



Report on the paddock adjacent to Thriplow school

In 2003 and 2004 Archaeology RheeSearch Group carried out resistivity surveys and in November 2008 magnetometry and resistivity surveys on this site to explore the extent of a deep right angle segment of ditch.

Members participating: Brian Bridgland, Bruce Milner, Pat Davies, Liz Livingstone, Ian Sanderson, Maureen Storey, Tony Storey, Richard Townsend and Jim Wilson.

Site liaison: Shirley Wittering

Owner: Oliver Walston

Site conditions: Grass paddock with right angle ditch segment rising towards an old clunch pit at the E end.

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

Area covered:	Magnetometry	seven 20 m × 20 m grids
	Resistivity 2008	two 20 m × 20 m grids
	Resistivity 2004	one 21 m × 20 m grid
	Resistivity 2003	four 20 m × 20 m grids

Location: TL4402 4694, N side of Thriplow school, Thriplow.

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



Location plan: Survey areas

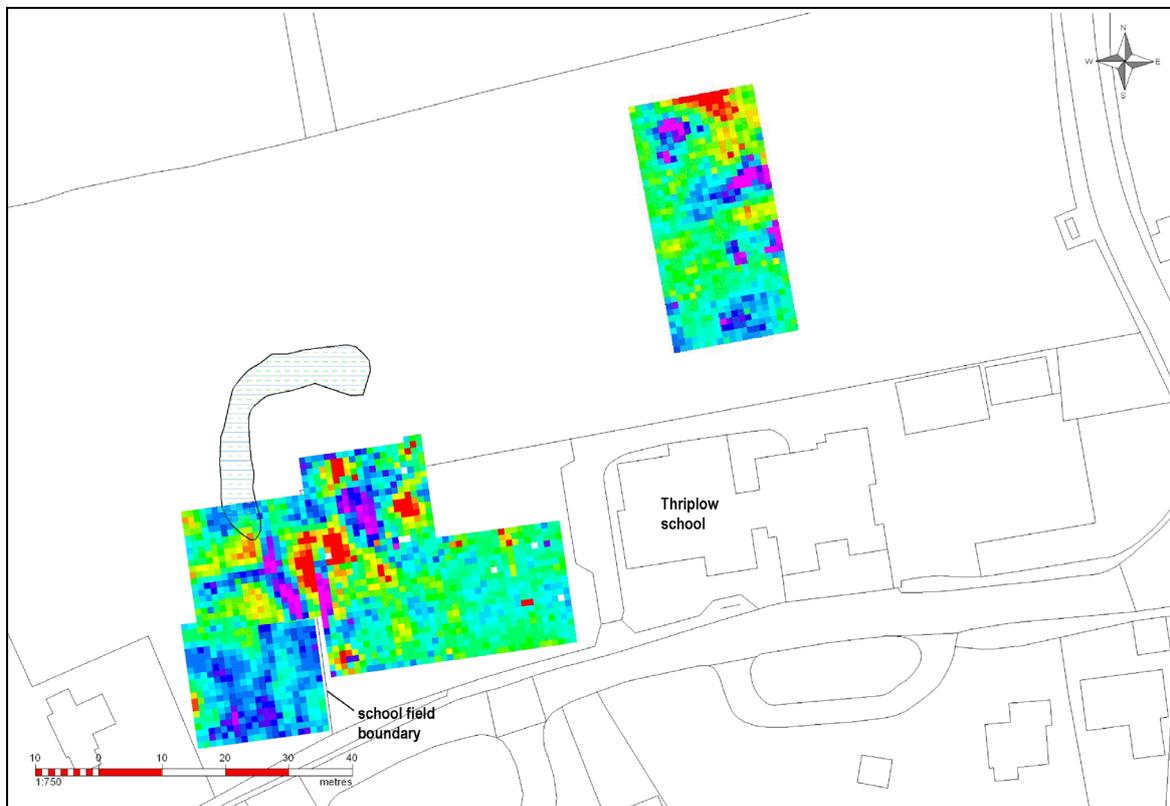
(Resistivity survey area is crosshatched, magnetometry areas are yellow solid.)

Purpose of survey: To determine if any subsurface structures were detectable.

