



GEOPHYSICAL SURVEY AT POUNDBURY, DORCHESTER

NATURE OF THE SITE

The area surveyed lies ^{at} WOS SY 685912 within the industrial estate which occupies the hillside E of Poundbury Camp. The subsoil is chalk. There are factory buildings to the S and a steep escarpment overlooking the Frome Valley forms a boundary to the N.

The excavations of C. Green have uncovered an archaeological sequence which starts with a Roman cemetery containing closely packed graves and the foundations of a number of stone mausolea. Over part of the site a system of ditches and a number of holes reminiscent of grubenhauser overlie the graves. These indicate apparently post-Roman occupation. The site has also been used as a military camp in recent times and there are remains of drains, slit trenches and Nissen hut foundations.

SURVEY PROCEDURE

The purpose of the survey was chiefly to investigate the areas which ~~it~~ it is not immediately planned to dig to the N and E of the excavated area. It was hoped that the results would show how the archaeological features here compared with the rest of the site and would perhaps indicate a boundary to the cemetery which must lie somewhere S of the escarpment.

Electrical resistivity readings using 3ft probe spacing and two different probe configurations were taken along a series of traverses 25ft apart. The plan shows the positions of the traverses in relation to part of the excavator's site plan. An area survey using 4ft probe spacing was made of a piece of clear ground in the NE part of the site.

The site was also scanned with a metal detector to locate possible Roman lead coffins. The results were notified on the spot and could be reproduced if necessary.

RESULTS

The readings from the 11 resistivity traverses are plotted on the accompanying graphs, and those from the area survey are shown as a dot-density plot. Note that in the computer plot there is a border around the area in which the readings were taken.

Certain of the traverses cross ground which has since been dug and this allows some useful comparisons, most notably at A in traverse 11 where a large positive anomaly corresponds to the pit and slit trench. The effect of the ditches is less pronounced but there are small positive anomalies at C and D in traverses 3 and 5. There was a larger anomaly at E but the ditch was not detected at B.

A number of possibly significant positive anomalies were also found outside the excavated area and these are marked on the graphs and plan. Usually there is a double peak in the Wenner traverse which coincides with a single one in the double dipole. A number of strong anomalies coincide with visible walls and banks and these are labelled.

There are also anomalies such as F and G in traverses 5 and 7 (marked on graphs only) where a minimum double dipole reading coincides with a double minimum in the Wenner traverse. These are negative anomalies and are probably caused by extant trenches and hollows in the ground.



Those positive anomalies which do not have an obvious visible cause could plausibly indicate ditches or pits, although whether they are archaeological or recent must remain uncertain.

It is possible that the pattern of irregular ditches already excavated extends over the area in question. The graves appear not to have been detected, presumably because they are too deep and their chalk fill offers less contrast with the chalk subsoil than the earth fill of the other features. It would be possible to draw a continuous enclosing ditch through a series of the anomalies. If such a ditch exists it might be related to the layout of the cemetery but this is largely conjectural and the dot density plot shows no clear sign of any continuous ditch.

The plot does however show a large central feature, probably a pit, which appears similar in size to those already excavated, particularly that at H. Traverse 6 shows a large anomaly which supports this interpretation. Some of the lesser concentrations of dots may indicate smaller pits.

