The present car park south-west of the prehistoric circle is to be extended northwards into the adjacent field, and both resistivity and magnetometer surveys were attempted here in the hope of locating archaeological features prior to the development (see location plan). The field was formerly subdivided and the former fence line runs north and westward meeting at a right-angle near the centre. The E - W limb of this boundary is associated with a broad and shallow depression to the north and east of which the ground is at a higher level and is perhaps made up in association with previous buildings or plots.

Magnetometer survey:

The greater part of the field was surveyed with the fluxgate gradiometer and field recording system. The ground was covered by 30 m traverses spaced at 1 m intervals, with a more intensive survey at 0.5 m spacing in the southern part of the field. The magnetometer traces are reproduced on the enclosed plan (C).

Over most of the area there is considerable magnetic disturbance from iron debris and the remains of fencing, and this obscures much of the survey. To the south of the old fence, where the ground level is less disturbed, traverse spacing was reduced in the hope of seeing weaker and smaller features, but no anomalies of undisputable archaeological origin were detected. Magnetic susceptibility of soil here is high (80 x 10 $^{-0}$ SI Units/Kg.), and therefore any reasonably substantial earth-filled features ought to be detectable where not obscured by iron interference.

Resistivity survey:

A more extensive area was surveyed by resistivity and the data is displayed as traces on plots A and B on the enclosed plan. The Twin Electrode probe configuration was used with a probe separation of 0.5 m, and readings at 1 m intervals. Plots A and B show the filtered data with the traces disposed at right-angles, respectively, in order to improve the recognition of anomalies.

Undulations in the resistivity values characterize much of the field, but these are rarely pronounced enough to satisfactorily outline or indicate archaeological features. The E - W ditch alignment is visible as a band of low readings, as is the northern limb of the internal fence. Apart from these anomalies, there are one or two areas of high resistance (outlined in red on plan B) that may be of significance, perhaps indicating areas of stonework, rubble or infilled pits.

Conclusions:

Both the magnetic and resistivity results show that the field has been considerably disturbed, but it is difficult to assess whether this is archaeologically significant on the survey evidence alone. Both surveys detected the old field boundaries, and there is considerable magnetic interference from scattered iron and from the remains of fences. The only other positive findings came from the resistivity survey which shows anomalies which could be interpreted as perhaps three or more substantial pits, including one some 10 m across in the SE corner of the field. To anomalies corresponding to these can be seen in the magnetic survey although conditions should be favourable for the detection of earth-filled pits, and so their significance remains unclear. Neither survey would necessarily detect minor features with a chalky or otherwise poorly undifferentiated fill.

8th. Jan. 1985

Surveyed and reported by: A. David.

with: A. Bartlett.

