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THE CROWN ESTATE

LAND EAST OF AXMINSTER, DEVON

GEOPHYSICAL SURVEY REPORT

January 2017

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SUMMARY

In January 2017 Wardell Armstrong LLP (WA) undertook a geophysical survey of land east of Axminster, Devon. The survey was undertaken for The Crown Estate, to provide information to support a planning application for a residential development.

Although no known archaeological sites pre-dating the post medieval period are recorded within the proposed development area, it is recognised that there is the potential for as-yet unrecognised archaeological remains to survive at the site, including possible prehistoric and/or Romano-British remains, which may survive sub-surface. Several post-medieval non-designated heritage assets are recorded within the site boundary in the Devon Historic Environment Record (HER), and are identified on historic maps of the site.

The objective of the geophysical survey was therefore to determine the presence/absence, nature and extent of potential archaeological features within the study area, and the presence/absence of any known modern features within the survey area, which may affect the results.

Geomagnetic survey was undertaken over the available land on a field by field basis, which comprised pasture at the time of the survey. Several geophysical anomalies detected were believed to be agricultural in nature, including possible plough furrows, land drains, lynchets, and former field boundaries. Topographic features were also detected, including possible evidence for clay/chalk extraction.

One of the archaeological features detected relates to a former rectangular building and three small enclosures, which are recorded in the Devon HER (MDV70579). Potential archaeological features have also been detected by the geophysical survey in several areas, including a pair of possible ring ditches or a barrow/cairn on the south side of the proposed development area.

1 INTRODUCTION

1.1 Circumstances of the Project (Figure 1)

1.1.1 Between the 9th and 19th January 2017 Wardell Armstrong LLP (WA) undertook a geophysical survey of land at Axminster in Devon. The survey was undertaken for The Crown Estate to provide information to support a planning application for a residential development at the site. This is in line with government advice as set out in Section 12 of the National Planning Policy Framework (NPPF 2012).

1.1.2 The proposed development area encompassed several fields of pasture and one arable field to the east of Axminster, and west of Sector, to the north of Lyme Road (B3261). The majority of the fields lay to the north of Sector Lane, and east of Prestaller Farm, with the most northerly field being separated by Beavor Lane (Figure 1). The area subject to geophysical survey amounted to *c*.31.5ha of land in total.

1.1.3 Several post-medieval non-designated heritage assets are recorded within the site boundary in the Devon Historic Environment Record (HER), and are identified on historic maps of the site. However, it is also recognised that there is the potential for as-yet unrecognised archaeological remains to survive at the site, including possible prehistoric and/or Romano-British remains, which may survive sub-surface.

1.1.4 As a result, a geophysical survey of the site was commissioned, in order to help determine the archaeological potential of the site. The objective of the geophysical survey was to determine the presence/absence, nature and extent of potential archaeological features within the study area, and the presence/absence of any known modern features within the survey area, which may affect the results.

1.1.5 This report outlines the results of the geophysical survey undertaken, and includes an interpretation of the geophysical survey results, in light of the historical and archaeological background of the site.

2 METHODOLOGY

2.1 Written Scheme of Investigation

2.1.1 A Written Scheme of Investigation (WSI) for the geophysical survey was produced by Wardell Armstrong LLP, and was submitted to Stephen Reed, Senior Historic Environment Officer at Devon County Council for approval, prior to the start of the survey (Wardell Armstrong 2016). The WSI was adhered to in full, the survey work being consistent with Historic England guidelines (English Heritage 2008), and undertaken in accordance with the standard and guidance of the Chartered Institute for Archaeologists (CIfA 2014).

2.2 Geophysical Surveys

2.2.1 ***Technique Selection:*** geomagnetic survey was selected as the most appropriate technique, given the non-igneous (sedimentary limestone and mudstone) environment, and the expected presence of cut archaeological features at depths of no more than 1.5m. This technique involves the use of hand-held gradiometers, which measure variations in the vertical component of the earth's magnetic field. These variations can be due to the presence of sub-surface archaeological features.

2.2.2 Magnetic survey over limestone and mudstone can produce variable results, but magnetic susceptibility exists, which can produce moderate anomaly strengths. The magnetic response over limestone is generally good. This response will also depend on local variations in drainage and overlying soils. Some gravels and pebble formations, may produce a more ambiguous response.

2.2.3 ***Field Methods:*** the geophysical study area measured *c*.31.5ha in total, subdivided into ten separate fields. A 30m grid was established across each area (Areas 1-10) and tied-in to known topographic survey points using a Trimble R8 GPS (Figure 2). Some small areas of woodland and steep slopes on the south side of the side had to be excluded from the geophysical survey, as did the steeper topography adjacent to Mill Brook. Due to the nature of the slope in Area 1, this field was surveyed in two parts (Area 1a: west and Area 1b: east), which were re-combined for the purposes of this report.

2.2.4 Geomagnetic measurements were determined using a Bartington Grad601-2 dual gradiometer system, with twin sensors set 1m apart. It was expected that significant archaeological features at a depth of up to 1.5m would be detected using this arrangement. The survey was undertaken using a zig-zag traverse scheme, with data

being logged in 30m grid units. A sample interval of 0.25m was used, with a traverse interval of 1m, providing 3600 sample measurements per grid unit, with measurements being recorded at the centre of each grid cell. The data were downloaded on site into a laptop computer for processing and storage.

2.2.5 ***Data Processing:*** geophysical survey data were processed using Terra Surveyor software, which was used to produce 'grey-scale' images of the raw data. Positive magnetic anomalies are displayed as dark grey, and negative magnetic anomalies are displayed as light grey. A palette bar shows the relationship between the grey shades and geomagnetic values in nT.

2.2.6 Raw data were processed in order to further define and highlight the archaeological features detected. The following basic data processing functions were used:

- *Despike:* to locate and suppress random iron spikes in the gradiometer data (despike was performed on all survey grids using a window of 11x3/threshold 1.5).
- *Destripe:* to reduce the effect of striping in the gradiometer data, sometimes caused by misalignment of the twin sensors (zero mean traverse was performed on all survey grids using a threshold of between 0.5 and 1.5 standard deviations).
- *Clip*: to clip data to specified maximum and minimum values, in order to limit large noise spikes in the geophysical data (clipped from -3nT to 3nT).
- *Low pass filter*: to remove high frequency components of the data set frequently a result of fired/ferrous litter in the topsoil (window 6 x 3)
- *Interpolate*: to match the resolution of the sample intervals in the x and y directions (doubled in the y direction).

2.2.7 ***Interpretation:*** four types of geophysical anomaly were detected in the gradiometer data:

- *positive magnetic*: regions of anomalously high or positive magnetic data, which may be associated with the presence of high magnetic susceptibility soil-filled features, such as pits or ditches.
- *negative magnetic:* regions of anomalously low or negative magnetic data, which may be associated with features of low magnetic susceptibility, such as stone-built features, geological features, land-drains or sub-surface voids.
- *dipolar magnetic*: regions of paired positive and negative magnetic anomalies, which typically reflect ferrous or fired materials, including fired/ferrous debris in the topsoil, or fired structures, such as kilns or hearths.

- *magnetic disturbance*: areas of high amplitude magnetic disturbance or interference, which may be associated with the presence of modern structures

2.2.8 ***Presentation:*** the grey-scale images were combined with site survey data and Ordnance Survey data to produce the geophysical survey figures. Colour-coded geophysical interpretation diagrams are provided, showing the locations and extent of positive, dipolar and bipolar magnetic anomalies and areas of magnetic disturbance. Archaeological interpretation diagrams are also provided, which are based on the interpretation of the geophysical survey results in light of the archaeological and historical context of the site.

2.3 Archive

2.3.1 The data archive for the geophysical survey has been created in accordance with the recommendations of the Archaeology Data Service (ADS 2013). This archive is held at the company offices at Carlisle, Cumbria. The archive comprises a compressed (zipped) file folder, containing the geophysical data, documentation (metadata), and other project material (report and field notes). A copy of the data archive will also be deposited with the ADS for long-term storage.

