

**ABINGDON ARCHAEOLOGICAL GEOPHYSICS**  
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Short Report form no. 2022-03

Name of site: Hook Norton - St Peter's Church.

County: Oxfordshire District: Cherwell Parish: Hook Norton

NGR grid reference Centred on SP35513314

Nearest postcode. OX15 5PJ

Start date: 6 April 2022

End date: 6 April 2022

Report date: 10 April 2022

This is in our short report format so others can use the information. Details of geophysics techniques can be found elsewhere such as in our book "Archaeology- In the Service of Property Development?" ([archgeophys.weebly.com](http://archgeophys.weebly.com))

## **Survey Details**

Topography; fairly level, with mound to north side of survey area and the garden to the east is some 1.5m lower than the level of the churchyard..

Land use at the time of survey; short grass graveyard with headstones cleared away and put around the edges.

Geology at site Marlstone Rock Formation - Ferruginous Limestone And Ironstone. Sedimentary Bedrock

## **Known archaeological sites / monuments covered by the survey**

Oxfordshire Historic Environment Record no.5999 has details of this medieval church and archaeological investigations. It is of note that work in 2018 alongside the exterior of the south aisle west of the south door, did not locate any human remains. More significant drainage works are mentioned as having taken place in 2012.

The occupier of the property to the east of the graveyard has advised us that when the boundary retaining wall between the properties partially collapsed, there were many human bones in the churchyard soil.

## **Archaeological sites / monument types detected by the survey**

Area of high resistance readings indicating more stone in the soil there.

Surveyor Abingdon Archaeological Geophysics, Roger Ainslie, Sally Ainslie

Name of client; Hook Norton Local History group

Purpose of survey:

To ascertain if magnetometry and earth resistance could to reveal whether there had been a chapel to the east of the north transept of the church.

Location of:

- a) Primary archive, i.e. raw data, electronic archive etc Abingdon Archaeological Geophysics. Also with client.
- b) Full report: ditto

## **Technical Details**

Type of survey

A Magnetometer

Area surveyed; 0.28ha. Traverse separation; 1 metre. Reading / sample interval: 8 per metre

Type, make and model of instrumentation: Bartington Grad 601/2

B Earth Resistance

Area surveyed, if applicable 0.02ha at 3 depths. Traverse separation; 0.5 metre. Reading / sample interval: 2 per metre

Type, make and model of instrumentation: TR Systems/CIA resistance meter.Mk2 Twin probe array, 0.5, 0.75 and 1m mobile probe separation. Remote probe separation 0.5 metres.

Additional remarks

30 metre grids for magnetometry and 20 metre for earth resistance.. First line start NW corner going east zig zag. First earth resistance reading NW corner at 0.5m probe spacing 61.05 ohms. Grids set out using a Trimble Pro XR differential GPS, probably accurate to 0.3m. Grids aligned on national grid.

## **Results (refer to plans below)**

### **Magnetometry**

- 1 line of low readings.  
These are usually paths, walls or similar.
- 2 Small patch of high and low readings.  
Probably pieces of steel or similar.
- 3 Area of high magnetic readings.  
Probably interference caused by steel in the area. The mesh over the window could be one cause

### **Earth resistance**

- 4 Small area of high readings.  
These are on all 3 assumed depths. It may be a rubble filled pit such as a soak-away or well.
- 5 linear slightly high resistance feature.  
This could be a drain run, which influences the interpretation of 4 above.
- 6 Slight high resistance line.  
This would normally put down as a path or area where ground had been compressed. There would appear to be nowhere for the northern end of this to go to, as it goes into the area of a mound of earth. It could be a collapsed wall or belong to a different phase altogether.
- 7 Edge with lower resistance area to the north.  
This has some straight sides, which may indicate that they are not geological in origin. It may just be a coincidence but it could indicate that some earth removal may have taken place or the high resistance areas overlie it.
- 8 area of high resistance along sides of church.  
These have been caused by a French drain filled with rubble and paving or old grave stones under the surface adjoining the north transept.
- 9 Patch of low readings as 2 above.  
That this is still visible in the 1.0m mobile probe separation survey indicates that it may not be a shallow feature. It also appears to be rectangular.
- 10 Rectilinear area of higher earth resistance.  
This is visible on all 3 plots. This could be a high resistance area at shallow depth reducing rainwater penetration to the soil at more depth. It could also be that this area contains more stone than other areas to its north.
- 11 Probably the drain as 8 above.  
This appears to be going eastwards beyond the chancel and not towards the possible soak away (2 above). It indicates that these may be different phases of surface water drainage.

