 1

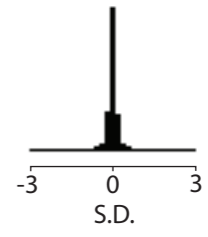


Processing:
 The data presented here is raw, with the exception that it has been clipped ± 100 nT for display purposes



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SITE NAME	Membury Court, Membury, East Devon	SCALE	1: 1333	0  100 metres
DATES	12/07/10 - 15/07/10	TITLE	Figure 7. Trace plot of raw data from Field 1	




Field 2

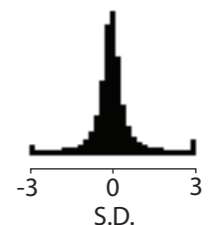
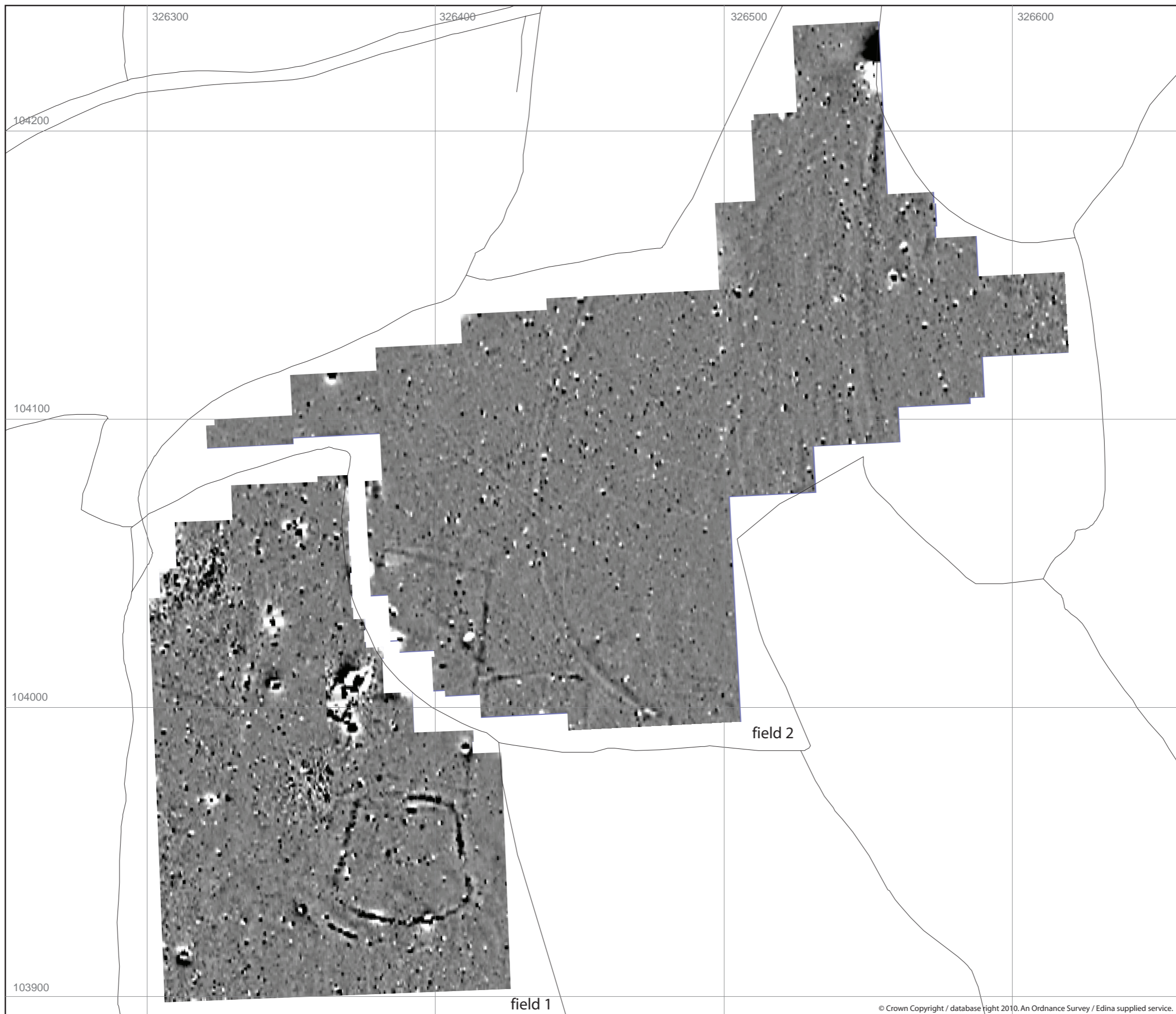