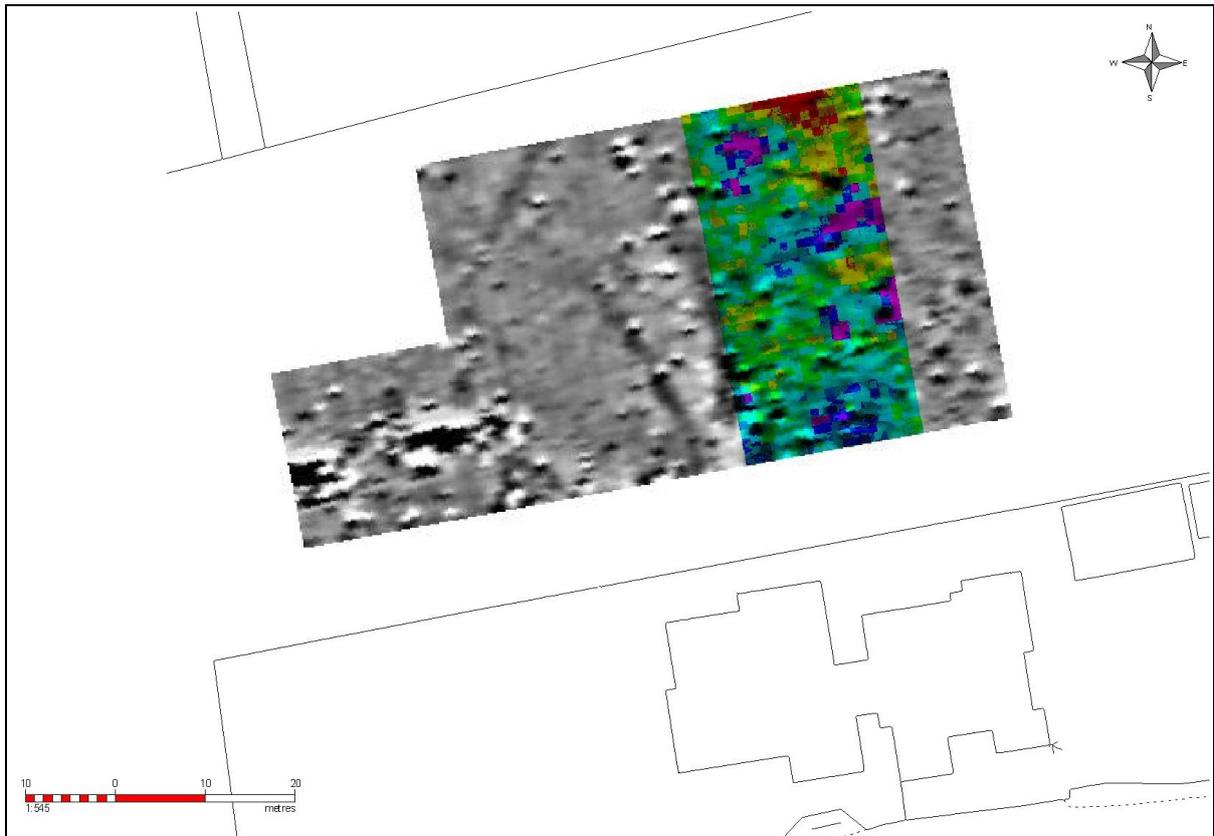
Results:



Magnetometry results in context with extant ditch segment



Resistivity results in context with extant ditch segment

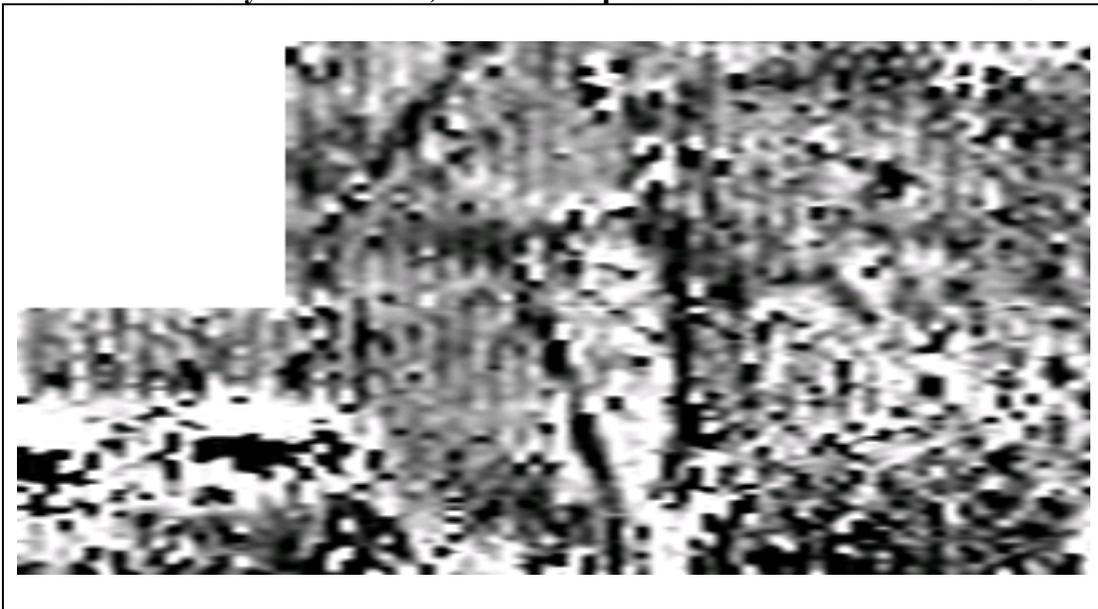
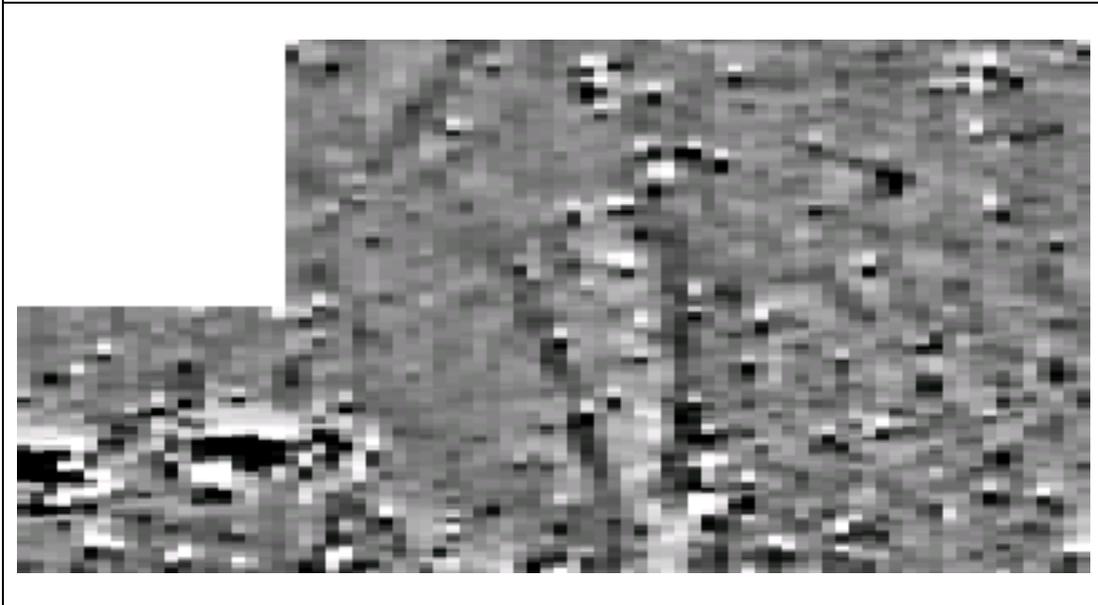


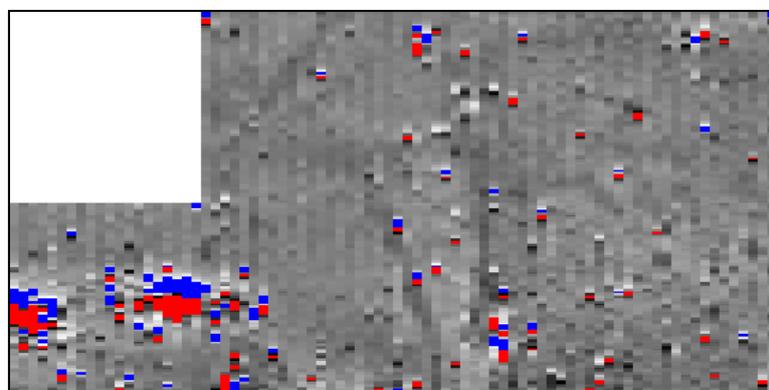
Superimposition of resistivity and magnetometry results



