



Eversden Eastmill Spring Report

In April and October 2009 Archaeology RheeSearch Group carried out magnetometry and resistivity surveys on this site at the request of the Cambridge Archaeological Field Group to determine if there was evidence for any subsurface features that might explain a concentration of field walking sites.

Members participating: Pat Davies, Liz Livingstone, Ian Sanderson, Maureen Storey, Tony Storey.

Site liaison: Mike Coles.

Site conditions: Short stubble.

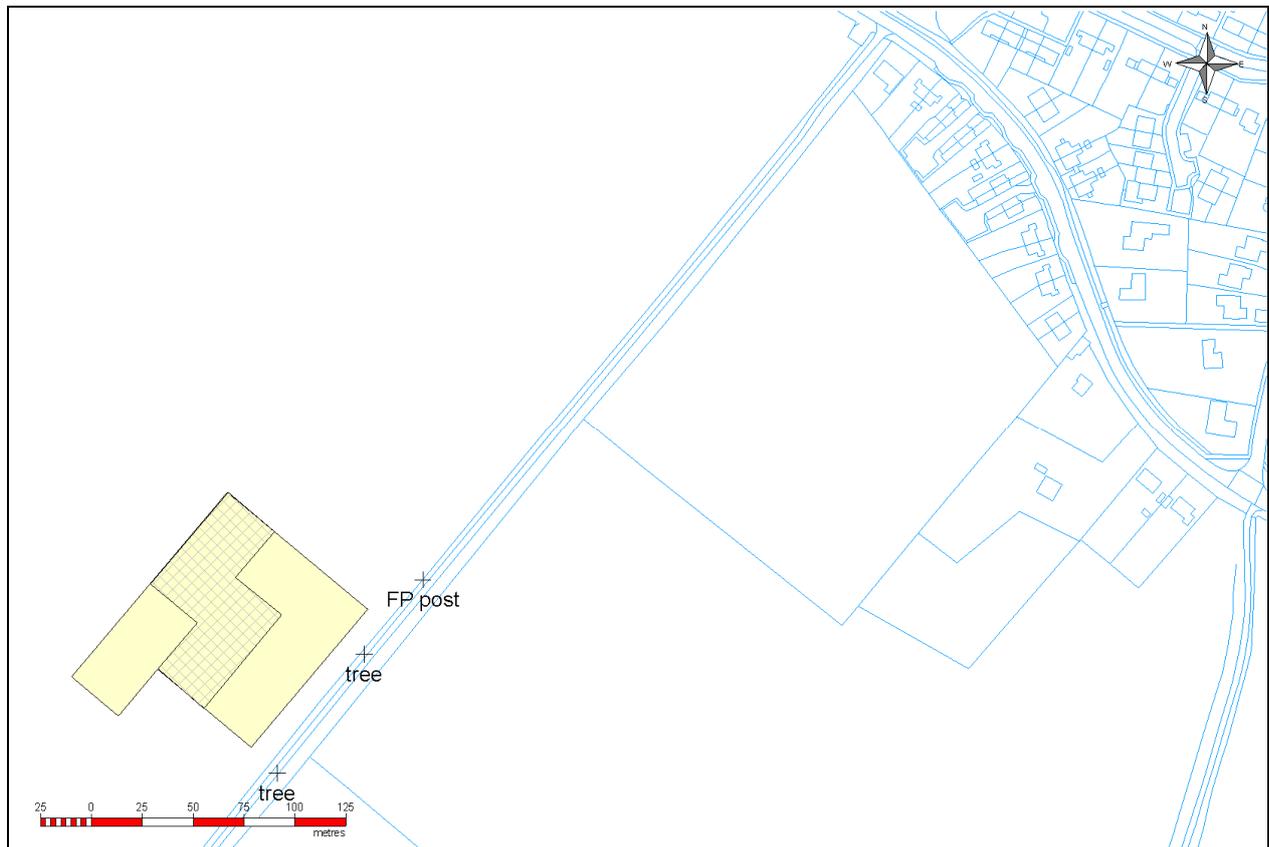
Equipment: Bartington 601 gradiometer; TRCIA 50cm twin probe.

