

A Potentiometric Survey in Cae Tynewydd Capel Iwan, Carmarthenshire

Tim Southern 2021

In May 2021 an area of Cae Tynewydd was surveyed using the GST Survey Frame combined with a Geoscan RM 15 set of electronics. A grid size of 20 metres by 20 metres was used with 2 reading per metre in both directions and a 1 mA current setting with parallel walking.

Figure 1 shows the outline of the 11 grids surveyed in relation to the field boundaries. This area was chosen as it is due south of a visible ditch in the field.

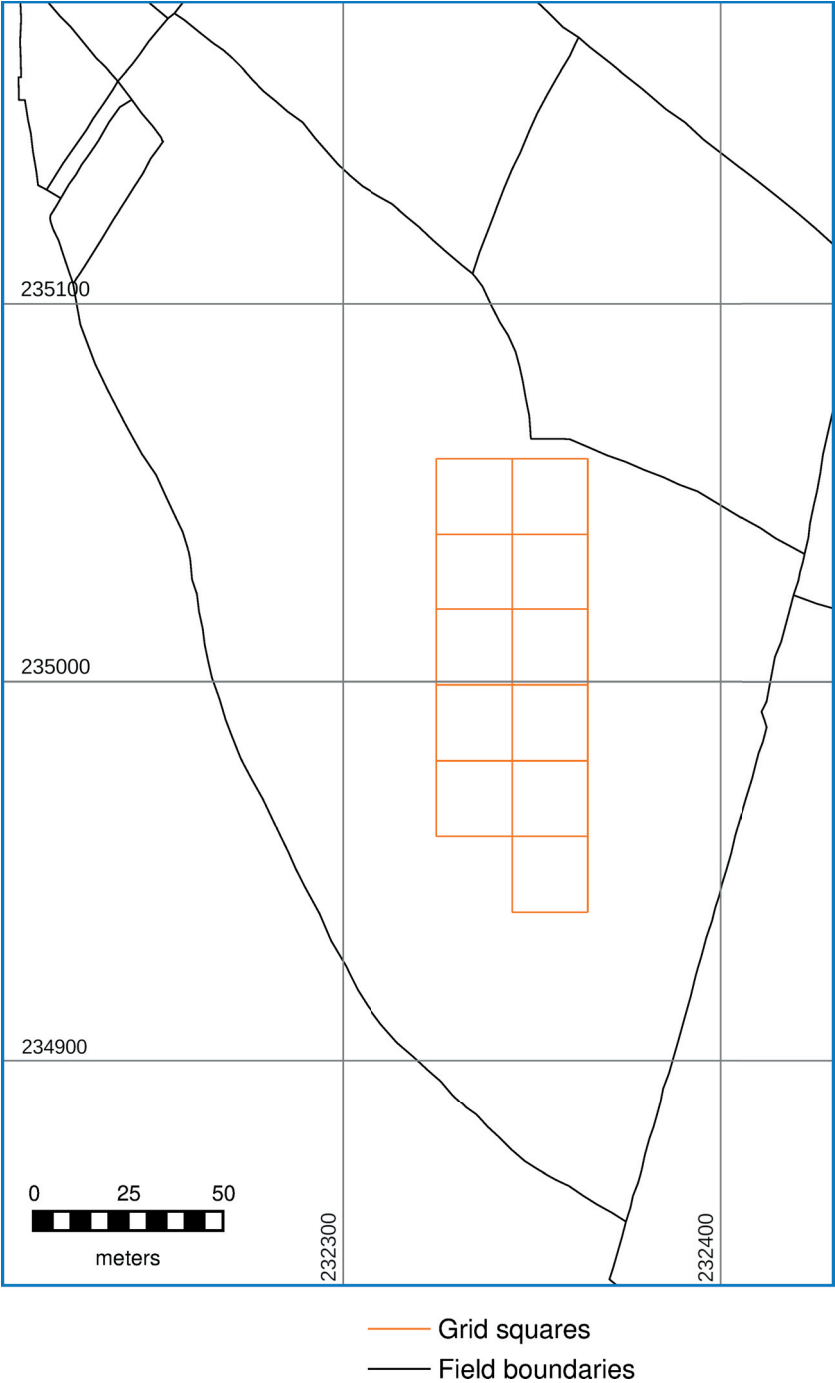
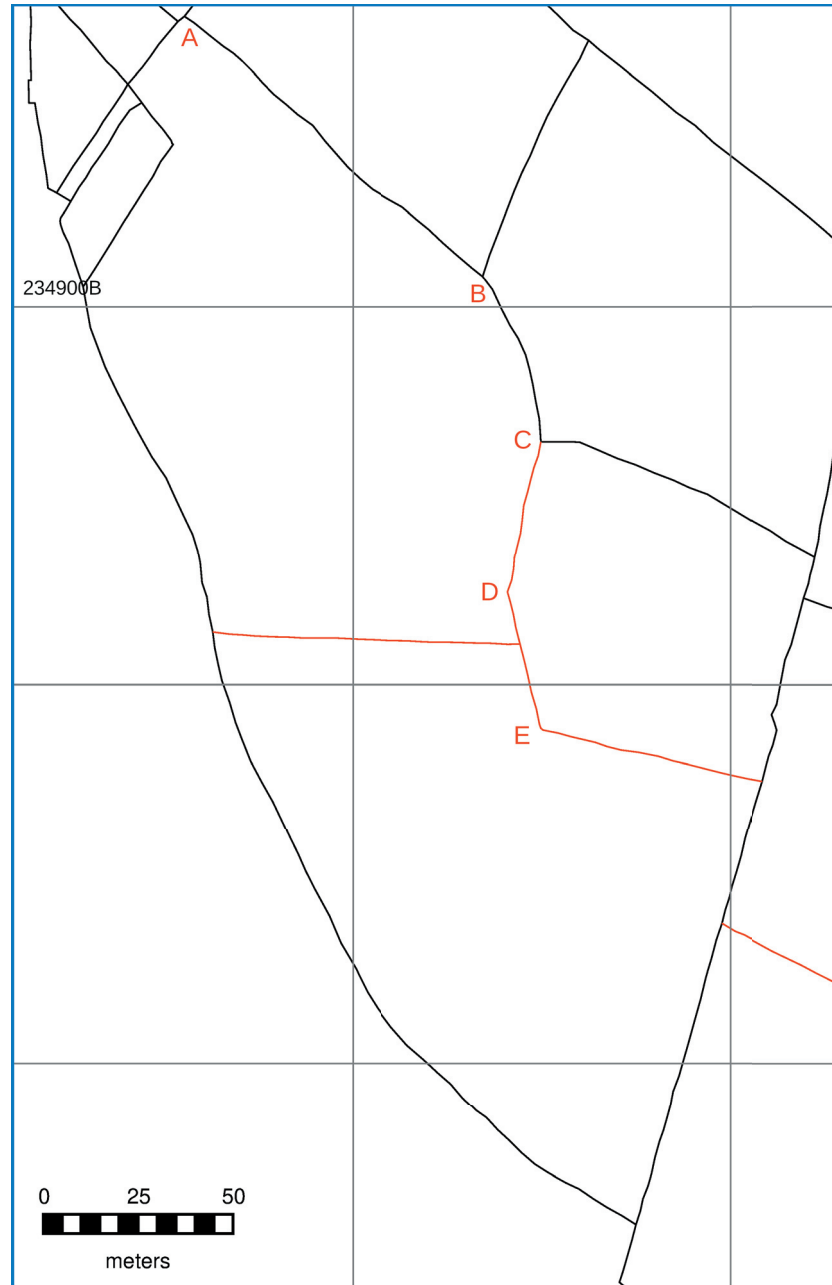


