

Markings Farm Report

During 2015 Archaeology RheeSearch Group carried out magnetometry and resistivity surveys on this site to determine whether any archaeological features were detectable.

Members participating: Pat Davies, Brian Bridgland, Liz Livingstone, Ian Sanderson, Gill Shapland, Maureen Storey and Tony Storey.

Site liaison: John Jennings.

Site conditions: Rolled plough.

Equipment: Bartington 601 gradiometer; TRCIA 50 cm twin probe.

Magnetometry readings: 8/m, 1 m separation.

Resistivity readings: 1 m interval, 1 m separation.

Raw data stored by Archaeology RheeSearch Group.

Location: TL467482, Whittlesford, Cambs.



Purpose of survey: The purpose of this survey was to determine if any subsurface features could be detected to identify earlier activity on the site.

Site topography

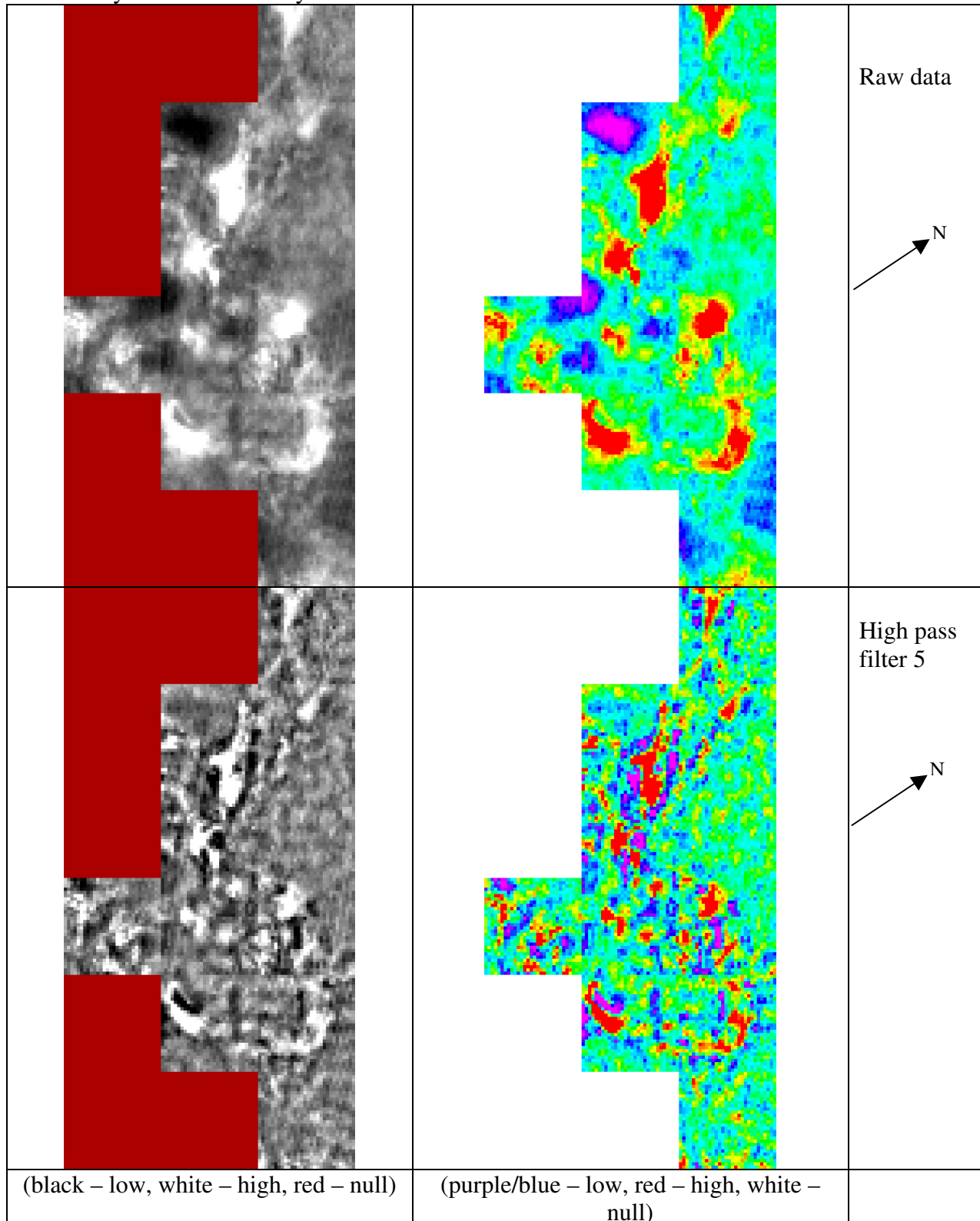
Ploughed, rolled and seeded surface. Almost level over most of the site, but the SW portion sloped slightly downward towards a damper area. A footpath crossed from NW to SE.

