Histon Abbey Farm Report

In September and October 2018 Archaeology RheeSearch Group carried out magnetometry and resistivity surveys on this site to determine whether any archaeological features were detectable.

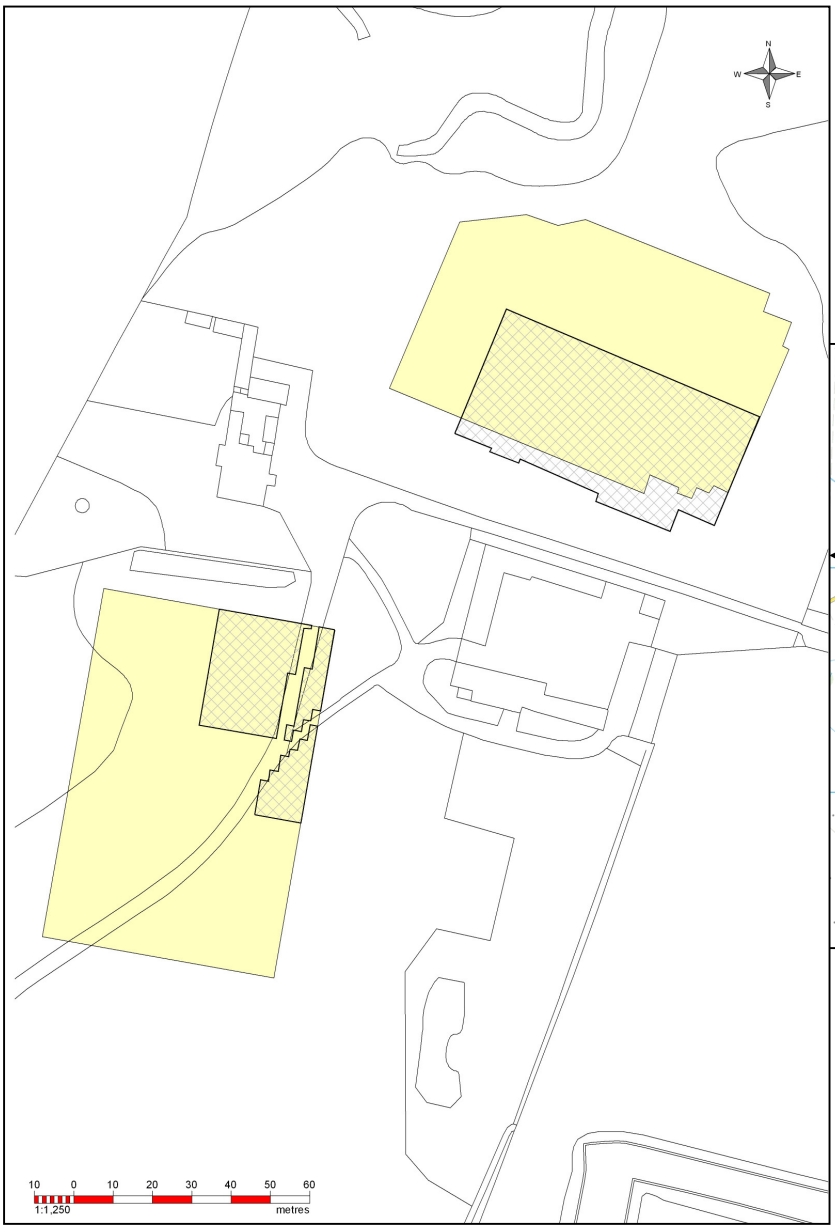
Members participating: Brian Bridgland, Pat Davies, Richard Freeman, Liz Livingstone, Ian Sanderson, Gill Shapland, Maureen Storey and Tony Storey.