## **Conclusions**

Locating remains in a well used churchyard was always going to be challenging. Here we appear to have located a well or soak-away, a possible wall and an approximately rectangular of higher resistance in the area of the predicted chapel.

The higher resistance area may be best checked by ascertaining whether the people who dug the French drain encountered anything. There is a good possibility that any chapel remains have been destroyed by graves and all we are seeing is the area which has more stones than elsewhere.

## **REMINDER**

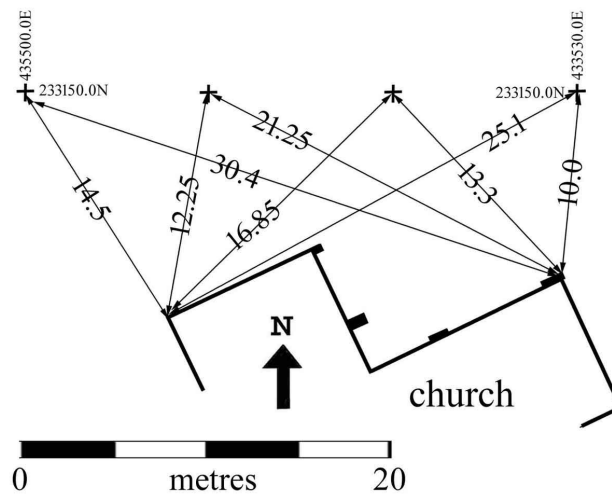
Many features cannot be located by using magnetometry or resistivity. Features including flint scatters and burials may well exist which are not detectable by these survey methods. The failure to locate remains does not mean that they are not there.

## **Acknowledgements**

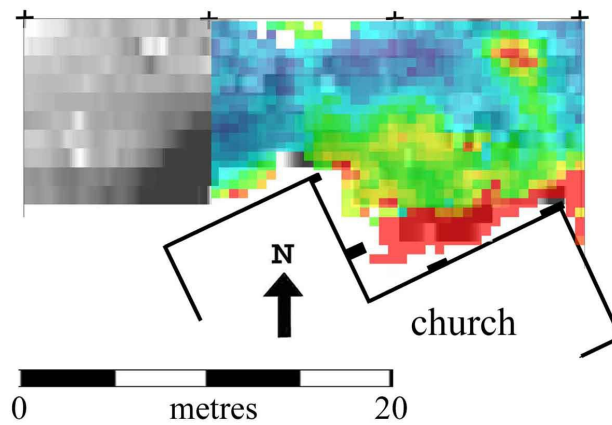
We would like to thank the clients for funding the work and for arranging access.