2.3.2 One copy of the final report will be deposited with the County Historic Environment Record, once approved by the client, where viewing will be available on request. The project is registered with the Online AccesS to the Index of archaeological investigationS (OASIS). The OASIS reference for the project is: wardella2-274195.

3 BACKGROUND

3.1 Site Conditions and Geological Context

3.1.1 ***Location:*** The survey area extended into nine fields to the south of Beavor Lane on the east side of Axminster, bounded by Sector Lane to the south, with further agricultural land to the east and modern developments to the north, south and west. A further single large field of agricultural land was also surveyed to the north of Beavor Lane. The site is centred at Ordnance Survey grid reference SY 3097 9863.

3.1.2 ***Geology and Soils:*** The underlying geology at the site comprises mainly limestone and mudstone, primarily Blue Lias Formation limestone and mudstone, with Charmouth Mudstone Formation to the north (BGS 2001). Superficial deposits comprise glacial clay, silt, sand and gravel. The overlying soils are seasonally waterlogged, clayey soils and clayey soils over fine loamy spoils, known as Denchworth soils (SSEW 1983).

3.1.3 ***Topography and Hydrology:*** The northern field to the north of Beavor Lane occupies a slight west-facing slope. The topography of the southern part of the site is noticeably steeper, with elevations falling towards to Mill Brook. The fields are grassed either side of the valley where they extend out into enclosed fields, which appear well-drained, with Mill Brook running southeast to north west through centre of the site.

3.1.4 ***Current land use and Vegetation:*** The site was mostly pasture land, some of which was wooded at the time of the survey. This included a small area of woodland on the south side of the site which could not be included in the geophysical survey. The site is bounded by hedgerows with some mature trees present along the Mill Brook.

3.1.5 ***Historic land use:*** An archaeological evaluation of land immediately to the west of the proposed development area produced a limited number of flint artefacts of probable Bronze Age date, indicating possible prehistoric activity in the vicinity (Carter 2013). Clay pipe stem, ceramic building material and sherds of medieval pottery were also recovered (HER reference MDV105154).

3.1.6 Stoney Lane to the west of the proposed development area is believed to follow the course of a Roman road, known as the Fosse Way. It is therefore possible that the proposed development area may have been utilised in this period for roadside settlement and/or agriculture. The site of Axminster Roman fort is also recorded *c.*1km to the south of the proposed development area at Woodbury Farm (SY 2982 9736). Excavations have revealed it to be a Roman fort dating to the second century

AD, although it may have been double ditched, with more than one phase of defences (Silvester & Allan 1984).

3.1.7 The town of Axminster grew up away from the site of the Roman settlement on a small spur close to the River Axe. It was centred around an early ecclesiastical foundation based on a minster church that had been founded by the Kings of Wessex in the late 7th or early 8th century. The medieval borough at Axminster was first mentioned in 1209 in a charter of King John when a free borough and market and fair were created (Wardell Armstrong 2015). Given the proximity of the site to Axminster it is possible that the land was utilised for agriculture during the medieval period, possibly for grazing on the slopes of the valley and crops on the higher and level plains.

3.1.8 South of Beavor Lane the field system is characterised by medieval enclosures based on strip fields. This portion of the site was probably first enclosed with hedge-banks during the later middle ages. The curving form of the hedge-banks suggests that earlier it may have been farmed as open strip-fields. Documentary sources suggest that enclosure of the subdivided strip-fields around Axminster began in the years after *c*.1250 and continued until it was almost complete in the later 14th century (*ibid*.).

3.1.9 The portion of the site north of Beavor Lane is noted by the Devon Historic Landscape Characterisation (HLC) maps as being modern enclosures adapting post-medieval fields. These modern enclosures are generally created by adapting earlier fields of probable post-medieval date.

3.1.10 Historic mapping also indicates that the proposed development area was agricultural land throughout the post-medieval period. The Tithe Map of 1838 notes the northern part of the site above what was then part of Evil Lane (now Beavor Lane) was made up of four rectangular fields with the orchard of Bonnors Copse in the most northerly field. By the time of the 1950 Ordnance Survey map the four fields had been amalgamated into one elongated enclosure. To the south the Tithe Map records a series of irregular fields with curving boundaries, which become more regular over time.

3.1.11 Four post-medieval features have been identified on historic Ordnance Survey maps within the southern part of the site. These are also recorded in the Devon Historic Environment Record, for which references are given below:

- MDV70582: Site of 'flagstaff' shown on 25" 1880s Ordnance Survey map on the field boundary
- MDV70580: Site of 'old clay pit' shown on 25" 1880s Ordnance Survey map – recorded as 'Old Chalk Pits' on the 1909 Ordnance Survey map
- MDV70581: Site of 'old limekiln' shown on 25" 1880s Ordnance Survey map
- MDV70579: Site of a small rectangular building shown on 25" 1880s Ordnance Survey map in a small L-shaped yard with three small enclosures to the south and west.

3.2 Previous Archaeological Work

3.2.1 No known previous archaeological interventions have taken place within the proposed development area. However, a number of archaeological interventions have been undertaken in and around Axminster, the majority of which have been to the west of the site around the area of the Fosse Way Roman Road (Wardell Armstrong 2015).

3.2.2 Of relevance to the proposed development area, there have been a number of investigations to the immediate west of the site, associated with the development of the Mill Brook residential area. These include an archaeological evaluation undertaken in 2008, comprising ten trenches, with one trench targeting the line of a former leat, which once provided power to a post-medieval mill. The trench across the leat exposed a shallow, flat based channel, with the inner silts containing 19th century or later finds. Towards the southern end of the site a large ditch was exposed, which seemed to extend along the contour of the northern edge of the hilltop. This feature was thought to represent the northern edge of a prehistoric hilltop enclosure, with finds recovered from the fills comprising possible Neolithic pottery and worked flint. A further prehistoric linear feature and an adjacent pit were recorded on the east side of the site (AC Archaeology 2008).

3.2.3 An archaeological trench evaluation was also undertaken on land off Chard Road in 2013. A total of 19 trenches were excavated within two fields forming part of a permitted residential development. No significant archaeological remains were found, with the only exposed features being post-medieval or modern land drains associated with agricultural improvement. A limited number of flint artefacts of probable Bronze Age date, were recovered (Carter 2013).

4 THE GEOPHYSICAL SURVEYS

4.1 Introduction (Figure 2)

4.1.1 Geomagnetic survey was undertaken over all the available land, on a field by field basis (Areas 1-10). An area of woodland on the south side of the site had to be excluded from the geophysical survey (in Area 5). To the south some small areas also had to be excluded, due to topographic factors, with some slopes being too steep to survey.

4.1.2 The survey areas were bounded by field boundaries consisting of mature hedges with fences, including some post and wire fences. These fences produced strong magnetic disturbance around the periphery of some of the survey areas. Overhead power lines also crossed some of the survey areas, and the supporting posts produced areas of strong magnetic disturbance. Metal field gates were also present in some fields which also produced strong magnetic fields.

4.1.3 Small discrete dipolar magnetic anomalies were detected across the whole of the study area. These are almost certainly caused by fired/ferrous litter in the topsoil, which is typical for modern agricultural land. These anomalies are indicated on the geophysical interpretation drawings, but not referred to again in the subsequent interpretations.

4.1.4 Potential archaeological features are numbered [in square brackets] in the text below, and are referenced on the archaeological interpretation drawings.

4.2 Area 1 (Figures 3-5)

4.2.1 Area 1 comprised an irregularly-shaped field of pasture on the south side of the proposed development area, immediately north of Sector Lane. Thus, strong magnetic disturbance was detected along the southern boundary. This field was crossed by overhead power lines, with four posts and supporting wires producing areas of strong magnetic disturbance on the north side of the survey area.

4.2.2 A discrete area of land on the east side of Area 1 could not be surveyed due to the presence of a spring and a land-slip. Very strong dipolar magnetic anomalies with a linear component were detected to the north of this area, which were indicative of buried ferrous material or rubble deposits.

4.2.3 A weak positive curvilinear magnetic anomaly was detected to the north of these, aligned north to south, which corresponds to the location of a former field boundary. This would have crossed the west side of Area 1 running northwest to southeast.