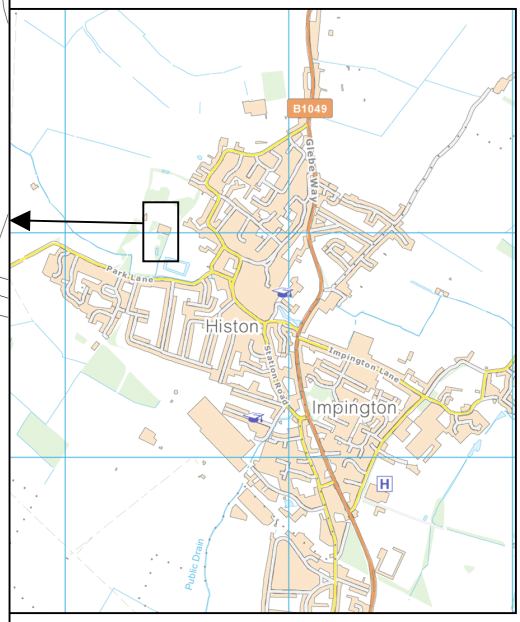
Site liaison: Rob Noble.

Site conditions: Rough or mown grass.

Equipment: Bartington 601 gradiometer; TRCIA 50 cm twin probe, Wenner array.
Magnetometry readings: 8/m, 1 m separation.
Resistivity readings: 1 m interval, 1 m separation.
Wenner Array: 30 probes 0.5 m spacing.
Raw data available as separate appendices.

Location: TL434640, Histon, 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 relating to St Etheldreda's church and a possible Jacobean farm house.

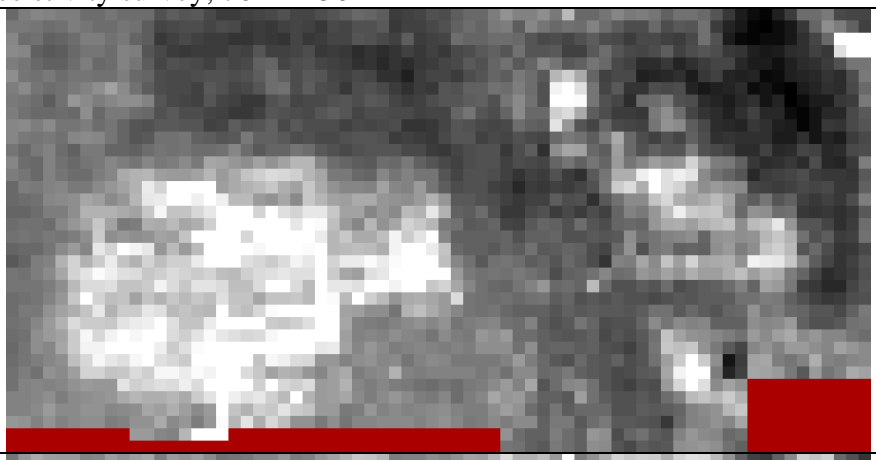
Site topography:
North field. Rough grass on a flat paddock with low earthworks. Trees with scrub bordering a metalled drive to the south.
South field. Close mown grass with a gentle slope down to the south. Constrained to the north by a ha-ha feature of the present house. The site is crossed by metalled roads.

Results:

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

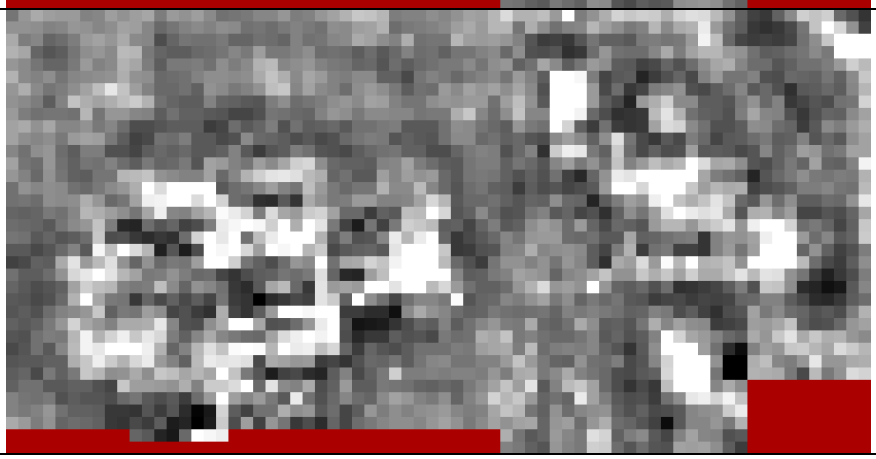
North field

Resistivity survey, 70 m x 36 m



Raw data

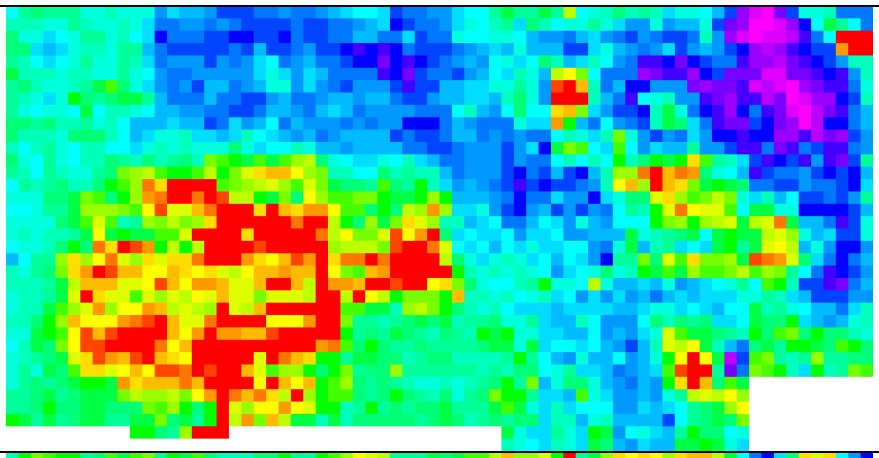
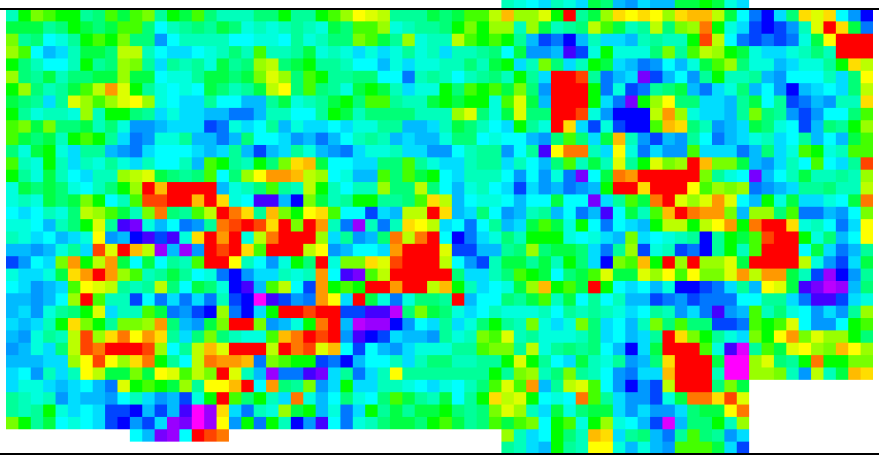
N