Area covered:

| | |
|--------------------|------------------------|
| Magnetometry day 1 | six 30 m × 30 m grids |
| Resistivity day 1 | two 30 m × 30 m grids |
| Magnetometry day 2 | four 30 m × 30 m grids |
| Resistivity day 2 | two 30 m × 30 m grids |

Location: TL 366 528, Southwest of Little Eversden High Street.

Images are orientated with north to the top of the page except where indicated otherwise.



Location plan: Survey areas in Eversden

(Resistivity survey area is crosshatched, magnetometry area is solid.)

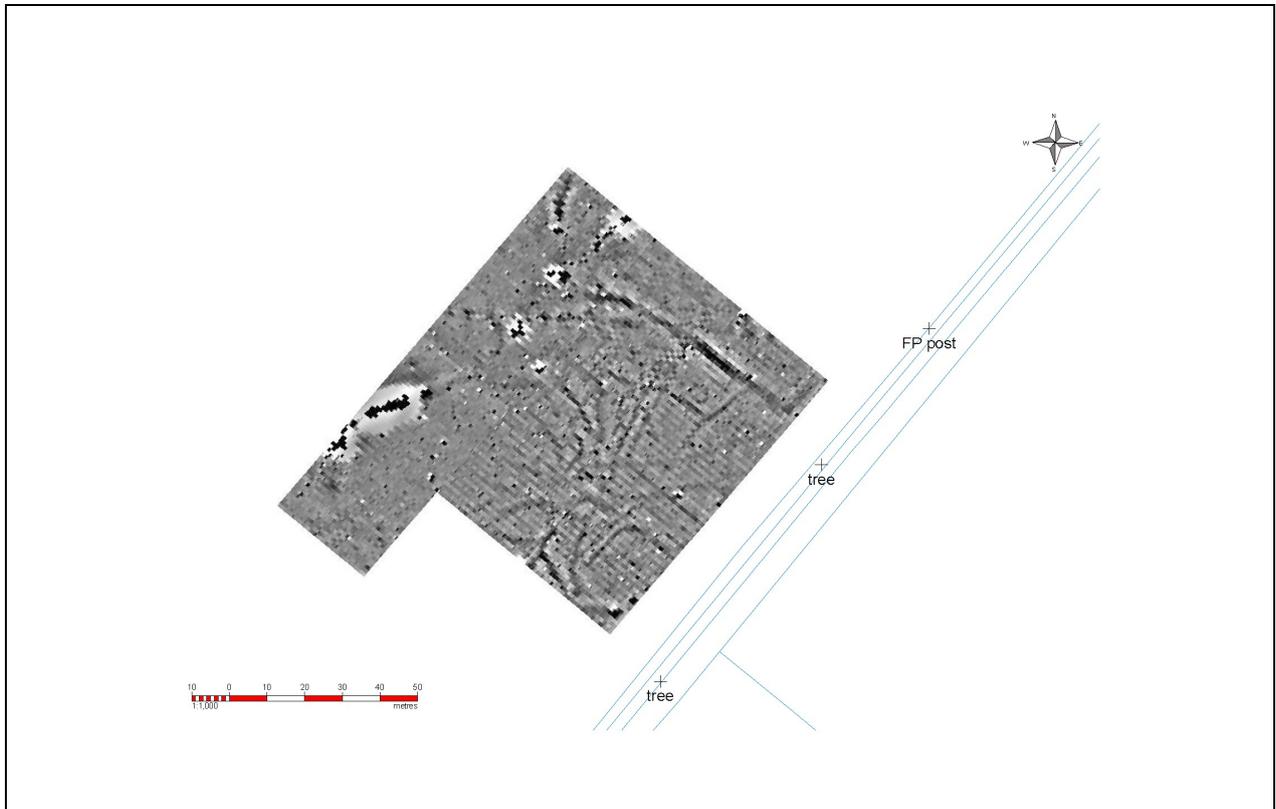
On the ground location points with distances in metres –.

From S Tree 24.35 to nearest grid corner and 38.15 to middle grid S corner (30 from first point).