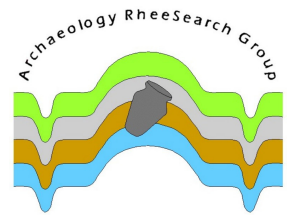
Results

The images in this section are orientated for presentation. The images are not to a common scale.

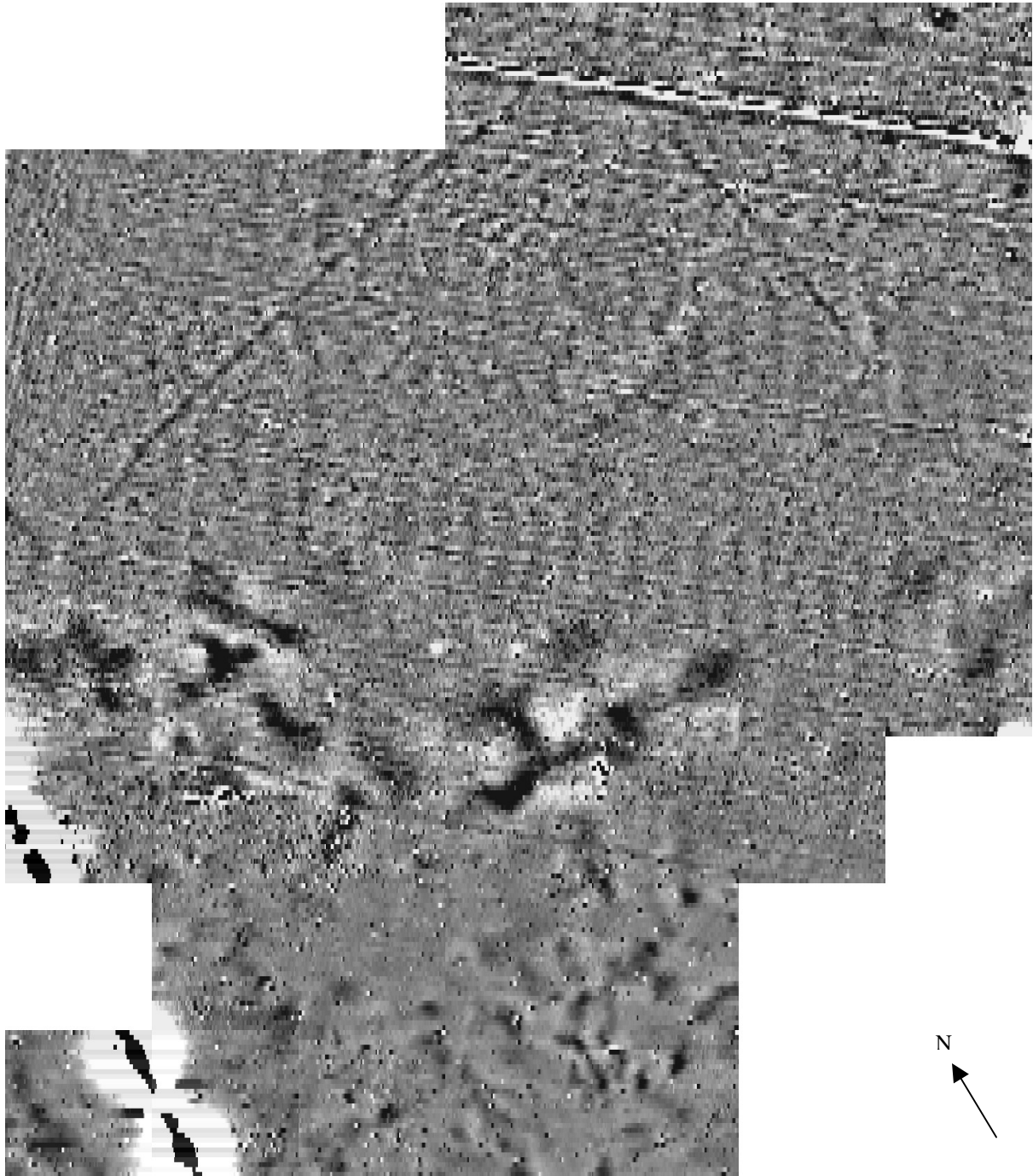
Note that the resistivity survey images below are composites of survey grids carried out at different times making grid balancing problematic.