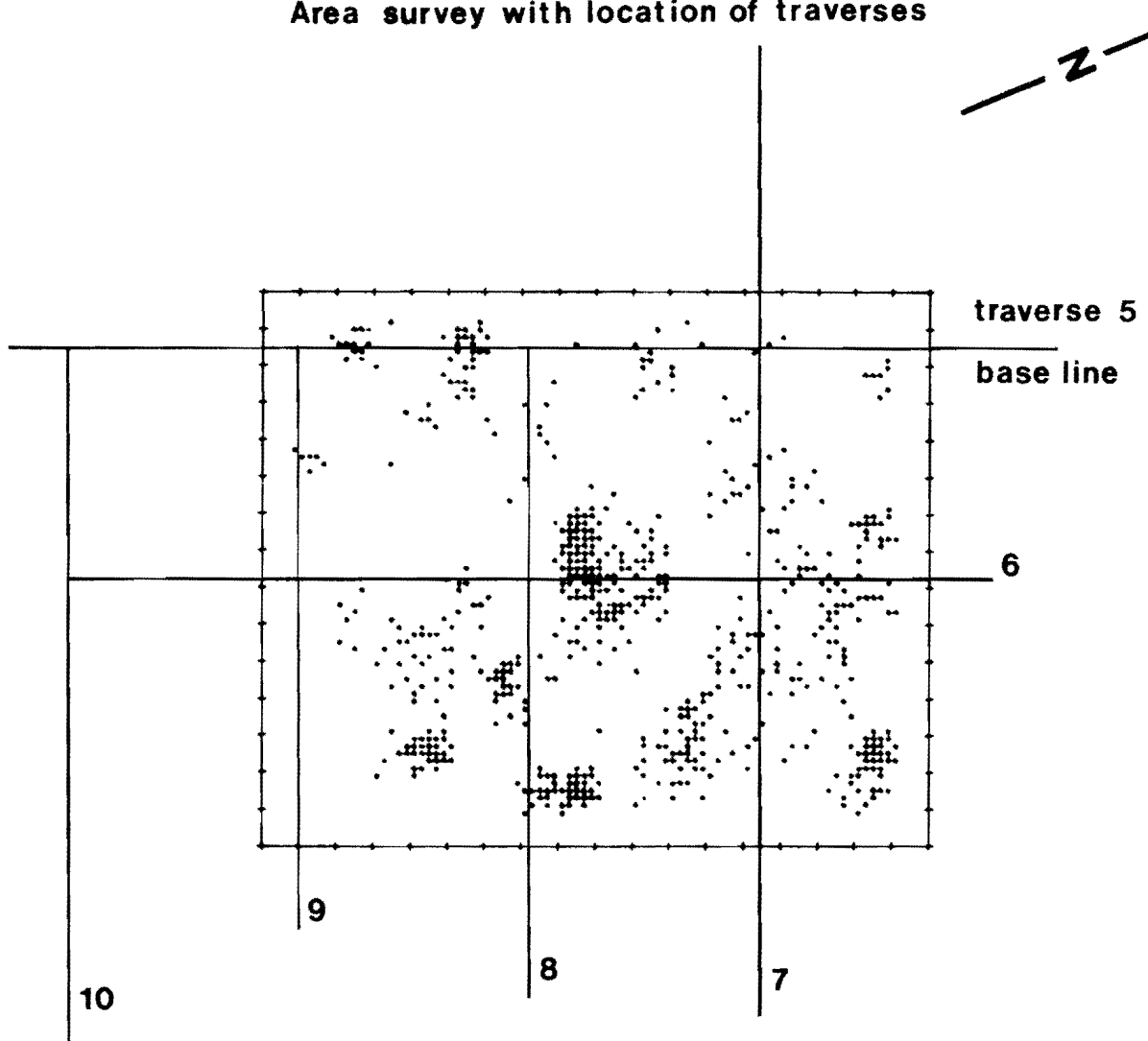
CONCLUSIONS

1. The disturbed nature of the site makes interpretation hazardous but the observed resistivity anomalies could reasonably be explained by a continuation of occupation features similar to those excavated.
2. The survey gives no clear indication of the presence or location of graves.
3. There is probably a large pit at the centre of the area survey but any ditches there may be are too slight to register.

A BARTLETT
Ancient Monuments Laboratory 1973

Poundbury Resistivity Survey

Area survey with location of traverses

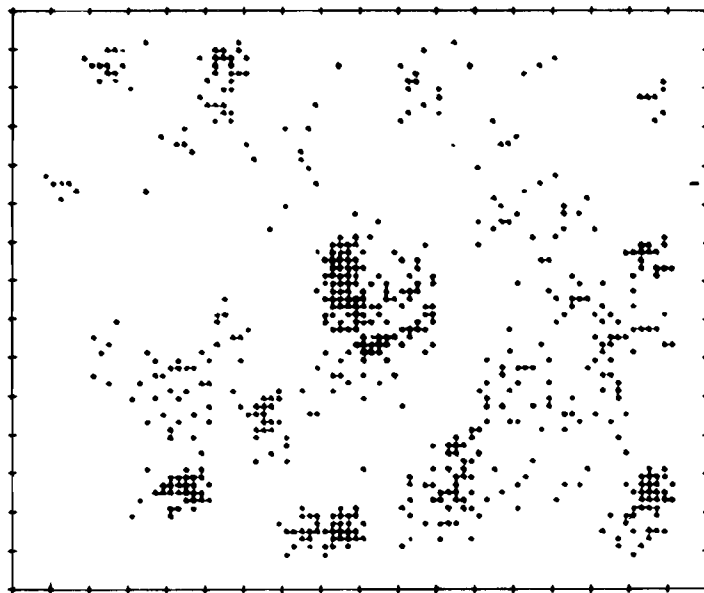
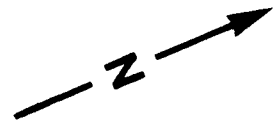