High pass filter 6

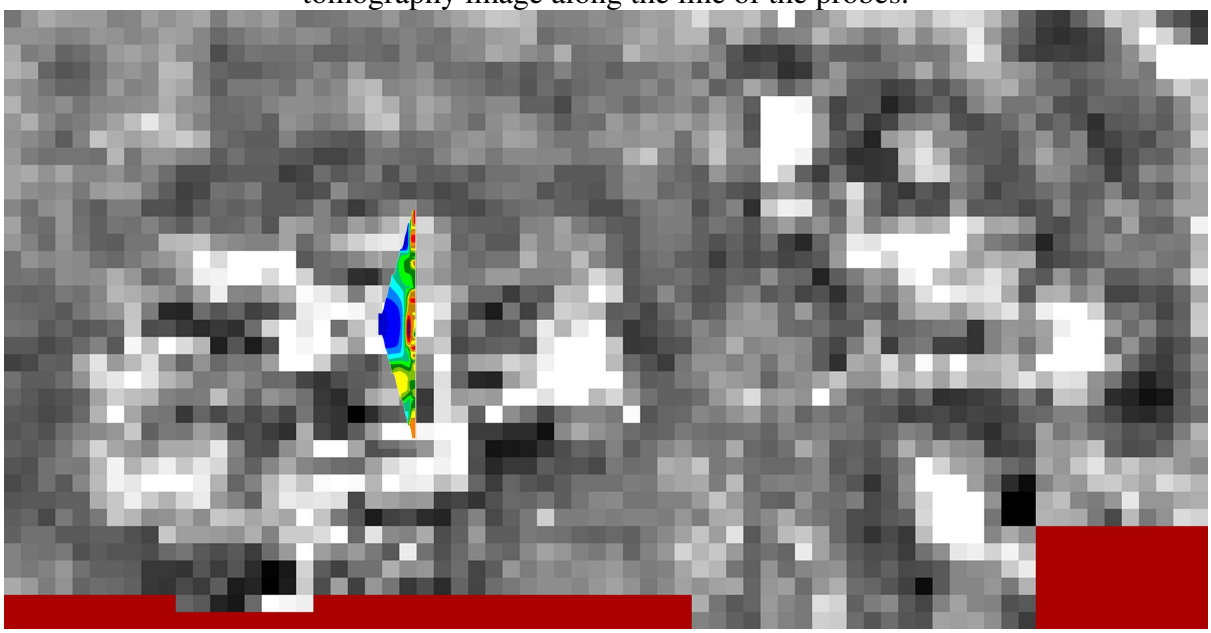
N

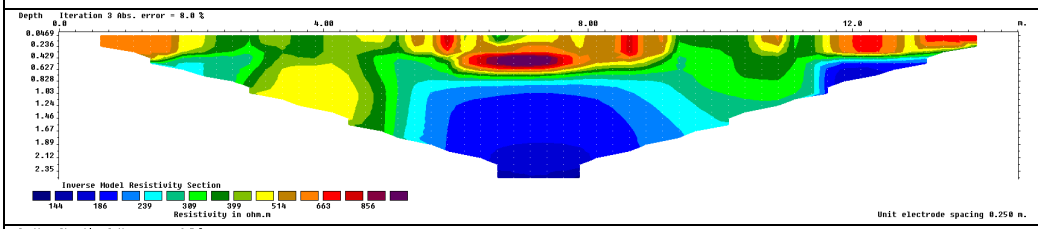
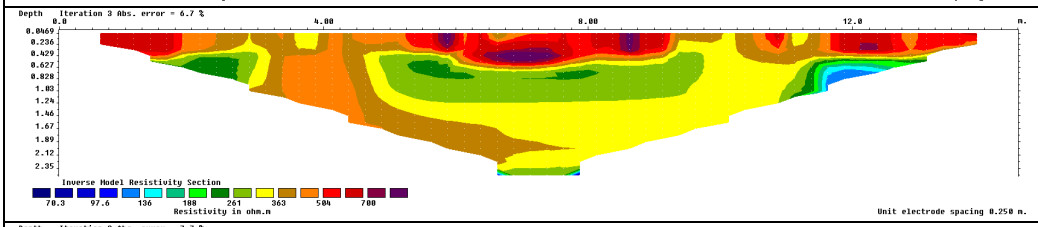
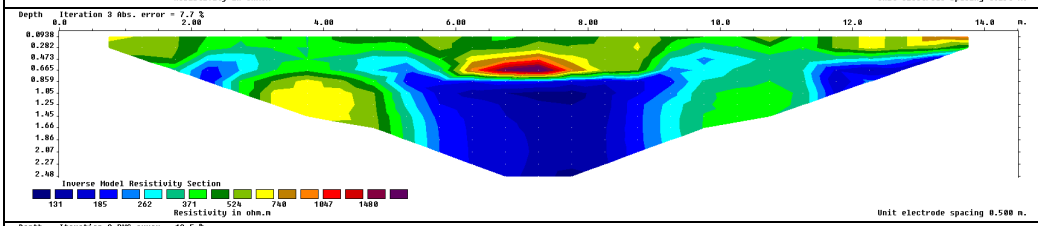
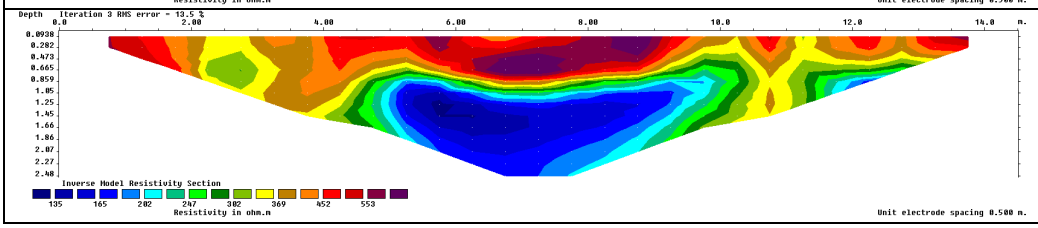
(black – low, white – high, red – null)