Location on Google Earth air photo

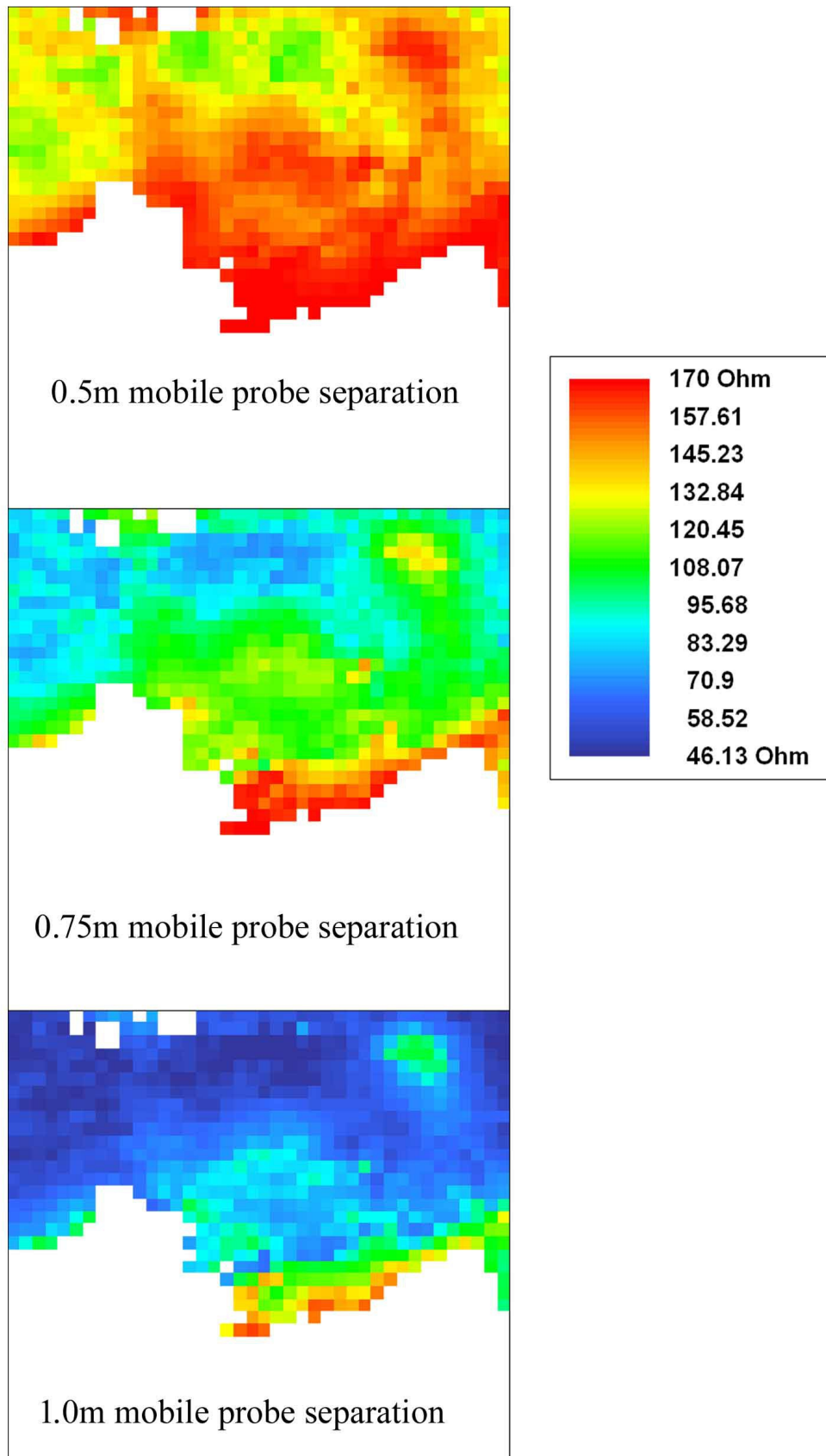


Detail of location