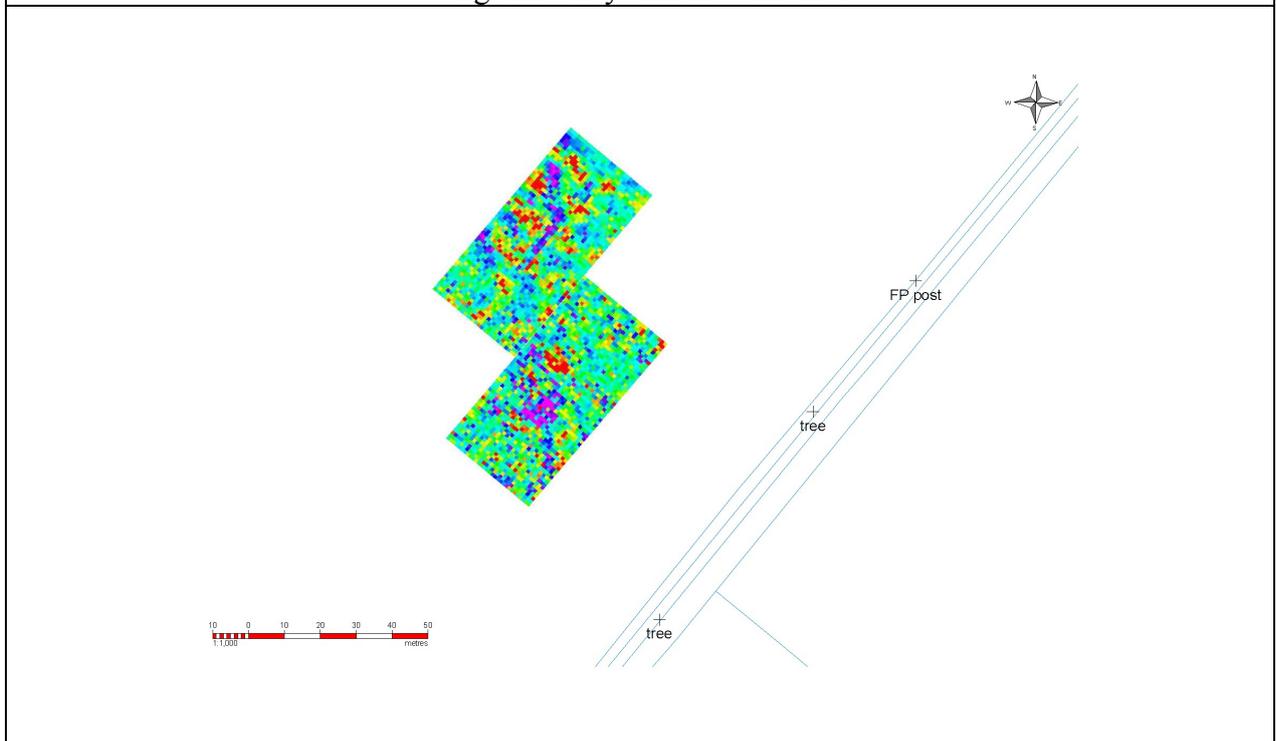
From N Tree 42.59 to last mentioned point. From Footpath (FP) post to N Tree 47.05 and 30.35 to nearest grid corner.

Purpose of survey: To determine if any subsurface structures were detectable that might explain a concentration of field walking finds.

Results:

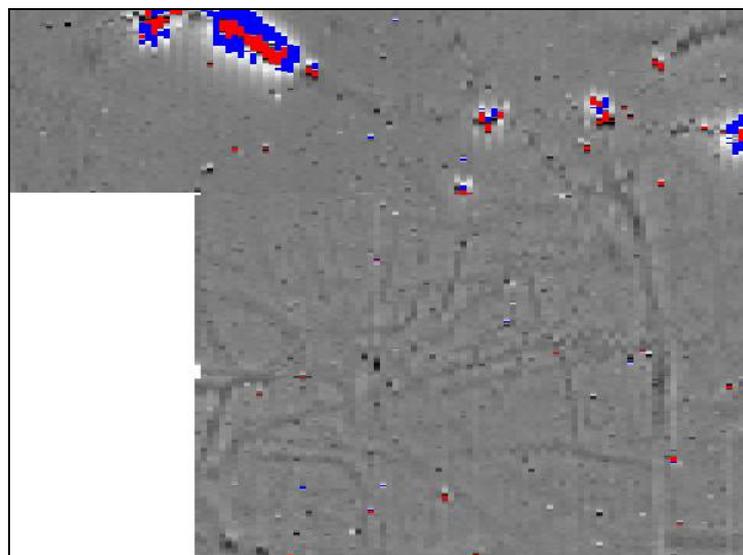
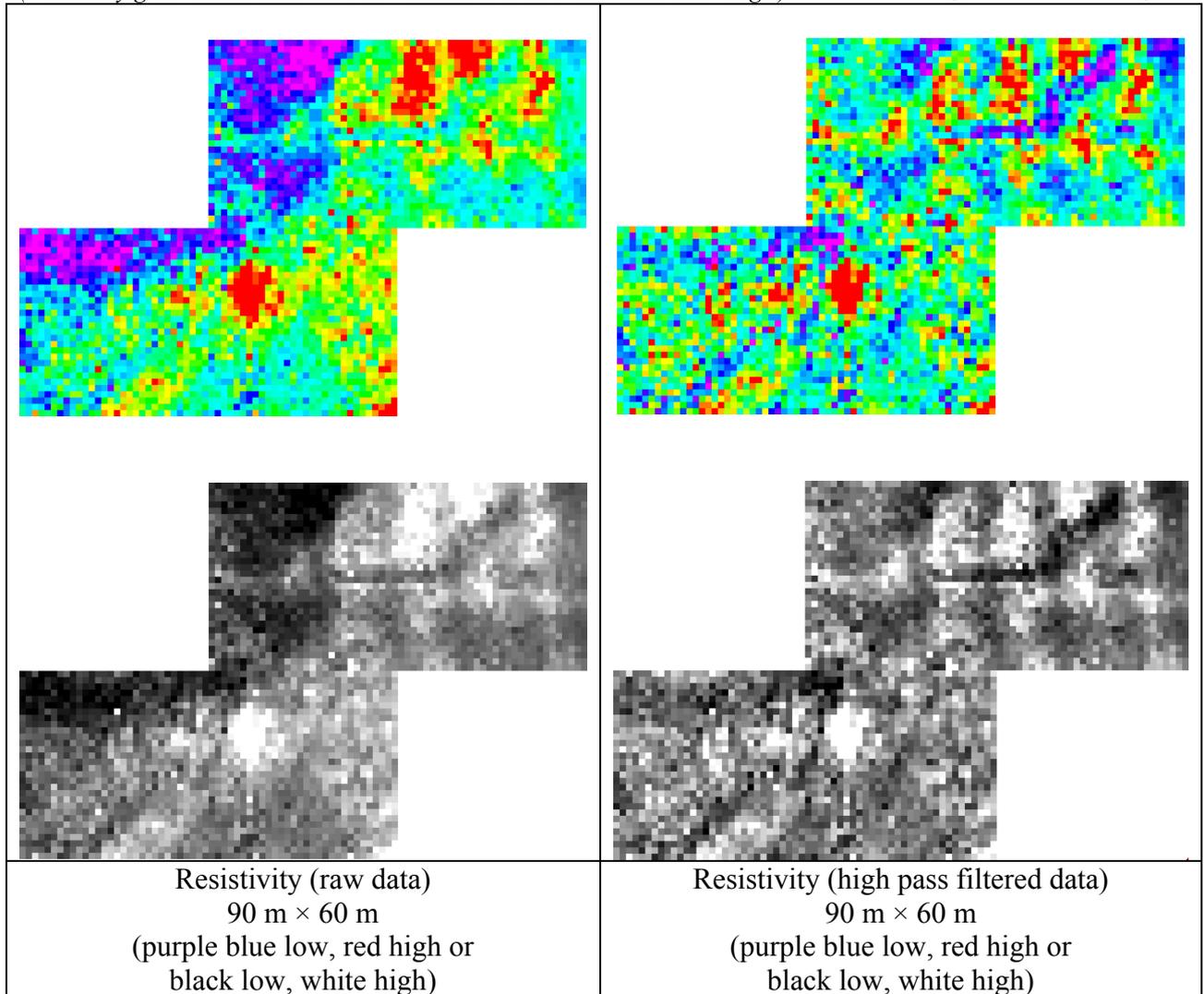