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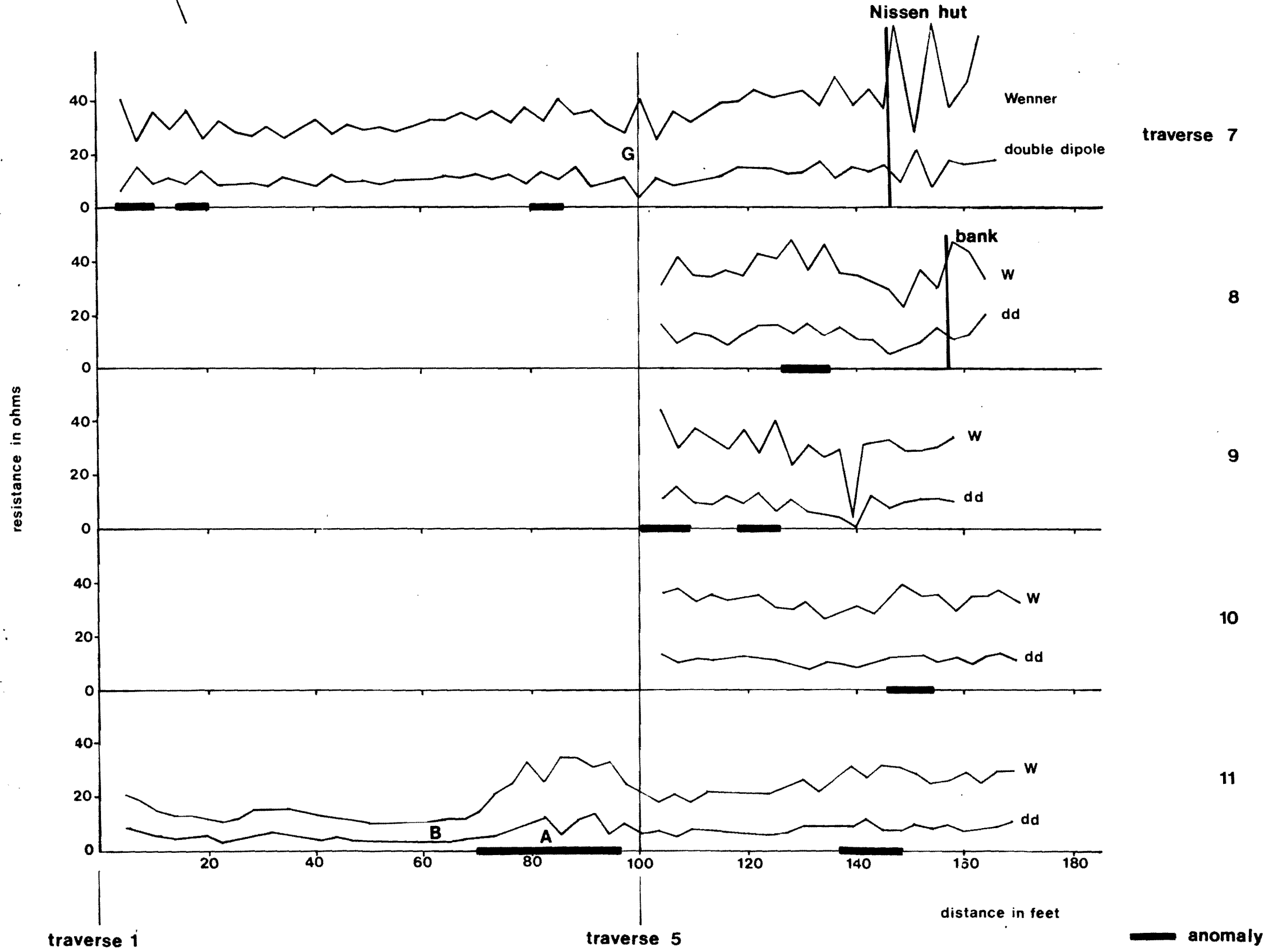
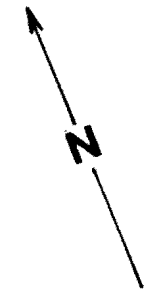
Poundbury Resistivity Survey