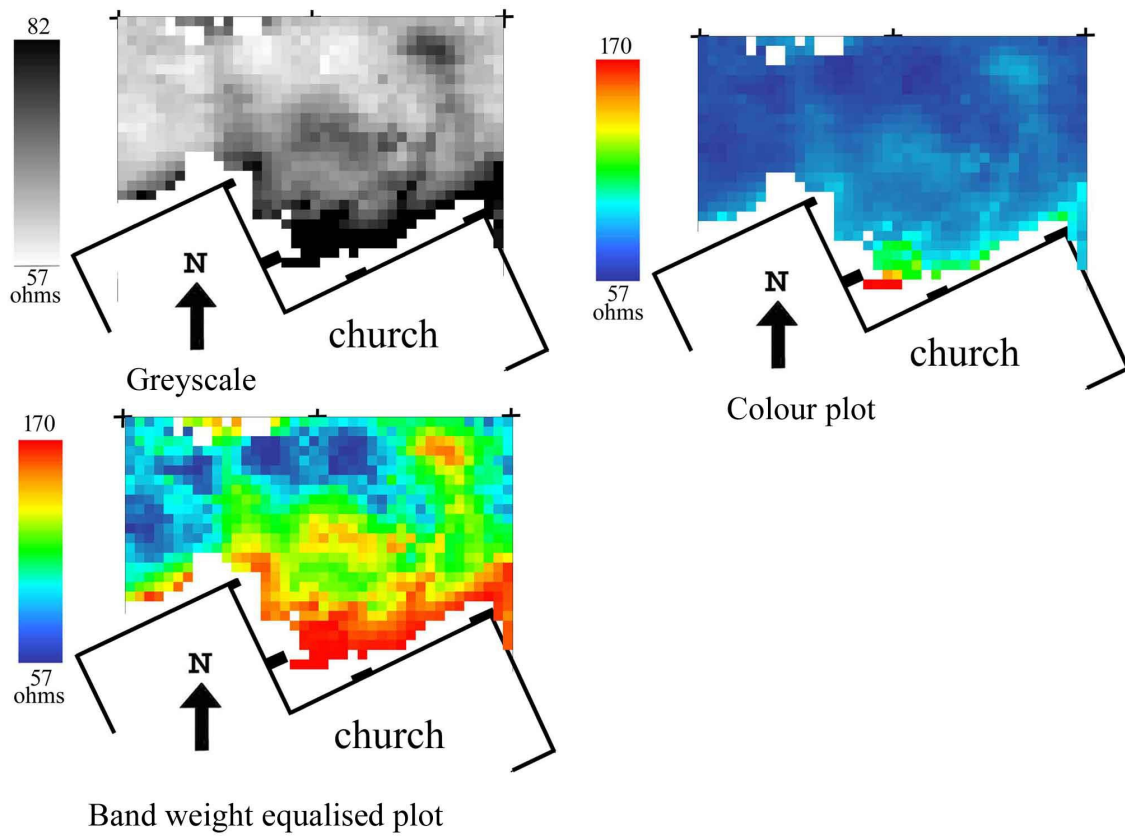


Earth resistance over magnetometry

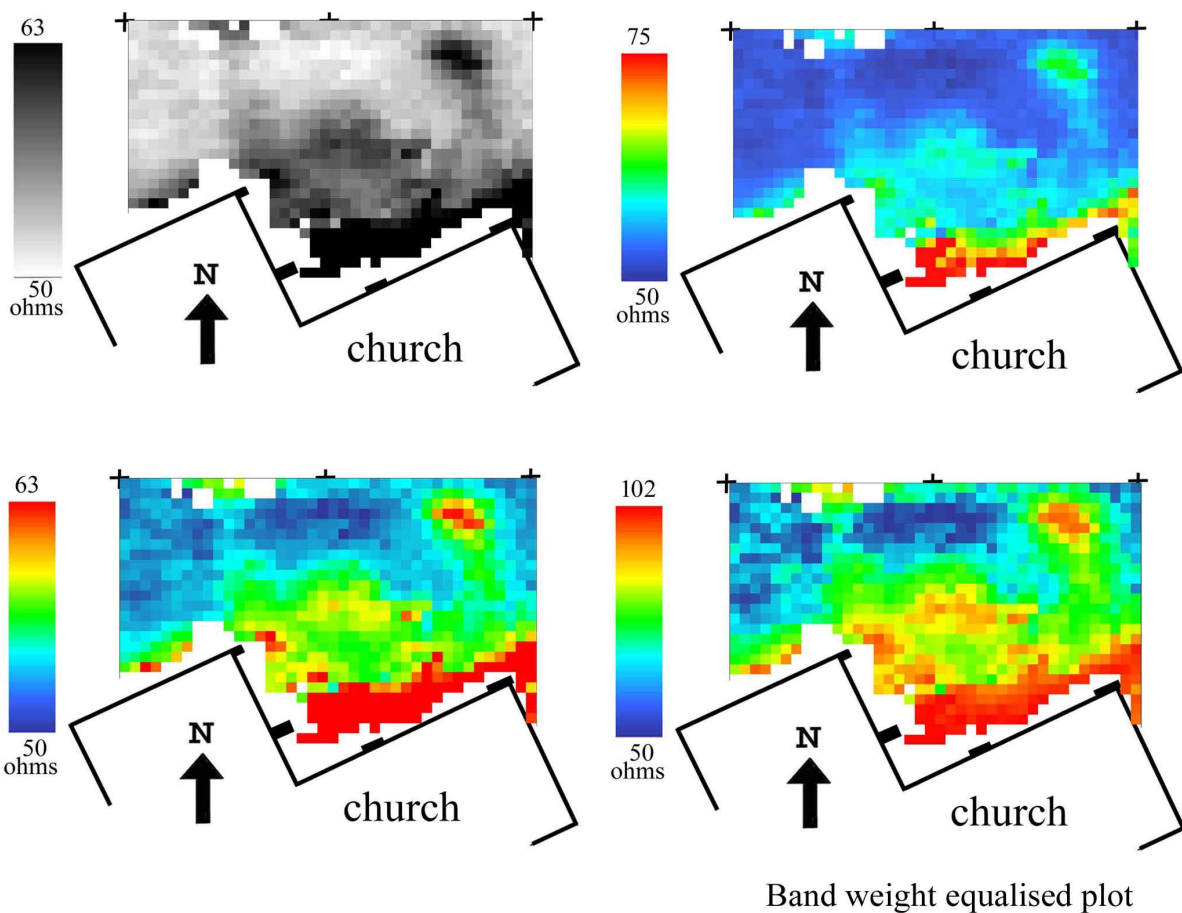