Figure 1, Field outline and position of survey grids

This figure below shows both the existing and the mid-20th century grubbed out field boundaries.

From the point labelled A, an existing ditch runs along the south side of this field boundary, through B and ends just before C. The 1946 aerial photographs show that this ditch continues to somewhere in the proximity of point D where there was a gateway giving access to the fields to the west.



— Removed field boundaries

— Field boundaries

Figure 2, The existing and grubbed out field boundaries.

This figure includes both 2017 and 2021 survey data along with the visible path of the ditch.

Both surveys are displaying black as low. The ditch is clearly visible from the eastern corner of Ty Newydd's garden, through the 2017 data block into the visible ditch and on in to the 2021 data.

Although the ditch is clearly visible entering grid 1, its path through the 2021 survey is not definitive, although it does appear to exit grid 11 in the general direction of the south corner of the field where, what appears to be a ditch breached by a relatively modern farm gate exists. Additional grids to both the east and the south are needed to confirm this.

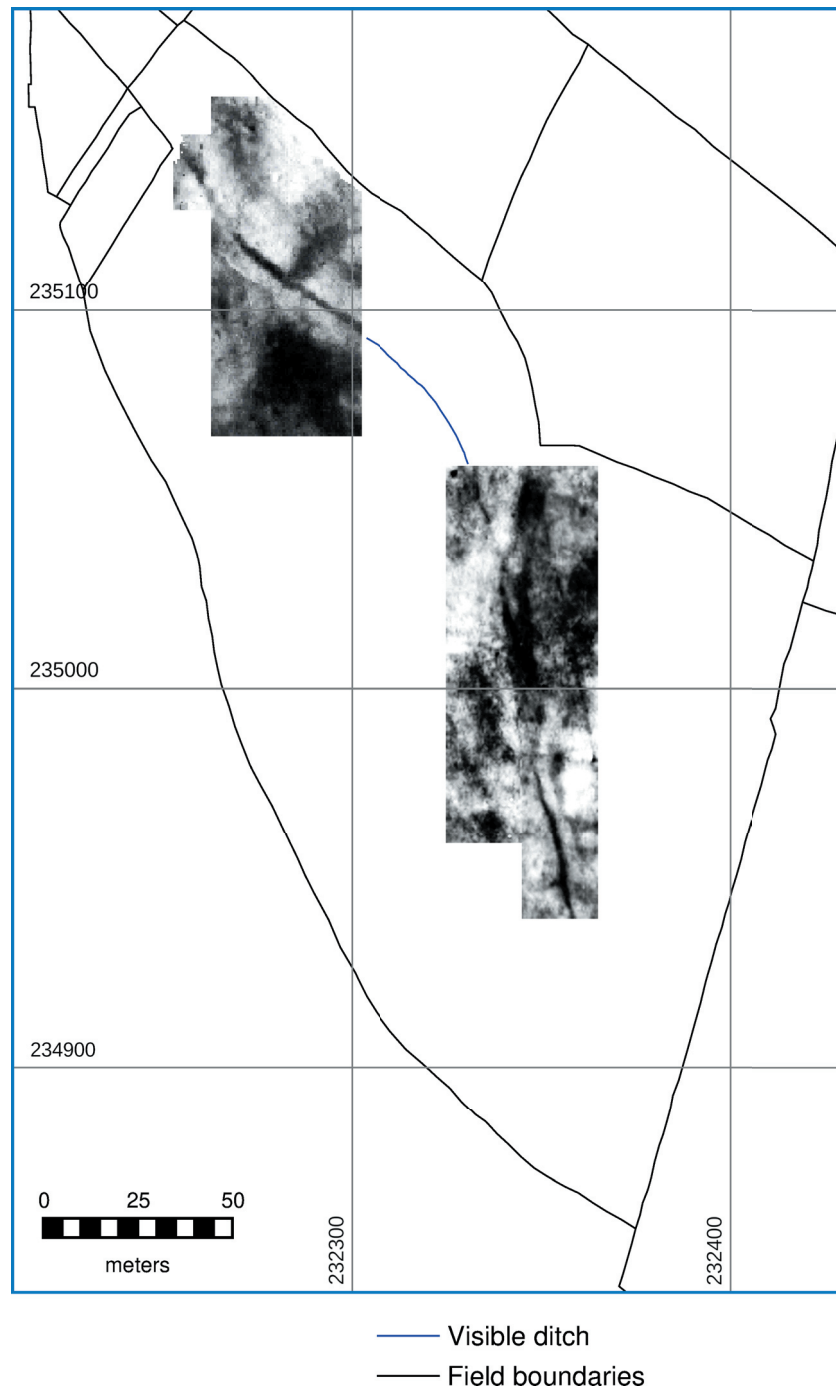


Figure 3, 2017 and 2021 survey data with the path of the visible ditch.