Processing:
 The data presented here is raw, with the exception that it has been clipped to +/- 100 nT for display purposes

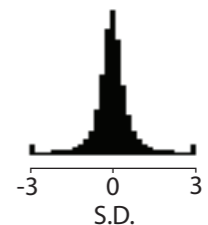


SITE NAME	Membury Court, Membury, East Devon	SCALE	1: 1333	0  100 metres
DATES	12/07/10 - 15/07/10	TITLE	Figure 8. Trace plot of raw data from Field 2	

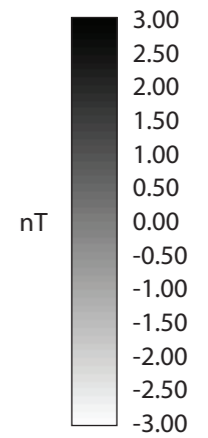
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Field 1




Field 2

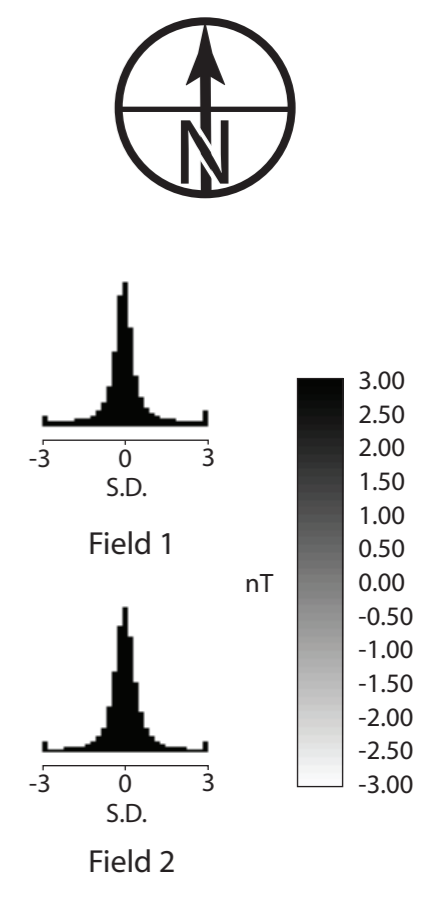