Location



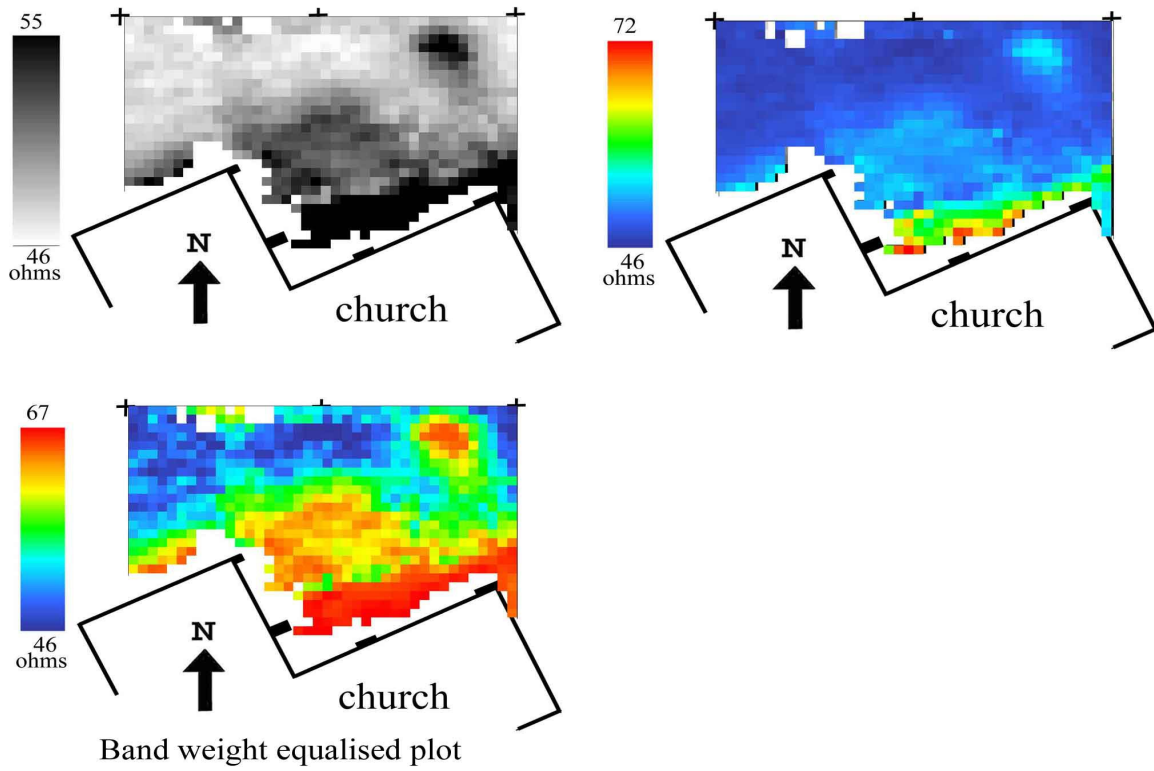
All earth resistance processed on the same scale.



