An aerial photograph of a rural landscape in Bures St Mary, Suffolk. The image shows a complex network of fields, roads, and a river. The fields are divided into various shapes and sizes, with some appearing as dark patches and others as lighter areas. A river flows through the landscape, winding between the fields. Roads are visible as thin, straight lines crossing the fields. The overall scene is a typical rural landscape from the early 20th century.

# Geophysical Surveys in Bures St Mary, Suffolk, 2017

Tim Dennis



To Sudbury

Bures St Mary

Bures Hamlet

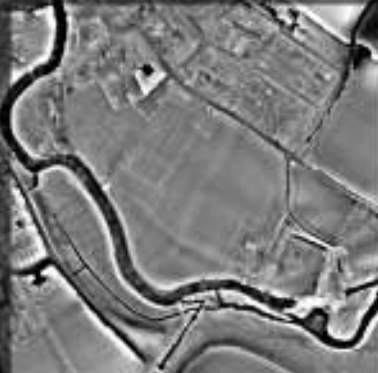
R. Stour

Smallbridge Hall

To Wormingford



2017 survey target areas

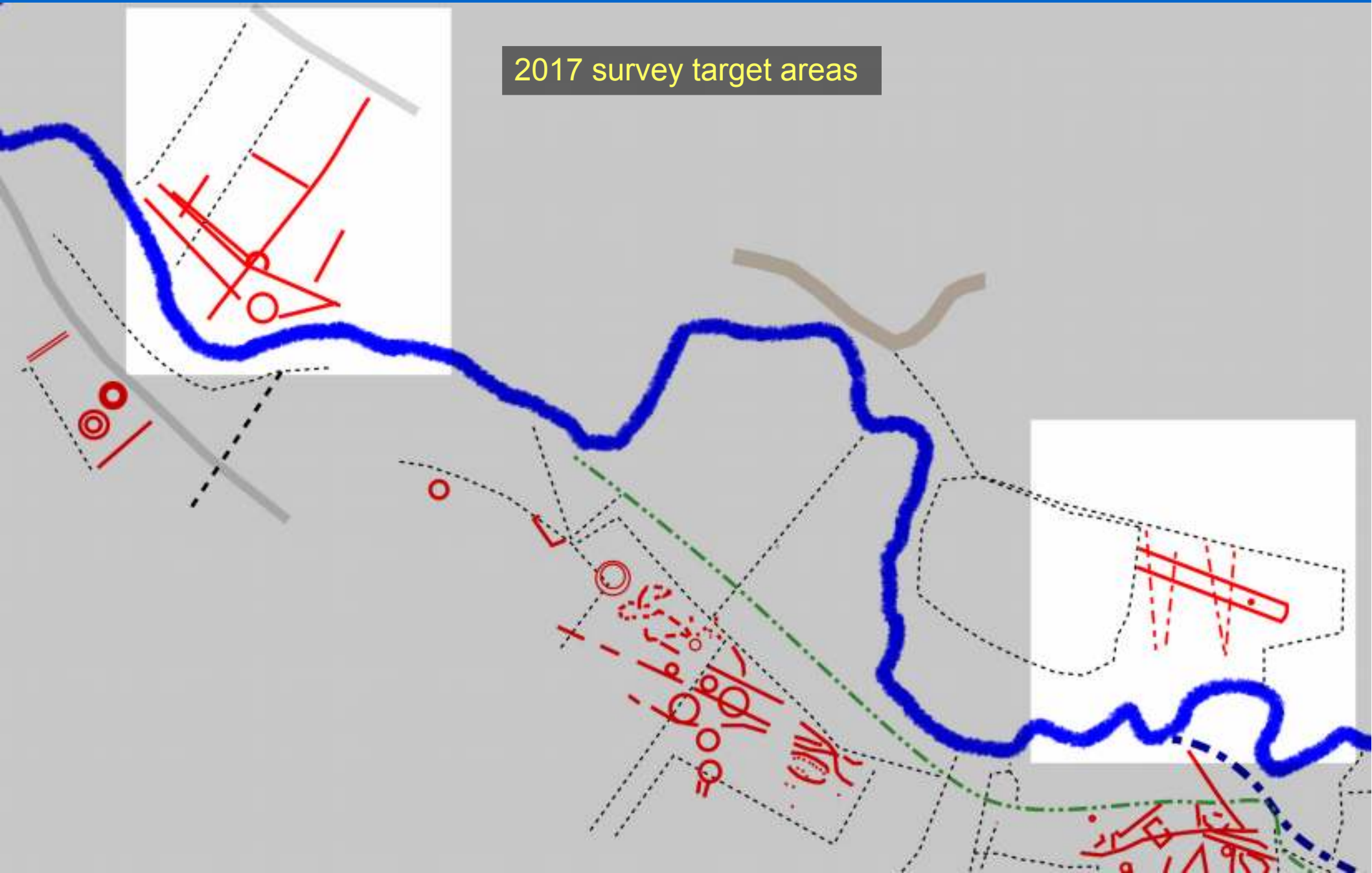


# Cropmarks in the Stour Valley

(Anna Moore)



## 2017 survey target areas

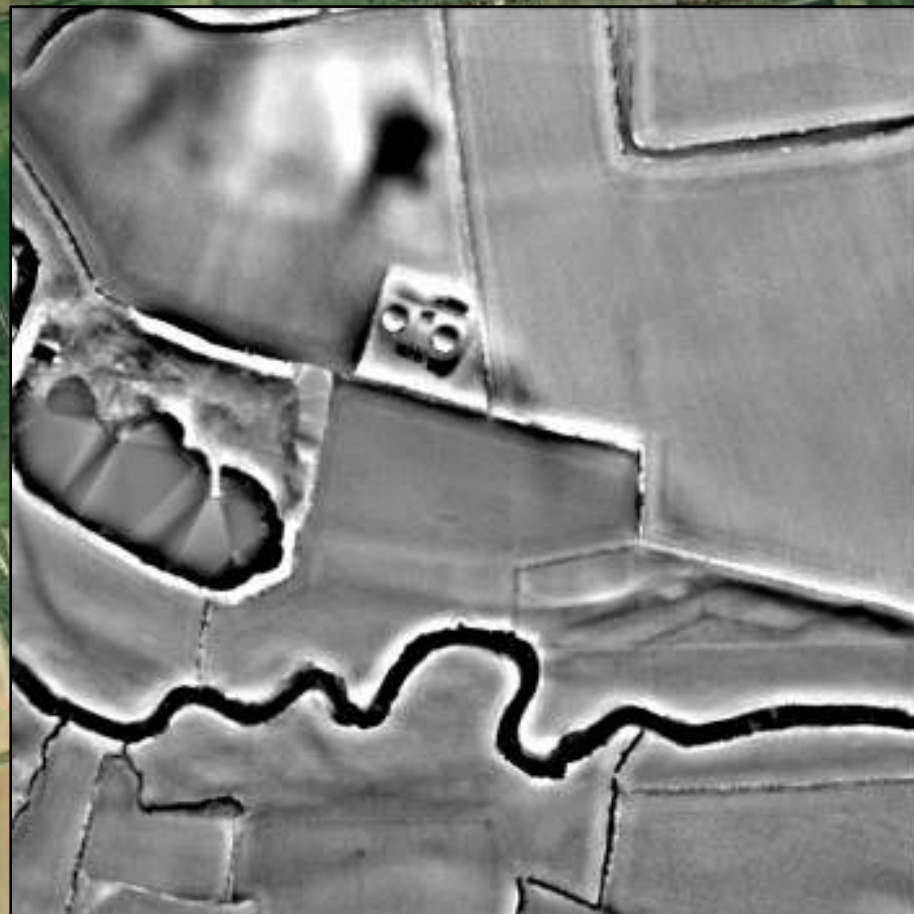






Site 2: Bures Playing Field

Site 1: Bures Cursus



R. Stour

Wormingford Mere

Mount Bures



## Site 1: The Bures Cursus

Sewage treatment plant

Former gravel pit

Outfall

Source: The Cambridge Collection





Outfall pipeline

Water pipeline?



Google Earth, 2009

200 m

591950,  
233330 (OS)

Outfall inspection chamber





Google Earth, 2009  
contrast enhanced

200 m



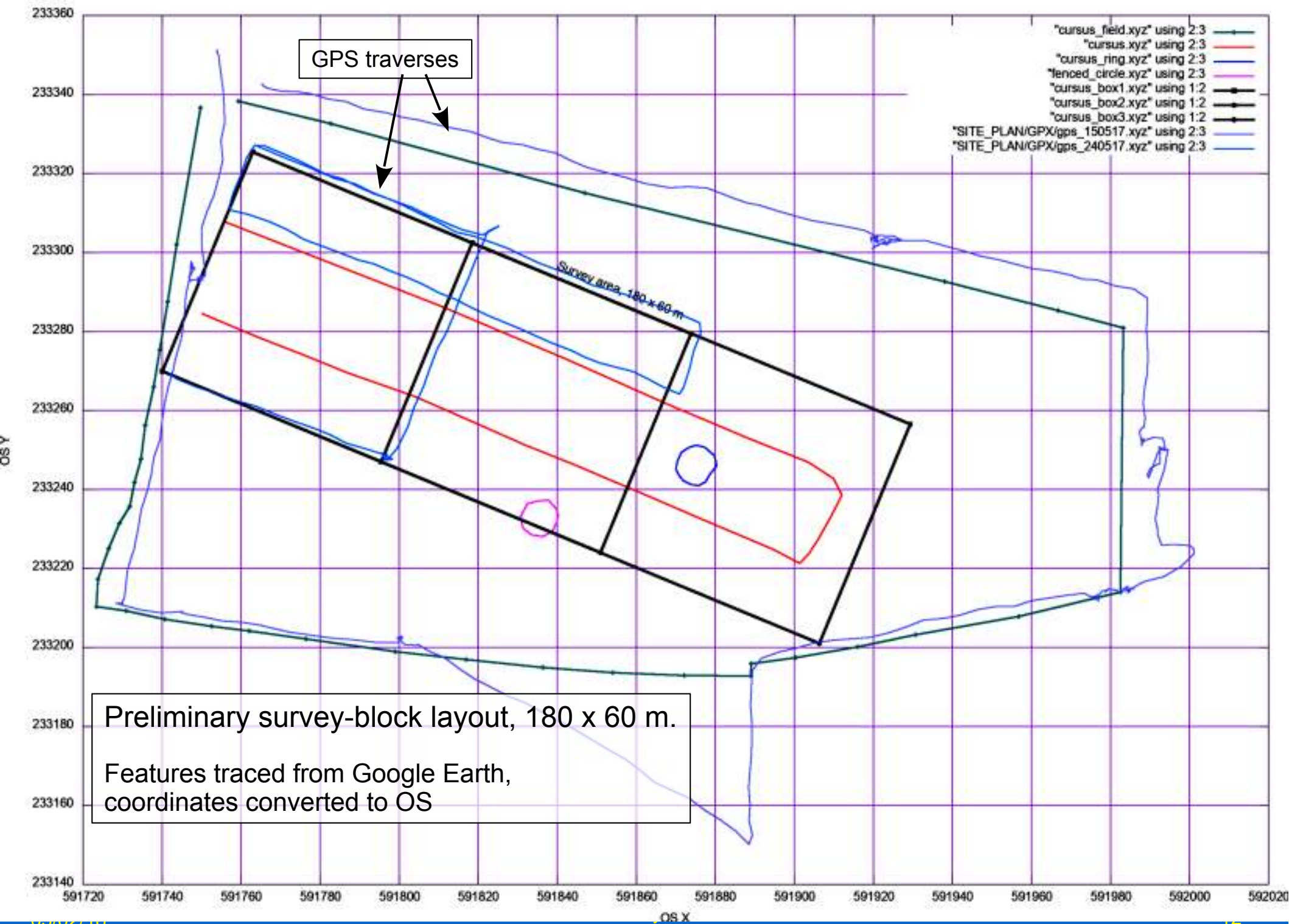


The site, looking southwest  
(15 May 2017)



