

Ancient Monuments Laboratory
Report 49/96

MOHUN CASTLE, SOUTH PERROT,
DORSET.
REPORT ON GEOPHYSICAL SURVEY,
JULY 1996

M Cole

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Summary

Resistivity survey was undertaken at Mohun Castle, South Perrot, Dorset, in an attempt to locate any surviving buried features associated with the former castle within part of the scheduled area to the south of St Mary's Church. This was necessary because the Parrett and Axe Parish Council were considering extending the graveyard of the church in this direction. The site conditions proved well suited to the technique and a range of features were located both within and outside the surviving parts of the castle moat. Of these, a number from within the moated area are of likely archaeological significance whilst a number of features beyond, including a possible drainage system, are of less certain, but possibly more recent, origin.

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Resistivity Survey, July 1996.

INTRODUCTION

Resistivity survey was undertaken at the site of Mohun Castle, South Perrot, Dorset (Scheduled Ancient Monument - Dorset 763), in response to a request from Paul Gosling, the Inspector of Ancient Monuments for Dorset. The Parrett and Axe Parish Council were exploring options aimed at extending the graveyard of St Mary's Church, South Perrot. The latter is situated within the remains of Mohun Castle and the area of the proposed extension impinges on part of the scheduled site. It was hoped that the geophysical survey would allow a broader understanding of the nature of any surviving buried remains.

The castle itself was reportedly dismantled during the 17th Century and currently no standing remains or obvious building platforms remain visible on the surface. The north-eastern quadrant of the site is occupied by St Mary's Church and here all surface traces of the castle have been all but obliterated, presumably during the creation and subsequent extension of the churchyard. However, much of the site to the south and west remains relatively undisturbed and the southern defences survive as well-preserved earthworks including a substantial moat (averaging 1.3m in depth). Many other earthworks survive both within and beyond the latter but as these have never been subjected to an accurate topographic survey it is difficult to appreciate the layout of the site.

The site (centred on ST 472 067) is located on clayey soils of the Denchworth Association (Soil Survey of England and Wales 1983) which overly a substrate of Jurassic limestone (Institute of Geological Sciences 1973).

METHOD

Given the main aim of attempting to locate buried stonework, resistivity survey was chosen as the most suitable technique to employ. The resistance to the passage of an electrical current in the soil is governed by the overall moisture content of the soil at the time of the survey and the concentration of dissolved ions this contains. Localised variations in resistivity are therefore created by contrasts in moisture retention such as those between buried archaeological features and the surrounding soil in which they are situated. For example, a non-porous stone foundation will retain less moisture than the surrounding soil and should therefore be detectable as a high resistance anomaly. Conversely, a moisture retentive silted ditch will generally produce a low resistance

anomaly.¹

A grid of 30m squares was established across the site aligned with the southern boundary of the existing graveyard (see Fig 1). Each of these squares was then surveyed using a Geoscan RM15 resistance meter. The Twin Electrode configuration was employed with a mobile probe spacing of 0.5m. Readings were recorded at 1.0m intervals along traverses spaced 1.0m apart. The measured response over parts of the site was revealed to be fairly subdued so a variety of image enhancement algorithms have been applied to the data to aid visual recognition. The most informative of these are presented, along with the raw data, on Figure 3. Buried walls and foundations are indicated on these greyscales by alignments of high resistivity, as well as broader, more amorphous areas of disturbance.

RESULTS

The site conditions proved to be well suited to the technique and an array of buried features were located. In the following discussion the numerals quoted in bold type refer to the interpretation diagram presented in Figure 4.

The Moated Area

The area available for survey within the moat measures approximately 35m by 60m. Despite this relatively small size, some features of clear archaeological potential have been detected. Most notably, there is a broad zone of high resistance within which discrete linearity is visible, particularly at **1**, **2** and **3**. These latter are arranged in a rectilinear pattern which clearly shares a similar alignment to the east-west course of the moat, just to the south. They also appear to respect the present causeway over the moat which may represent the remains of a former entrance. As such, this pattern of anomalies may relate to the presence of a former gatehouse or similar structure. This interpretation is questionable, however, given that **3** crosses the causeway and continues southwards towards the current field boundary with which it shares a potentially significant alignment (see Fig 2).

