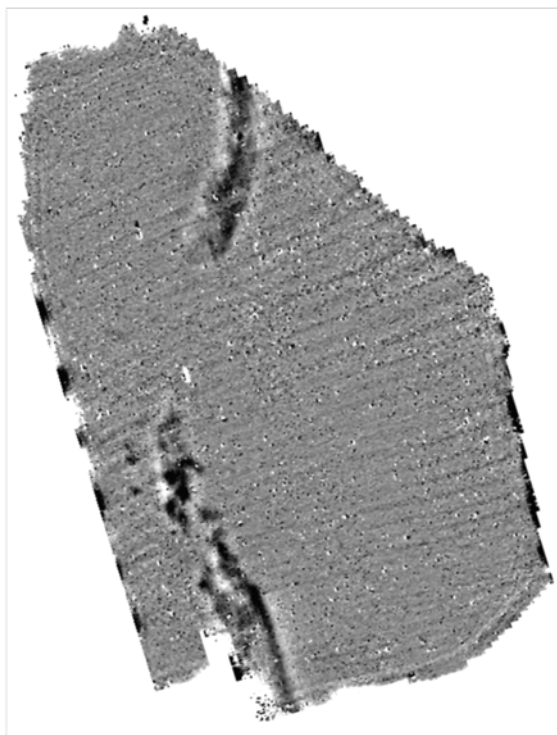




# Northamptonshire Archaeology

## Archaeological Geophysical Survey of Land to the West of Europa Way, Warwick



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Report 12/41

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**OASIS REPORT FORM**

PROJECT DETAILS		
Project name	Archaeological Geophysical Survey of Land to the West of Europa Way, Warwick	
Short description	Northamptonshire Archaeology was commissioned to carry out a detailed magnetometer survey of approximately 32ha of land on the western side of Europa Way, Warwick. The survey recorded one small cluster of anomalies of possible archaeological significance, extensive traces of ridge and furrow, and a large geological anomaly which probably represents a Pleistocene river channel. Nothing was detected which might relate to the deserted medieval village of Myton.	
Project type	Geophysical survey	
Site status	None	
Previous work	Desk-based assessment	
Current Land use	Pasture and arable	
Future work	Unknown	
Monument type/ period	Medieval ridge and furrow, Pleistocene palaeochannel	
Significant finds		
PROJECT LOCATION		
County	Warwickshire	
Site address	King Henry VIII Farm, Saumer Way, Warwick	
Study area	c 32ha	
OS Easting & Northing	SP 303 646	
Height OD	c 55-65 m AOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	Amec Environment and Infrastructure UK Ltd	
Project Design originator	Amec Environment and Infrastructure UK Ltd	
Director/Supervisor	Ian Fisher and John Walford	
Project Manager	Adrian Butler	
Sponsor or funding body	Amec Environment and Infrastructure UK Ltd	
PROJECT DATE		
Start date	29 November 2011	
End date	13 March 2012	
ARCHIVES	Location	Content
Physical	N/A	
Paper	NA	Site survey records
Digital	NA	Geophysical survey & GIS data
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report	
Title	Archaeological Geophysical Survey of Land to the West of Europa Way, Warwick	
Serial title & volume	Northamptonshire Archaeology Reports 12/41	
Author(s)	John Walford	
Page numbers	8	
Date	13 March 2012 (with minor revisions, 22 May 2012)	

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Cover Greyscale image of survey results, Field 6

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**ARCHAEOLOGICAL GEOPHYSICAL SURVEY OF LAND  
TO THE WEST OF EUROPA WAY, WARWICK  
MARCH 2012**

**ABSTRACT**

*Northamptonshire Archaeology was commissioned to carry out a detailed magnetometer survey of approximately 32ha of land on the western side of Europa Way, Warwick. The survey recorded one small cluster of anomalies of possible archaeological significance, extensive traces of ridge and furrow, and a large geological anomaly which probably represents a Pleistocene river channel. Nothing was detected which might relate to the deserted medieval village of Myton.*

**1 INTRODUCTION**

Northamptonshire Archaeology (NA) was commissioned by Amec Environment and Infrastructure UK Ltd to conduct an archaeological geophysical survey in advance of a proposed development to the west of Europa Way, Warwick (NGR SP 303 646; Fig 1). The purpose of the survey was to investigate whether there were any archaeological remains present which might be affected by the proposed development.