Looking west





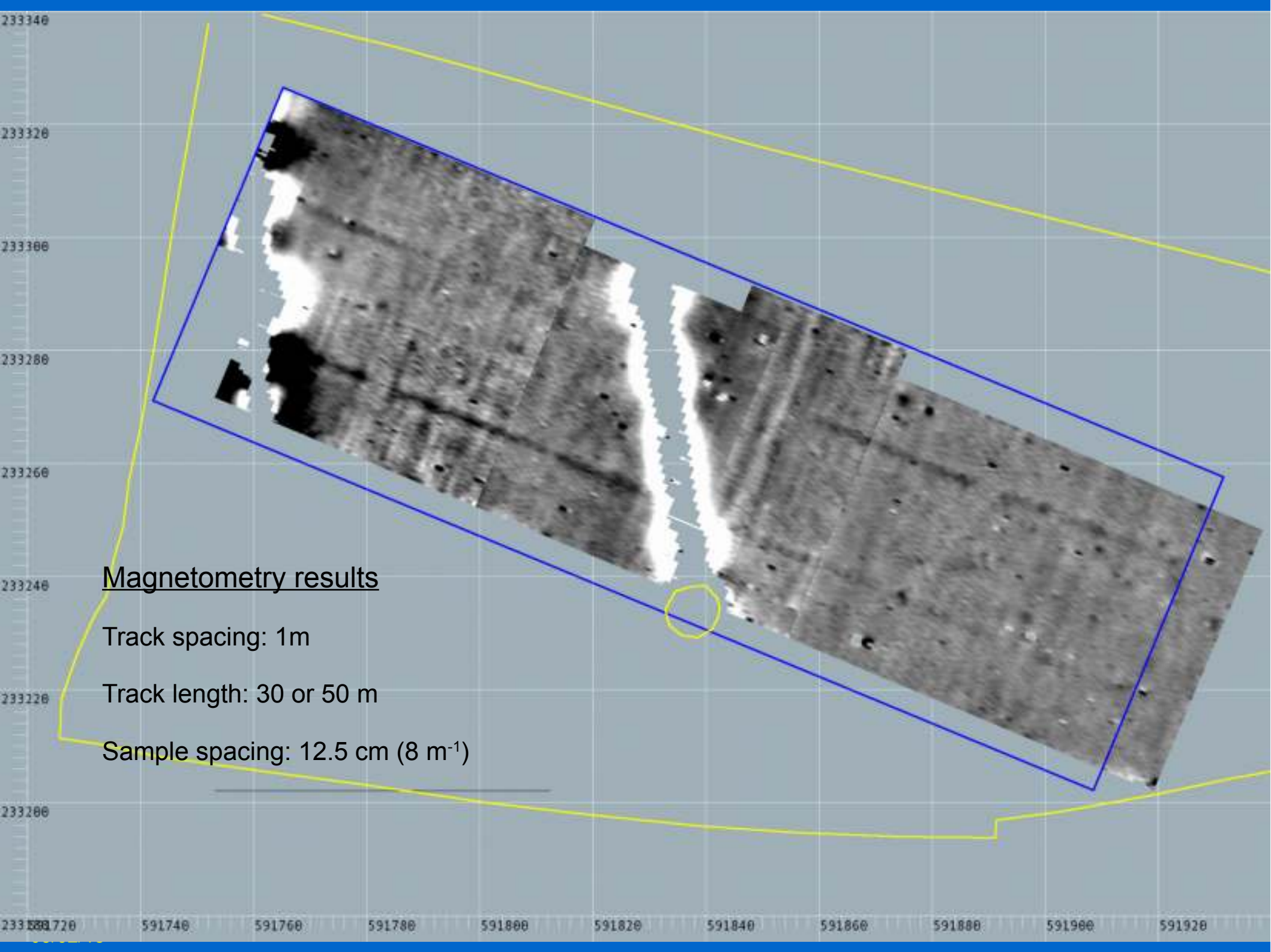


Magnetometer survey in progress

Instrument: Geoscan Research FM256







## Magnetometry results

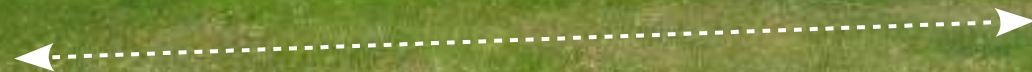
Track spacing: 1m

Track length: 30 or 50 m

Sample spacing: 12.5 cm ( $8 \text{ m}^{-1}$ )



Inspection cover  
enclosure



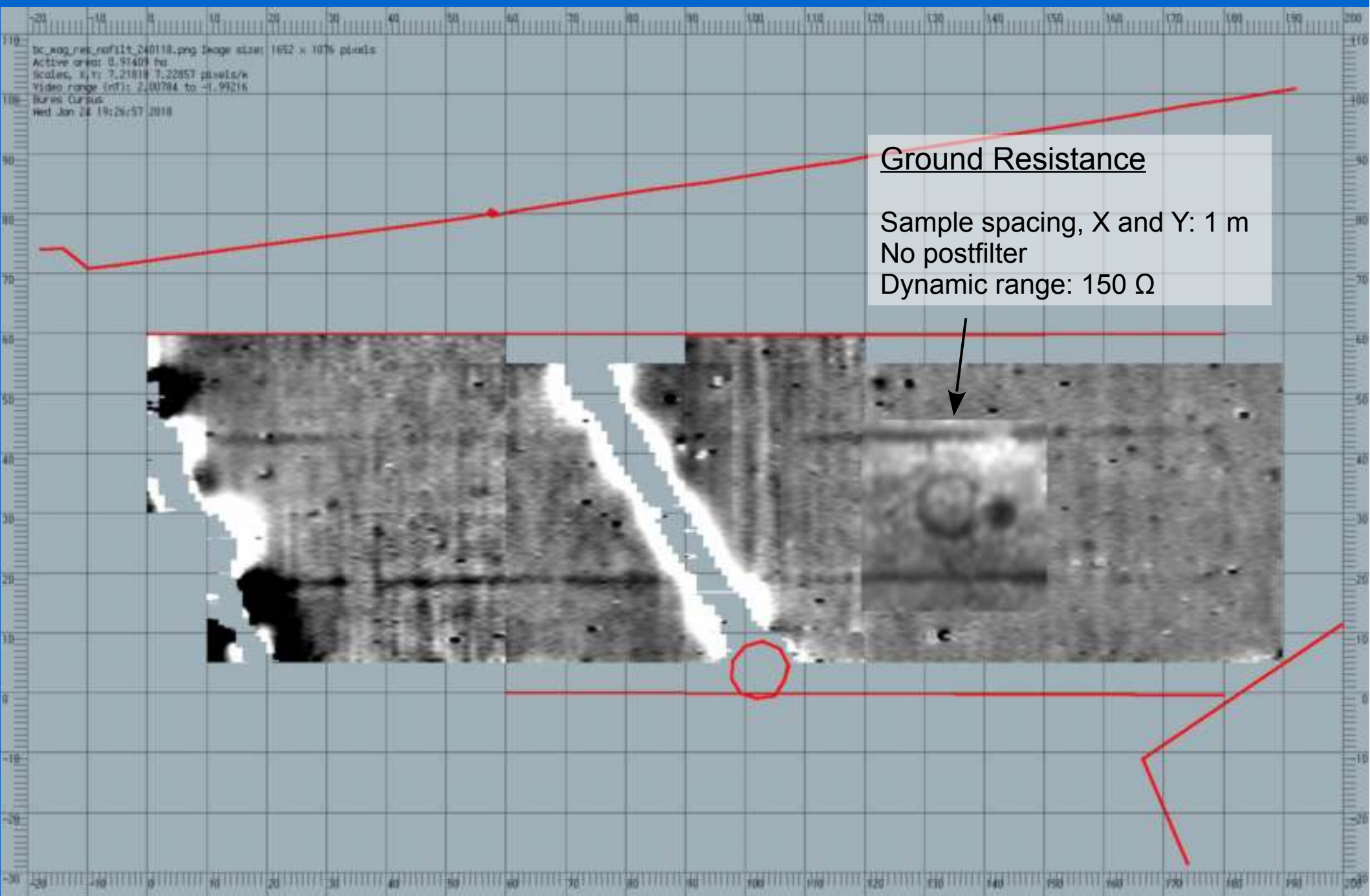
Cursus north side?

