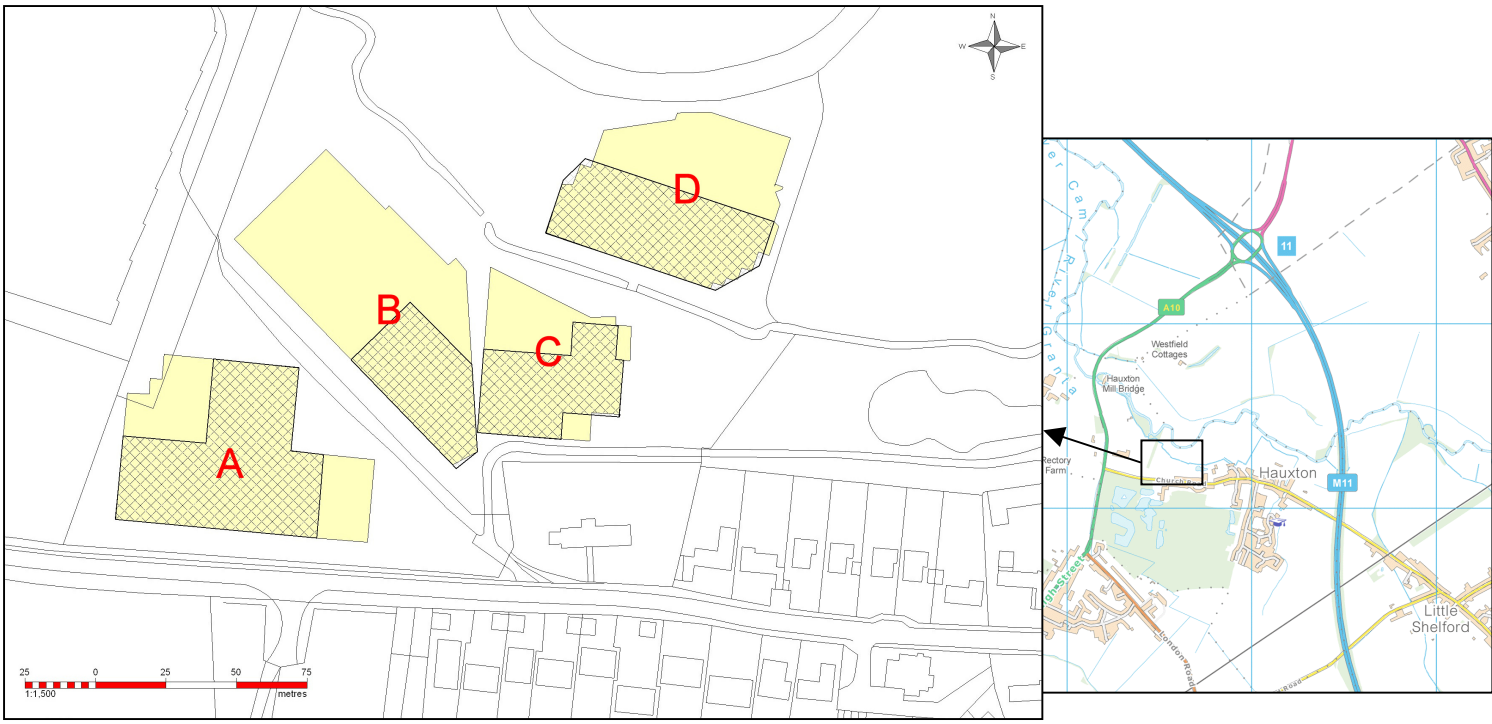
Hauxton Church Fields Report

In 2018 and 2019 Archaeology RheeSearch Group carried out magnetometry and resistivity surveys on this site.
Members participating: Brian Bridgland, Pat Davies, Richard Freeman, Liz Livingstone, Ian Sanderson, Gill Shapland, Maureen Storey and Tony Storey.
Site owner: Peter Elliot.
Site conditions: Fine grass (A), cropped grass (B-D).
Equipment: Bartington 601 gradiometer; TRCIA 50 cm quad probe.
Magnetometry readings: 8/m, 1 m separation.
Resistivity readings: 1 m interval, 1 m separation.
Raw data are available as separate appendices.
Location: TL435522, Hauxton, Cambs.