4.2.4 Strong dipolar magnetic anomalies were detected running along the western boundary of Area 1, aligned north to south, which indicate the presence of a service pipe or drain. These anomalies also continued into Area 2 to the west.

4.2.5 Several very weak linear positive magnetic anomalies were detected in Area 1, aligned northwest to southeast, which are likely to represent plough furrows or other agricultural features. Some broad linear positive magnetic anomalies were also detected which are probably topographic features or lynchets, due to the slope.

4.2.6 Several very weak linear negative magnetic anomalies were also detected in Area 1, aligned north to south, and east to west, which may represent land drains.

4.2.7 Strong dipolar magnetic anomalies were detected at the northwest corner of Area 1, which are likely to represent rubble deposits associated with a former rectangular building and small enclosures [1]. These are depicted on the 25" 1880s Ordnance Survey map and are recorded in the Devon HER (MDV70579), but are now removed.

4.2.8 Immediately to the south of these features, two concentric curving positive magnetic anomalies were detected, which may represent soil-filled ditches [2]. These measured *c.*12m in diameter and may continue to the north, where the dipolar magnetic anomalies may have masked these features. It is possible that the curving anomalies represent an archaeological feature, such as a cairn, barrow, or the ring ditches of a round house, which may predate the small enclosures, although this is uncertain.

4.2.9 Some small discrete positive magnetic anomalies were also detected close to the boundaries of the survey area, which may represent soil-filled features or areas of disturbed ground.

4.2.10 **Area 2 (Figures 6-8)**

4.2.11 Area 2 comprised a smaller sub-rectangular field on the west side of the proposed development area, west of Area 1, bounded by Mill Brook to the north. Strong magnetic disturbance was detected along the southern and northern edges of Area 2 due to the presence of modern fences. This field was also crossed by overhead power lines, with a single post producing an area of strong magnetic disturbance on the south side of the survey area.

4.2.12 Strong dipolar magnetic anomalies were detected crossing the south side of Area 2, aligned east to west, which indicate the presence of a service pipe or drain. This is believed to be the same service pipe detected in Area 1 to the east. In Area 2 this was

noted to follow the alignment of a former field boundary, which is depicted on the Tithe Map of 1838, and early Ordnance Survey maps, but has since been removed.

4.2.13 A cluster of discrete dipolar magnetic anomalies, and positive magnetic anomalies, was detected immediately to the north of this feature, which are likely to represent fired/ferrous deposits possibly relating to an area of disturbed ground. It is also possible that some of these anomalies represent soil-filled features, such as pits [3].

4.2.14 A broad linear positive magnetic anomaly was detected to the south of these, measuring up to *c*.4m wide, which may represent a wide soil-filled channel or other topographic feature.

4.2.15 Further discrete positive magnetic anomalies, and some curvilinear positive magnetic anomalies, were detected on the north side of Area 2 which may represent soil-filled features, the nature of which is uncertain [4].

4.3 **Area 3 (Figures 9-11)**

4.3.1 Area 3 comprised another irregular field to the north of Area 1, and east of Area 2, with Mill Brook to the north. A small area on the east side of Area 3 was too steep to survey, and had to be excluded.

4.3.2 A cluster of dipolar magnetic anomalies was detected on the southwest side of Area 3, which are believed to be due to the presence of the remains of the former rectangular building and small enclosures [1]. These were also detected in Area 1.

4.3.3 A weak linear magnetic anomaly was detected crossing the west side of Area 3, aligned northeast to southwest, which corresponded to the location of a former field boundary.

4.3.4 Several very weak linear positive magnetic anomalies were detected crossing Area 3, aligned northwest to southeast, which are likely to represent plough furrows.

4.3.5 Further discrete dipolar magnetic anomalies, and some positive magnetic anomalies, were detected on the north side of Area 3, which are likely to represent fired/ferrous deposits and/or areas of disturbed ground.

4.3.6 An alignment of rectilinear positive and negative magnetic anomalies was detected on the northwest side of Area 3. These anomalies appear to define an area measuring *c*.18m by *c*.10m, which may indicate the presence of a buried structure or building [5].

4.4 Area 4 (Figures 12-14)

4.4.1 Area 4 comprised a small irregularly-shaped field on the west side of the proposed development area, immediately to the south of Prestaller Farm, with Mill Brook bounding this field to the south. A small area on the east side of Area 4 was too steep to survey, and had to be excluded. A public right of way crossed this field, aligned northwest to southeast, and an alignment of very weak anomalies was detected crossing Area 4, which related to this foot path.

4.4.2 Several discrete dipolar and positive magnetic anomalies were detected close to the Mill Brook, and a bridge across the stream, which may reflect soil-filled features, such as pits, or areas of disturbed ground.

4.4.3 Irregular broad positive magnetic anomalies were detected on the west side of Area 4, which may reflect topographic features, or possibly areas of former clay extraction.

4.5 Area 5 (Figures 15-17)

4.5.1 Area 5 comprised another small irregularly-shaped field on the east side of the proposed development area, with Mill Brook bounding this field to the south. A wooded area on the east side of Area 5 was excluded from the geophysical survey. This is also the location of a former clay pit (or chalk pit) and lime kiln (MDV50780 and MDV50781), which are depicted on the on the 25" 1880s Ordnance Survey map.

4.5.2 The public right of way also crossed this field, aligned northwest to southeast, and an alignment of very weak anomalies was detected crossing Area 5, which related to this foot path.

4.5.3 Irregular broad positive magnetic anomalies were detected on the west side of Area 5, which may reflect topographic features, or possibly further areas of extraction.

4.5.4 A cluster of weak positive magnetic anomalies was also detected on the northwest side of Area 5, which may reflect soil-filled features, of uncertain nature [6].

4.6 Area 6 (Figures 18-20)

4.6.1 Area 6 comprised a sub-rectangular field to the east of Prestaller Farm, to the north of Area 5. The site of a 'flagstaff' (flagpole) is recorded on the eastern field boundary between Area 6 and Area 8 (MDV70582).

4.6.2 Several very weak linear positive magnetic anomalies were detected crossing Area 6, aligned northeast to southwest, which are likely to represent plough furrows.

4.6.3 A broad curving positive magnetic anomaly was detected on the southern edge of Area 6, which may represent a soil-filled ditch or topographic feature [7]. This measured c.24m in diameter, and appears to be a continuation of a broad feature detected immediately to the south in Area 5. It is possible that this relates to clay extraction. Several other very indistinct positive magnetic anomalies were detected to the north of this in Area 6, which are unconvincing as archaeological features.

4.7 **Area 7 (Figures 21-23)**

4.7.1 Area 7 comprised a rectangular field to the northeast side of the proposed development area, to the north of Area 6, immediately to the south of Evil Lane. Strong magnetic disturbance was detected on the periphery of this area due to modern fences and field gates.

4.7.2 Several very weak linear positive magnetic anomalies were detected crossing Area 7, aligned northeast to southwest, which are likely to represent plough furrows.

4.7.3 No potential archaeological features were detected in this area.

4.8 **Area 8 (Figures 18-20)**

4.8.1 Area 8 comprised a sub-square field to the northeast side of the proposed development area, to the east of Area 6, and south of Area 7.

4.8.2 Three very weak linear positive magnetic anomalies were detected crossing the east side of Area 8, which appeared to connect and may represent land drains.

4.8.3 No potential archaeological features were detected in this area.

4.9 **Area 9 (Figures 21-23)**

4.9.1 Area 9 comprised a narrow rectangular field to the northwest side of the proposed development area, west of Prestaller Farm, and immediately to the south of Beavor Lane. Strong magnetic disturbance was detected on the periphery of this area due to modern fences and field gates.

4.9.2 Broad weak linear positive magnetic anomalies were detected on the northeast side of Area 9, which are likely to represent shallow topographic features.

4.9.3 No potential archaeological features were detected in Area 9.

4.10 **Area 10 (Figures 24-27)**

4.10.1 Area 10 was the northern most field within the proposed development area, and lay

to the north of Beavor Lane, with modern developments to the north and west. Strong magnetic disturbance was detected on the north and west edges of the survey area due to the presence of modern fences and structures. This field was also crossed by two overhead power lines; whose supporting post and wires were a source of strong magnetic disturbance on the north side of the survey area. An area on the north side of the field was excluded from the survey due to the boggy ground in this area.

