

## **Radwinter Throssels Report**

In August 2018 and in March and April 2019 Archaeology RheeSearch Group carried out magnetometry and resistivity surveys on this site at the request of the owners.

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

**Site liaison:** Stephen Graves.

**Site conditions:** Stubble on a very dry surface in 2018. Emerging cereal crop with a moist surface in 2019.

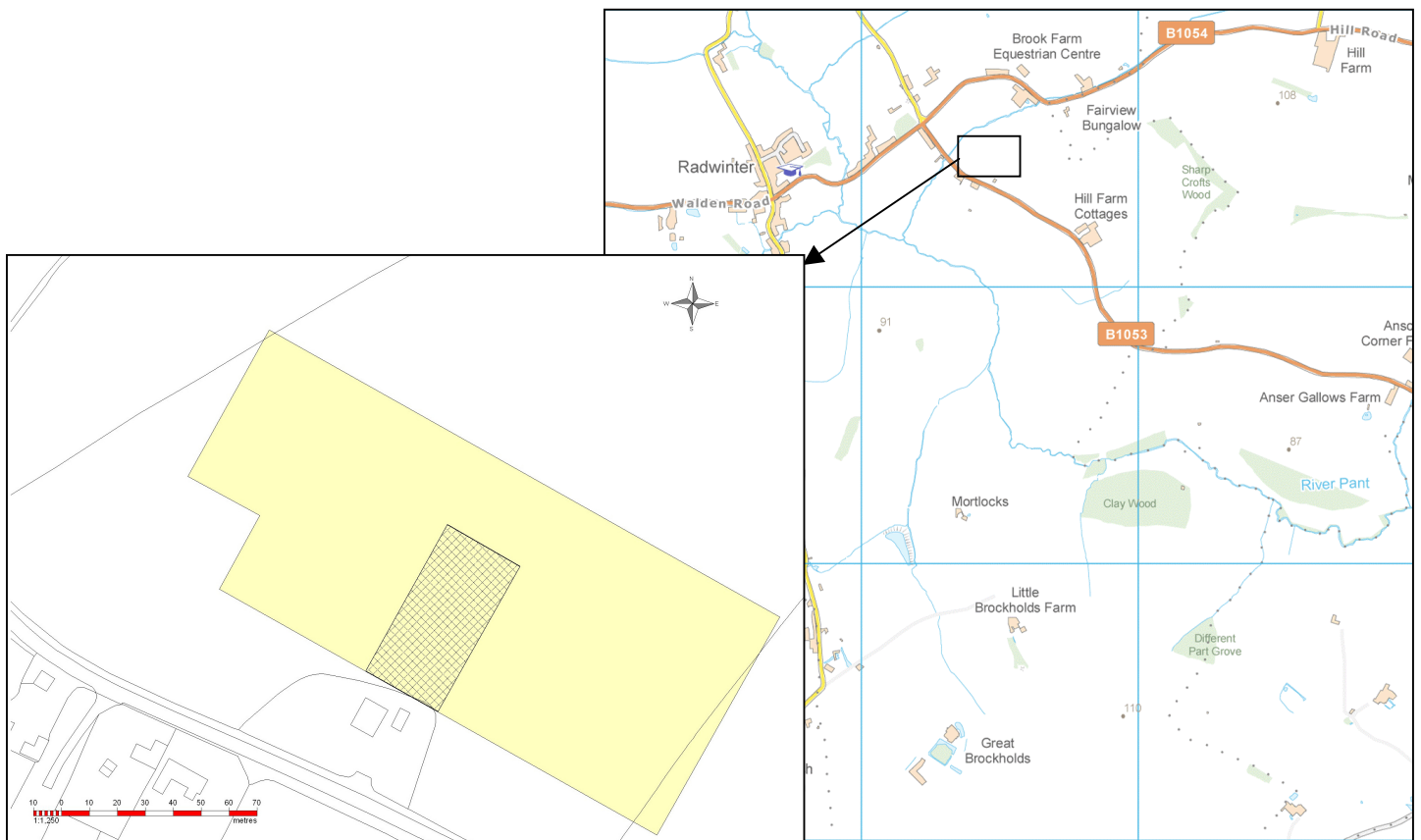
**Equipment:** Bartington 601 gradiometer; TRCIA 50 cm twin probe.

Magnetometry readings: 8/m, 1 m separation.

Resistivity readings: 1 m interval, 1 m separation.

Raw data are available as separate appendices.