Location plan: Survey areas
(resistivity survey areas hatched, magnetometry areas solid)

Purpose of survey: The purpose of this survey was to determine if any subsurface features could be detected that could indicate positions of the old river bed of the river Cam for Dr. Charles Turner.

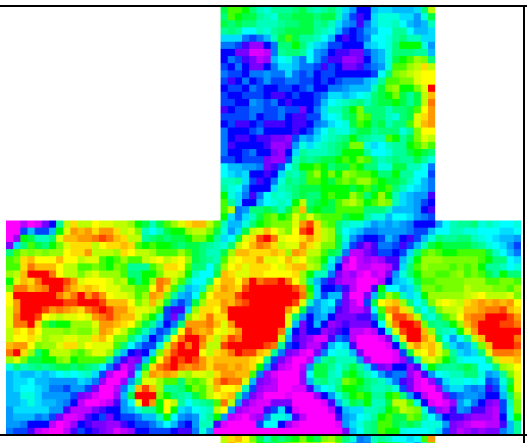
Site topography:
Area A. Level field of mown grass and a footpath with rough vegetation along the north east boundary. The south boundary had tall dense hedging. The north west boundary had trees, scrub with an earth mound along part of the length. Areas B and C. Post and wire on all sides of each paddock. Rough cropped grass gently sloping down by 2 m to the stream passing to the north. Area D. Level paddock of rough cropped grass with post and wire fencing on all sides. Slightly raised bank with rough vegetation bordering the river to the north.

Results:

The images in this section are orientated for presentation. The images are not to a common scale.

Area A

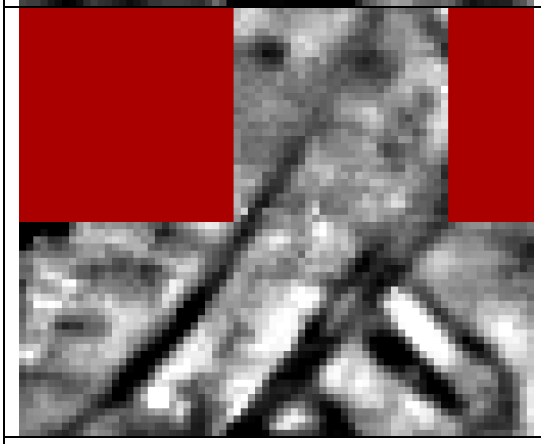
Resistivity 60 m x 72 m

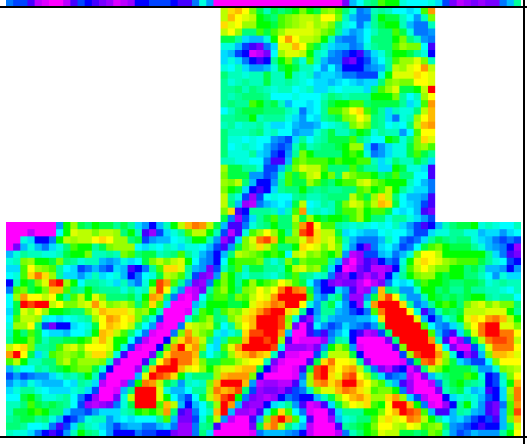


Resistivity

Raw data

N





High pass filter 7

N

(black – low, white – high, red – null)

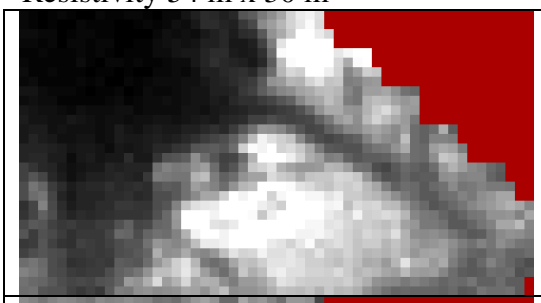
(purple/blue – low, red – high, white – null)

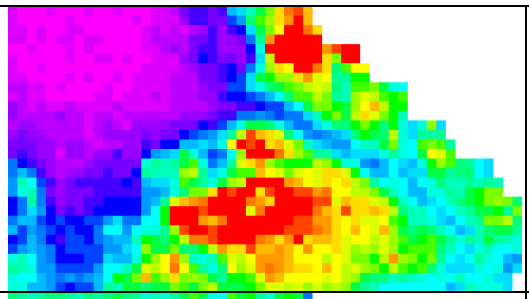
Magnetometry 60 m x 90 m range +3 to -2 nT