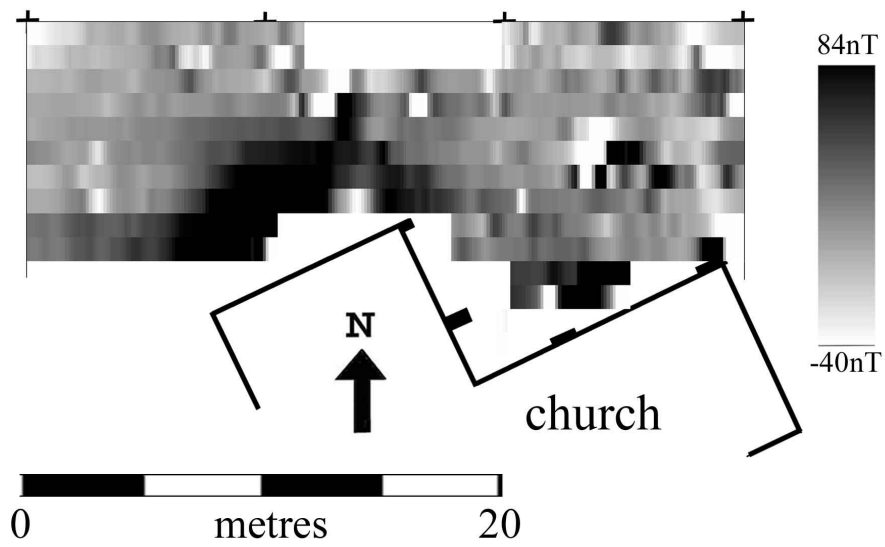
Earth resistance with mobile probes 0.5m apart.