Resistivity south field survey area 180 m x 90 m

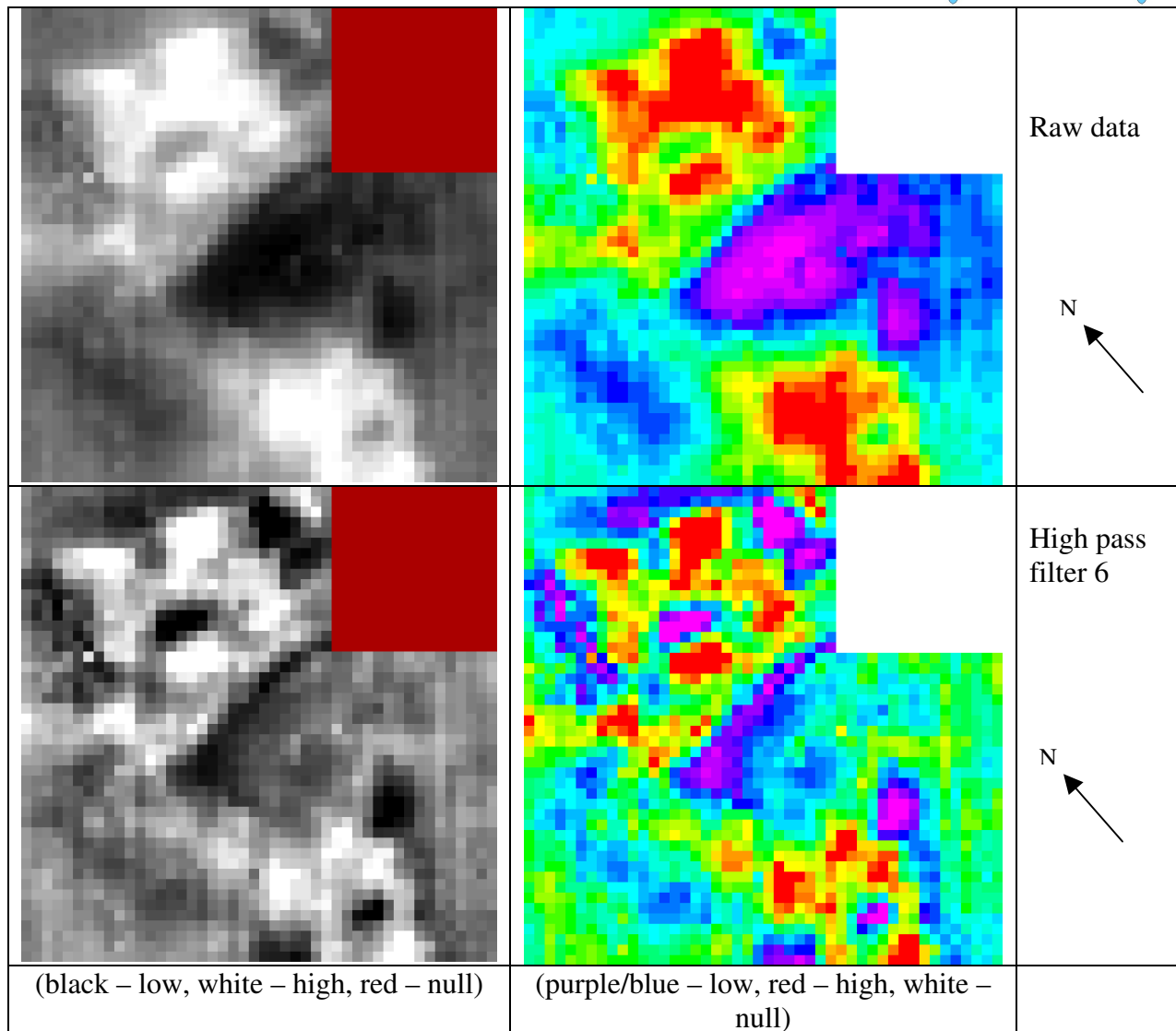