	Raw data N
	High pass filter 6 N
(purple/blue – low, red – high, white – null)	

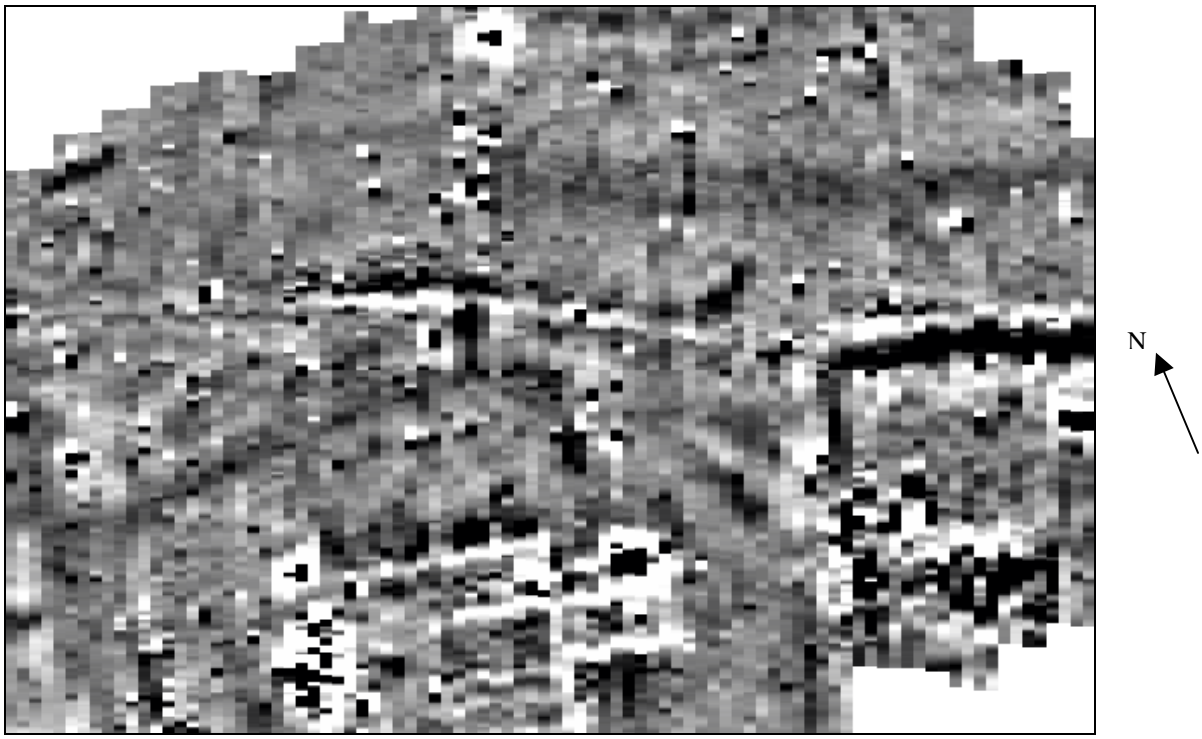
Earth Resistivity Tomography, 30 probe Wenner array at 0.5 m spacing

Superimposition of tomography on a planar resistance survey with the longest part of the tomography image along the line of the probes.