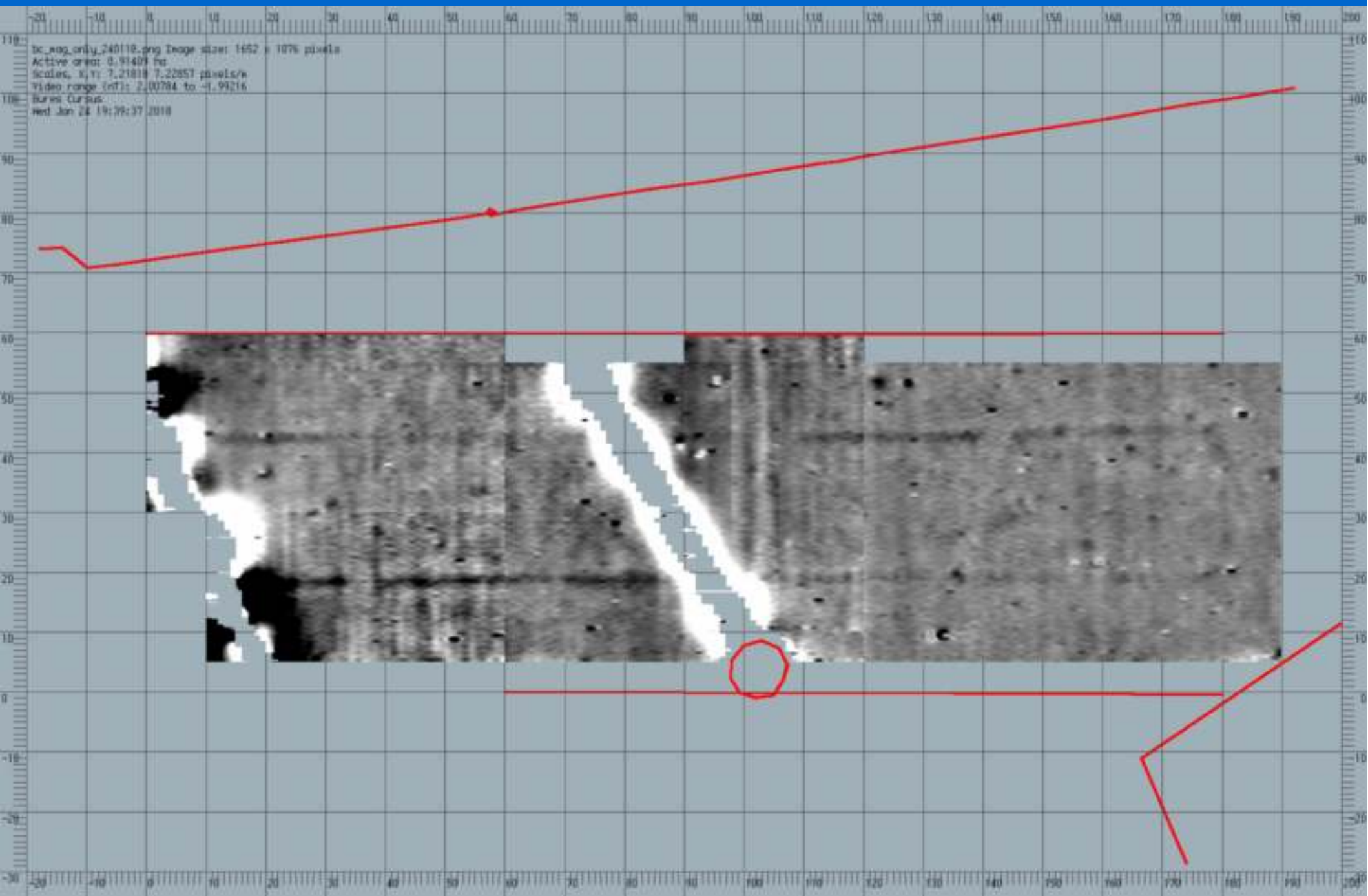






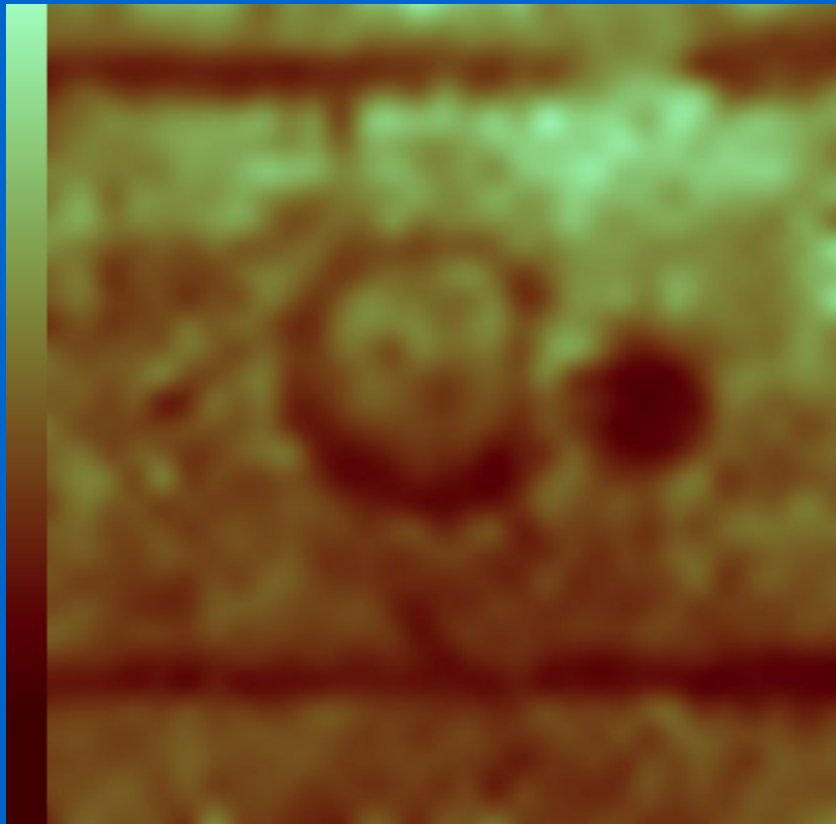




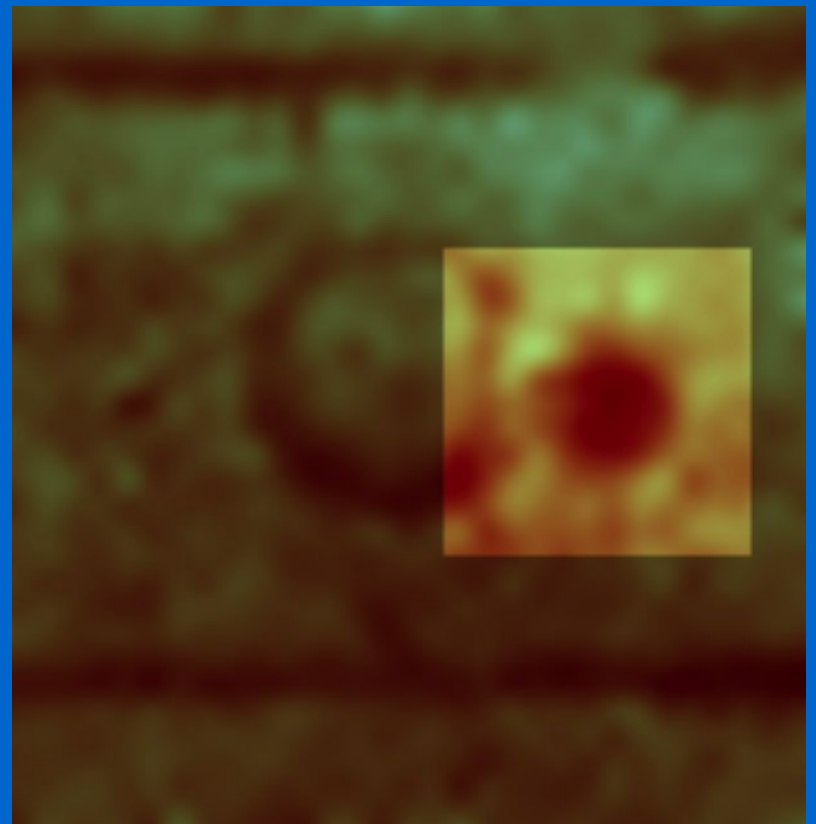




## Ground resistance: false colour rendition

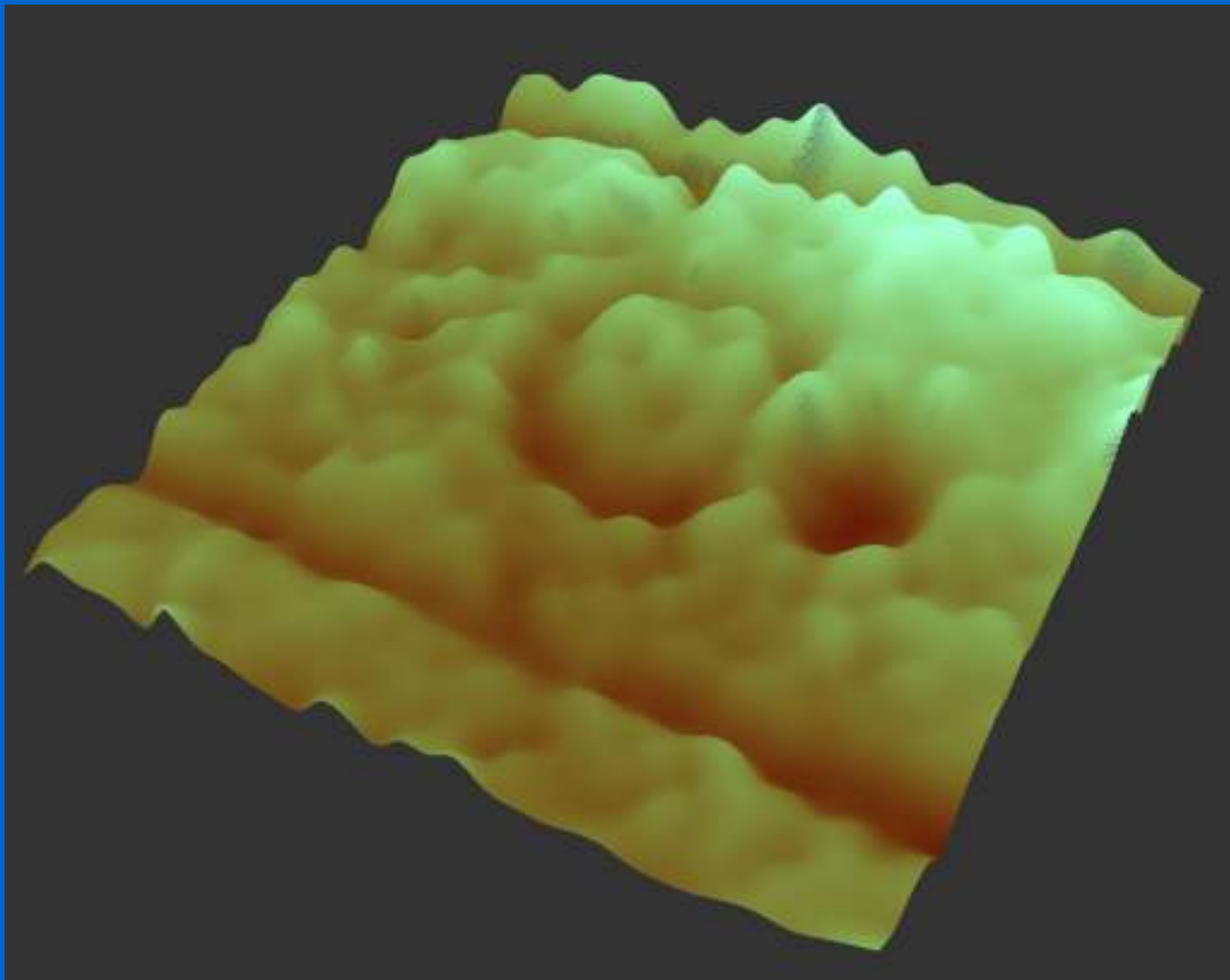


31 x 32 m





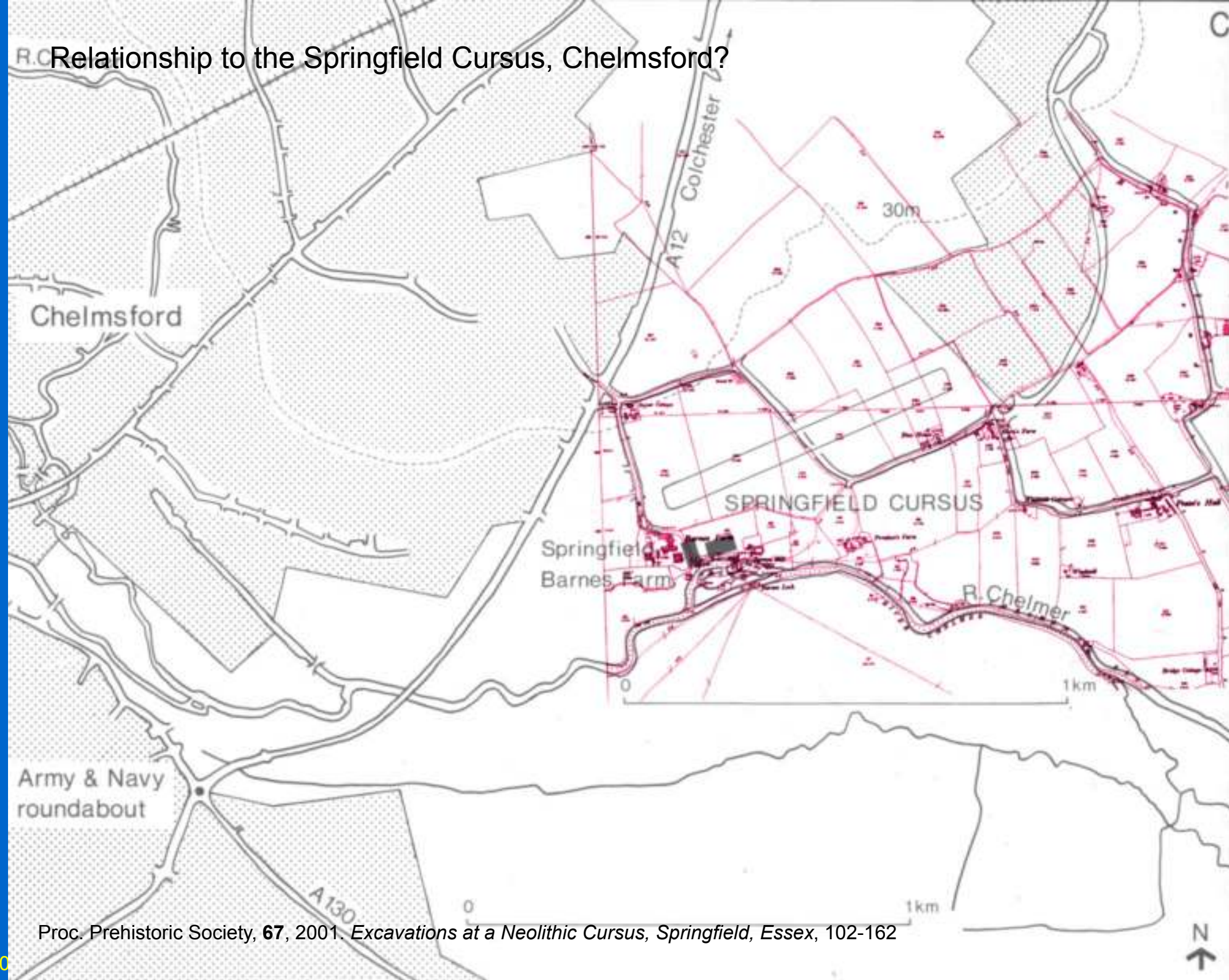
Ground resistance: '3D' with false-colour texture mapping



See also: <https://skfb.ly/6wnV8>

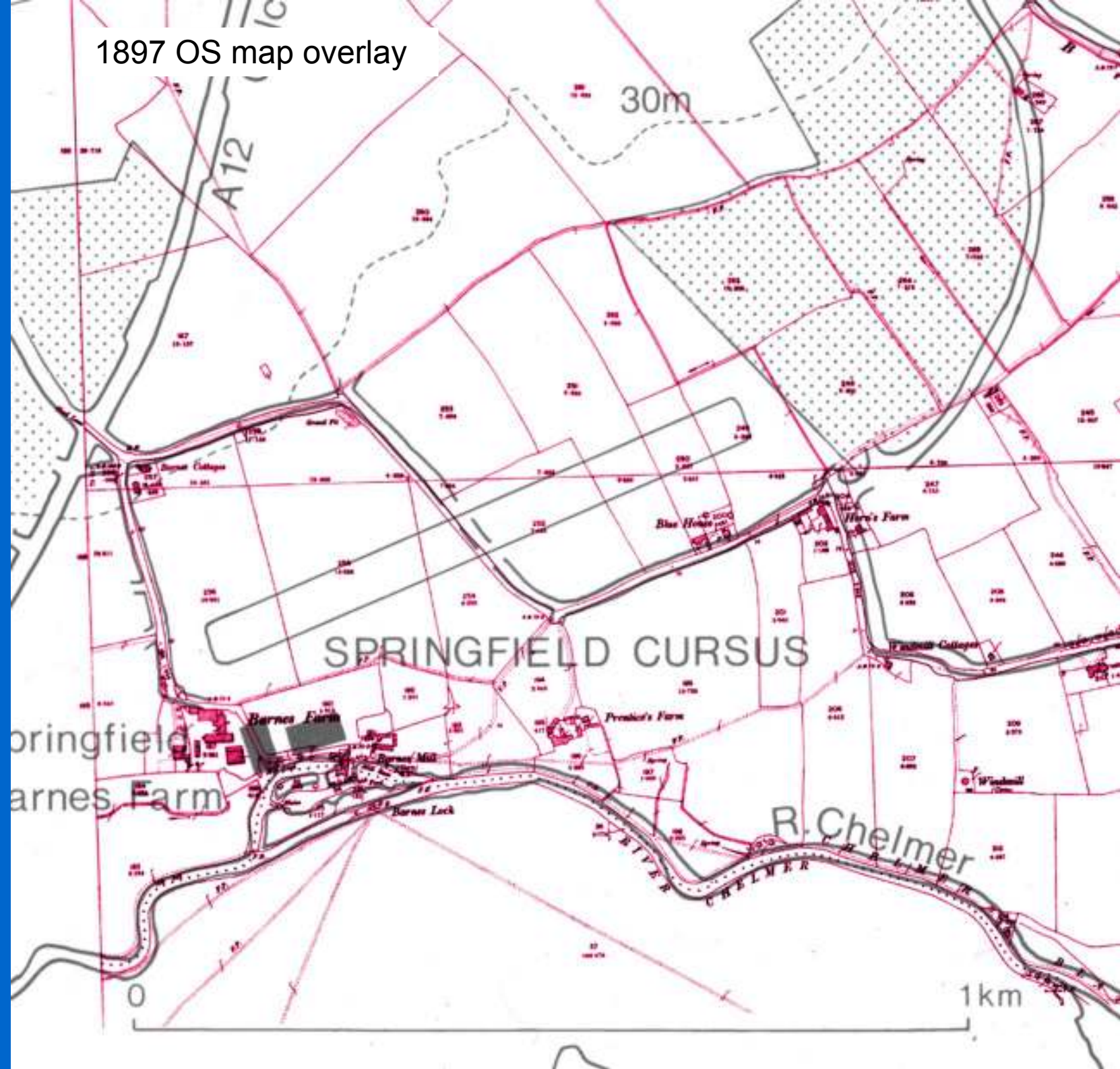


# Relationship to the Springfield Cursus, Chelmsford?





1897 OS map overlay