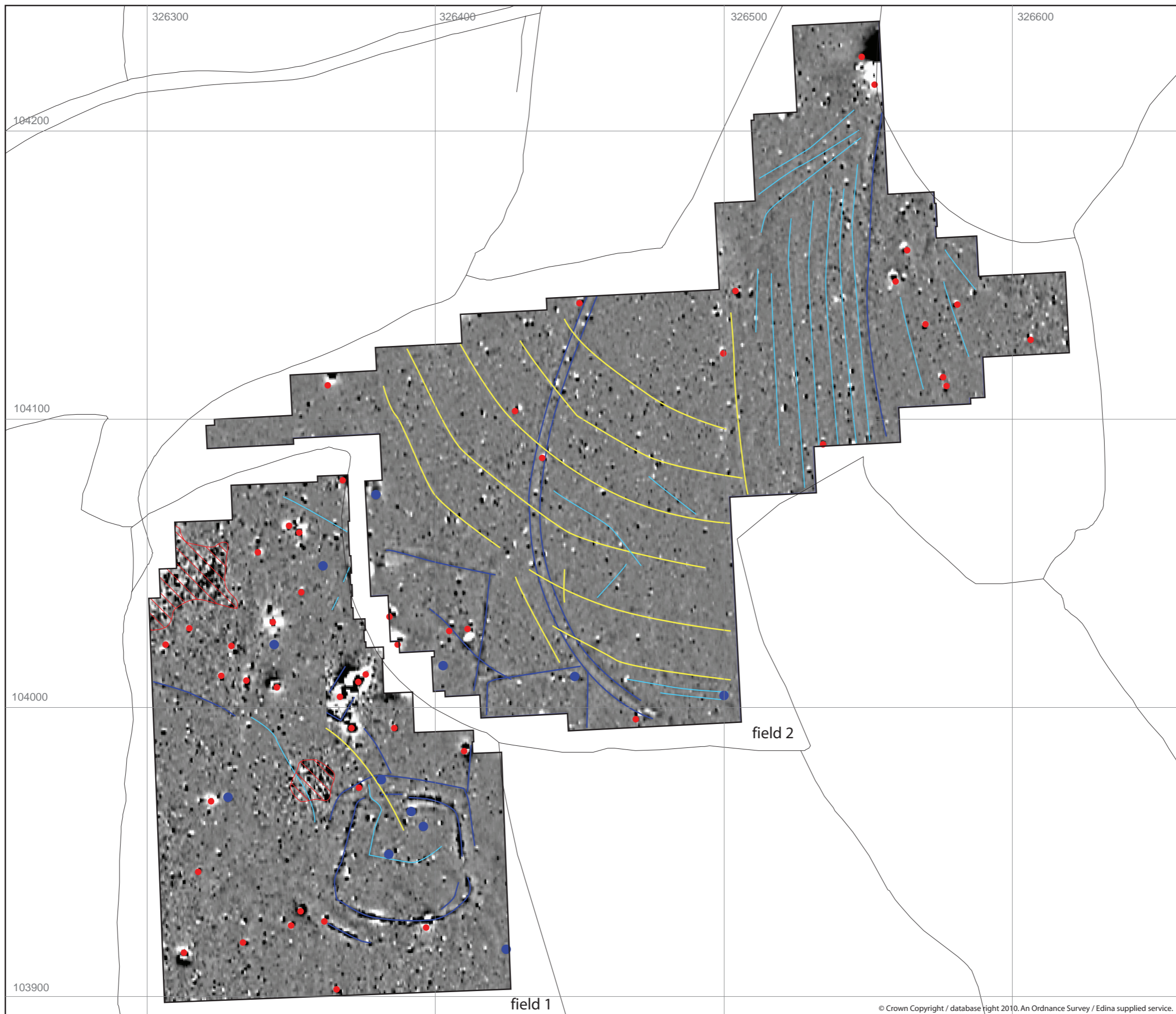








Processing:
 Despike (X=1, Y=1, Threshold=3.0, Spike Replacement=Mean)
 Clip (Min = -3, Max = 3)
 Low Pass Filter (X=1, Y=1, Weighting = Gaussian)
 Interpolate (Direction=Y, Mode = Expand, Sin X/X)



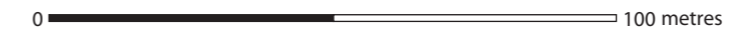
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SITE NAME	Membury Court, Membury, East Devon	SCALE	1: 1333	0  100 metres
DATES	12/07/10 - 15/07/10	TITLE	Figure 9. Greyscale shade plots of processed data from Fields 1 and 2	