4.10.2 Very strong dipolar magnetic anomalies were detected on the northeast side of Area 10, which are almost certainly due to deposits of fired/ferrous materials.

4.10.3 Several very weak linear positive magnetic anomalies were detected crossing Area 10, aligned northwest to southeast, which are likely to represent former ploughing.

4.10.4 Several very weak curvilinear positive magnetic anomalies were also detected on the east side of the survey area, which could potentially represent soil-filled features [8], however, these may also be agricultural features.

4.11 **Discussion**

4.11.1 Many of the geophysical anomalies detected are believed to relate to the agricultural use of the site, including possible plough furrows, land drains, lynchets, and former field boundaries. These boundaries are depicted on the Tithe Map of 1838, and early Ordnance Survey maps, but have since been removed.

4.11.2 Several potential archaeological features have been detected at the site:

- Strong dipolar magnetic anomalies were detected in Area 1, which may relate to former buildings or structures. These include a former rectangular building and three small enclosures [1], which are depicted on the 25" 1880s Ordnance Survey map and are recorded in the Devon HER (MDV70579). These are likely to be post-medieval features.
- Possible soil-filled features have been detected at several locations on the south side of the proposed development area [2-6] which could potentially relate to sub-surface ditches and pits. Of these, two concentric curving positive magnetic anomalies in Area 1 are perhaps the most convincing features [2] and could potentially indicate the presence of a prehistoric cairn, barrow or round house. Less convincing is a further series of curvilinear features in Area 10 [8].

4.11.3 No evidence for the former flag staff (MDV70582) was detected by the geophysical survey, which from the evidence of historic mapping, is believed to have been located

on the field boundary on the west side of Area 8. However, this is unlikely to have been detected given the insubstantial nature of the feature and its location.

4.11.4 The remains of a former clay pit (MDV50780) and lime kiln (MDV50781) are believed to be located within an area of woodland in Area 5. Further possible evidence for clay/chalk extraction has been detected in Area 5 and Area 6 [7].

5 CONCLUSIONS

5.1 Conclusions

5.1.1 Geomagnetic survey has been conducted on land to the east of Axminster, to provide information in relation to a proposed residential development at the site. The survey was undertaken within nine individual fields of pasture to the north of Sector Lane and one arable field to the north of Beavor Lane.

5.1.2 Magnetic disturbance was detected in several areas associated with modern structures, including fences, gates, service pipes, and posts for overhead wires. However, the geophysical survey also successfully detected several potential archaeological features, as well as agricultural and topographic features.

5.1.3 The results of the geophysical survey therefore indicate that the technique has been successful in achieving its objectives, with moderate anomaly strengths being detected across the survey area, as well as fired/ferrous materials and structures.

5.1.4 One of the archaeological features detected relates to a former rectangular building and three small enclosures, which are recorded in the Devon HER (MDV70579). Former field boundaries were also detected, which are depicted on historic mapping of the site, but have since been removed. These are believed to be post-medieval.

5.1.5 Potential previously-unknown archaeological features have also been detected by the geophysical survey in several areas, including a pair of possible ring ditches or a barrow/cairn on the south side of the proposed development area. If the interpretation is proved correct, this could be associated with prehistoric evidence recovered during previous investigations to the west of the site.

6 BIBLIOGRAPHY

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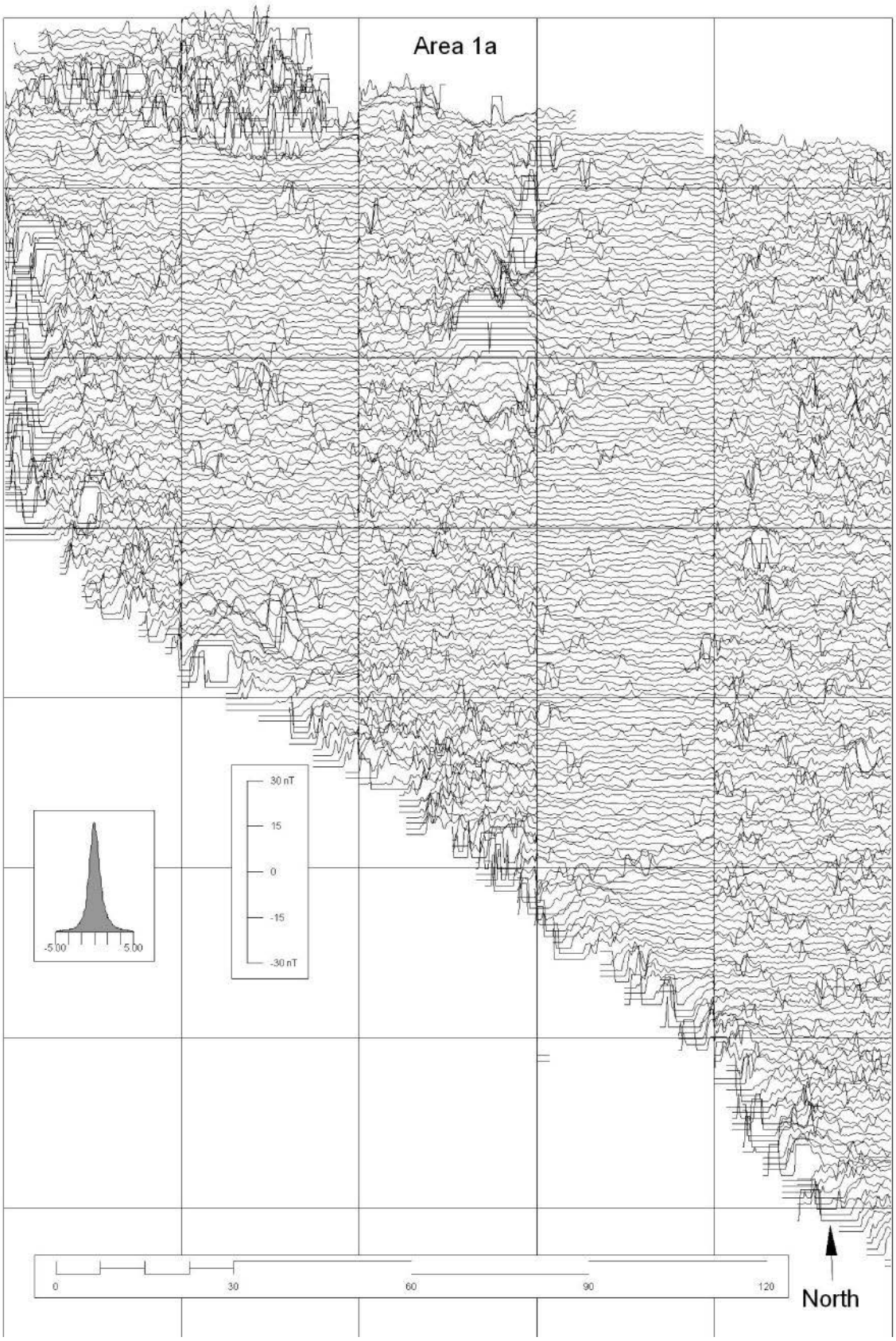
APPENDIX 1 – TRACE PLOTS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-15
-30 nT
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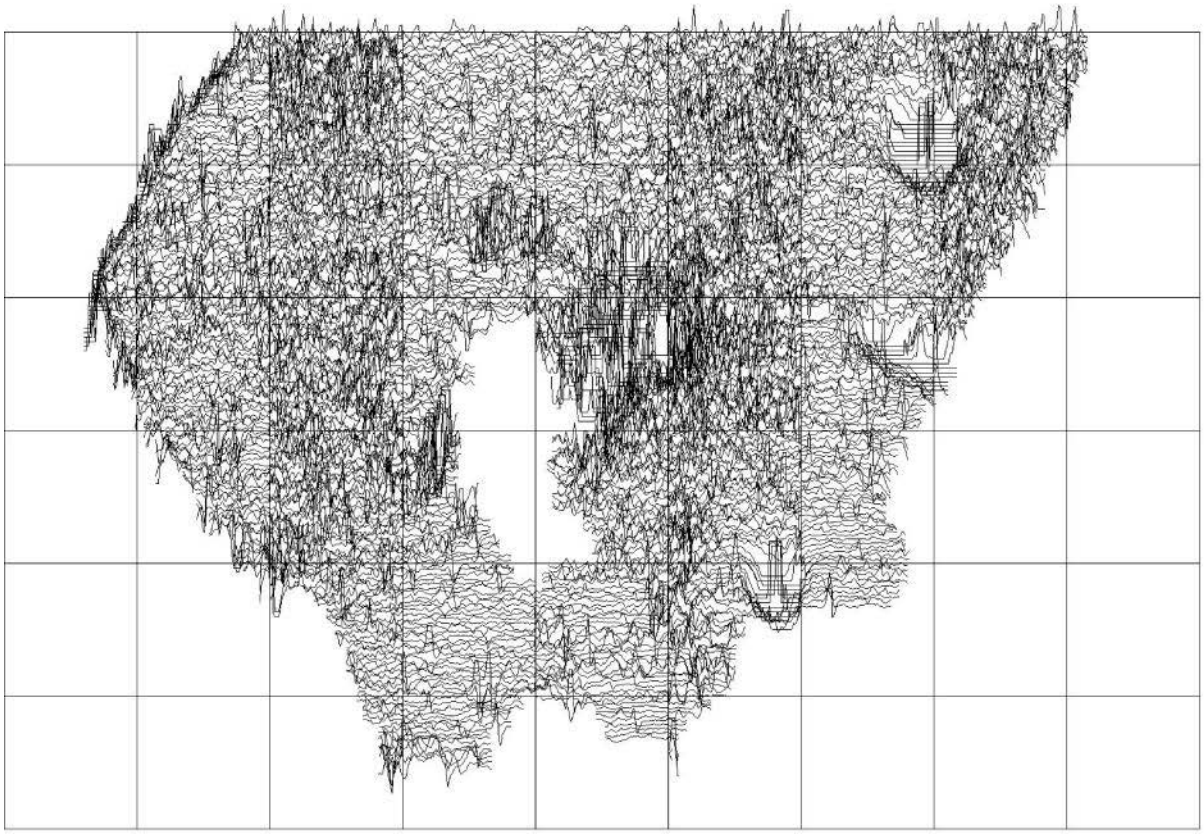
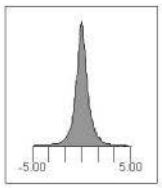
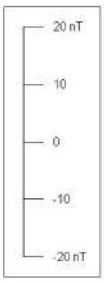
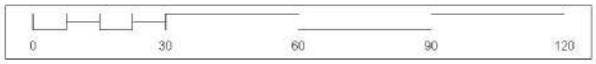
5.00
0
30
60
90
120
North