## Comparisons

### Springfield

Length     ≈690 m  
Width      37-49m

Incomplete ring of post holes close to east end.

Breaks in the sides showing on cropmark images not confirmed by (limited) excavation.

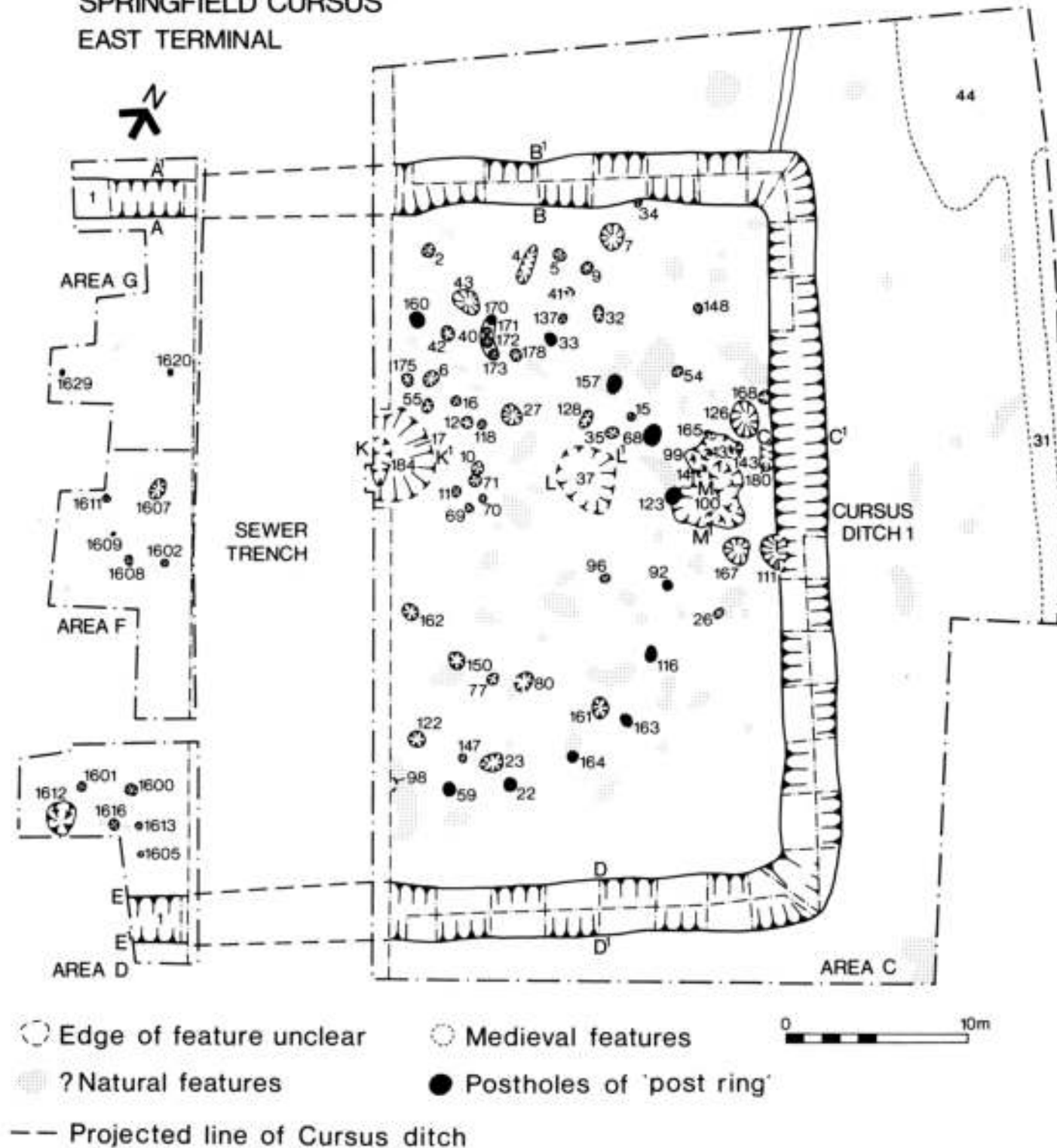
### Bures St Mary

Length     ≈240 m  
Width      24 m (parallel)

Ringditch centred ≈45 m from east end, with adjacent ?pit surrounded by 5 post holes.

Side breaks confirmed by geophysical surveys.