**Location:** TL615374, Radwinter, Essex.



### **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 to explain the cropmarks shown on a aerial photograph (see Discussion).

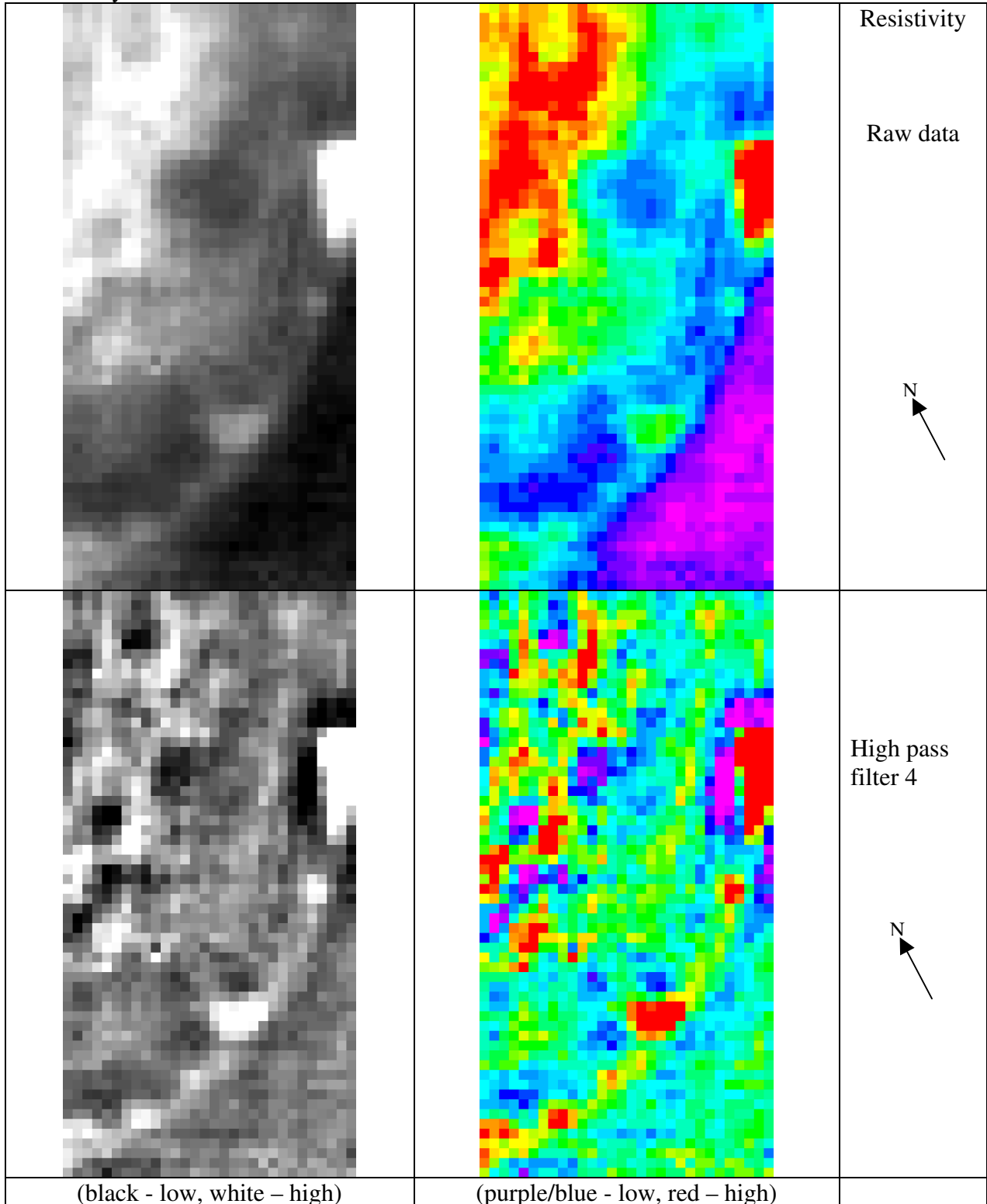
### **Site topography.**

The site was an arable field with a gentle slope down to the south west. A building was situated on the south west with a mature hedge along its western and eastern sides but no structural demarcation adjacent to the survey areas.