A. Fayne.

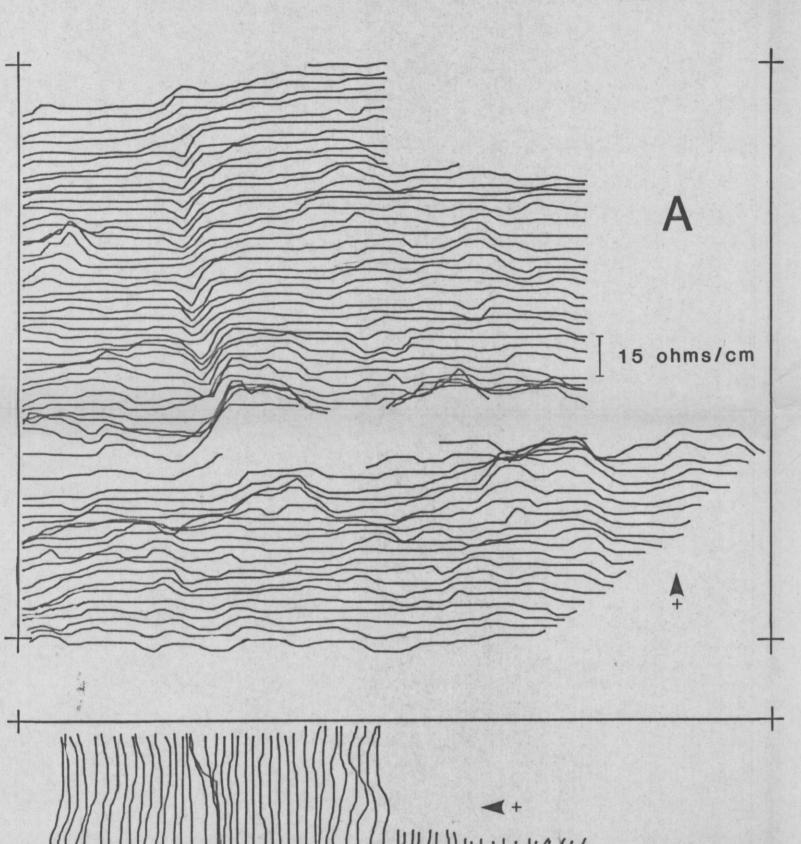
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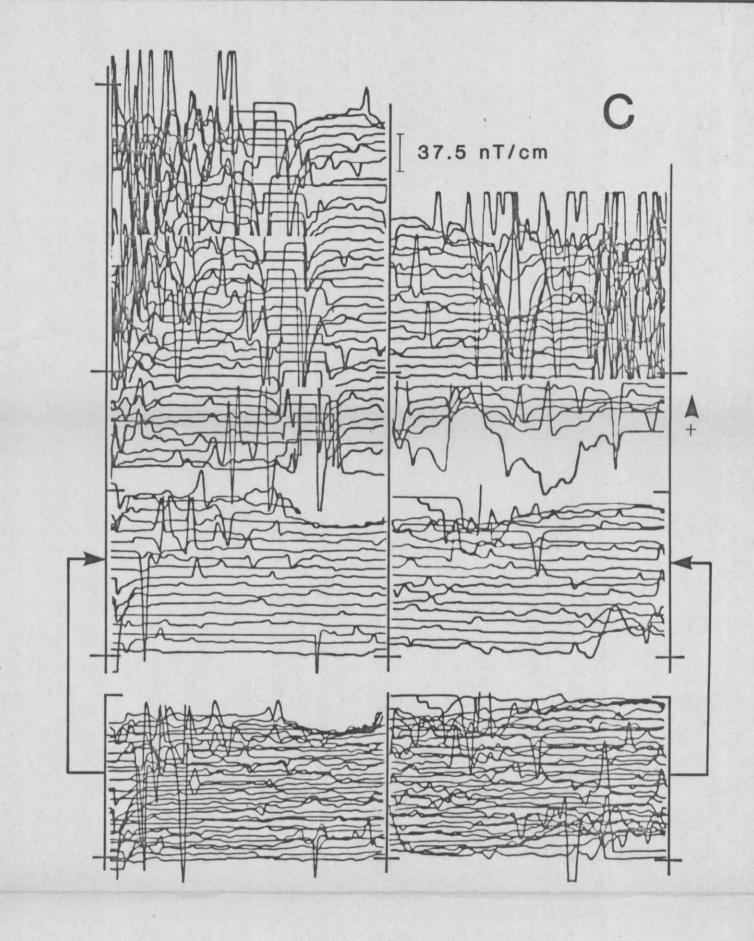
Ancient Monuments Laboratory Archaeometry Section, Room 536, Fortress House, 23 Savile Row,
London W 1 01 734 6010 x 591

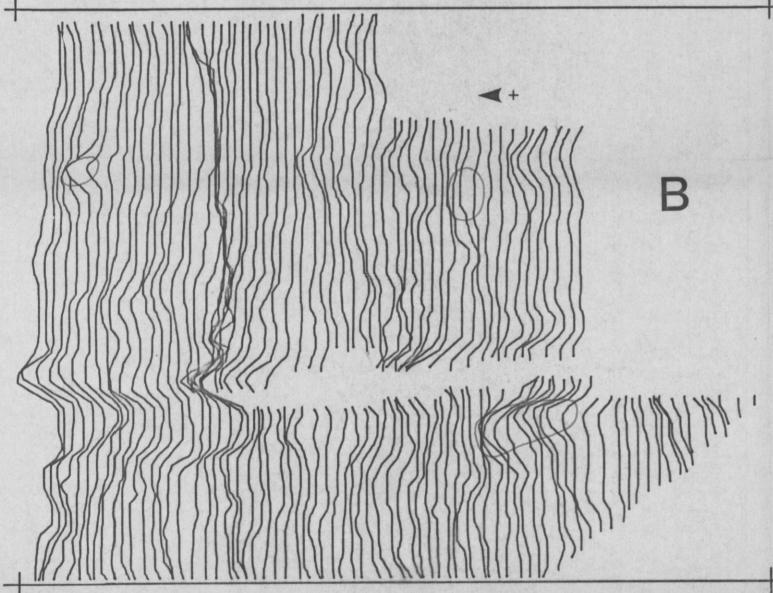
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AVEBURY CAR PARK Geophysical survey, 1984

A,B: resistivity plots

C: magnetometer traces

1:400

D: location

1:2500 magnetometer and . resistivity survey resistivity survey :

possible archaeological anomalies indicated in red

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