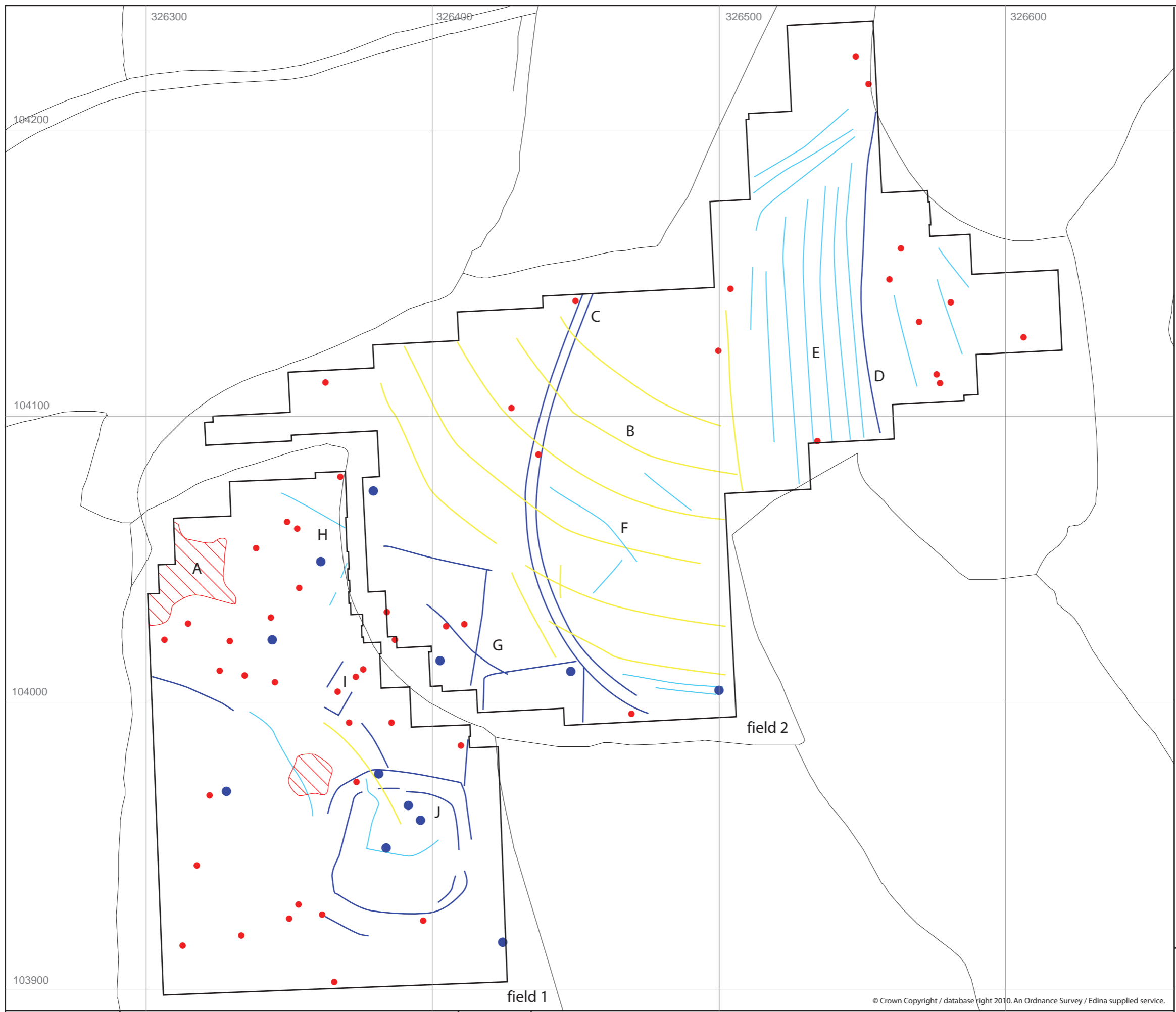








-  positive linear anomaly
-  weak ?positive linear anomaly
-  negative linear anomaly
-  positive point anomaly
-  ferrous debris
-  magnetic disturbance

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SITE NAME	Membury Court, Membury, East Devon	SCALE	1: 1333	
DATES	12/07/10 - 15/07/10	TITLE	Figure 10. Greyscale shade plots of processed data from Fields 1 and 2 overlain by interpretation	





-  positive linear anomaly
-  weak ?positive linear anomaly
-  negative linear anomaly
-  positive point anomaly
-  ferrous debris
-  magnetic disturbance

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SITE NAME	Membury Court, Membury, East Devon	SCALE	1: 1333	
DATES	12/07/10 - 15/07/10	TITLE	Figure 11. Interpretation of data from Fields 1 and 2	