The fieldwork was conducted between November 2011 and February 2012. It comprised the detailed magnetometer survey of 12 fields, with a total extent of c 32ha, which were in mixed agricultural usage. The individual fields are identified by number in this report (Fig 2), with the numbers reflecting the order in which the survey progressed.

**2 TOPOGRAPHY AND GEOLOGY**

The proposed development area comprises a compact block of land, approximately 38ha in extent, between Warwick and Leamington Spa. It is bounded to the east by Europa Way, to the north by modern suburban housing and to the south by fields, and encompasses two farms, King Henry VIII Farm and Cottage Farm. The fields are a mixture of arable land and permanent pasture. One field of about 6ha, located in the

south-east of the area, was judged to be unfit for survey, due to its uneven surface and rough vegetation (Fig 2).

The topography of the area is gently undulating, with a general slope down from c 65m AOD in the south to c 55m AOD in the north. Myton Brook, a small and partly culverted watercourse, flows from south to north through the middle of the area.

The solid geology of the area comprises Mercia Mudstone, but this is overlain in most places by various drifts. Fourth terrace deposits of the River Avon occur in the southernmost part of the site, and second terrace deposits in the north. There is also a narrow band of alluvium along the line of the brook (BGS 2012).

### **3 ARCHAEOLOGICAL BACKGROUND**

The proposed development area lies close to the deserted medieval village of Myton, and records held by the Warwickshire HER suggest that a chapel, a well and other medieval remains associated with that village may occur in the fields north of Brook Farm (MWA 1976; MWA 5522; MWA 5523). Also, some medieval ridge and furrow is known to survive within the development area. One set of earthworks extends south-westwards from Cottage Farm, covering Fields 1 and 2 and another occurs in Field 12, to the south of Myton Crescent.

To the immediate south of the proposed development area, the Warwickshire HER records an extensive group of cropmark enclosures of probable late prehistoric or Roman date (MWA 4562). Further to the south and west, in the vicinity of Warwick Business Park, there are many recorded findspots of coins and metal artefacts. However, these finds span a very wide date range, and their distribution probably reflects the search area of a particular metal detectorist rather than the location of an archaeological site.

None of the farms within the development area appears to be of particular antiquity. All of the farm buildings look to be of 19th to 20th century date (*pers obs*), and none are shown on the Ordnance Survey surveyors draft of 1813 (BL 2012).

## 4 METHODOLOGY

The survey was conducted with Bartington Grad 601-2, twin sensor array, vertical component fluxgate gradiometers (Bartington and Chapman 2003). These are standard instruments for archaeological survey and can resolve magnetic variations as slight as 0.1 nanoTesla (nT).

An independent system of 30m grids was established within each of the fields to be surveyed. The grids were established with a tape measure and optical square and were tied in to the Ordnance Survey National Grid by means of a Leica Systems 1200 dGPS. The gradiometers were then carried at a brisk but steady pace through each grid square, collecting data along 1m spaced traverse lines. Measurements were automatically triggered every 0.25m along the traverses, giving a total of 3600 measurements per square.

All fieldwork methods complied with the guidelines issued by English Heritage and by the Institute for Archaeologists (EH 2008; IfA 2011).

The survey data were processed using Geoplot 3.00v software. Striping, caused by slight mismatches in sensor balance, was removed using the 'Zero Mean Traverse' function and destaggering of the data was performed as necessary.

The processed data is presented in this report in the form of grey-tone plots, at a scale of +/- 4nT black/white. The plots have been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Figs 2, 3 and 5). An interpretative overlay has been produced and is shown in Figures 4 and 6. The raw (unprocessed) survey data is displayed in Figures 7 and 8.

## 5 SURVEY RESULTS

### **Field 1** (Figs 2-4)

The data from this field are largely dominated by parallel linear anomalies, corresponding to the surviving ridge and furrow earthworks. One of the furrows is marked by a narrow band of magnetic noise, which probably represents a localised

deposit of track hardcore, and another contains an alternating chain of very weak magnetic dipoles, indicating a ceramic field drain.

A more extensive area of intense magnetic noise occurs at the eastern end of the field, where construction spoil has been dumped to form a terrace. Also at the eastern end of the field are a few large magnetic dipoles and some magnetic halos. The dipoles will have been caused by ferrous objects within the topsoil, and the halos by adjacent buildings and fences.