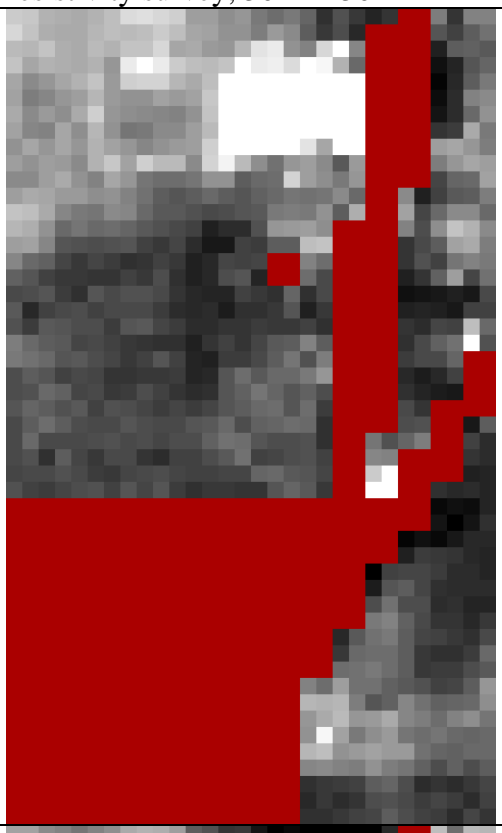
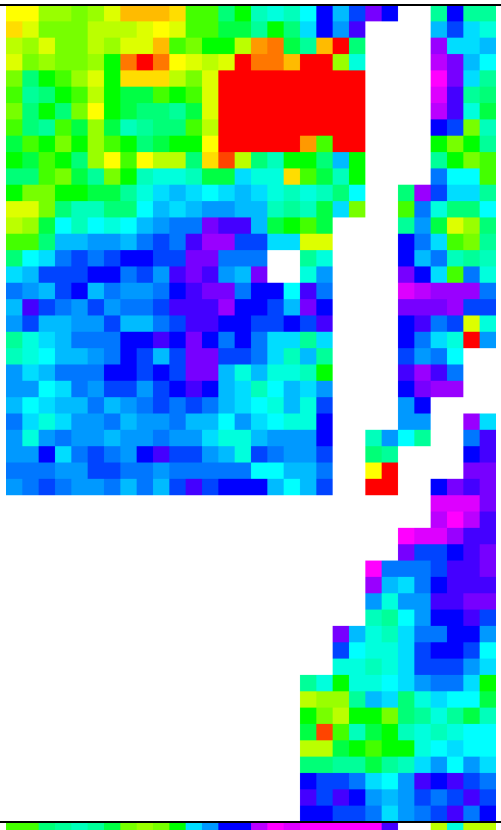
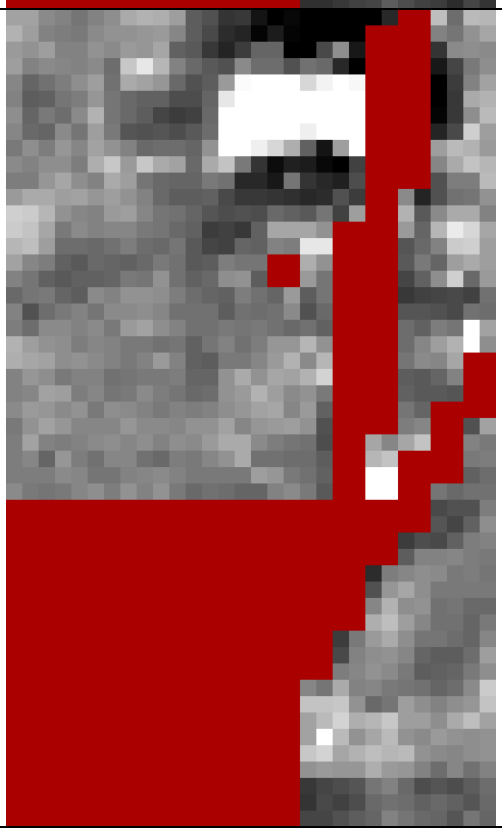
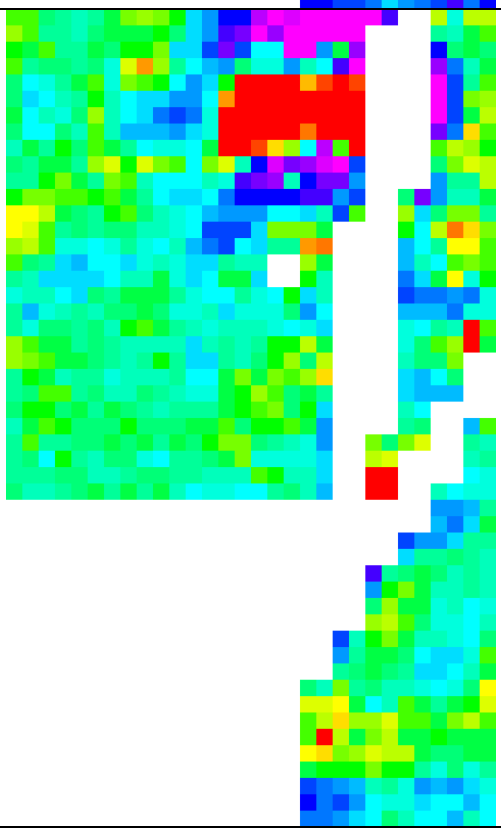
South	North	Processing Code
		RRYYN ref
		RRYYN comb
		RRYYN
		SSYYN