**Results:**

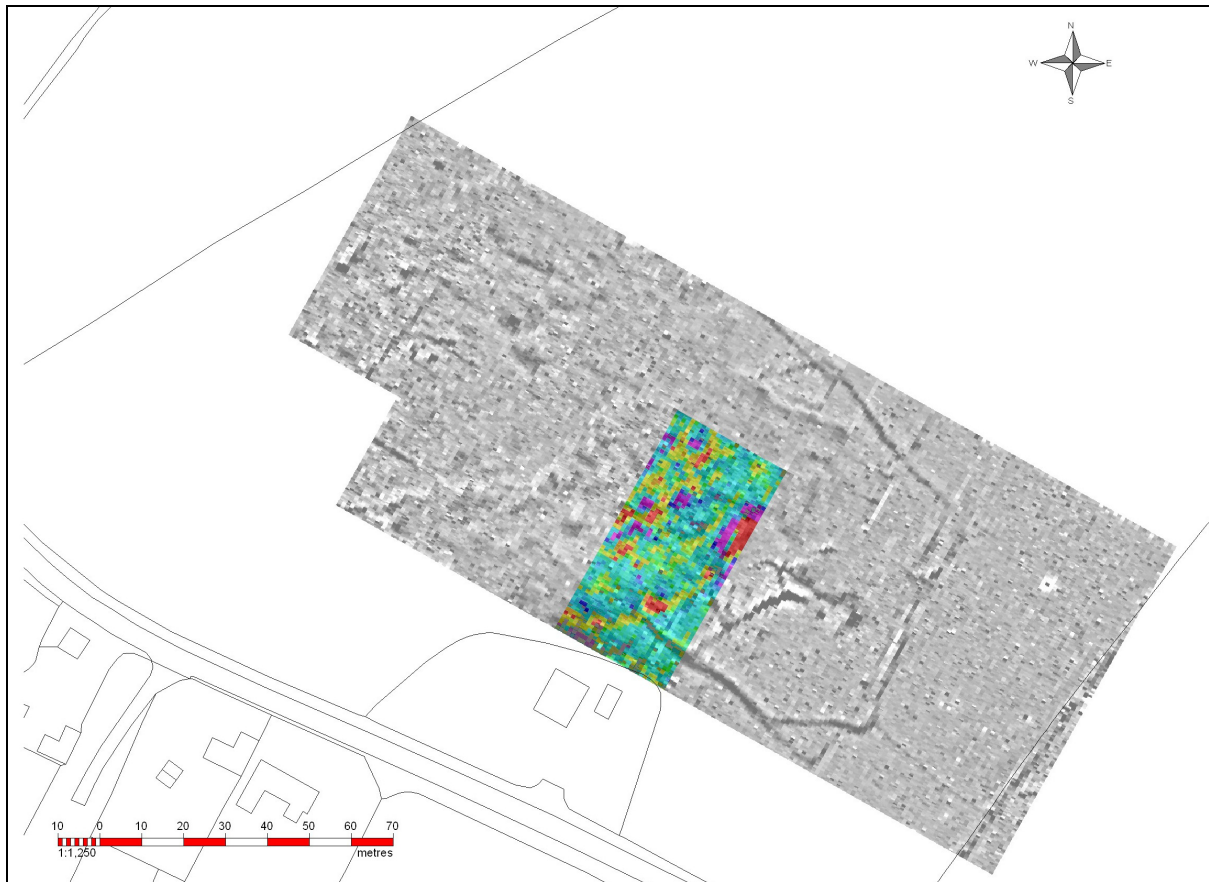
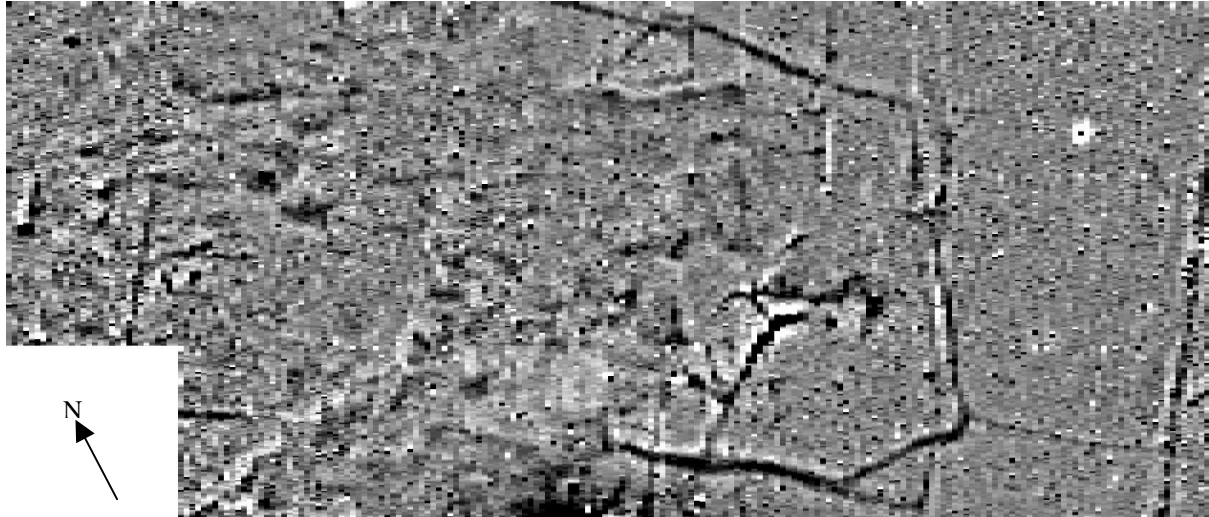
*The images in this section are orientated for presentation. The images are not to a common scale.*