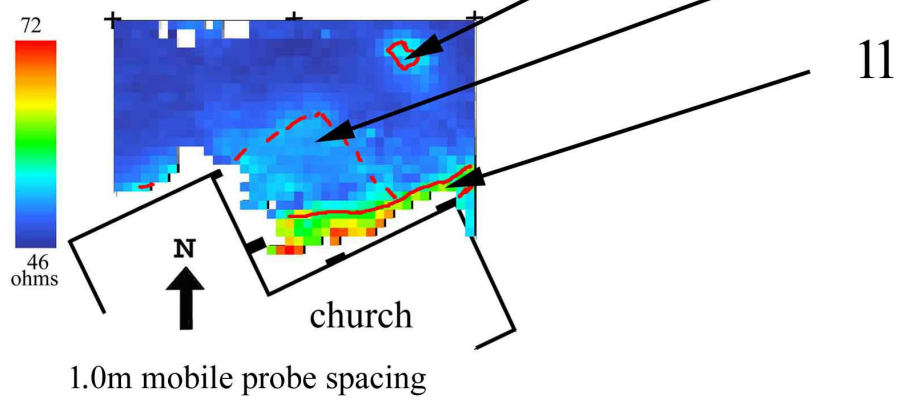
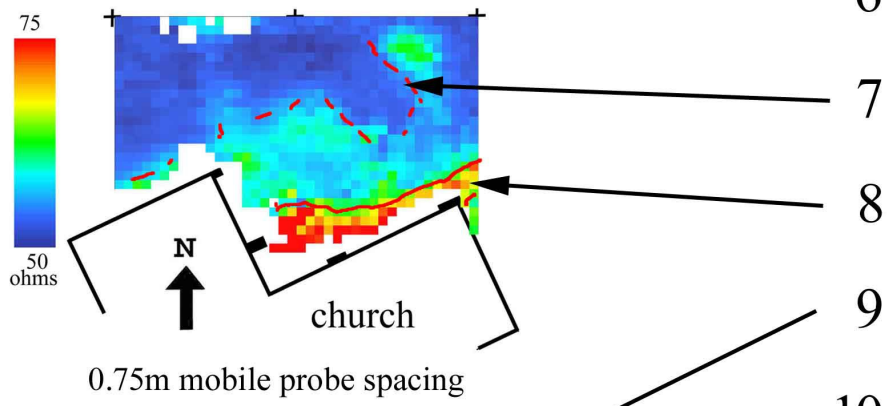
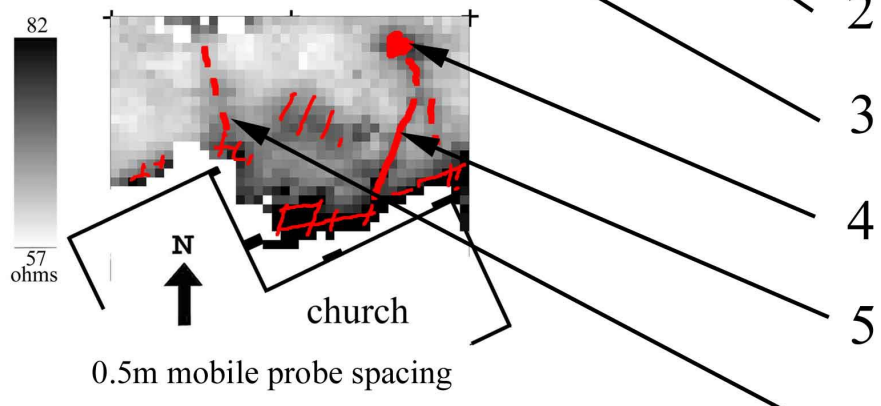
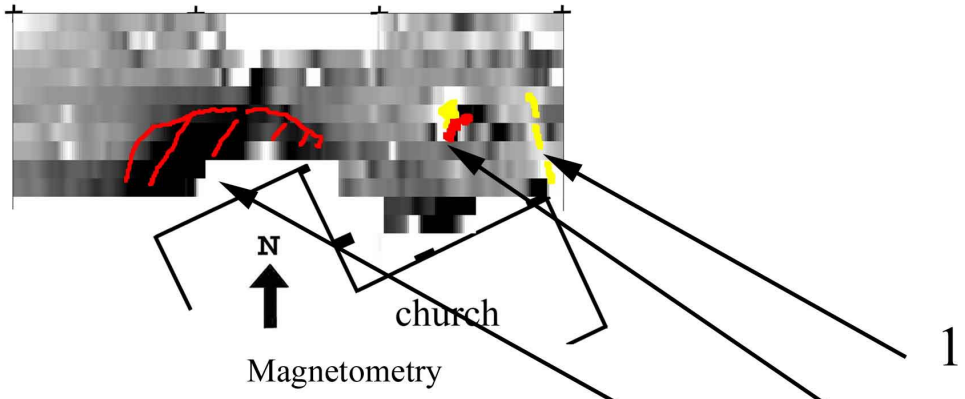
Earth resistance with mobile probes 0.75m apart.



Earth resistance with mobile probes 1.0 m apart.



Magnetometry



Interpretation