N

Area B

Resistivity 54 m x 30 m

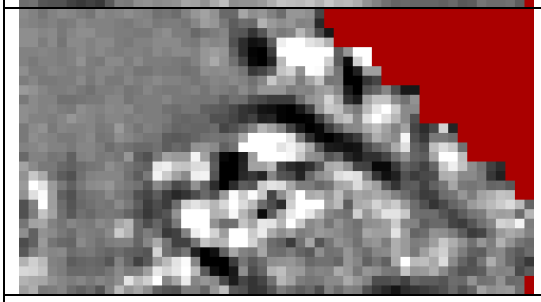


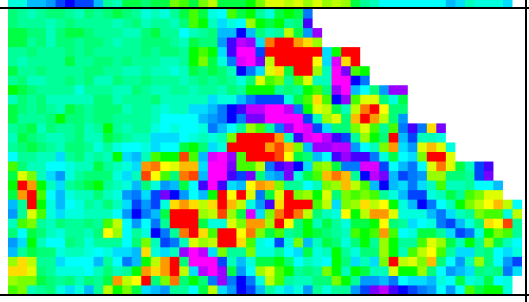


Resistivity

Raw data

N





High pass filter 4

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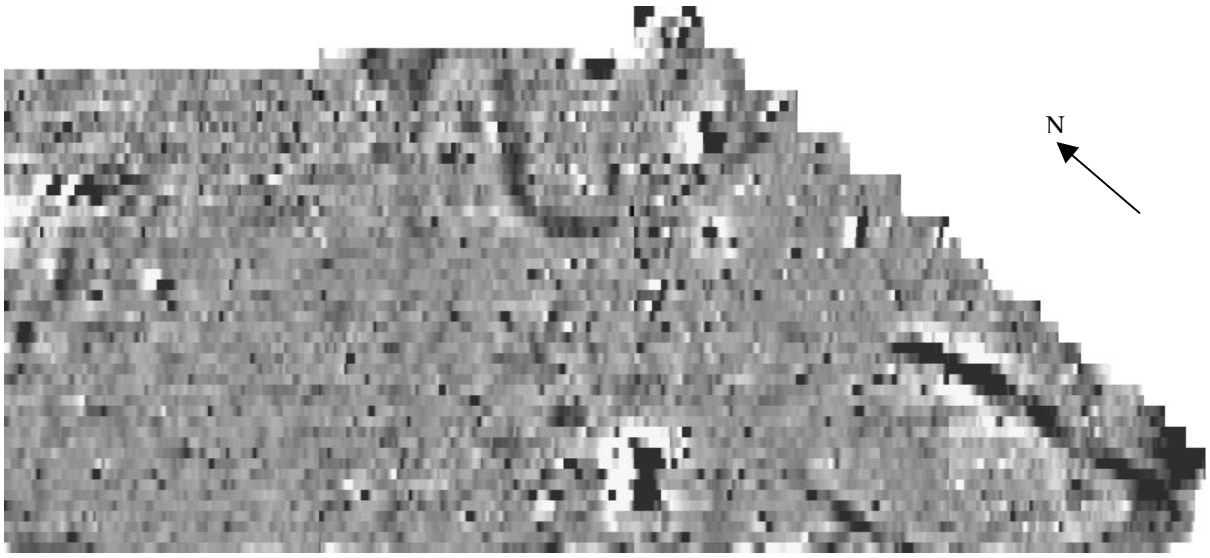
(black – low, white – high, red – null)

(purple/blue – low, red – high, white – null)