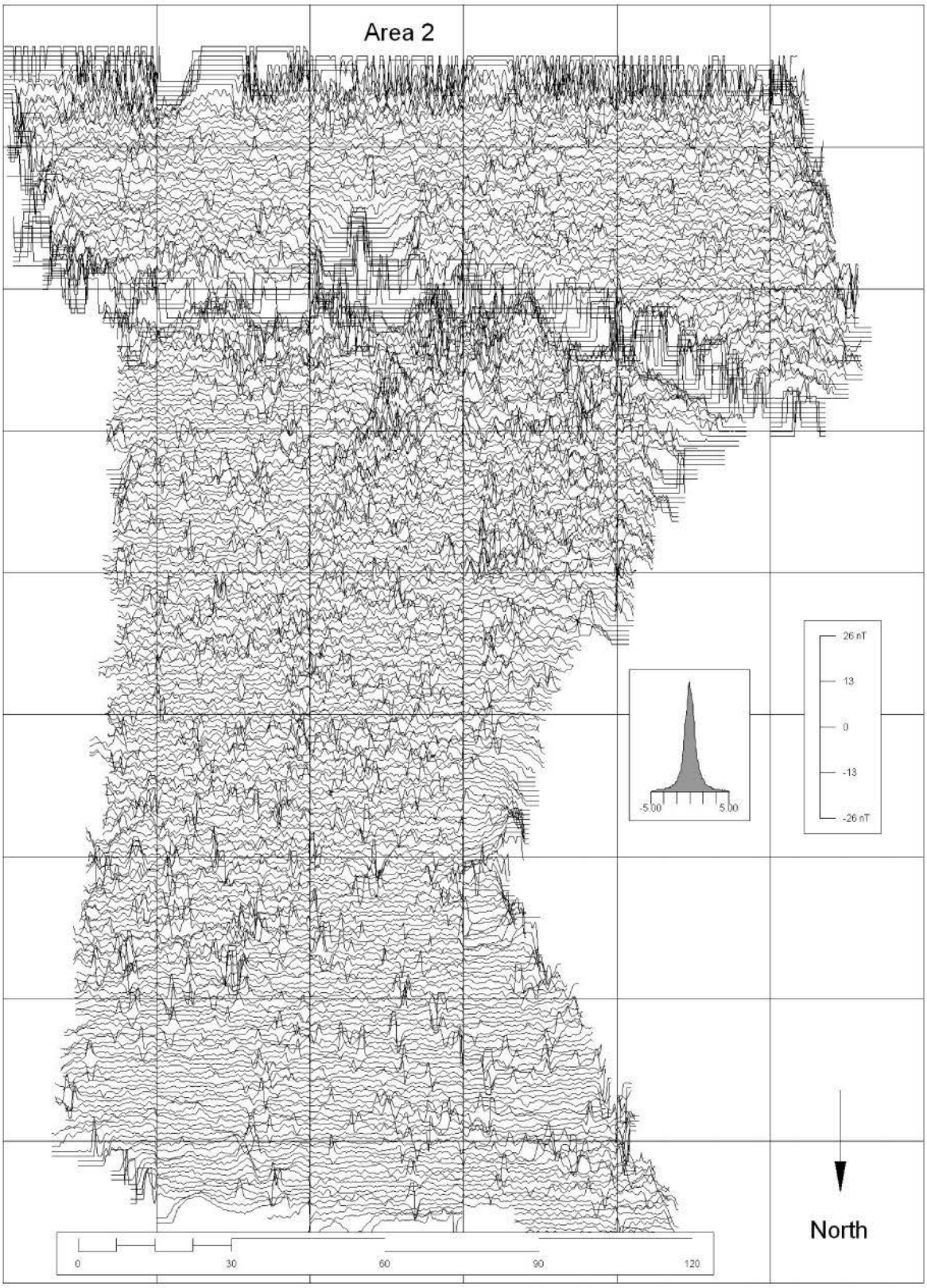
Area 1b







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-13
-26 nT
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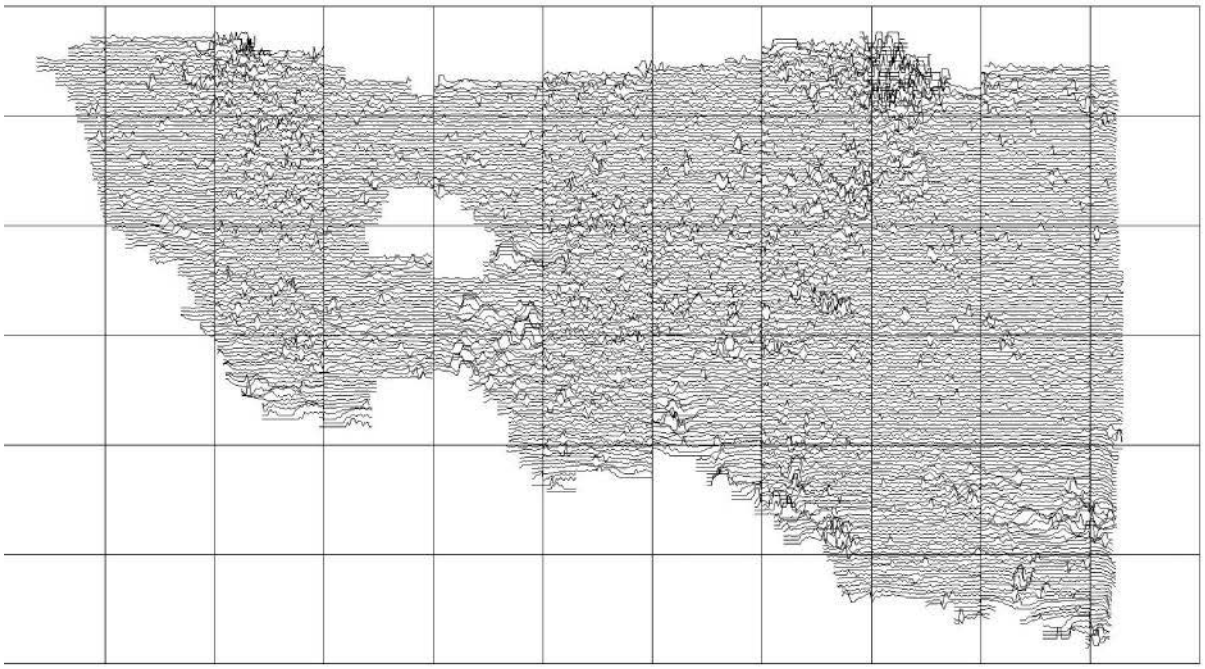
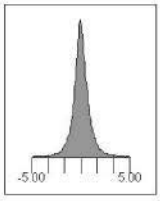
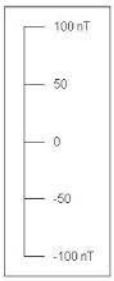
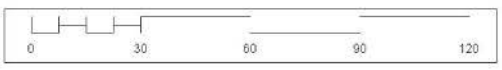
5.00
0
30
60
90
120