**Field 2** (Figs 2-4)

The results from this field are comparable to those from Field 1. Parallel linear anomalies reflect the layout of the ridge and furrow earthworks, and scattered dipolar anomalies represent pieces of buried iron. There is also a large anomaly caused by a telegraph pole, and a band of magnetic noise which represents a deposit of track hardcore on either side of the brook.

The western end of the field is crossed by a broken hedgeline which is marked by a line of small gaps in the data.

**Field 3** (Figs 2-4)

There is a small positive anomaly in the south-western corner of this field which perhaps represents a pit, and there are also some very weak, east – west aligned linear anomalies which represent traces of ridge and furrow. One other linear anomaly, which runs along the eastern field edge, reflects the pattern of modern ploughing and is not archaeologically significant.

Towards the northern end of the field there are two anomalies which are probably an ephemeral continuation of the geological anomalies in Field 6 (see below). In the same area are two groups of intense magnetic anomalies relating to modern services. Those to the west represent two pairs of telegraph poles and an underground electricity cable. Those to the east represent two parallel pipes. The other ferrous anomalies and halos within the field do not merit individual discussion.



**Fields 4 and 5** (Figs 2-4)

The data from these two fields are dominated by ferrous anomalies and incoherent magnetic noise, reflecting the presence of underground services and a general scatter of magnetic debris within the topsoil. One particularly intense linear anomaly represents a continuation of a pipe or cable which was also detected in Field 8.

**Field 6** (Figs 2-4)

This field is crossed by sinuous parallel anomalies, aligned roughly north-west to south-east, which represent ploughed-out ridge and furrow. There is also a very broad but disjointed positive anomaly which trends from east to west across the field. This probably represents a Pleistocene palaeochannel of the River Avon and is almost certainly related to the similar anomalies in Fields 8, 10 and 12 (see below).

It is quite typical for palaeochannels to produce broken and 'blotchy' anomalies such as that present here (Gaffney and Gater 2003, 121-2) and, because a complex range of factors will dictate the final anomaly form, detailed interpretation is inadvisable. For instance, an apparent gap in an anomaly might represent an area where the channel has been truncated by erosion, but could equally represent an area where leaching has depleted the iron content of the fill and rendered it magnetically invisible.

The other anomalies in Field 6 call for little comment. There are some weak linear anomalies parallel with the field margins, marking the edge of modern cultivation. There are also a few ferrous halos and some isolated dipoles indicating buried pieces of iron.

**Field 7** (Figs 2-4)

This field has been built up with spoil from the construction of Europa Way (James Thomas *pers com*), and this is reflected in the heavily disturbed nature of the magnetic data. There are no anomalies which call for individual description or interpretation.

**Field 8** (Figs 2, 5-6)

The dominant anomaly in this field is a broad swathe of magnetically positive data, aligned approximately north-east to south-west. This is comparable in size and nature to the palaeochannel anomalies identified in Field 6, and almost certainly represents a continuation of the same feature. Where it abuts the edge of the field it is partially masked by a more intense magnetic 'fringe' from the adjacent iron railings.

Elsewhere in this field there are two very weak linear anomalies which are of uncertain significance. They could represent either ditches or field drains, although the former interpretation seems slightly more likely. An intense linear anomaly and a large magnetic dipole are also present. The former represents a buried pipe or cable and the latter a telegraph pole.

**Field 9** (Figs 2, 5-6)

The data from this field exhibit a few extremely weak linear anomalies which follow the same general alignment as the ridge and furrow in Fields 2 and 10. There are also two ferrous anomalies from telegraph poles, one isolated ferrous anomaly of uncertain origin, and several ferrous halos around the field margins.

**Field 10** (Figs 2, 5-6)

The data from this field exhibit a series of weakly positive parallel linear anomalies, representing ridge and furrow. Also, in the south-eastern corner of the field, there is a small group of very weak and incoherent positive anomalies which coincide with the location of a partially infilled quarry pit. Diametrically opposite, in the north-western corner of the field, is a much stronger anomaly which is a continuation of the 'palaeochannel' anomaly previously noted in Field 8.

A single large ferrous anomaly occurs near the southern end of the field, and some ferrous halos are present around the field margins.

**Field 11** (Figs 2, 5-6)

The data from this field contains a small cluster of magnetic anomalies which may be of archaeological significance. There is one irregular positive linear anomaly, perhaps representing a segment of enclosure ditch, associated with three small dipolar anomalies of probable ferrous origin. Approximately 100m to the north there is one small positive anomaly which most probably represents an infilled pit of indeterminate date. Some very weak parallel linear anomalies, indicating ridge and furrow, are also present.