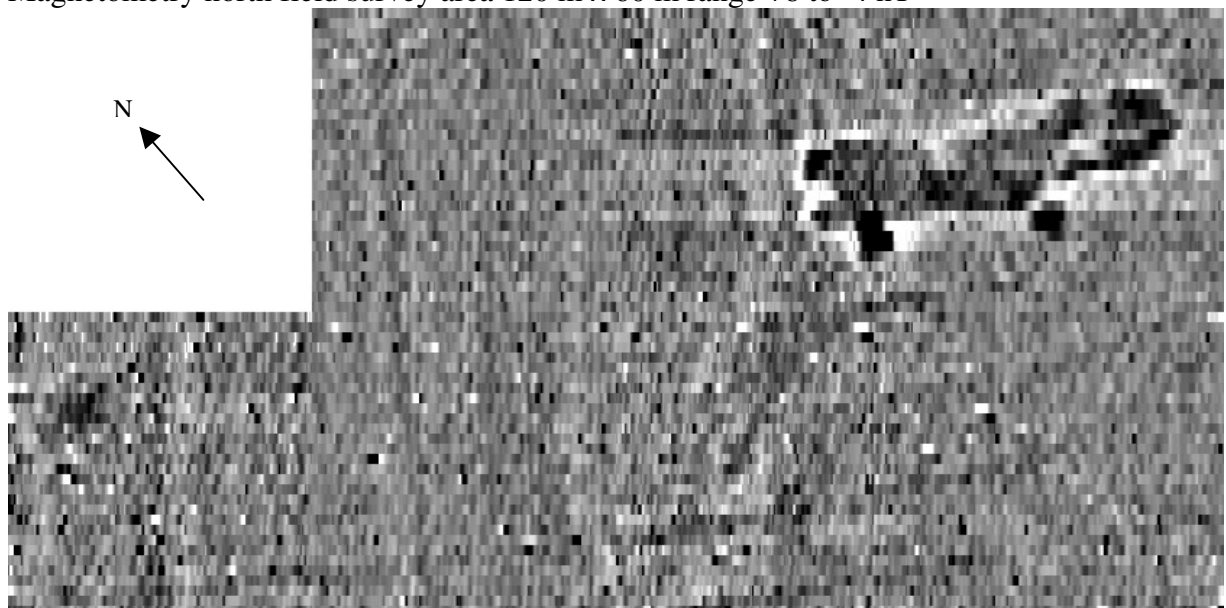
Magnetometry south field survey area 210 m x 210 m range +5 to -5 nT