Magnetometry results in context

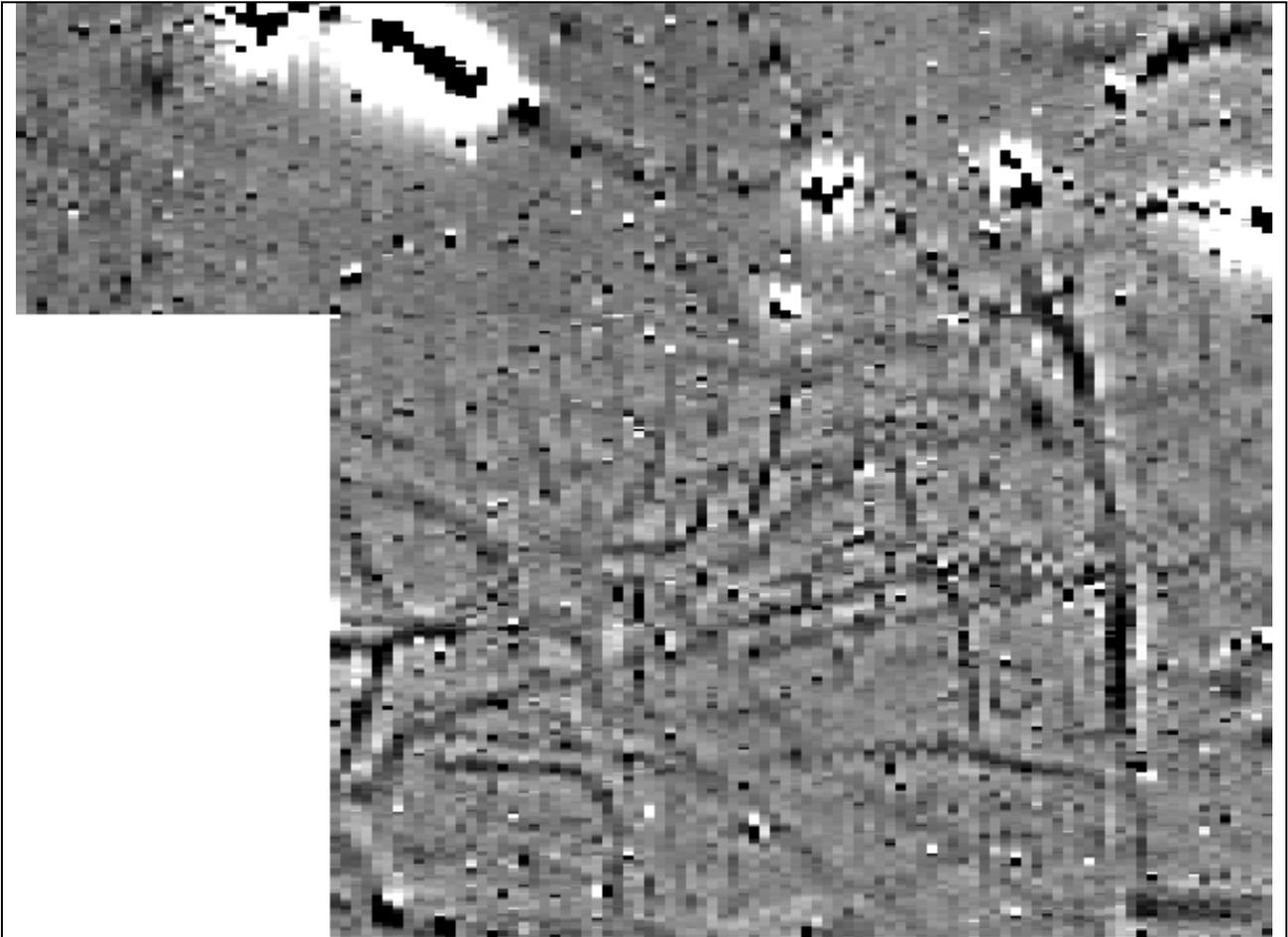


Resistivity results in context

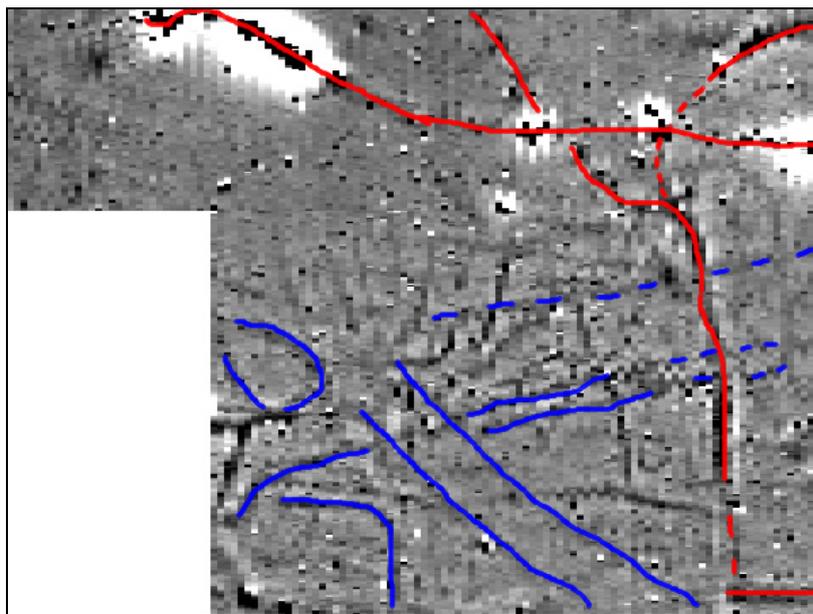
Individual survey area results, rotated for presentation