## SPRINGFIELD CURSUS EAST TERMINAL







Site 2: Bures Playing Field

Site 1: Bures Cursus

R. Stour

Wormingford Mere

Mount Bures



Site 2: Bures Playing Field







CAG photo archive, Ida McMaster

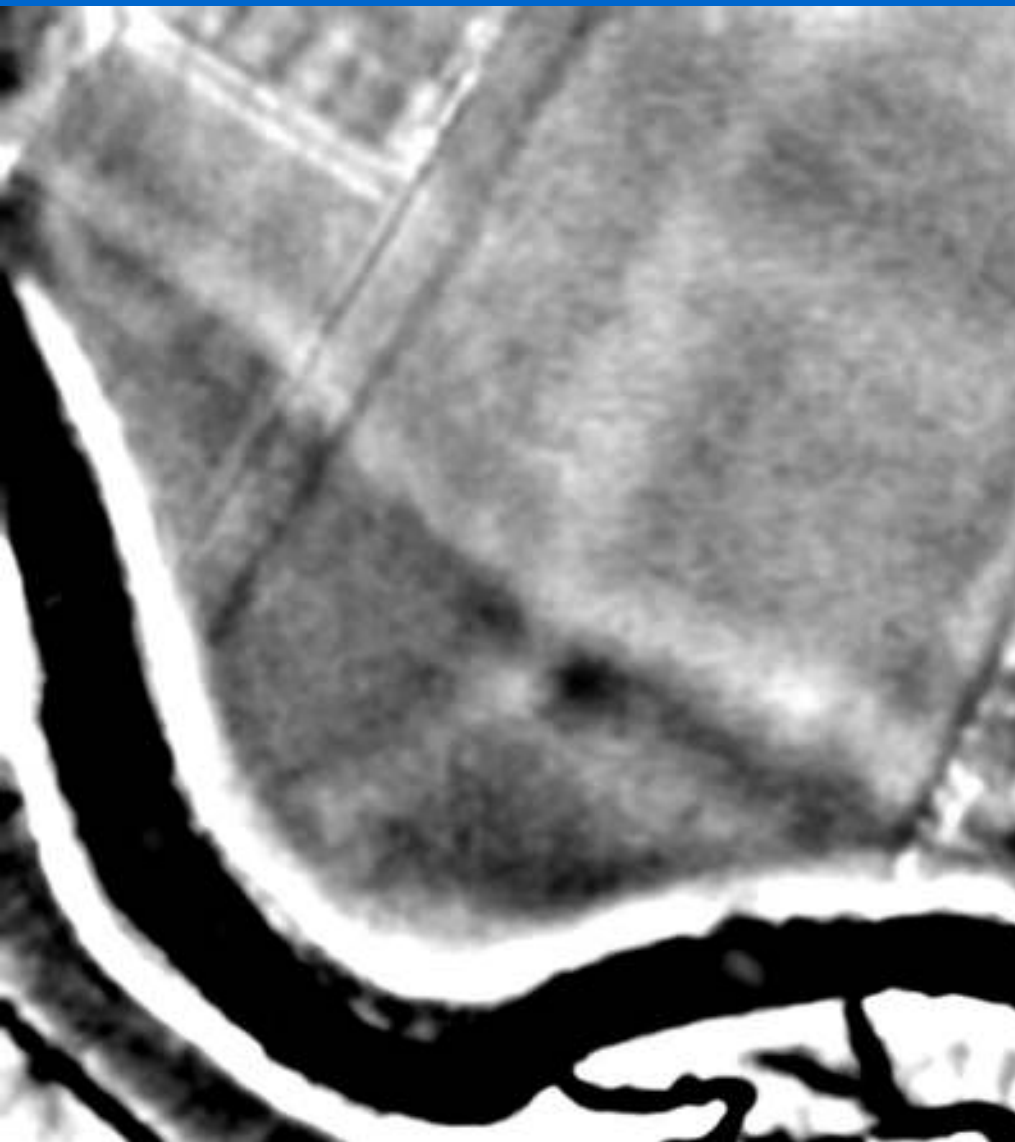




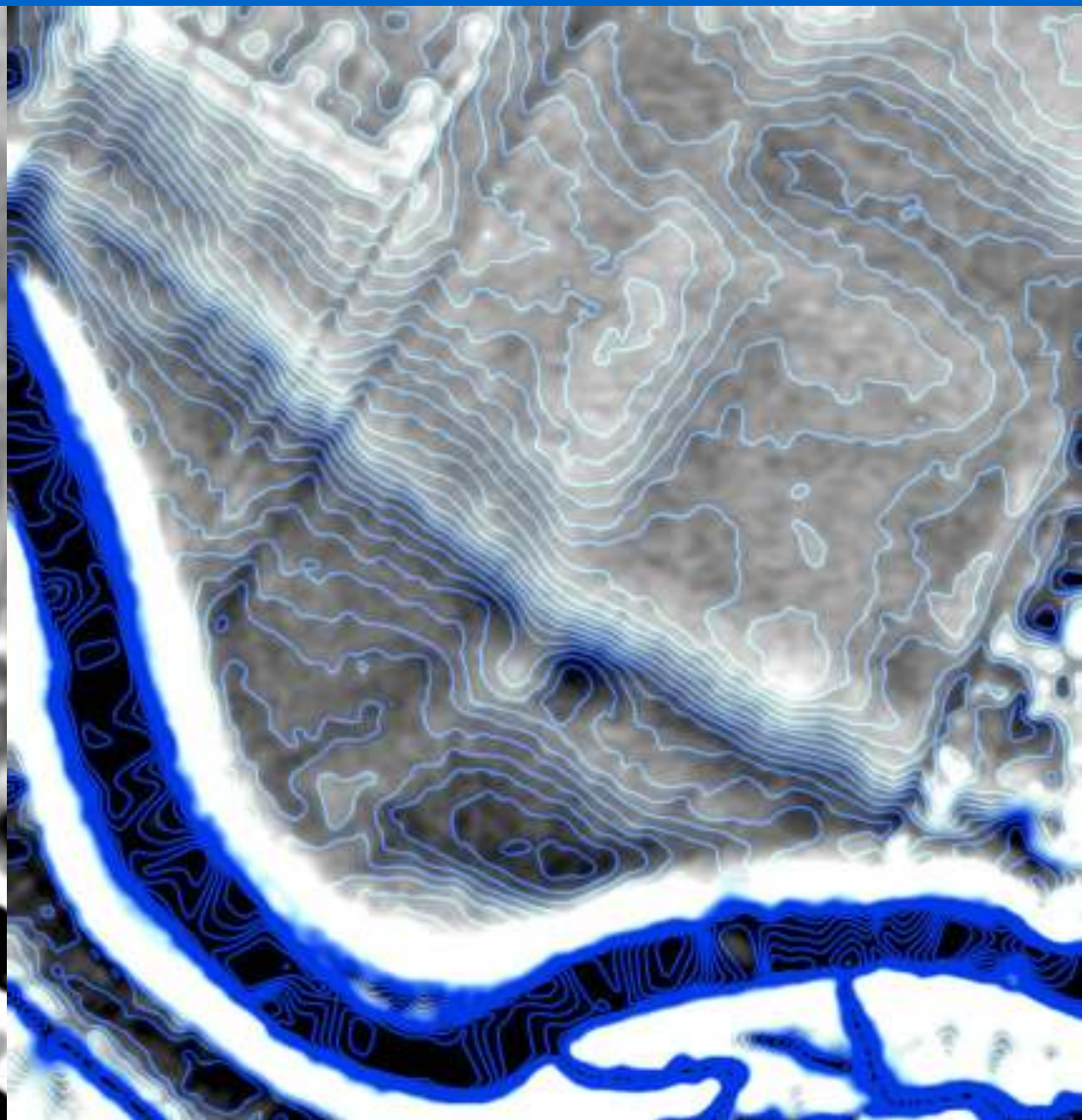
CAG photo archive, July 2013



Lidar, target area closeup



Contours, 50 mm spacing



The site, looking northwest

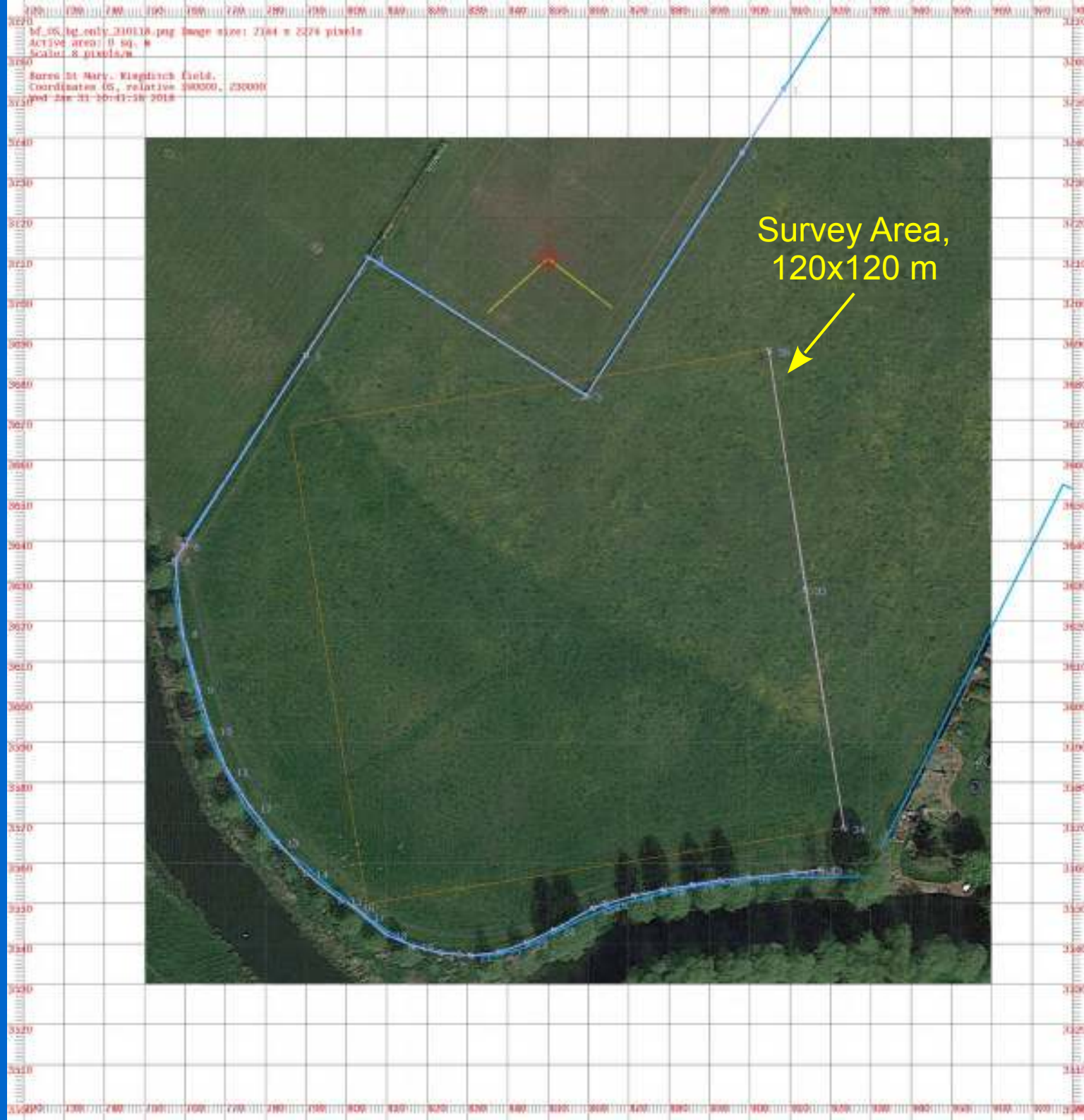




The site, looking northwest









Survey Area,  