North

Area 3









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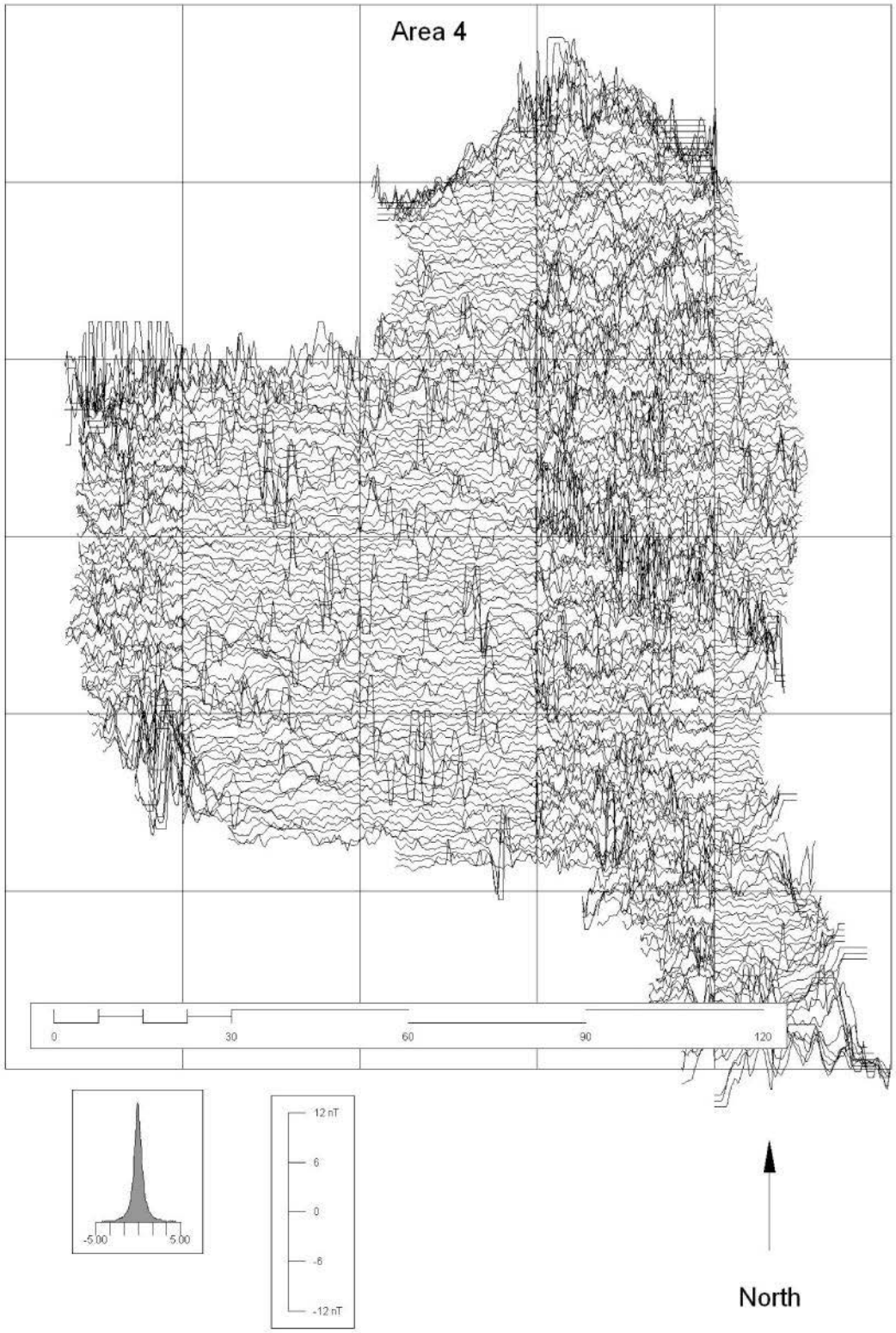
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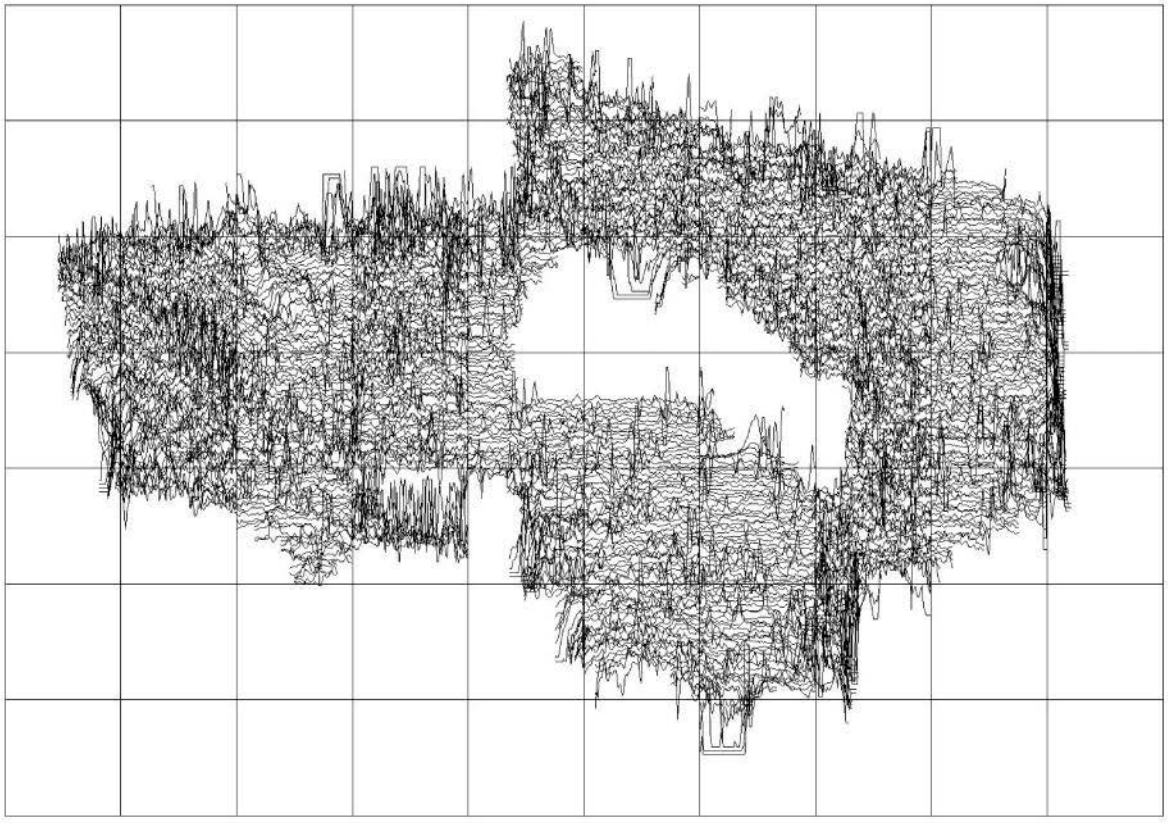
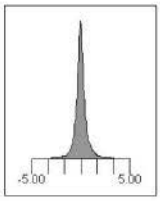
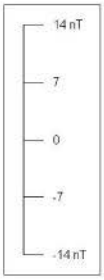
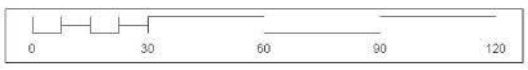
6
0
-6
-12 nT
North