Figure 4 shows that the large areas of low response in grids 2, 3 and grids 6 through 8 are, in part, associated with the ditches associated with the grubbed out field boundaries.

Since the ditch of interest, entering grid 1 appears to merge with a grubbed out field boundary between point D and Point E on figure 2.

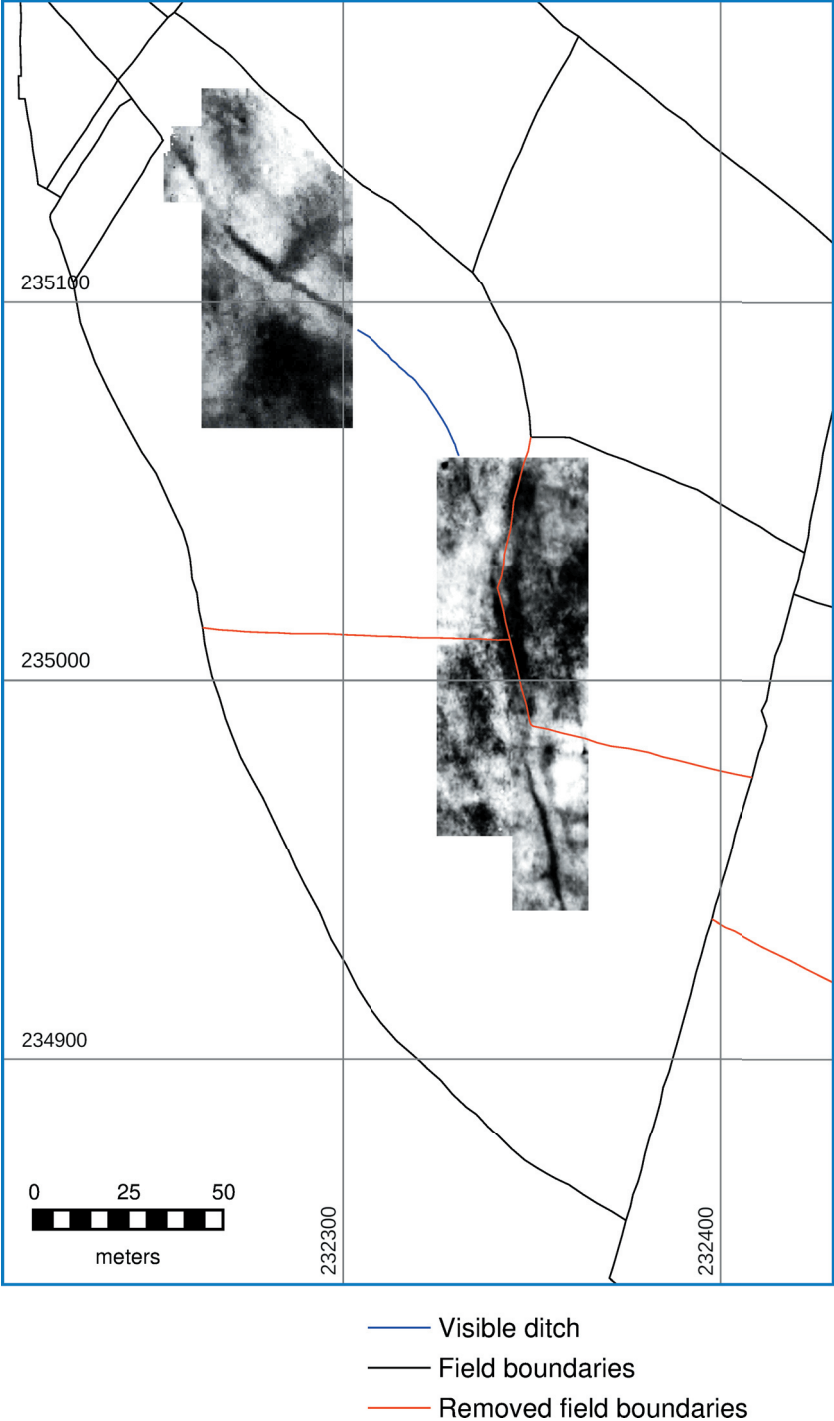


Figure 4, The grubbed out boundaries overlayed on the survey data.