To the east of the above, and still within the moated area, a further pattern of rectilinear high resistance anomalies (**4**) has been detected. These occupy a distinctly different alignment to **1**, **2** and **3** and also appear to be narrower, suggesting that the two groups may be unrelated. Indeed the more easterly group (**4**) is very similar both in alignment and in form to the arrangement of possible drainage features located beyond the moat to the east (see below).

The moat itself has, as expected, been detected as a low resistance anomaly. The latter is flanked, on both sides in places, by narrow bands of high resistance indicative of the remains of internal and external walling. Further weight to this interpretation is added by the traces of inner and outer banks or scarps which are visible on the surface. The southern extension of the moat in the south-eastern corner has also been detected clearly (**5**).

¹ For a more detailed description of the principles governing this technique see Clark (1990) or Scollar et al (1990).

Within the westward continuation of the moat, beyond the causeway described above, there is a discrete area of high resistance approximately 10m in diameter (6). From this a high resistance linear feature (6a) runs northwest towards a tributary stream of the river Parrett. A possible explanation for these latter is that they constitute part of a drainage system with 6a representing a conduit carrying water away from the site. There is not, however, any clear evidence in the data of an association between these features and the possible network of drains detected elsewhere by the survey (see below).

To the east of the surveyed area, beyond the moated area, a rectilinear pattern of narrow high resistance anomalies (7) has been detected. Whilst it is possible that these features represent a range of enclosures, they bear a striking resemblance to a response encountered during the resistivity survey at Kirby Hall, Northants (Linford 1992), revealed by excavation to be due to a network of drains (Dix 1991). Given that the clayey soil in this area is often waterlogged during the winter months (P Hinton *pers comm*), the interpretation of 7 representing a drainage system certainly seems reasonable.

To the south two parallel high resistance linear anomalies (8) have been detected, the more easterly of which is by far the stronger, which correlate well with the edges of an 'L' shaped earthwork mapped by the OS (see Fig 2). However, the westward continuation of this earthwork is much less distinct and appears only as a discontinuous high resistance anomaly. Just to the south of this 'L' shaped feature, and running parallel to it, a low resistance anomaly (9), similar in response to that over the moat, has been detected. Unfortunately, it is not possible to elucidate how these features relate to the main moated area just to the north or with the earthworks visible on the ground.

CONCLUSION

The clayey soil conditions at the site proved well suited to resistivity survey at this time of year and a range of buried features were located, some of which are evident on the ground surface as earthworks. Within the moated area a rectilinear pattern of probable wall footings has been detected which may represent the remains of part of the former castle. Beyond the moated area, a number of further features have been located, including a possible drainage system of some sophistication, for which an attribution to any particular period is not possible from the geophysical data alone. It is clear that an accurate topographic survey of the site would benefit both the interpretation of the geophysical data and, more broadly, the understanding of the site as a whole.