(Resistivity grid results have been normalised to a common mean and range.)



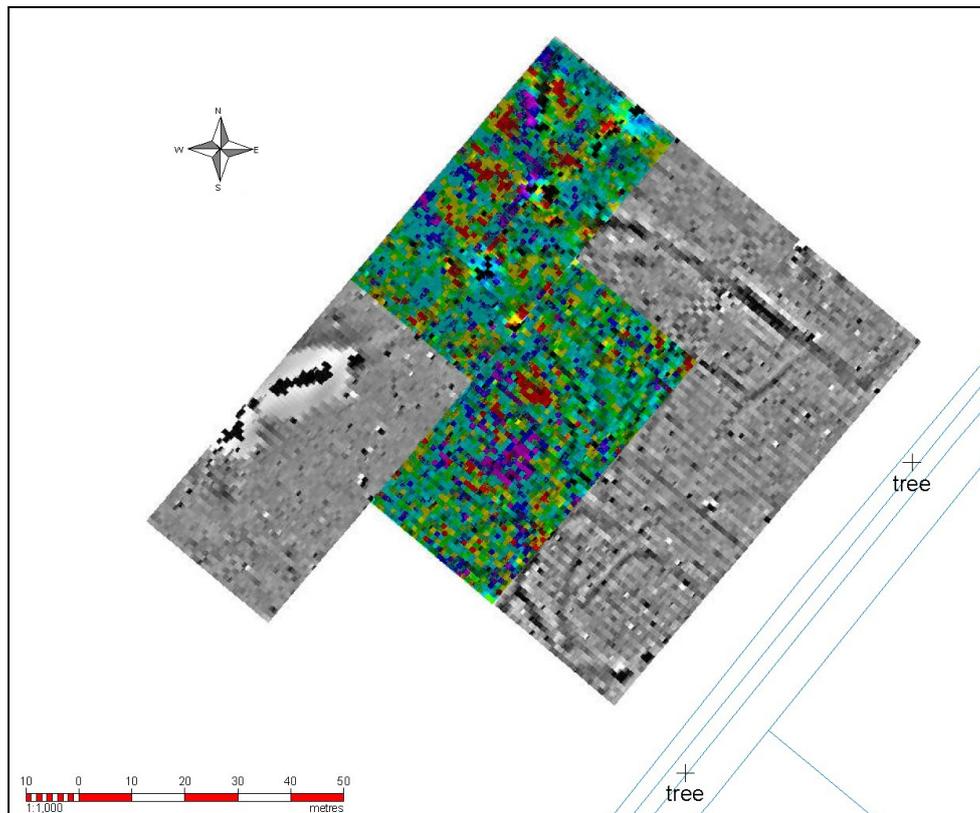
Magnetometry peak values (<100 nT)