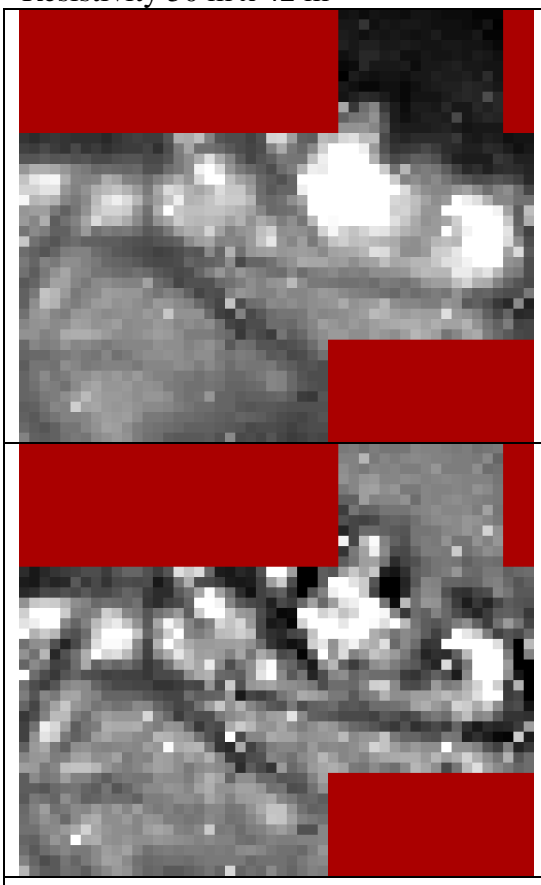
Magnetometry 113 m x 52 m range +8 to -5 nT

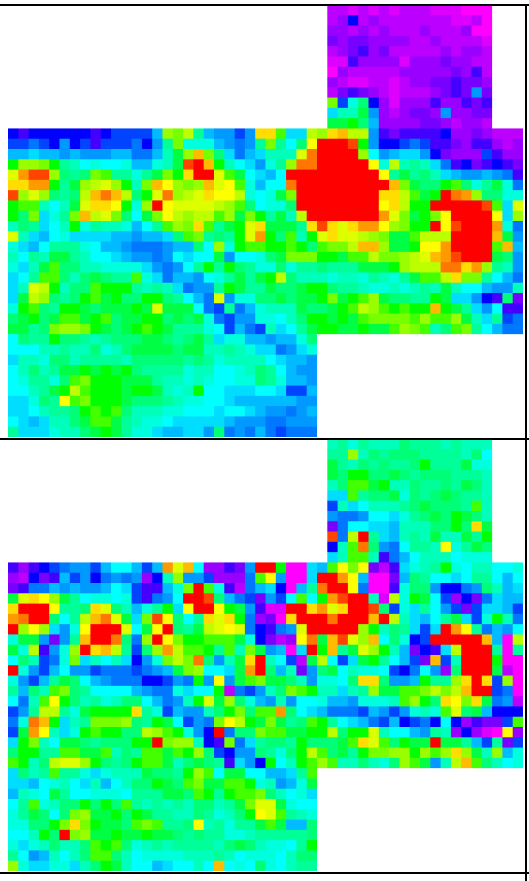


N

Area C

Resistivity 50 m x 42 m





Resistivity

Raw data

N

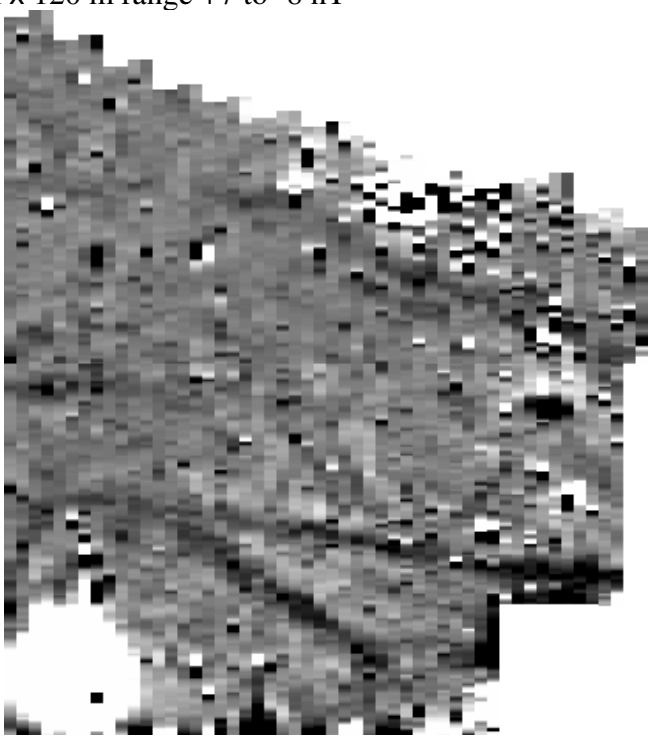
High pass filter 4

N

(black – low, white – high, red – null)

(purple/blue – low, red – high, white – null)