Resistivity north field survey 46 m x 46 m



Magnetometry north field survey area 120 m x 60 m range +8 to -4 nT

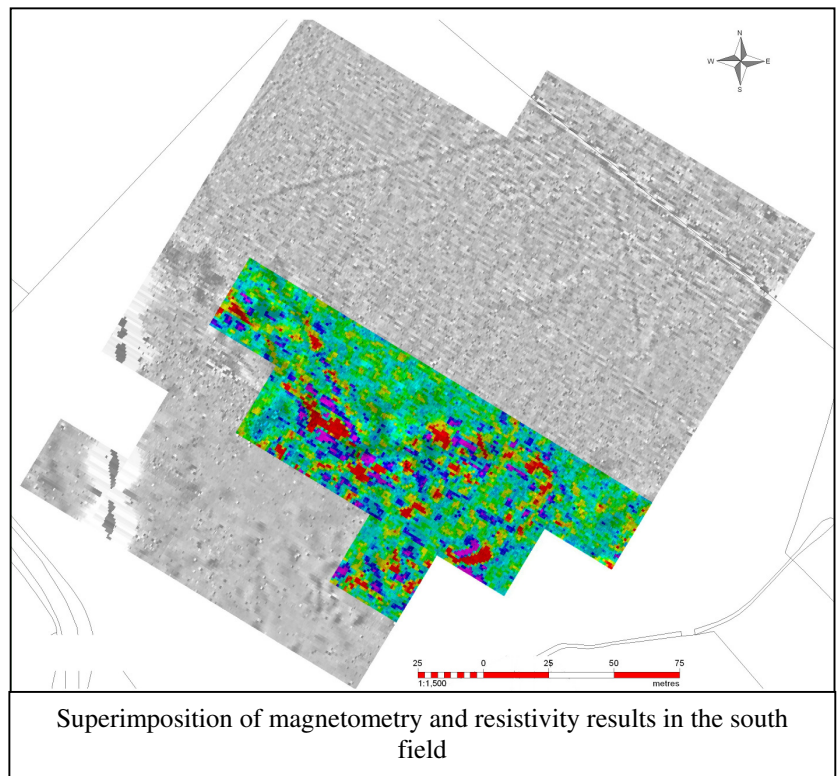


Discussion

South field

The main feature in the magnetometry survey is the difference between the NE and the SW parts of the survey area, with a dividing band containing some strong responses. This divide was apparent on the ground with the SW part sloping to an area known to have a number of pingo remnants. The distinct line of responses may be along the edge of the underlying Melbourn chalk or the edge of one of the terrace gravels in this area. There is little correlation

between the resistivity and magnetometry responses.



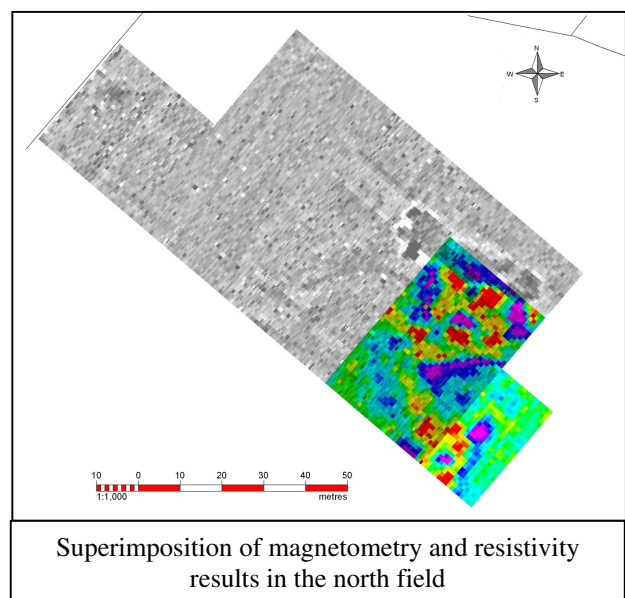
A utility pipe or cable runs N—S across the W corner of the magnetometry survey and a footpath runs SE—NW near to the NE edge. There are three linear features of probable archaeological interest, all likely to be either shallow ditch boundaries or footpaths. One runs approximately E—W across the N part of the magnetic survey, perhaps terminating or turning S at or just beyond the present footpath. The second runs N—S and is likely to be a continuation of the first line but the present footpath obscures the join. The third runs on the SW side of the dividing band and is on a different alignment to the other linear features.

North field

The main feature in this magnetometry survey is an area of strong responses on the E side. Lines extending SE and NW from this area are artefacts of processing which occur in proximity to strong signals. In the resistivity survey the magnetic anomaly coincided with low values bordered by high values to the SW. The sharp distinction between the high and low values suggests a steep sided pit, possibly for gravel extraction.

A linear feature runs from the W corner of the magnetic survey to the SE and is joined by a parallel line from the mid-point of the SW

side of the area. This suggests a road or track but it is not shown in the resistivity results.





Between the pit feature and the possible track is an arc shaped line which is anomalous.

Report by Dr I Sanderson for Archaeology RheeSearch