Plot of area survey



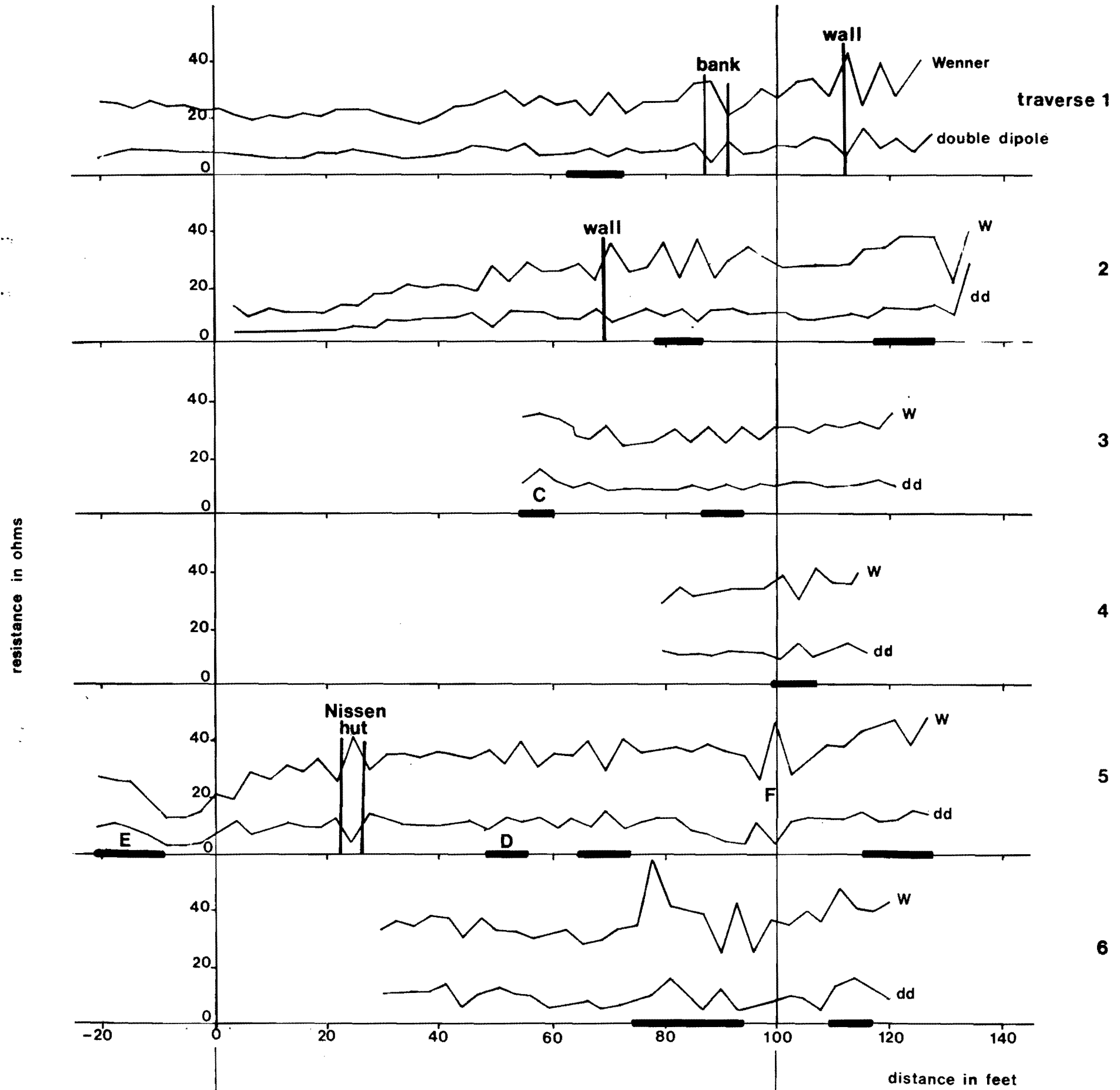
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Poundbury Resistivity Survey





Poundbury Resistivity Survey



traverse 11

traverse 7

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anomaly

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