Aerial photograph of the site c2000

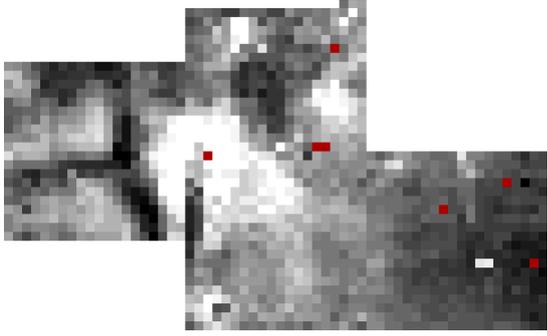
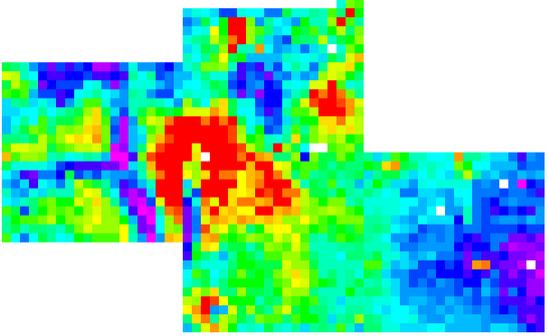
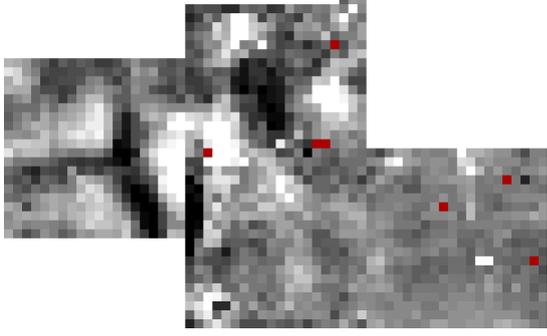
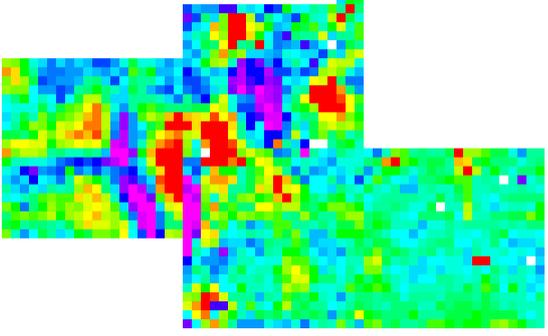
Individual survey area results, rotated for presentation

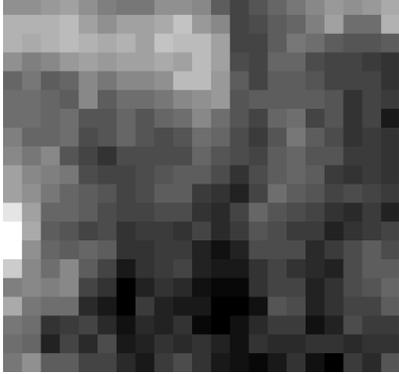
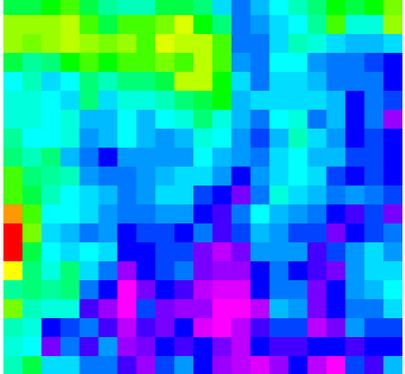
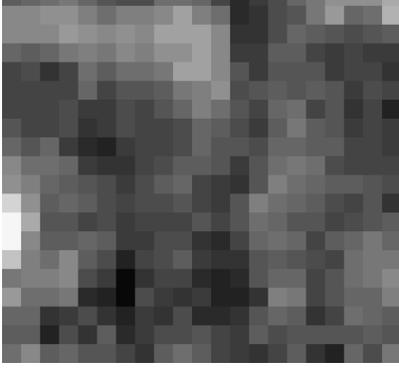
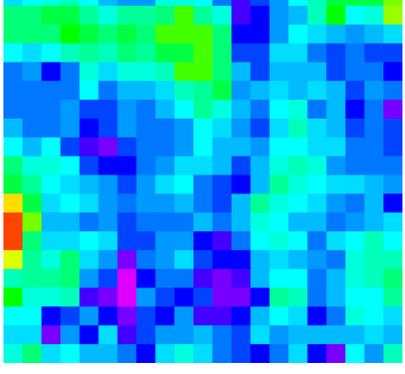
	<p>Magnetometry +2 to -2 nT (black high, white low) interpolated</p>
	<p>Magnetometry +6 to -5 nT (black high, white low)</p>