At the southern end of the field there is a very extensive zone of magnetic noise associated with an old quarry pit. This noise is composed of a mass of small dipolar anomalies, indicating a spread of ferrous and/or ceramic debris, and a few much larger anomalies which suggest the presence of some substantial pieces of iron scrap.

### **Field 12** (Figs 2, 5-6)

There are some parallel linear anomalies in the western part of this field, correlating with the surviving ridge and furrow earthworks. There is also a broad positive anomaly which marks a continuation of the palaeochannel identified in Fields 8 and 10.

The remaining anomalies in this field are likely to relate to fairly modern features. Two sets of pipes are indicated, and also various ferrous objects and spreads of magnetic debris.

## **6 CONCLUSION**

The survey has identified a small group of anomalies of potential archaeological significance located in Field 11, close to the western end of the development area. The main element in this group is a small, curving length of ditch, which may form one side of an enclosure. Unfortunately the evidence is quite slight, and cannot support a more detailed or confident interpretation.

Ridge and furrow is almost ubiquitous across the proposed development area, although much of it has been flattened by later ploughing. Some other features of minor archaeological significance are also present, including two small quarries, and a few possible pits and segments of ditch.

Nothing was detected in the north of Fields 3, 4 and 5, where parts of the deserted medieval village of Myton are thought to have stood. This could reflect a genuine absence of archaeology, especially in those places which have been disturbed by modern service trenches. However, medieval settlement remains do not always present good targets for magnetic survey (Gaffney and Gater 2003, 165) and so their apparent absence should not be accepted uncritically.

A probable palaeochannel of the River Avon extends through much of the northern part of the development area. It stands well above the present floodplain, between the second and fourth terraces, and must therefore be of Pleistocene date. Channel deposits this age may be of archaeological interest, particularly if they contain finds or environmental material pertaining to the Palaeolithic occupation of the area (Garwood 2011, 18-19).

As well as the archaeological remains noted above, the survey has mapped some modern features which may be of relevance to the development. These include areas of made ground, former quarry pits, and various pipes and cables.