Magnetometry
(± 6 nT, black high, white low)
120 m x 90 m



Main features in magnetometry



Superimposition of resistivity and magnetometry results

Resistivity

The resistivity results are not clear cut. A horizontal line of low resistivity runs across the centre of the top block of the survey area before turning towards the top right. There are several high resistance areas above and below this line. One large area of high resistance occurs in the lower survey area.

Magnetometry

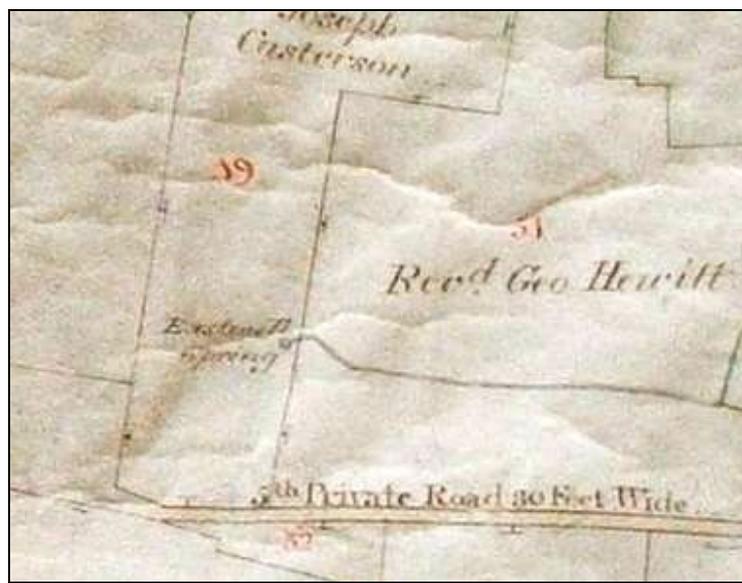
The magnetometry responses are dominated by a sequence of very high responses linked by sinuous interrupted line towards the top of the image of the survey. This is crossed by a strong line running parallel to the right of the image which splits just before crossing the first line with part branching to the left and the other to the right. Intense responses occur at the intersections of these lines. A short but wide linear response extends into the lower corner of the survey area, terminating in line with the second line described. The blue lines highlight a complex mesh of responses. This includes sets of parallel linear features, segments, linear features with kinks in, and a line comprising two parts at right angles joined by a very even curve.

Correlations

Magnetometry and resistivity detect different aspects of subsurface structures and should not therefore be expected to show the same features. The differences and coincidences in what is detected can sometimes add further information about those structures. In this case the line of low resistivity matches the sinuous line in the magnetometry results but little else correlates.

Discussion:

The interrupted sinuous line in the magnetometry results and a portion of the line of low resistivity correspond to the line from a spring shown on the Eversden Inclosure map. The responses indicate that this water course has been piped. In the magnetometry results the two central peak responses on the spring line occur at the intersections with linear responses (highlighted in red), suggesting that these lines are all related drainage channels. The low resistivity values with a corresponding magnetometry response towards the upper right of the survey area suggests that the main drainage line does not follow the spring line on the Inclosure map. The remainder of the features in the magnetometry results may relate to multiple attempts to control water flow in this area. The high resistance responses form no coherent pattern but several blocks strongly suggest a rectilinear form which might indicate building foundations.



Part of the Great and Little Eversden Inclosure Map

Conclusion:

Several water courses have been located with indications of other water channels close by. Some small building foundations were also located.

Raw data are available as separate appendices.
 Magnetometry readings: 4/m, 1 m separation.
 Resistivity readings: 1 m interval, 1 m separation.