Other Archaeology

The complete survey data is shown in figure 6 with figures 7 through 10 showing subsets of the data which help in identifying some of the underlying archaeology.

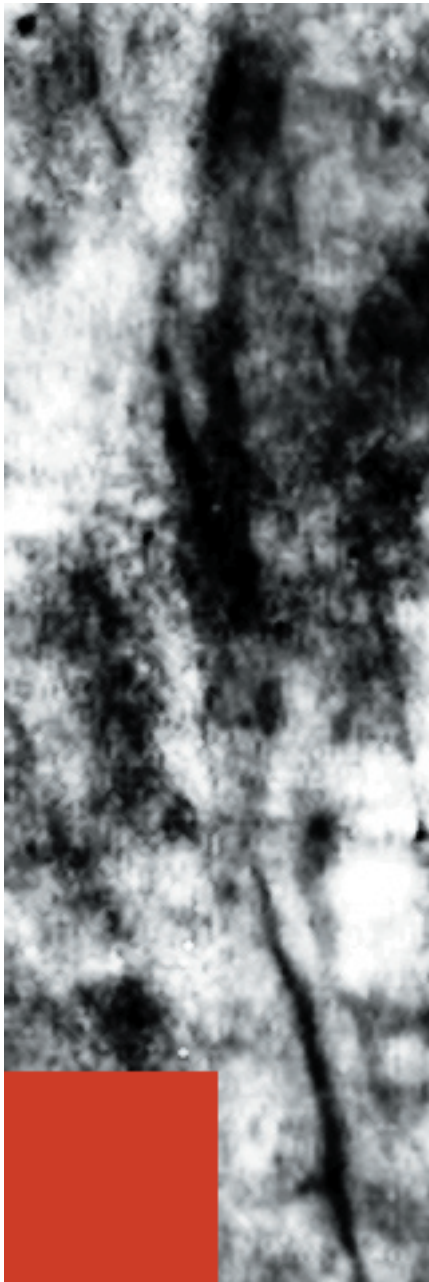


Figure 6, 2021 Survey data

The overall impression of the survey data is that there are numerous layers of archaeology all laying on top of one another and, therefore, no attempt will be made to identify all of the archaeology present.

That said there are areas where circular features of various sizes appear to exist, such as in grids 2 and 3, figure 7 below, grids 6 and 7, figure 8 below and in grids 9 and 10 below, figure 9.

In both figures 7 and figure 9, these circular features appear to be interlinked circles from ditches that suggest a round structure that was demolished and rebuilt on a slightly different footprint at least 3 times.

There also appears to be in the eastern edge of grids 4 and 5, figure 10, mid way down a robber trench from a rectilinear structure with either a narrow passage or corridor. These robber trenches are very close to where a trench carrying the cable from the nearby wind turbine crosses the survey area.

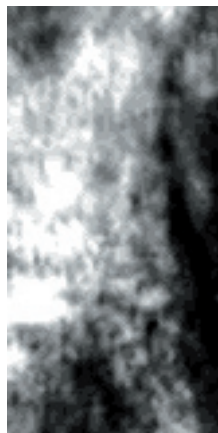


Figure 7

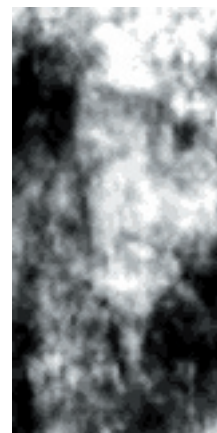


Figure 8



Figure 9

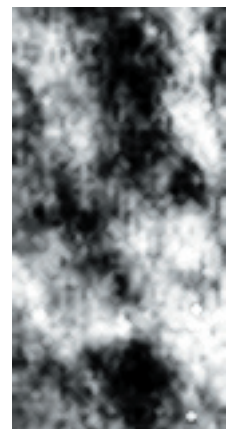


Figure 10

Appendix

Aerial photographs 1946 106 GUK-1424 frames 4263 and 4264

Survey Data information

Grid Number	Survey Data File nm
1	05_052_cor
2	14_052_cor
3	05_053_cor
4	06_052_cor
5	06_053_cor
6	19_052_cor
7	16_052_cor
8	07_052_cor
9	12_052_cor
10	14_053_cor
11	17_052_cor