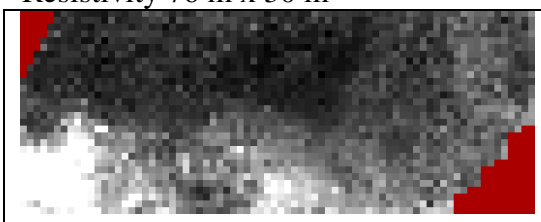
Magnetometry 150 m x 120 m range +7 to -8 nT

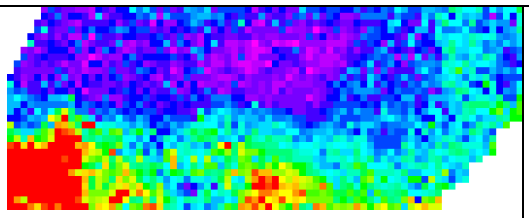


N

Area D

Resistivity 76 m x 30 m

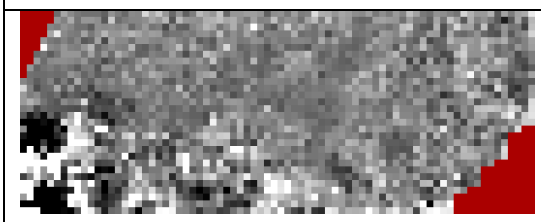


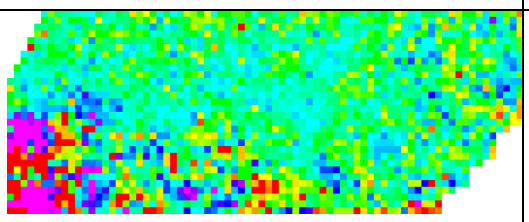