Resistivity 30 m x 60 m



# Magnetometry

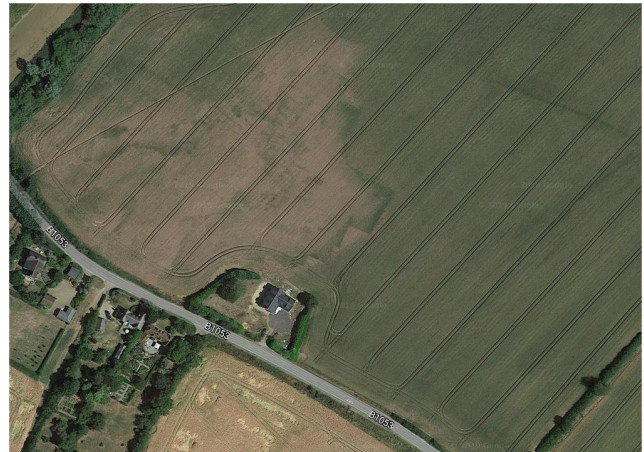
Magnetometry 210 m x 90 m range +4 to -3 nT



Superimposition of resistivity and magnetometry results.

**Discussion:**

The magnetometry results contain only one feature that is readily explainable, the ditch line on the E edge of the survey area which is coincident with a field boundary shown on maps from 1887 onwards. The principal feature is an irregular ditch line extending across the whole survey area but with no responses on the W side to complete an enclosure. The cropmarks in the adjacent aerial photograph appear within the results as slightly diffuse responses apart from three stronger responses, all parallel to the NE edge

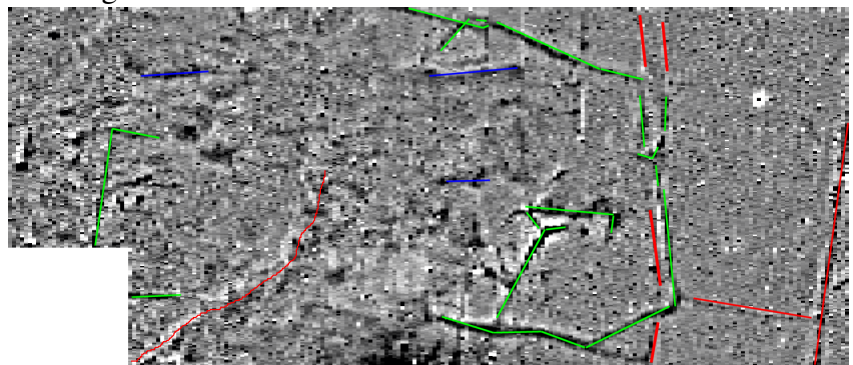


Aerial photograph of the site  
(Google 2019)

of the survey. These diffuse responses cover the potentially missing side of the ‘enclosure’ feature. The S corner of the irregular feature has a triangular area which is near to a faint line running towards the old field boundary. The E side of the triangular feature has a faint parallel line on its E side which continues N, parallel to but on the W side of the irregular feature before it widens about half way across the survey area. The wider part if extended about 250m joins the W road out of Radwinter just after it crosses a stream and is about 5 m wide. The irregular feature is not broken at the crossing point suggesting that it post dates the fainter feature. There is a complex of strong responses within the irregular feature and a linear feature on the W side of the survey area which might have been joined to another if the SW corner of the survey had been included.