Surveyed by: A Payne
M Cole

Dates: 11-12 July 1996

Reported by: M Cole

21st July 1996

Archaeometry Branch
Ancient Monuments Laboratory

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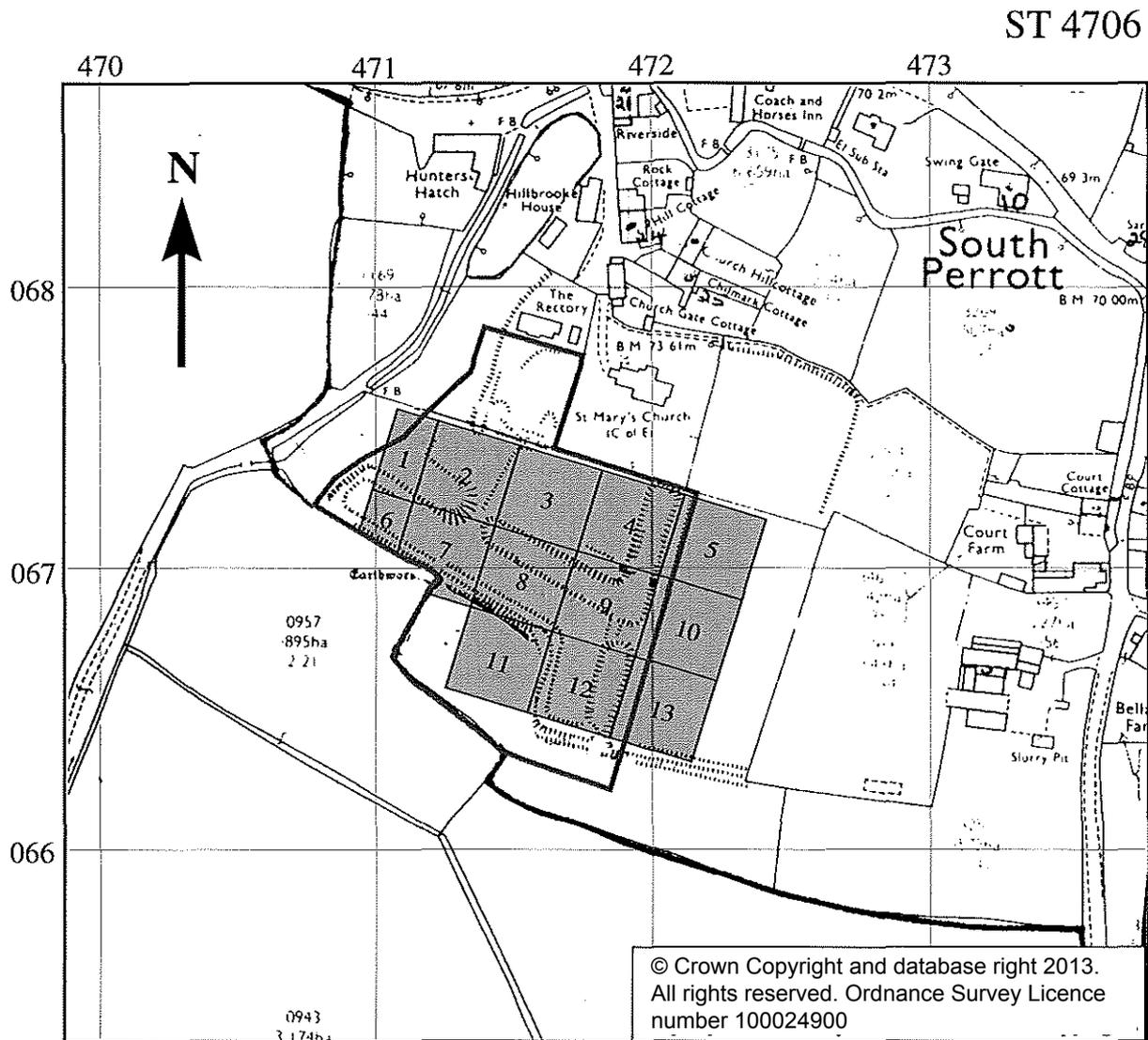
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- Figure 4** Interpretation diagram

FIGURE 1.

MOHUN CASTLE, SOUTH PERROT, DORSET.
Resistivity Survey, July 1996.

Location plan of survey.