Resistivity

Raw data

N





High pass filter 6

N

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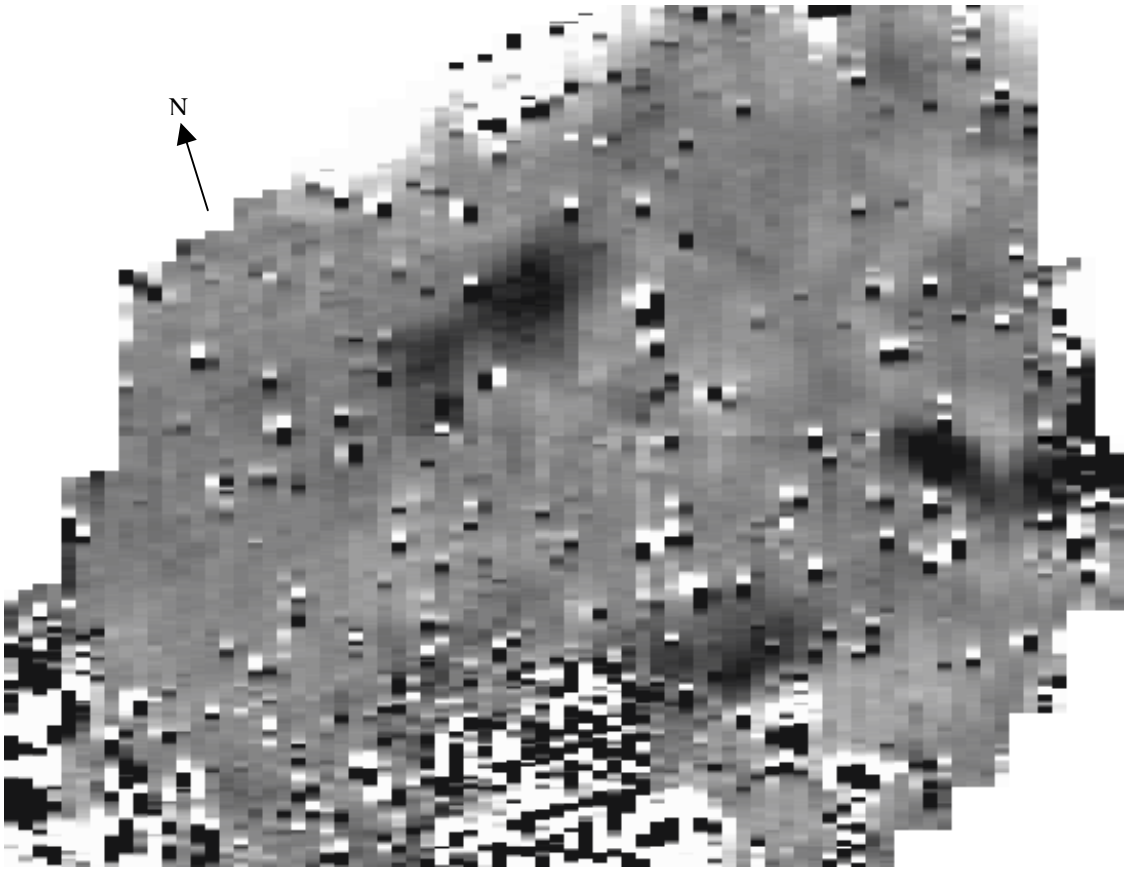
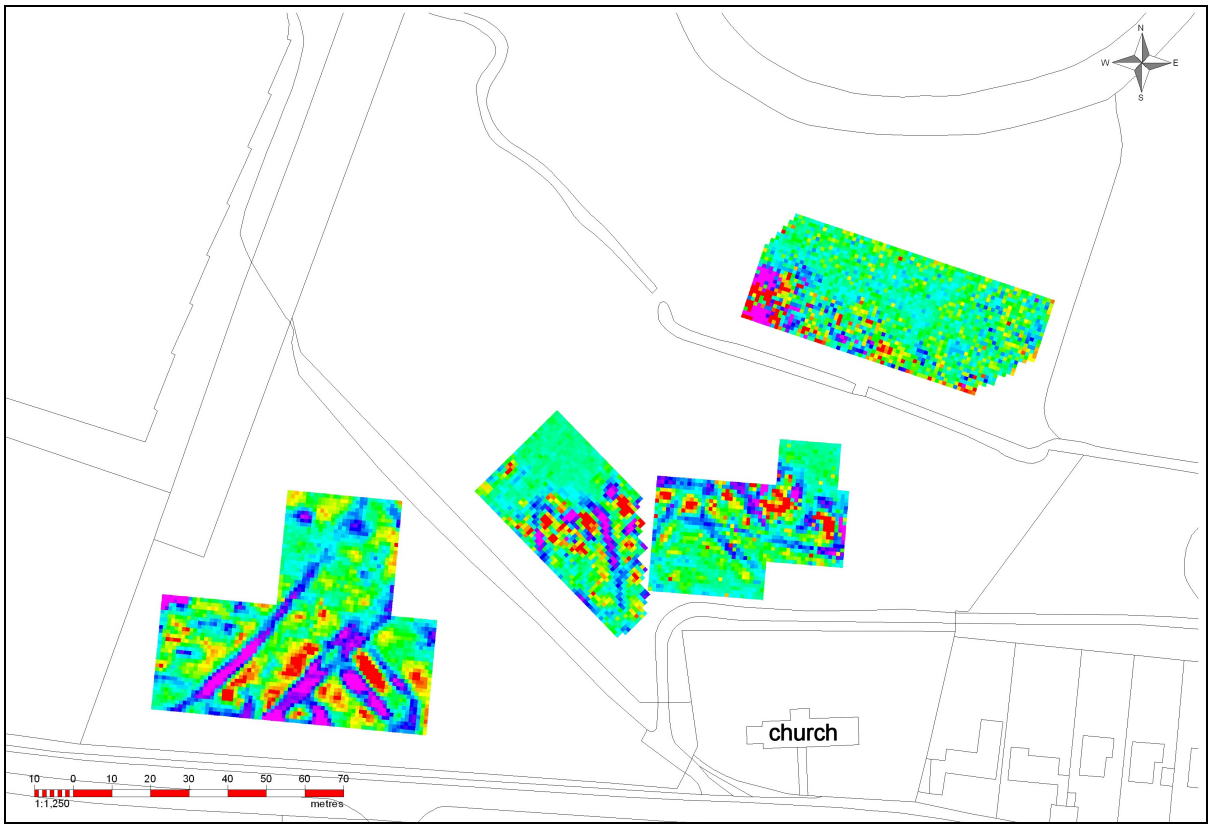
(purple/blue – low, red – high, white – null)