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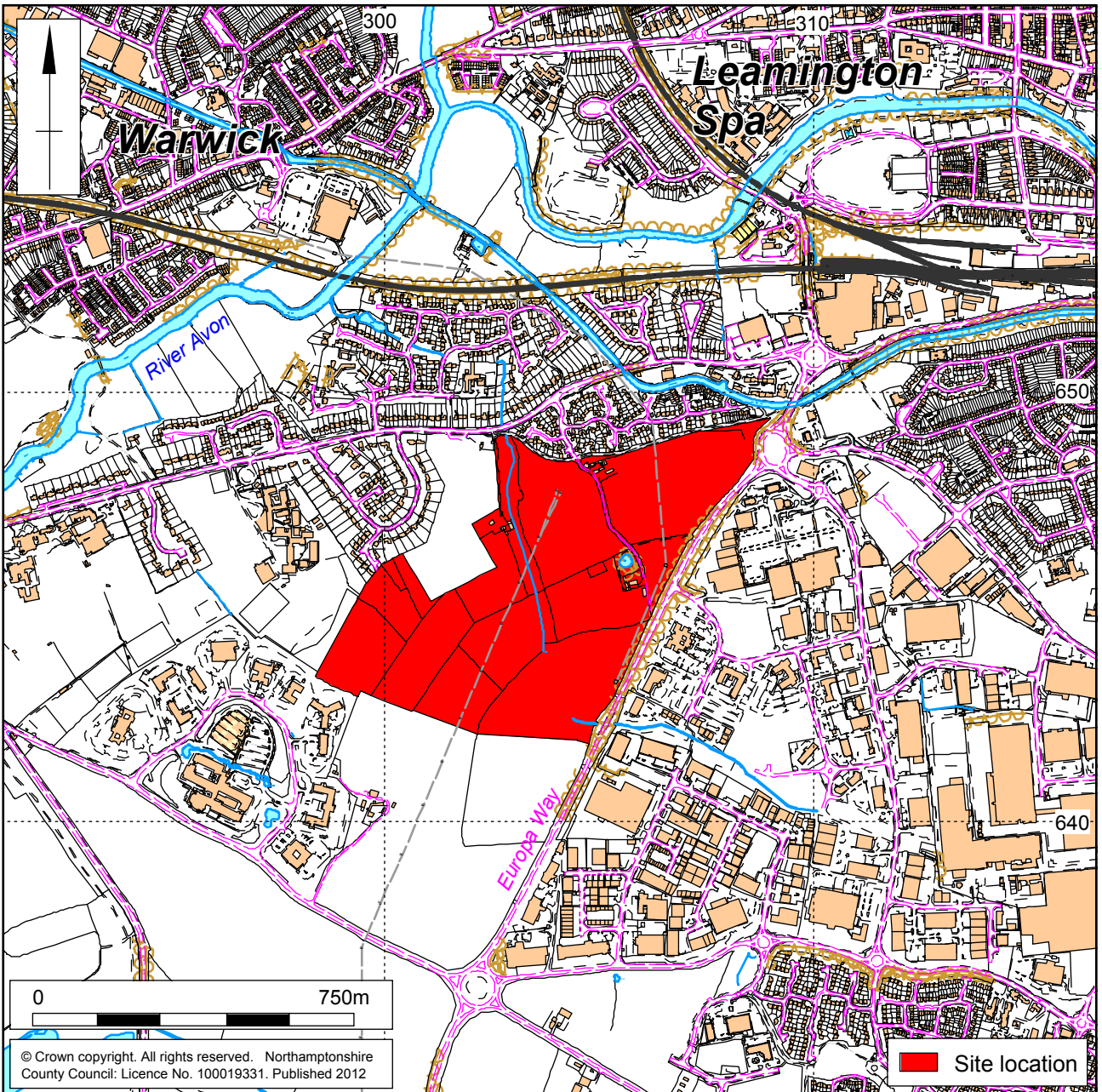
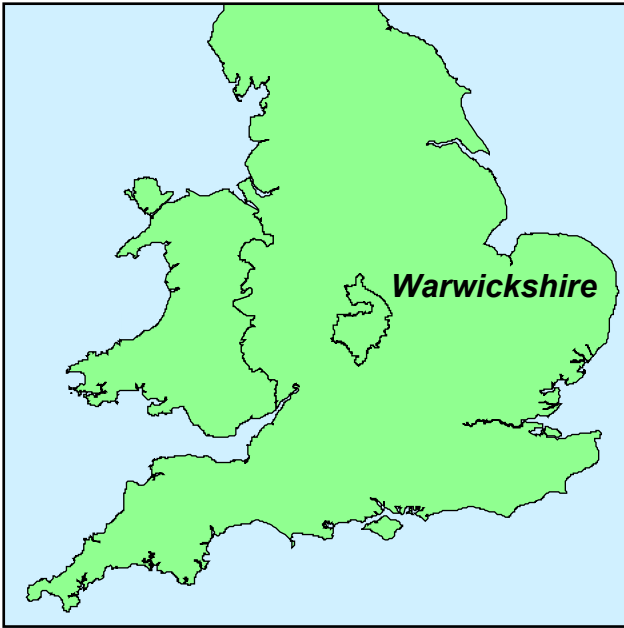
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Scale 1:15,000

Site Location Fig 1



Scale 1:4,000

Overview of magnetometer survey results Fig 2



Scale 1:2,500

Magnetometer survey results (North-east) Fig 3



Scale 1:2,500

Magnetometer survey interpretation (North-east) Fig 4

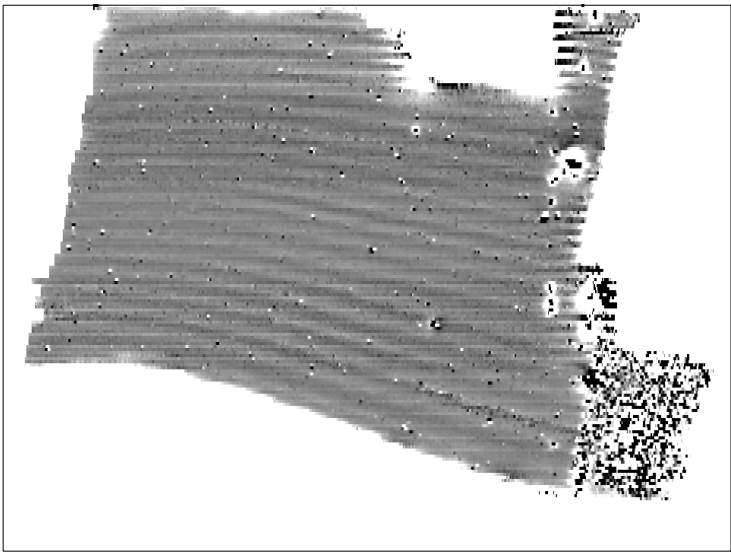
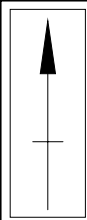