0 90m

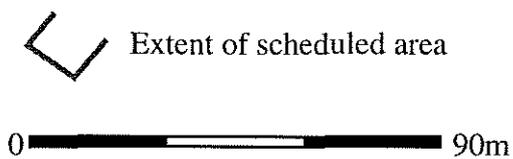
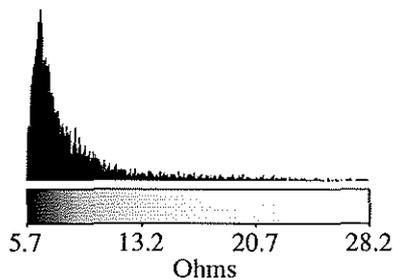
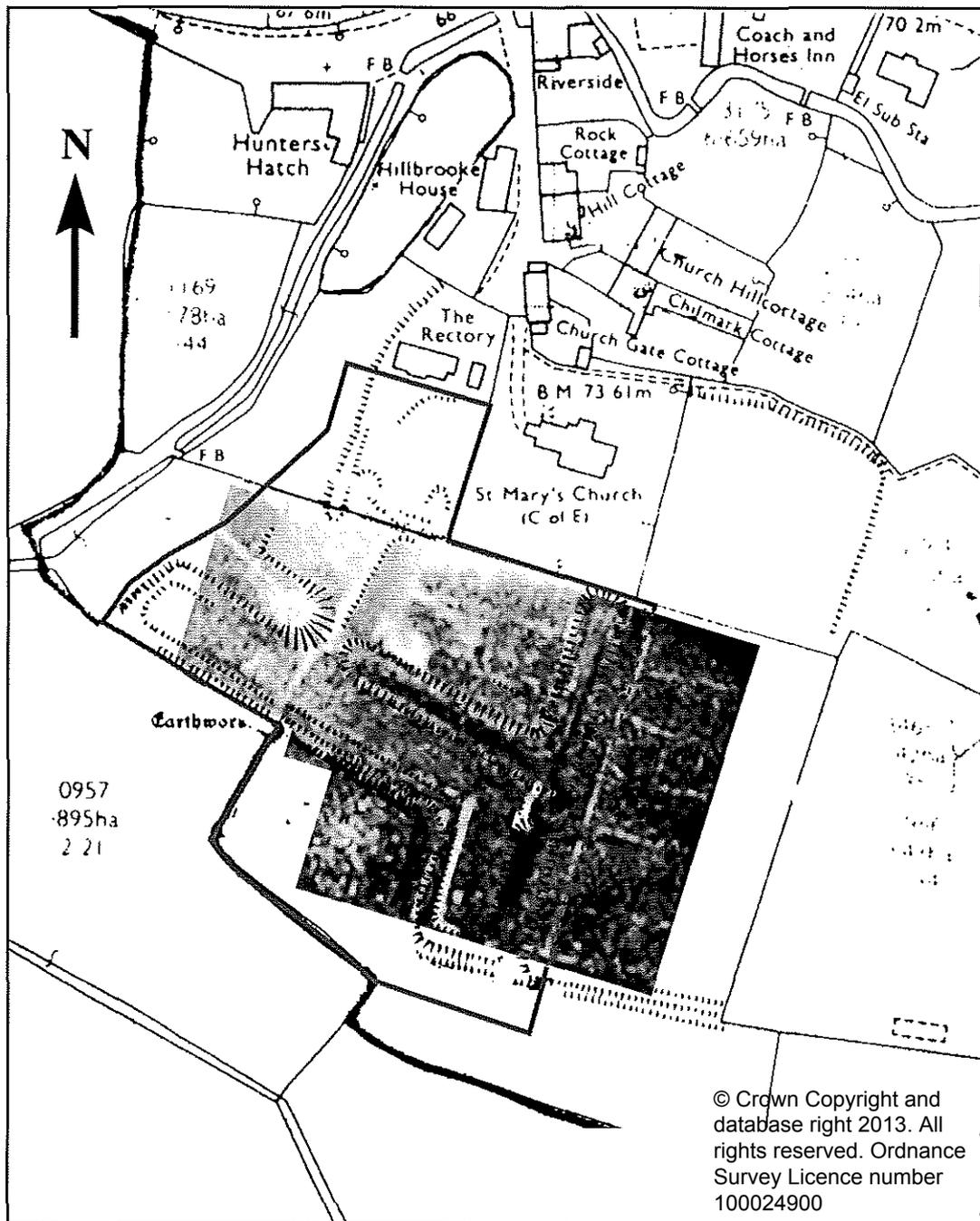


Extent of scheduled area

FIGURE 2.