Magnetometry +20 to -20 nT peaks (red high, blue low)

		<p>Resistivity northern area raw data 20 m x 40 m</p>
		<p>Resistivity northern area high pass filter 4 20 m x 40 m</p>
<p>Black low, white high</p>	<p>Purple blue low, red high</p>	

		<p>Resistivity southern area</p> <p>raw data 60 m x 37 m</p>
		<p>Resistivity southern area</p> <p>high pass filter 7 60 m x 37 m</p>
<p>Black low, white high, red null</p>	<p>Purple blue low, red high, white null</p>	

		<p>Resistivity southern area SW</p> <p>raw data 20 m x 21 m</p>
		<p>Resistivity southern area SW</p> <p>high pass filter 8 20 m x 21 m</p>
<p>Black low, white high</p>	<p>Purple blue low, red high</p>	



Discussion

Northern survey area

Magnetometry

The main features shown in the magnetometry results are an interrupted strong response running E – W across the western grid, and three weaker linear signals. One of the weaker signals runs NE – SW through the interruption and the other two converge towards the S edge of the survey.

Resistivity

No particular patterns are discernible within the area covered. High values on the N edge of the survey area reflect a boundary fence. Low values along the S side of the W edge of the survey are coincident with one of the linear features shown in the magnetometry.

Southern survey areas

Resistivity

The W boundary of the school field, which runs almost N – S to the W of the centre of the southern survey area, is marked by mature trees and a rise in the ground level suggesting that soil has been brought in to level the school playing field. The trees probably account for the areas of high resistance straddling that boundary and the import of material probably accounts for the lack of differentiation over the bulk of the playing field. The N part of the southern survey area where there is little indication of surface levelling shows a greater differentiation in the results than the bulk of the playing field. This suggests the potential existence of subsurface features but the area covered was too small to identify any interpretable patterns. To the W of the school field boundary the low values indicate that the extant ditch continued S with a spur to the W. The signal from the southern continuation then merges with other features giving a complex pattern of low values.

The geophysical results indicate that the extant ditch at some stage continued further along both arms. The magnetometry shows that the ditch extended to the east but does not show the return that would be expected if this were a moated site. However, given that some of the signal from this extension appears to have been masked by the path running NE – SW across the survey area it is reasonable to assume that other parts of the ditch have also been obliterated. The NE – SW pathway forms an obvious route to avoid the rise associated with Thriplow church to the E. The working of the clunch pit just beyond the E edge of the survey area may have obliterated geophysical evidence. It should be noted that there are patches of low values in the N area resistivity where an extension of the ditch line might be expected to be.

Given that the village lies on the boundary between different types of underlying chalk and has a number of springs arising along that boundary it is possible that the two very low responses in the SW of the southern survey area represent springs. If so, then the W source appears to form a complex system draining first briefly to the N and then W towards the main streamline from the village. The E source has some rectilinear form about it suggesting some sort of active water use for example in tanning or fleece washing. If the extant ditch does represent a moated site, then it may be conjectured that the moat may have been filled from the E source and drained by the spur in the same direction as the outflow of the W source.



Conclusions

It is possible that the extant ditch represents the corner of a moat which has been filled by clunch workings and lost under the present school and road but the geophysical evidence is ambivalent.

We thank Peter Cott for the use of his equipment and for his assistance, advice and patience in conducting the southern area survey detailed above.

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

Report by Dr I Sanderson for Archaeology RheeSearch