Area 5









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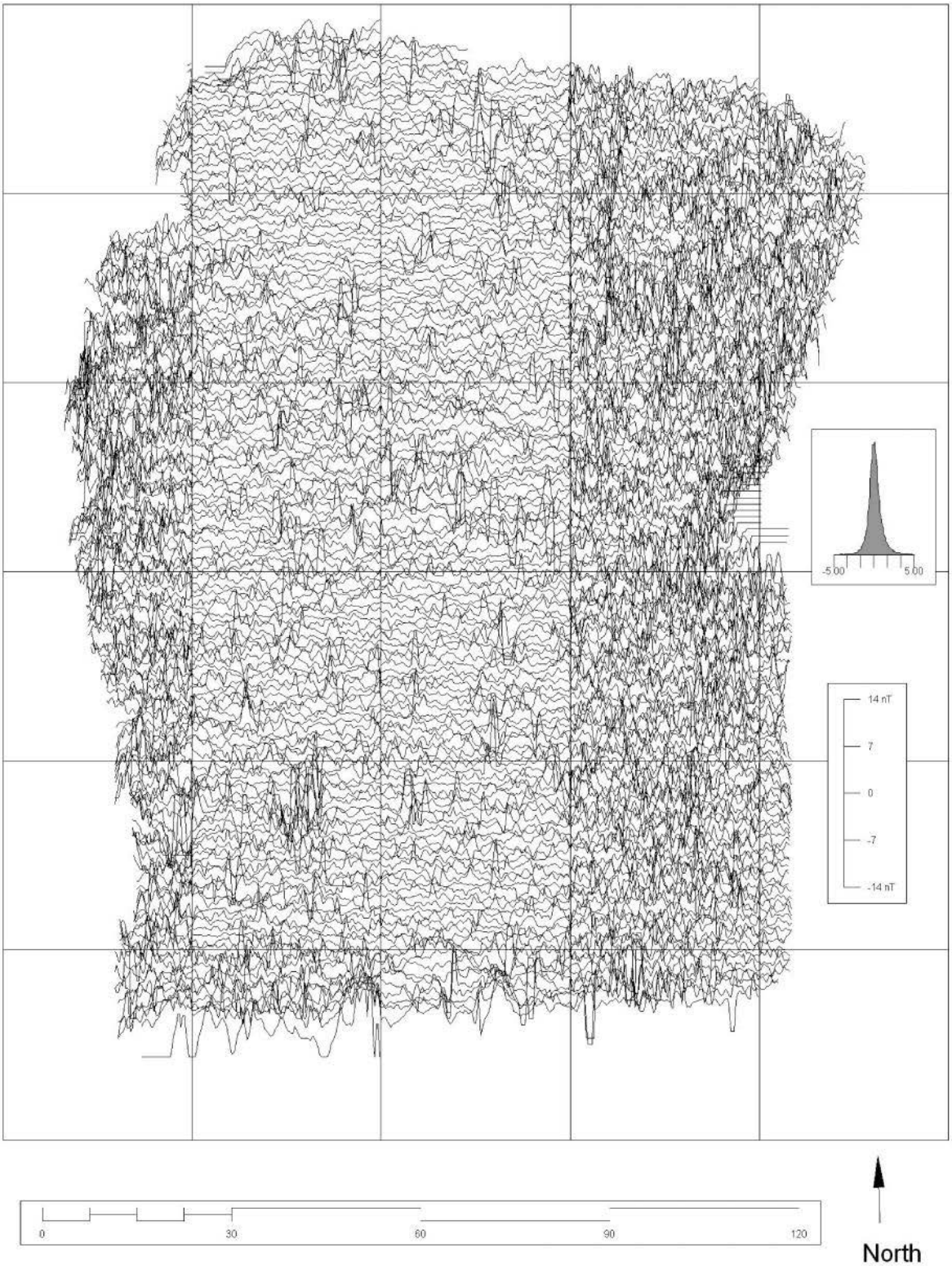
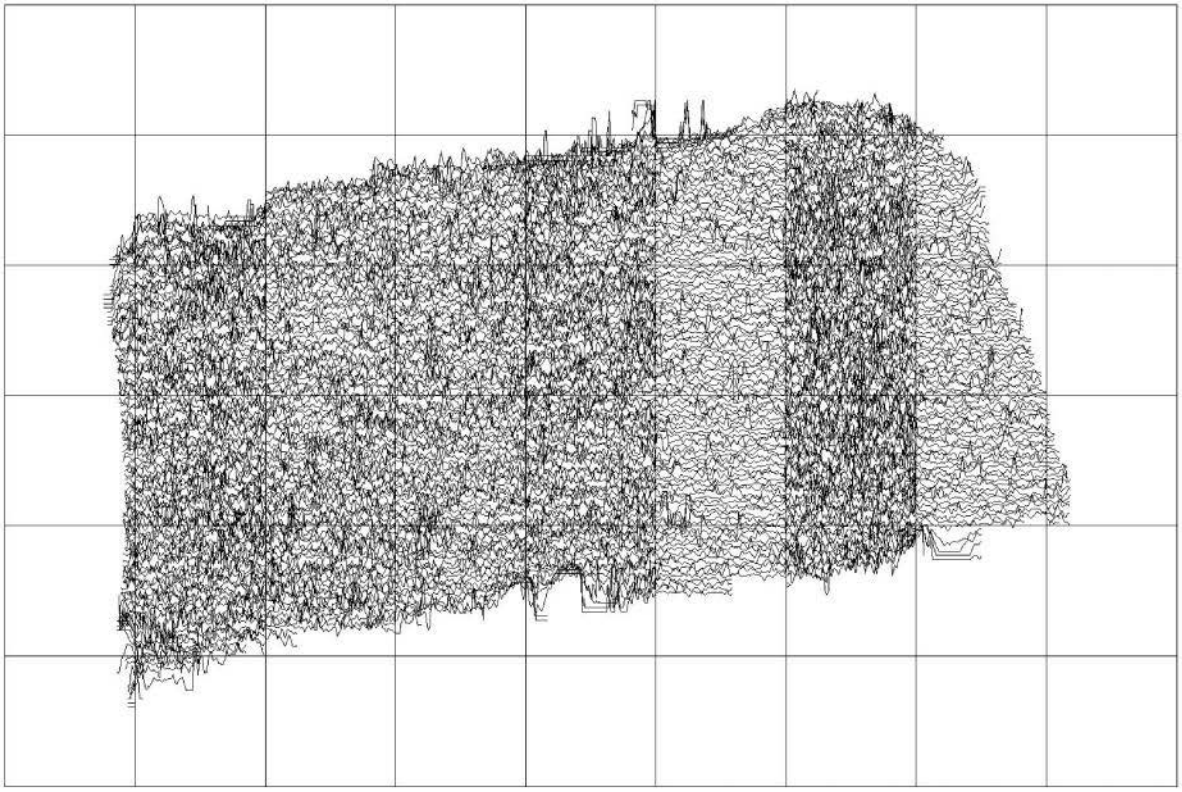
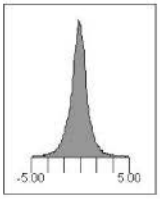
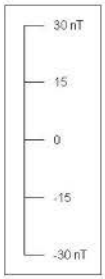
Area 6