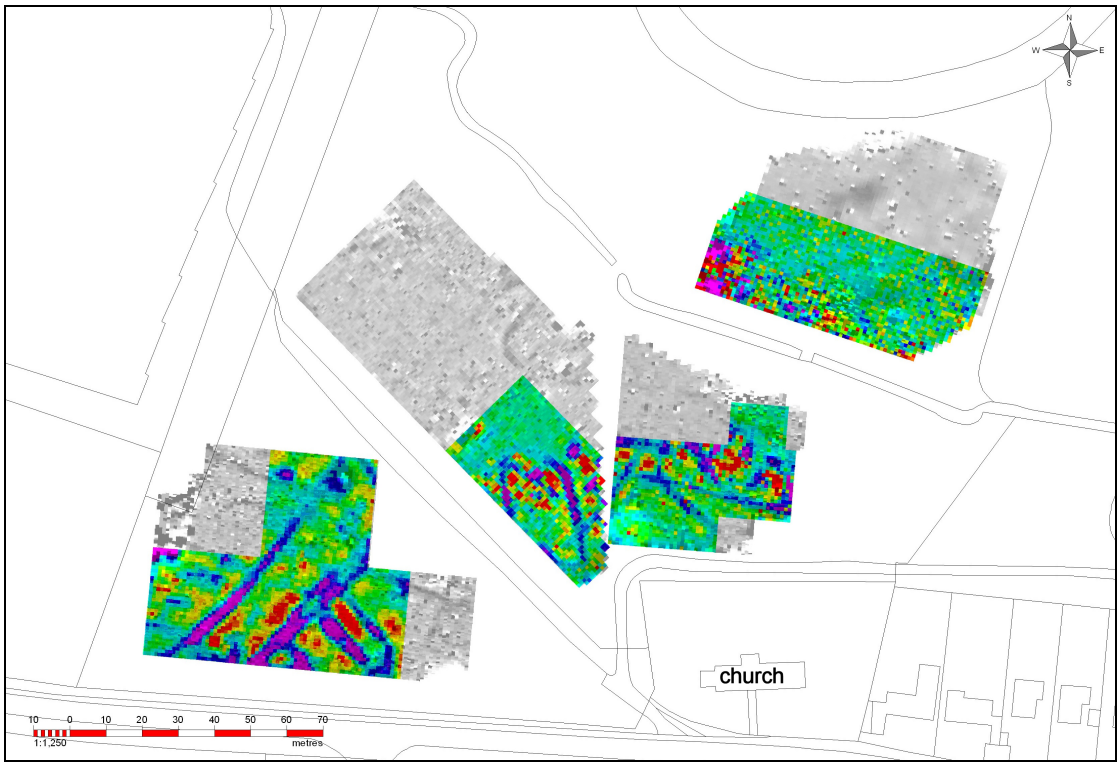
Magnetometry 78 m x 60 m range +4 to -4 nT





Resistivity results in context.

Magnetometry results in context.



Superimposition of resistivity and magnetometry results.

Discussion:
The results show a complex network of ditches on the slightly higher ground around the church. Most, but not all, of the magnetometry responses have a corresponding and unusually strong response in the resistivity results. Area D has three particularly dark areas and two areas of noise in the magnetometry survey. The dark areas have little correspondence in the resistivity results, but one of the noisy areas in the magnetic survey corresponds to a small area of high resistivity values, whilst another corresponds to a group of high resistivity values bracketed by deep low value areas. The high resistivity value areas almost certainly represent metalling of entrance points and the darker magnetic areas probably represent ponding areas in a frequently flooded zone.
The complex network of ditches in Areas A-C indicate occupation activity around the church which could only be clarified by excavation.
The most interesting pair of ditches shown in both the resistivity and magnetometry results occur in Area A, with a weak magnetic continuation into Area B. These are roughly parallel about 16 m apart running SW—NE and probably represent the edges of a trackway. These align very closely with the N part of the present Harston High Street (A10) and, although an extrapolation of any distance should be treated with caution, they align with a distinct double ditched cropmark running S from close to Foxton level crossing on the A10. The trackway found in Area A may therefore be part of the Avenell Way that fell into disuse after that route is thought to have turned towards Cambridge (Atkins & Hurst, 2014). Extending this pair of ditches to the N would suggest the location of a significant river crossing point.
After examining the preliminary results Dr. Turner expressed the view that there were braided river features that he had hoped to see.

Reference:
Atkins & Hurst, Proceedings of the Cambridge Antiquarian Society, 103, 2014, p83

Report by Dr I Sanderson for Archaeology RheeSearch