120x120 m



## The Methods: Dual Magnetometer

Instruments spaced 1 m

Synchronised sampling

Sample spacing 12.5 cm

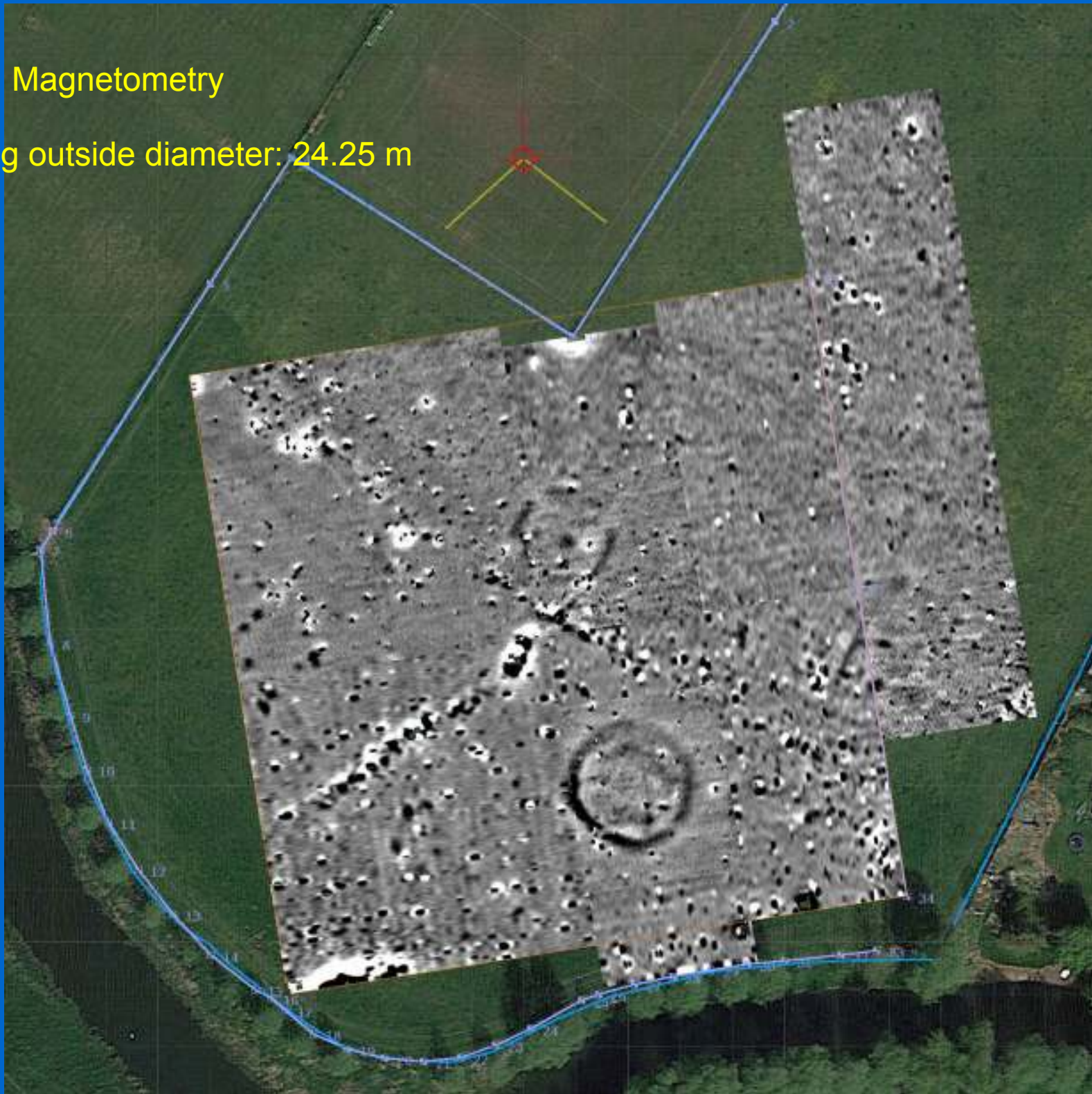
Track spacing 0.5 or 1 m





Results: Magnetometry

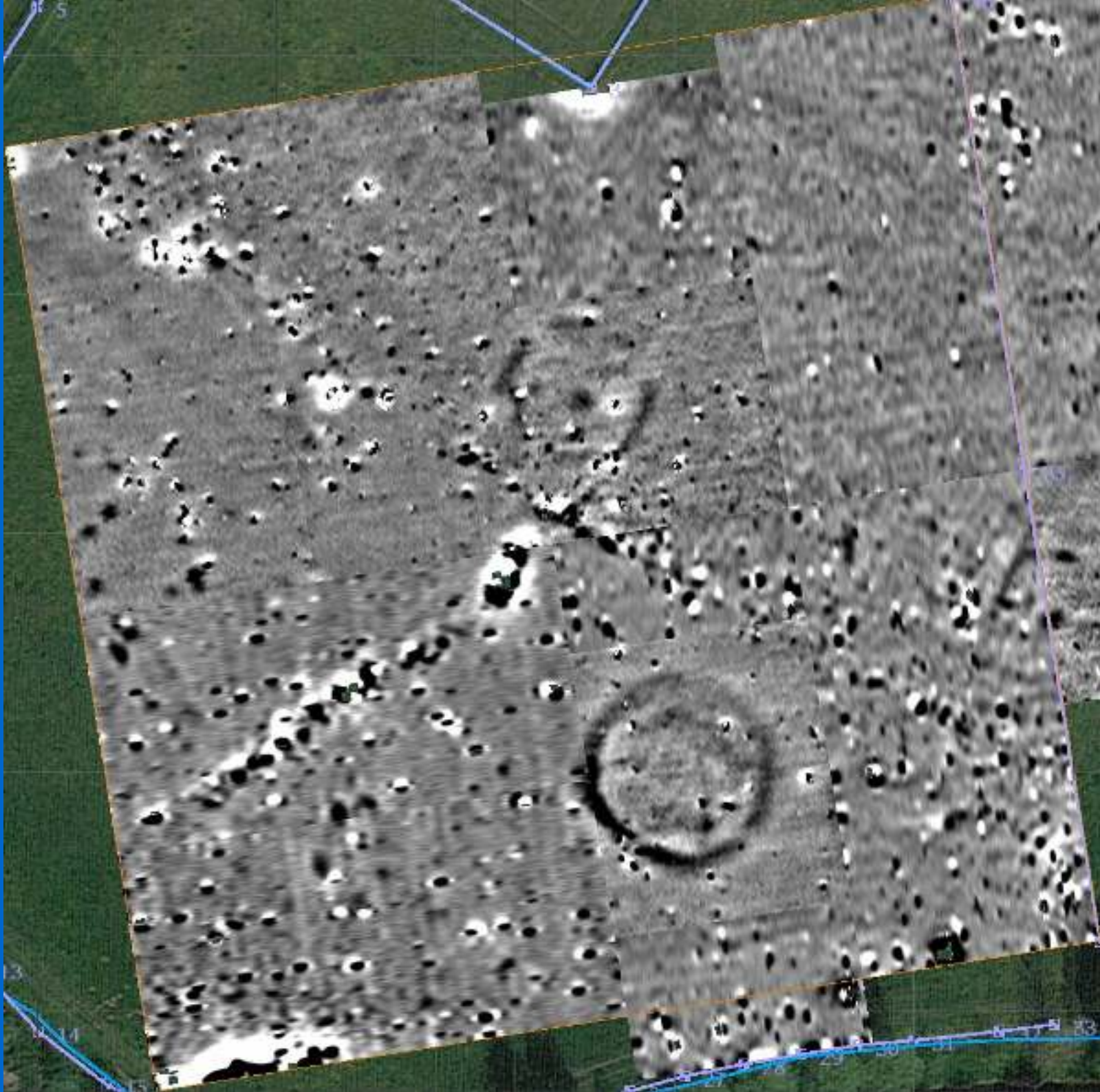
Main ring outside diameter: 24.25 m

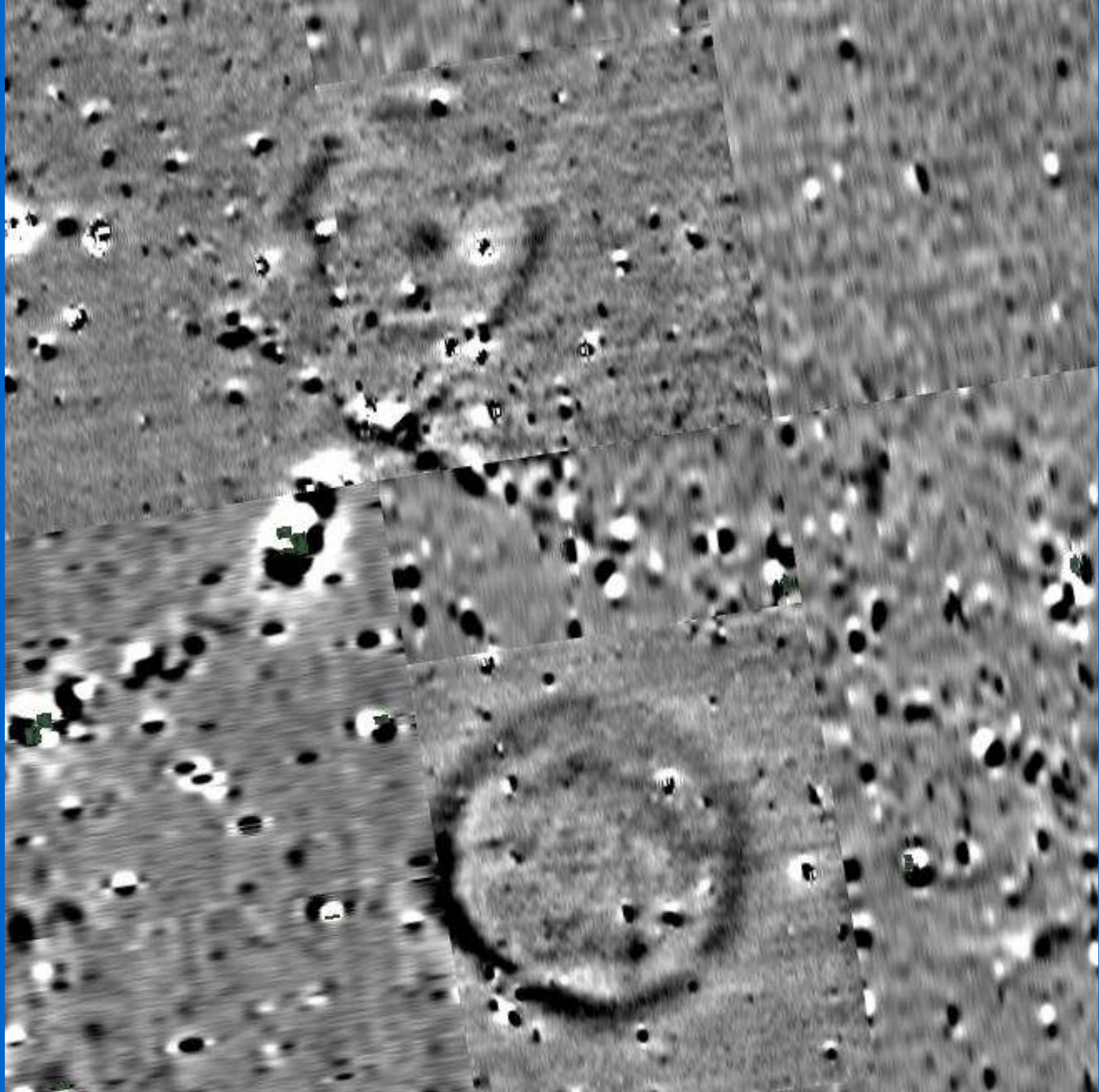














The Methods:  
Ground resistance

Sample/track spacing 1 m

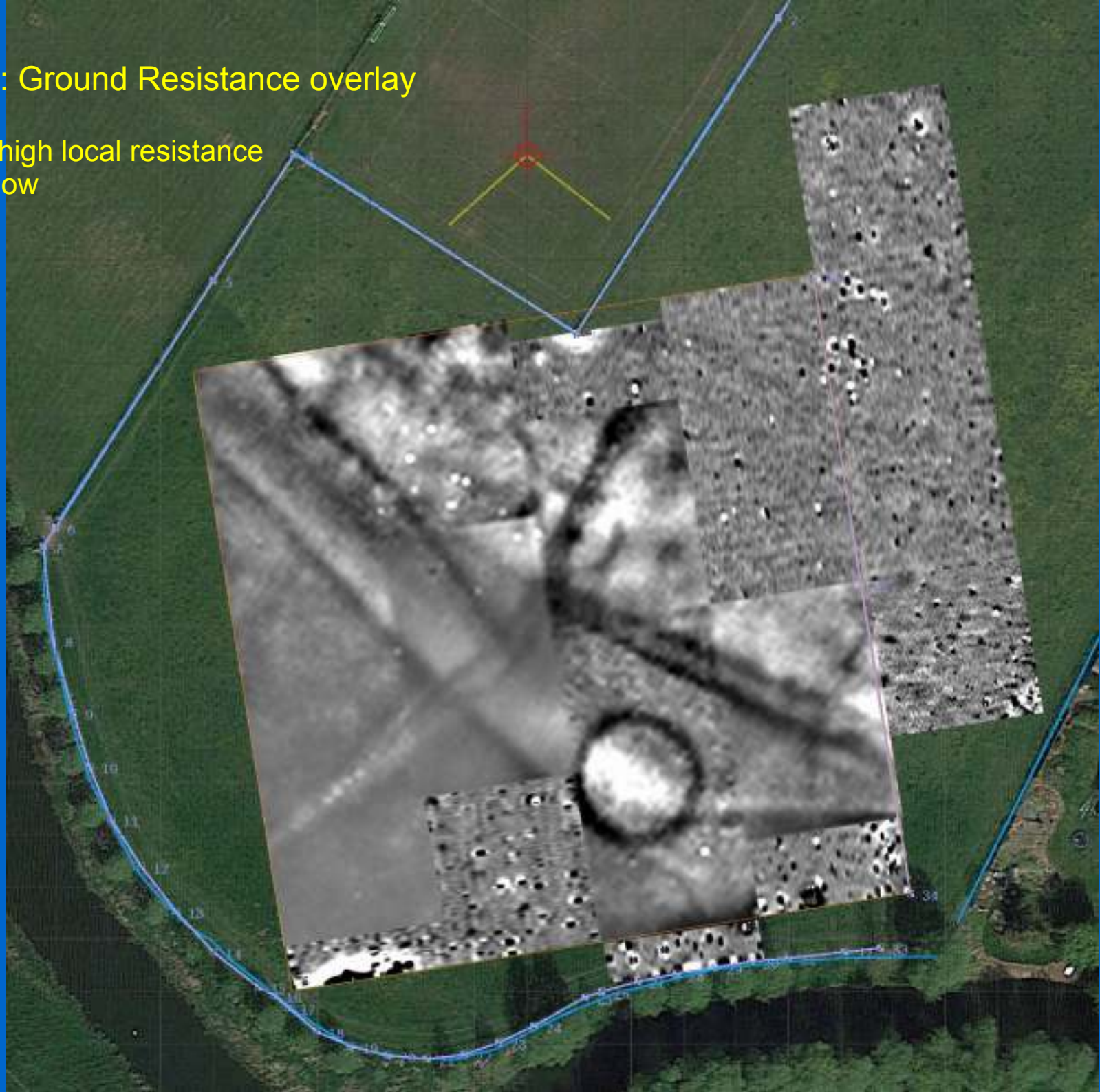
Probe spacing 0.5 m



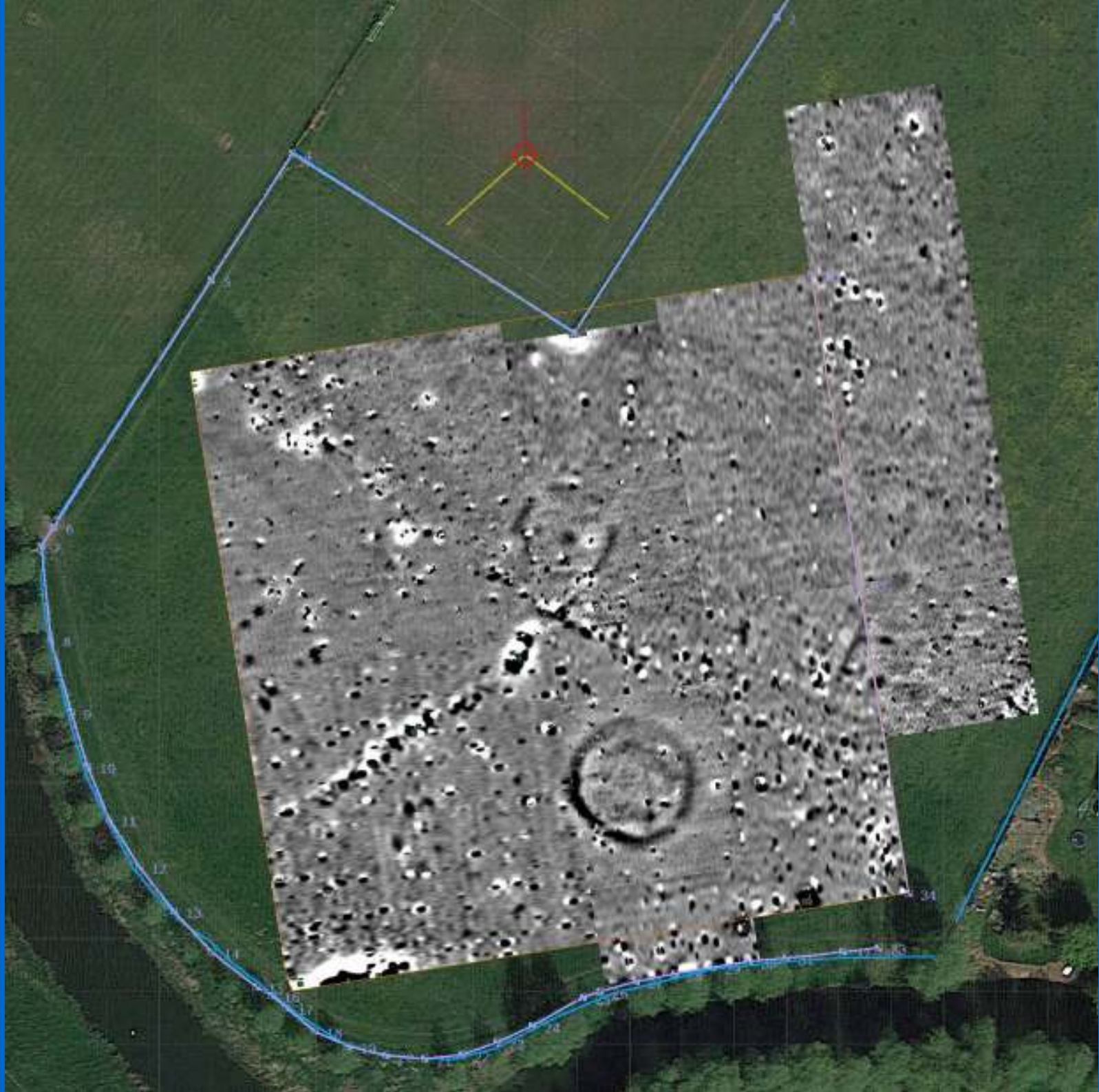