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Magnetometer survey results (South-west) Fig 5

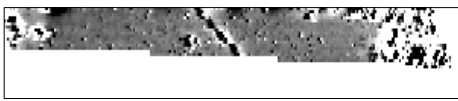




Field 1



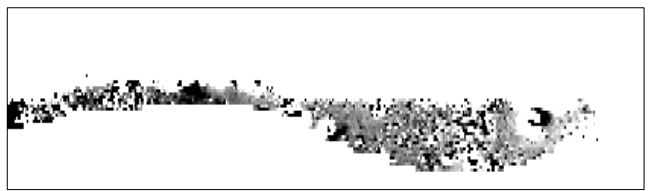
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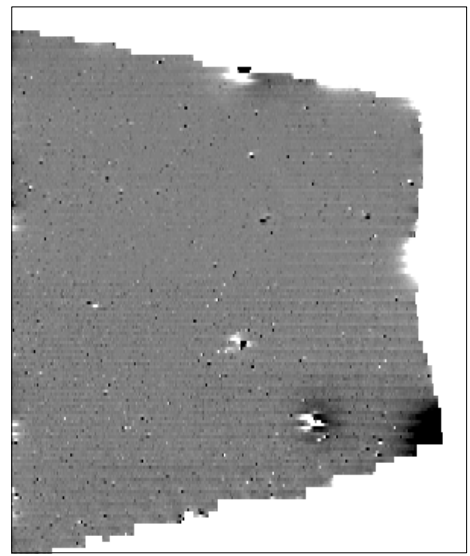
Field 5



Field 4.2



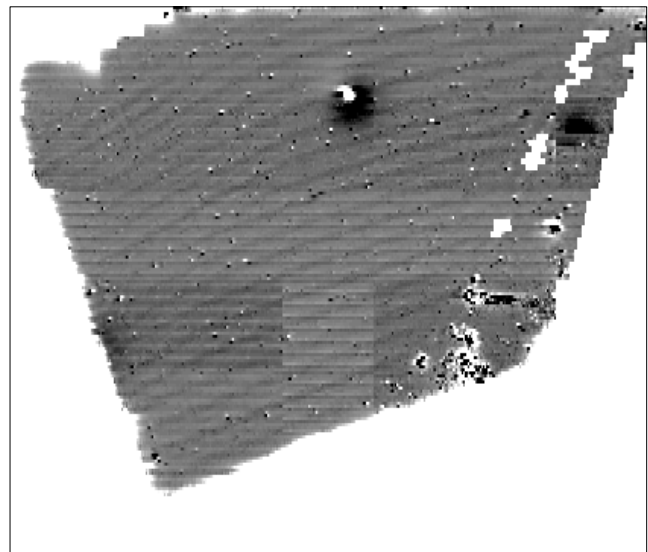
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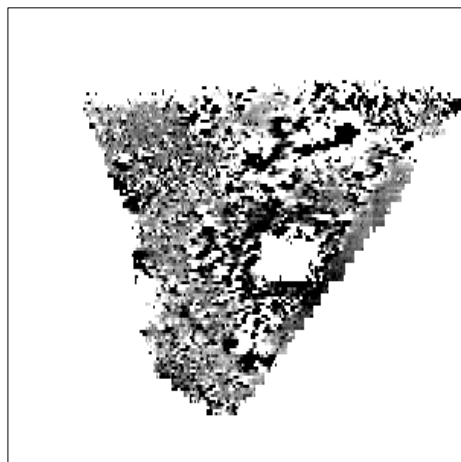
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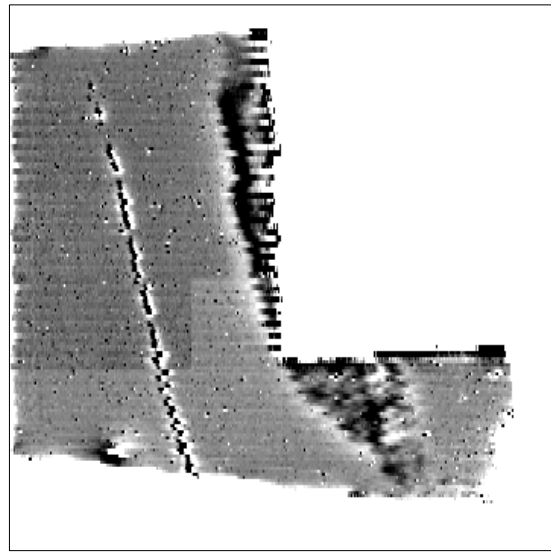
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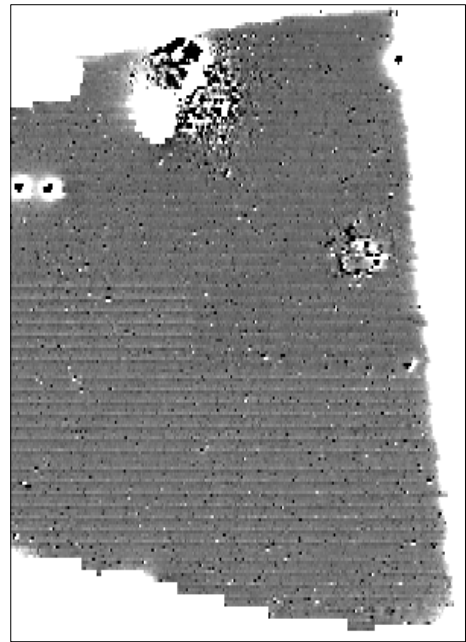
Field 2