Magnetometry survey 60 m x 90 m range +6 to -5 nT



South field

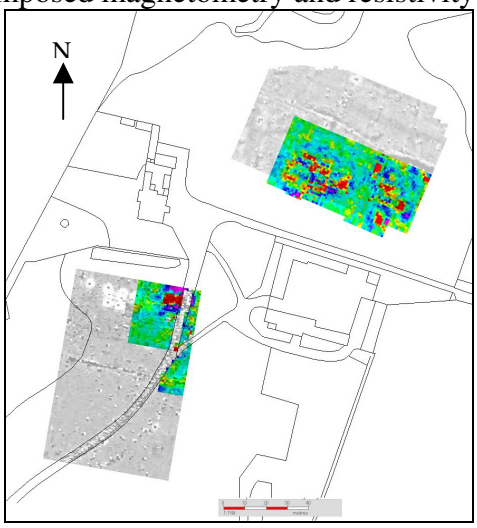
Resistivity survey, 30 m x 50 m

		Resistivity Raw data N
		High pass filter 6 N
(black – low, white – high, red – null)	(purple/blue – low, red – high, white – null)	

Magnetometry survey 60 m x 90 m range +7 to -7 nT

N

Superimposed magnetometry and resistivity results



Discussion:

North field

Both the magnetometry and the resistivity results show foundation remains of what is almost certainly a church. The main body is about 20 m long but this may have in addition a 3 m corridor to a detached 4 m square tower at the E end. The width is at least 14 m to the S edge of the survey area which was limited by trees and scrub on that side. Magnetometry and some of the extant earthworks, but not resistivity, showed a rectangular enclosure about 15 m E of the church, this may be a modern levelling (May, 1992). Within this enclosure the resistivity results and an area of magnetic noise suggest foundation remains of up to four small buildings.

The magnetometry results also show a linear feature extending WNW from the corner of the rectangular enclosure. This could be a boundary or a well used track. Between the linear feature and the church there is a diffuse curving feature which may represent an early boundary for the church.

The Wenner array survey indicated that foundations extended to about 70 cm below the current surface with parts at about 6 and 8.5 m from the start point less than 50 cm deep, suggesting lighter walls.

South field

The resistivity results show a block of high values about 9 m long and 5 m wide although the survey on the E side of the block was limited by a road. There were also high values that suggest walls might extend from the block towards the W. The magnetometry results have an area of noise, which is often an indication of building demolition, in the same place as the block of high resistivity values. This area corresponds to a building shown on the Inclosure map. The magnetometry results have a curious arrangement of very strong point anomalies probably due to ferrous concentrations. The four northernmost of these broadly align with the block of high resistance values. The six central anomalies form an avenue to the S.

Running E – W across the middle of the magnetic survey is a linear feature which terminates to the E in another area of magnetic noise which has high resistivity responses suggesting the remains of a small building. Neither of these features is shown on the Inclosure map. The small high resistance response where the two roads join does correspond to a small building shown on that map but the magnetic noise from the roads obscures a clear demolition area at that point.

The main feature in the magnetometry results, curving from N – S across the survey area, is a metalled road.

Reference: S. May, 1992, *Proceedings of the Cambridge Antiquarian Society*, **LXXXI**, 49

Report by Dr I Sanderson for Archaeology RheeSearch