MOHUN CASTLE, SOUTH PERROT, DORSET.
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Location of resistivity survey.



MOHUN CASTLE, SOUTH PERROT, DORSET.
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Interpretation of survey.

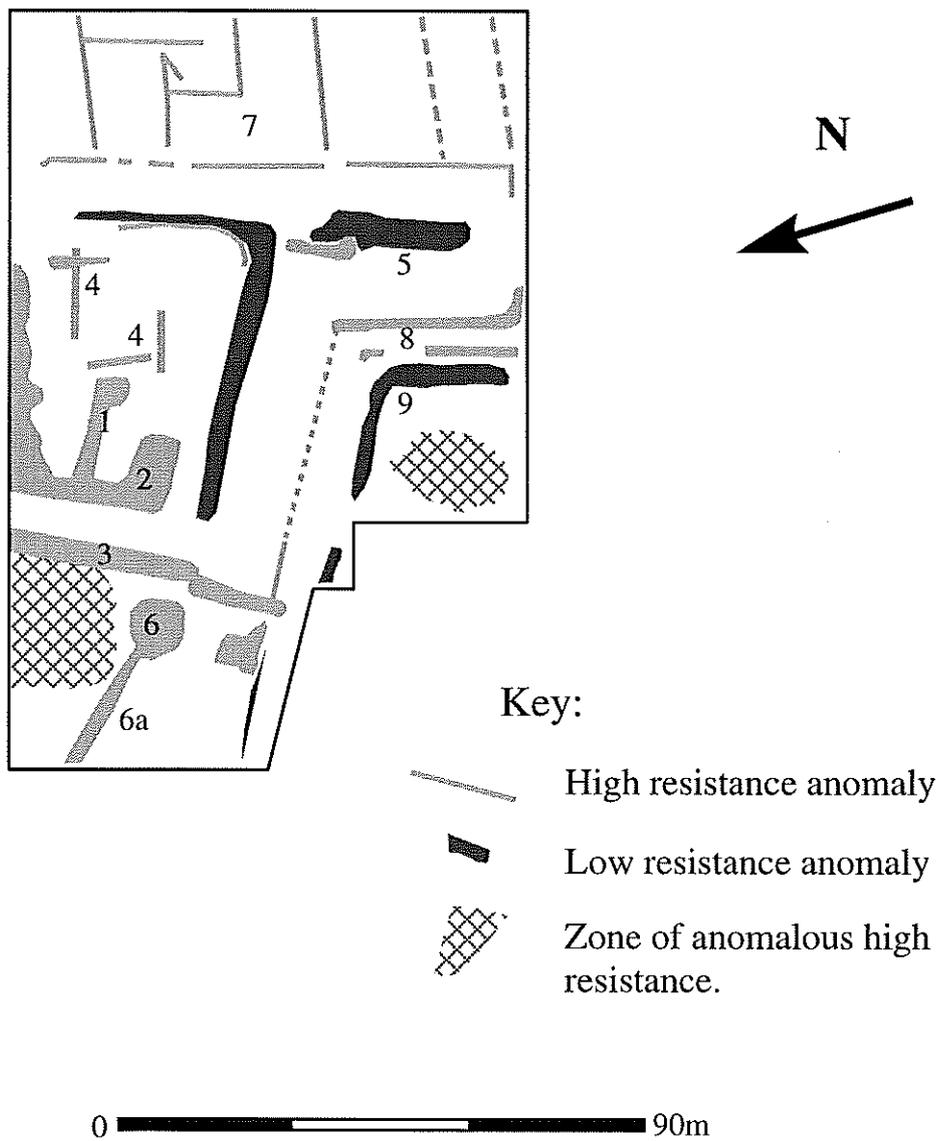
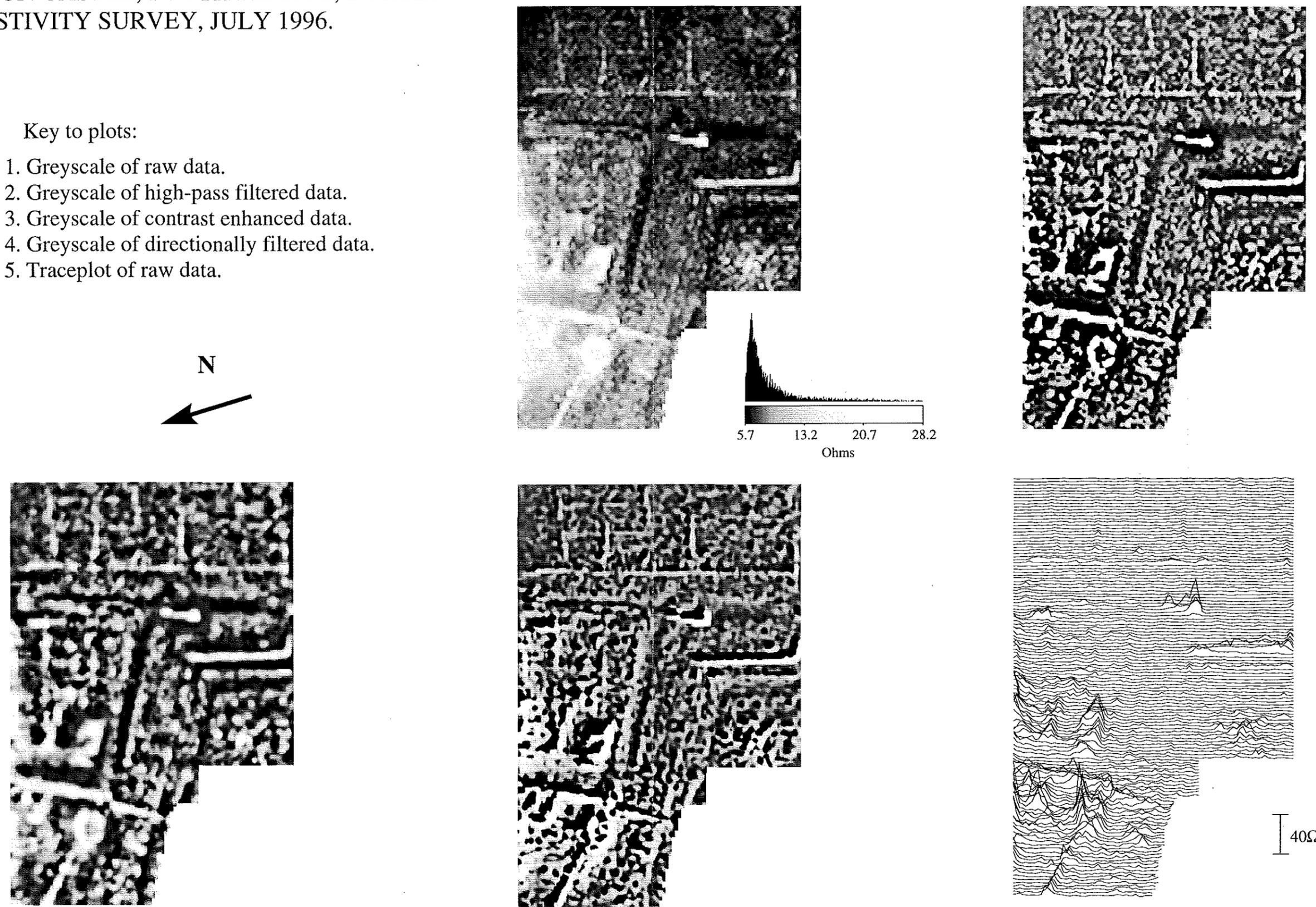


FIGURE 3.

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Key to plots:

1. Greyscale of raw data.
2. Greyscale of high-pass filtered data.
3. Greyscale of contrast enhanced data.
4. Greyscale of directionally filtered data.
5. Traceplot of raw data.



0 90m

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