Field 7



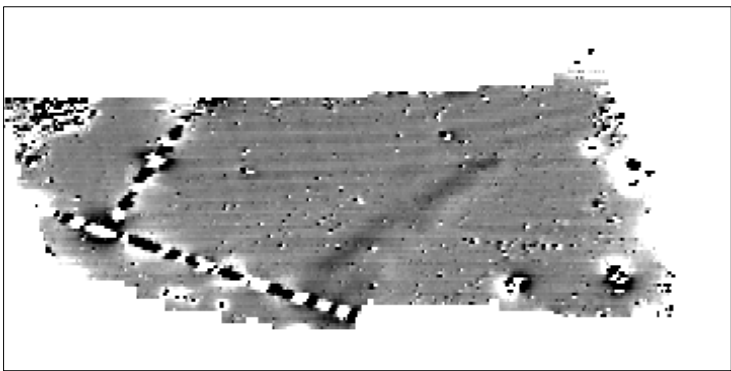
Field 8



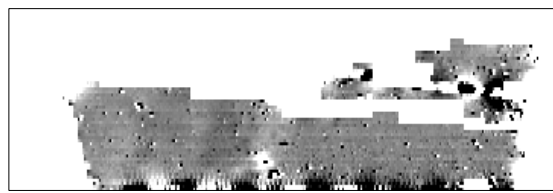
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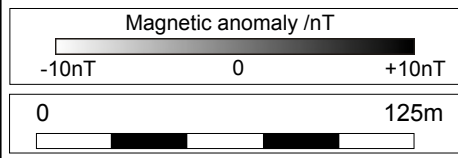
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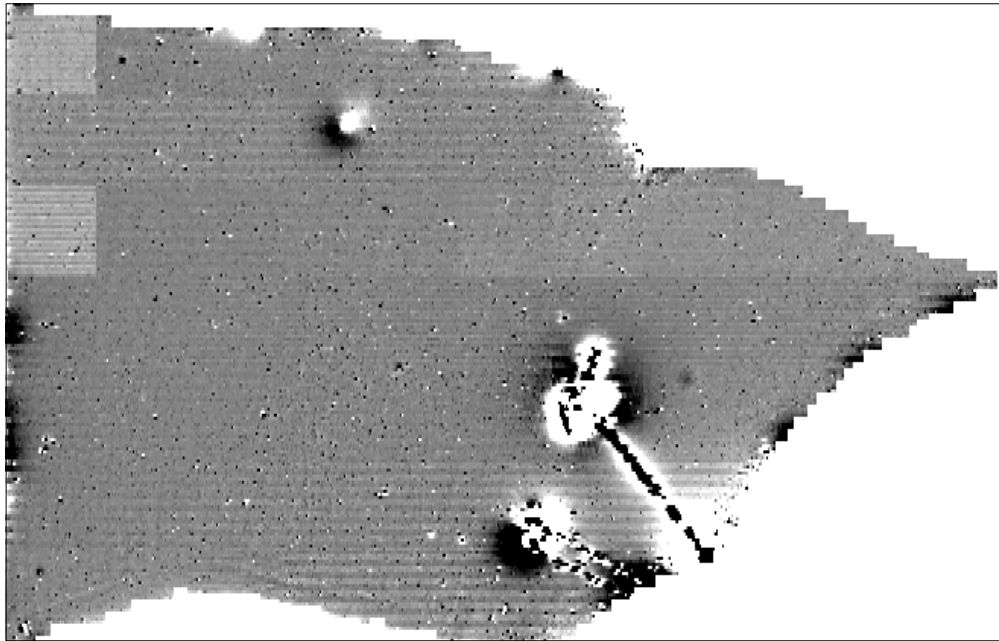
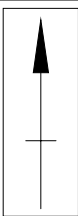