The resistivity survey area was wholly completed in 2019 as results obtained earlier in extremely dry conditions were considered invalid. The main feature in the resistivity results is a block of high resistance values on the E edge of the survey area with low values to the N and W of the block. A curving line of high values runs from the SW corner of the area to the main block,

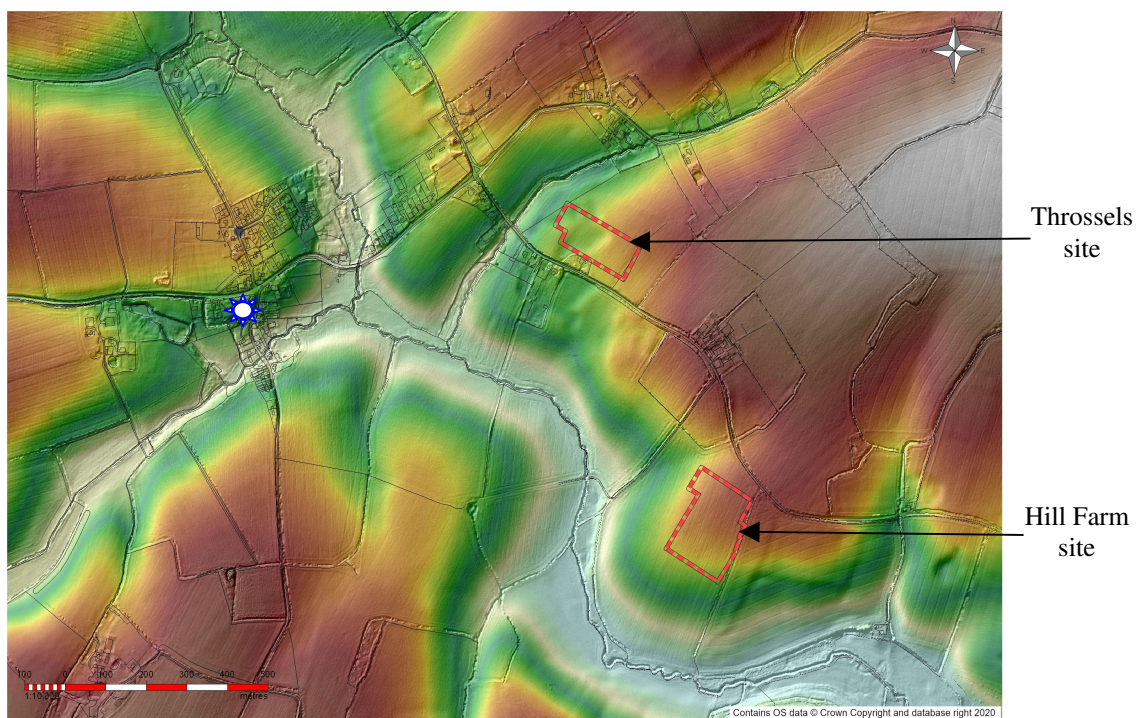
The pattern of the cropmarks indicates that the surface of the W side of the field is different from that on the E side. The sharp dividing line made up of linear segments suggests mechanical reinstatement but discussions



with the long term farmer of the site gave no indication that this took place at least within the last 60 years or so. The magnetometry results show a clear difference in the magnetic responses on the two sides of the field including the lack of one side of what would appear to be the ditch of an enclosure. Within the magnetometry results, and clearly within the resistivity results, are parts of a curve which might be concentric. One speculative suggestion that might fit the data would be an explosion near the gravel pit which used to be situated about 50 m W of the W edge of the survey area. This might be disposal of munitions, possibly after the first world war. The 40 m long rectilinear feature within disturbed area might be associated with the reinstatement after such an event.

The results from the E side of the field are those associated with an archaeological rather than a relatively modern site, although it cannot be assumed that the features on both sides of the survey area are not connected. The strong magnetic signals of the irregular and incomplete enclosure ditch post date and respect the earlier trackway leading from the triangular corner feature across the survey area which extrapolates to the E—W road passing through the village just after the last stream crossing point. This enclosure ditch bears some resemblance to that detected about 700 m away to the SE at Hill Farm (deposited with Essex HER). This possibly represents a Roman field system with a later Anglo Saxon defensible farmstead, given the approximately 2 m width of the enclosure ditch. The cluster of magnetic features in the middle of the enclosure may be a well or water source system allowing a farmstead to be located on higher ground away from the nearby streams.

The block of high values on the SE edge of the resistivity survey is coincident with one of the stronger crop marks dividing the two parts of the field.



Terrain map showing the location of two sites with similar enclosures..  
Radwinter church is also indicated.

Report by Dr I Sanderson for Archaeology RheeSearch