## Results: Ground Resistance overlay

White = high local resistance  
Black = low



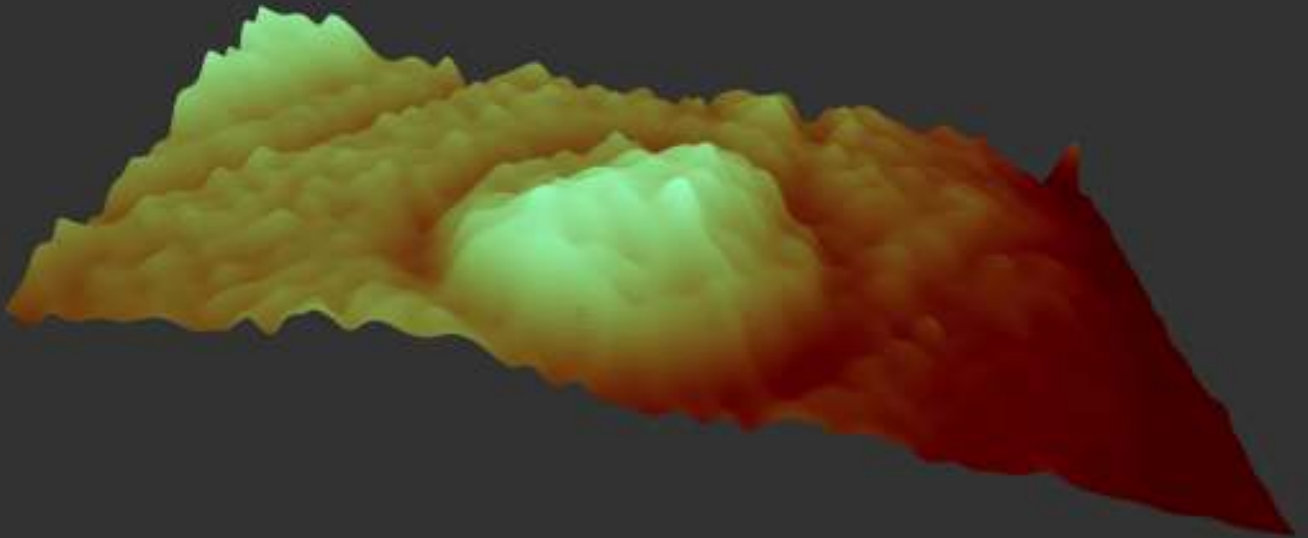




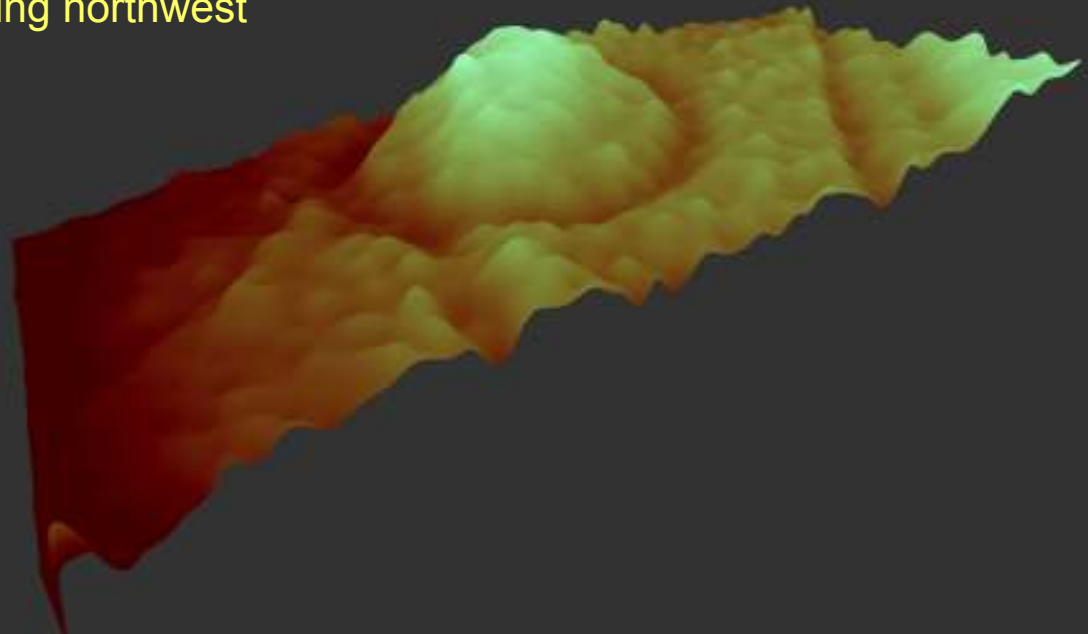
## Ground resistance 3D models

False-colour texture-mapped

Looking northeast



Looking northwest



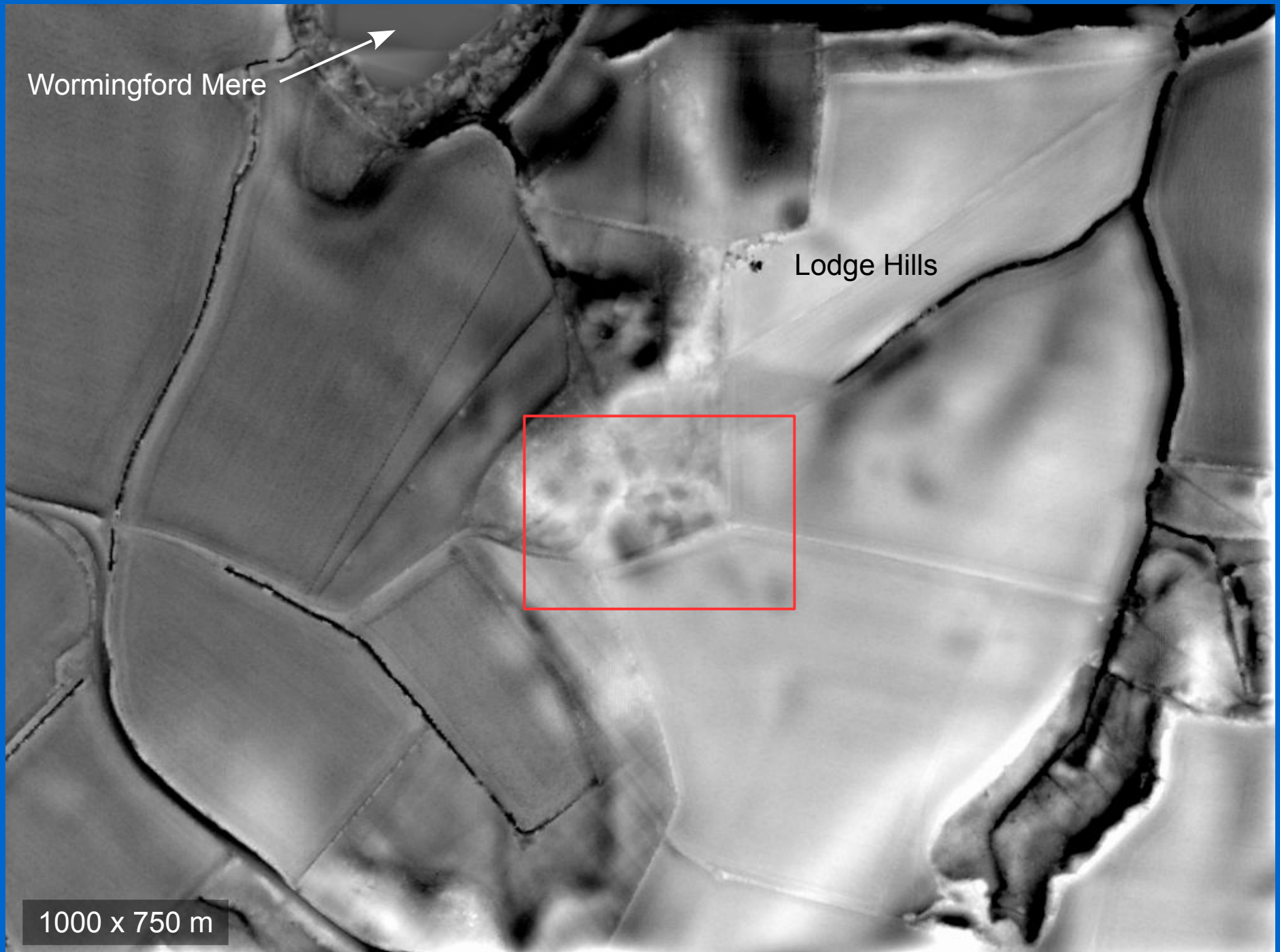
See also:

<https://skfb.ly/6w8Ty>



And finally (1)...







Looking south





And finally (2)...

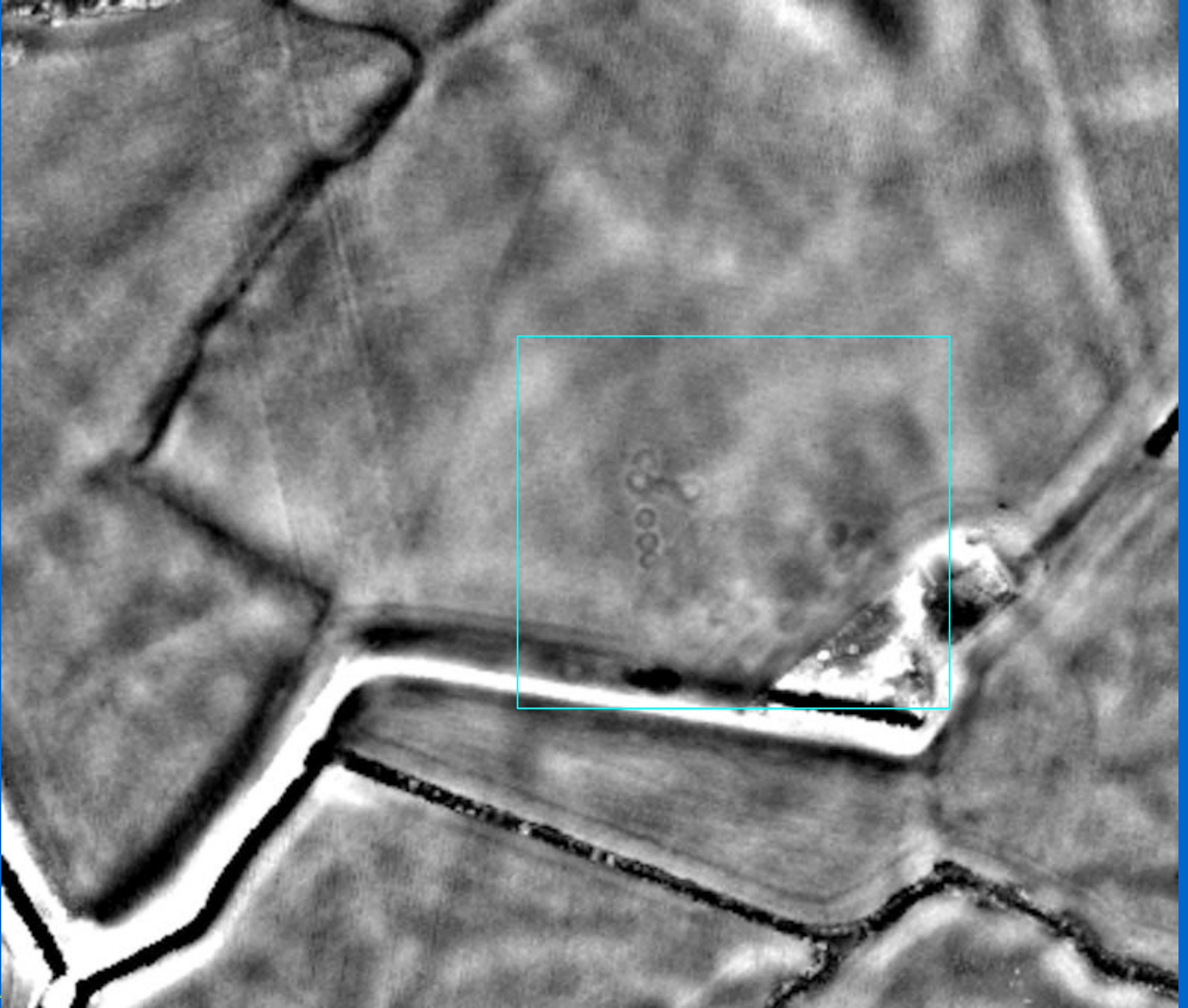
Iken

R. Alde

Yarn Hill

TM4255





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Hannah Rowe

### *Sites access*

Dennis Ambrose, Fysh House Farm

Geoffrey Probert, Bevills Estate



## 3D Models, Fordham

Large excavation area 29 January 2018

<https://skfb.ly/6w7WJ>

Room 1 – 29 January 2018

<https://skfb.ly/6wosZ>

Room 1 – November 2017

<https://skfb.ly/6uyQt>

Room 1 – October 2017

<https://skfb.ly/69UKN>

Pipeline collar

<https://skfb.ly/69UOD>

?Late Saxon polychrome tile fragment, Court Knoll, Nayland, 2016

<https://skfb.ly/6wtNS>