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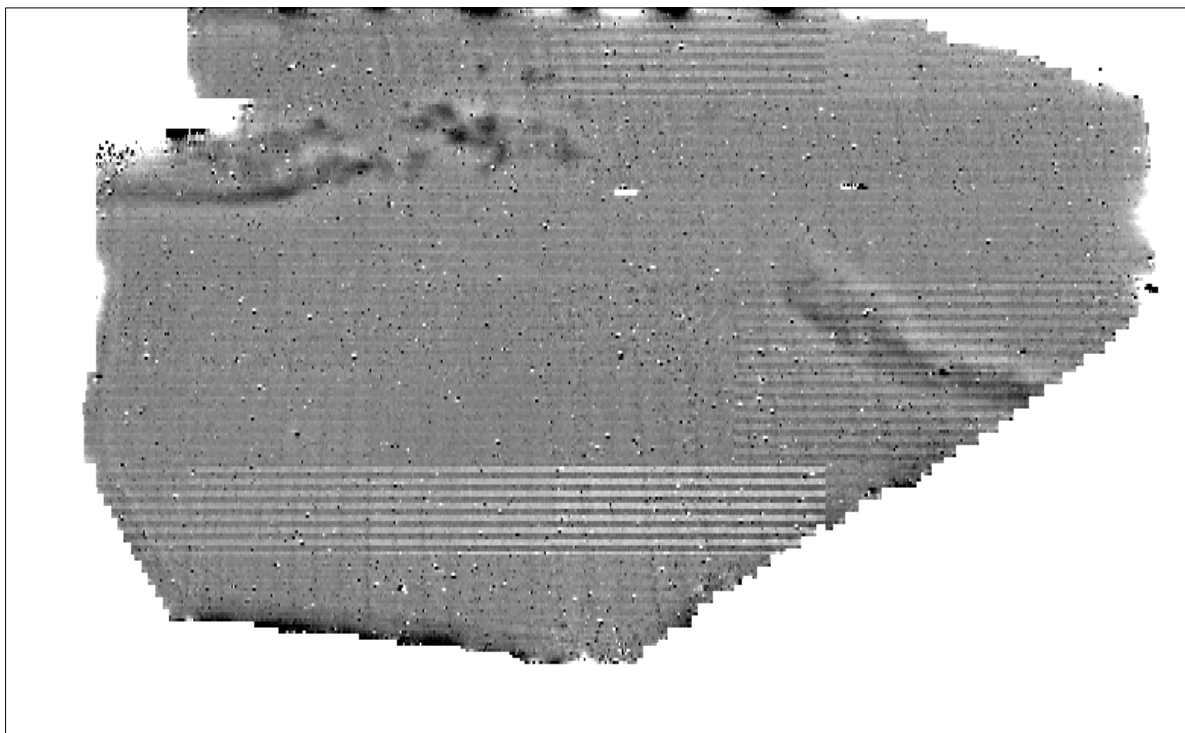


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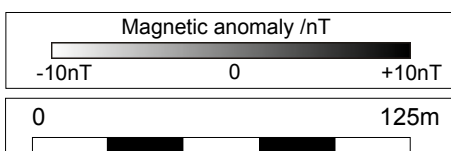




Field 3



Field 6



Scale 1:2,500

Raw survey data (Fields 3 & 6) Fig 8



Northamptonshire County Council

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