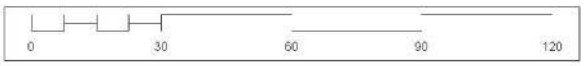


Area 7









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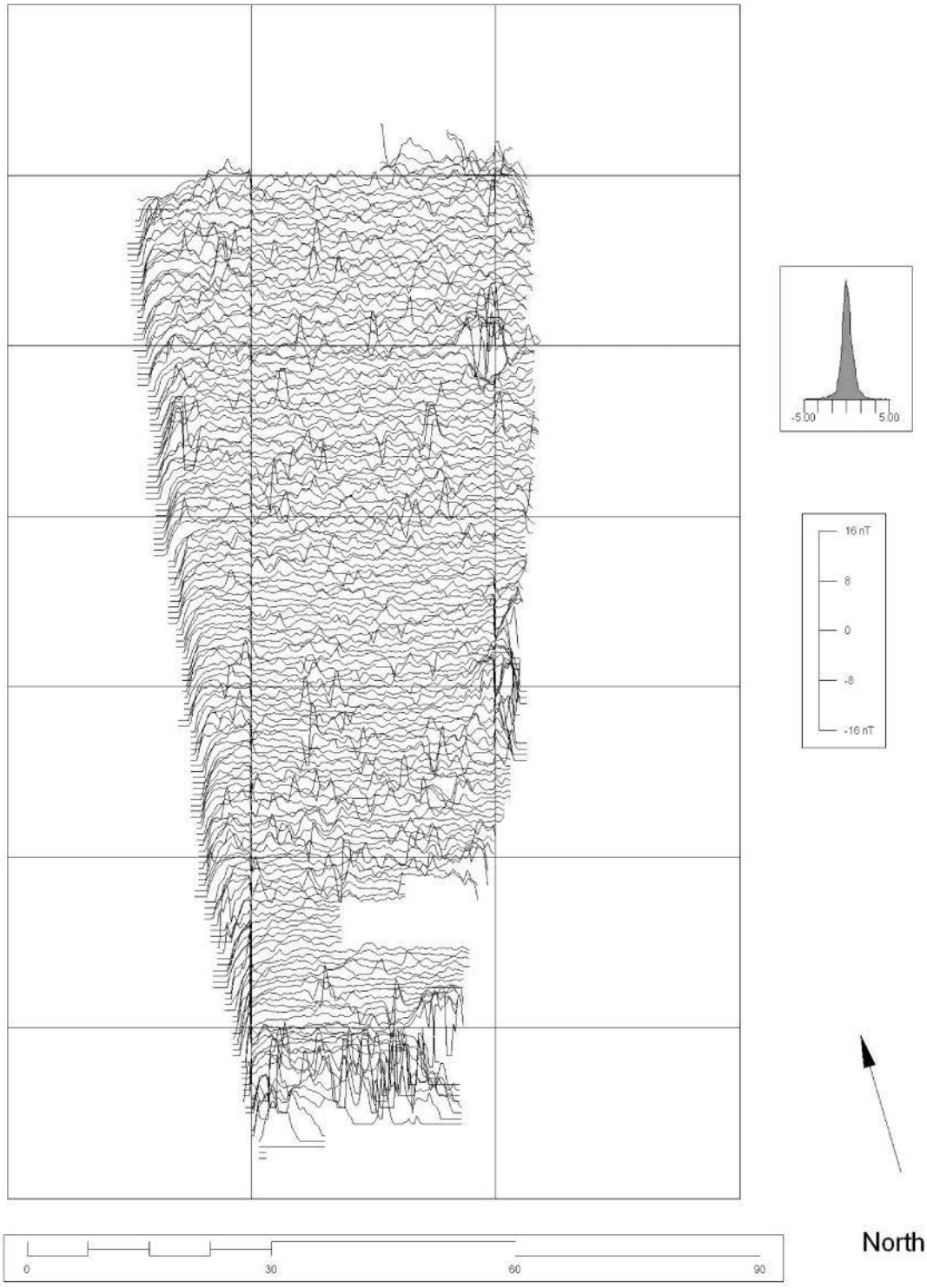
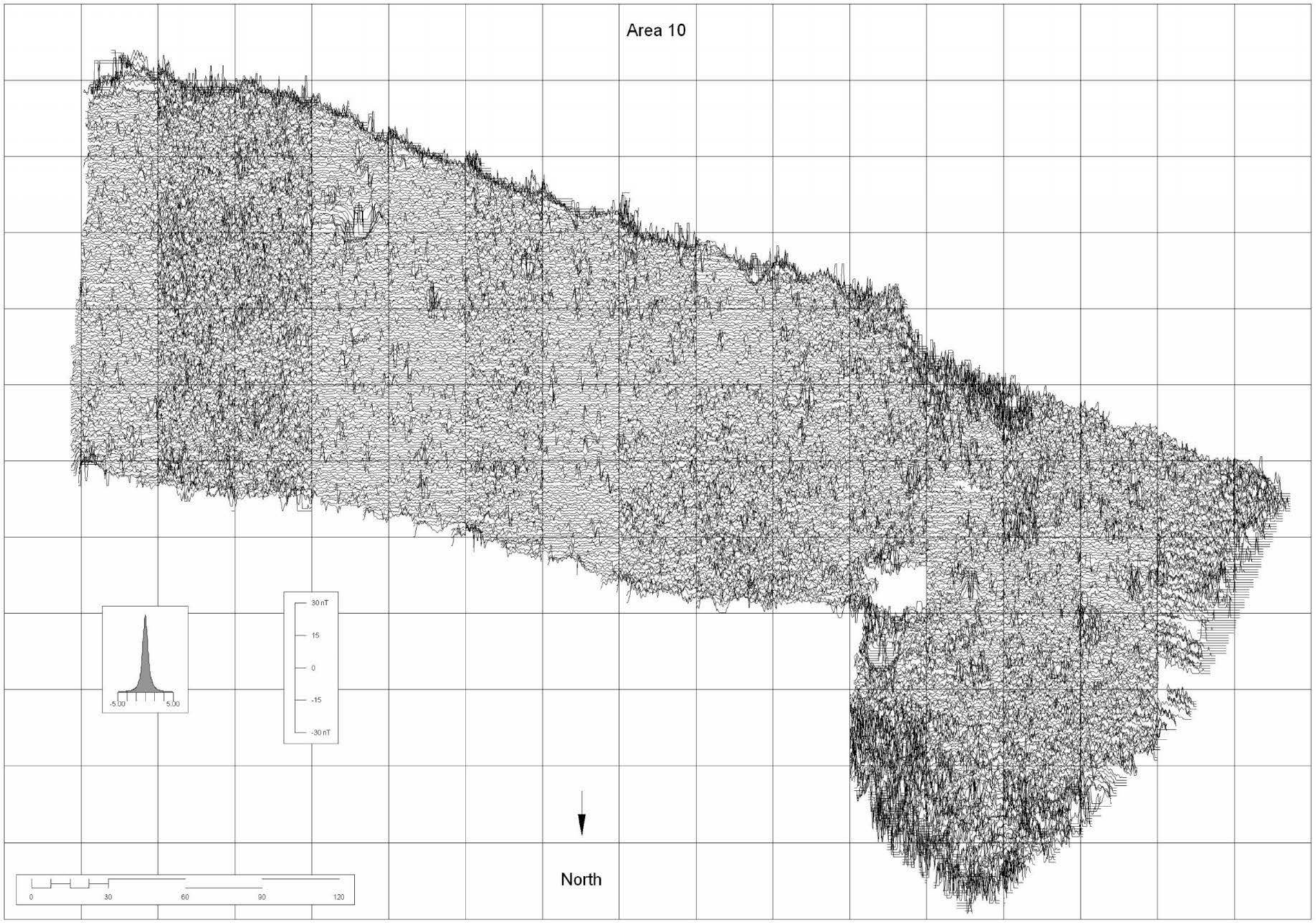
Area 9

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0
-15
-30 nT
-5.00
5.00
0
30
60
90
120
North

APPENDIX 2 - FIGURES

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