

Reconstructing the history of the planning of the Medamoud temple: magnetic and electromagnetic prospecting results

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KEY-WORDS: Medamoud temple, magnetic and electromagnetic prospection, magnetic signal

INTRODUCTION

During the pharaonic era, Medamoud was a provincial city of average importance. The god Montou was worshipped in the city, as in the neighbouring cities of Karnak, Ermant and Tod. Archaeological surveys were undertaken by French scientists from the Louvre Museum between 1925 and 1939. They excavated the Greco-Roman great temple, which was founded on top of Middle and New Kingdom remains. A new study started in 2011 in order to summarize and to complete the earlier ones. The geophysical surveys, planned as part of this project, are aimed at completing the topographic survey undertaken to georeference the map drawn in 1925 and at an evaluation of the archaeological potential of the area located south and east of the temple (Fig. 1), which has never previously been investigated in this regard.

MATERIAL AND METHODS

SITE

The preserved area around the temple covers about 15.5 ha. Its limits describe a roughly circular kôm. The height difference compared to the surroundings is about 1.5 m with some mounds reaching nearly 3 m. Only the dromos, the temple area and the embarking area have been excavated. Figure 1 shows the whole area as it was excavated in the late 1920s. Considering that the site can be quite complex (various building alterations, several old excavations), the idea was to combine electrical resistivity/conductivity measurements with magnetometry in areas defined as being of maximum archaeological interest.

GEOPHYSICAL METHODS

A G858 caesium magnetometer (Geometrics) will be used for mapping magnetic anomalies. These surveys will be combined with electromagnetic induction (EMI) prospecting using a CMD-MiniExplorer (GF Instruments), which will give values of apparent electrical conductivity and magnetic susceptibility. Finally, detailed studies will be done using a MS2B and D susceptibility meter (Bartington) and a prototype resistivity meter (UMR 7619 METIS).

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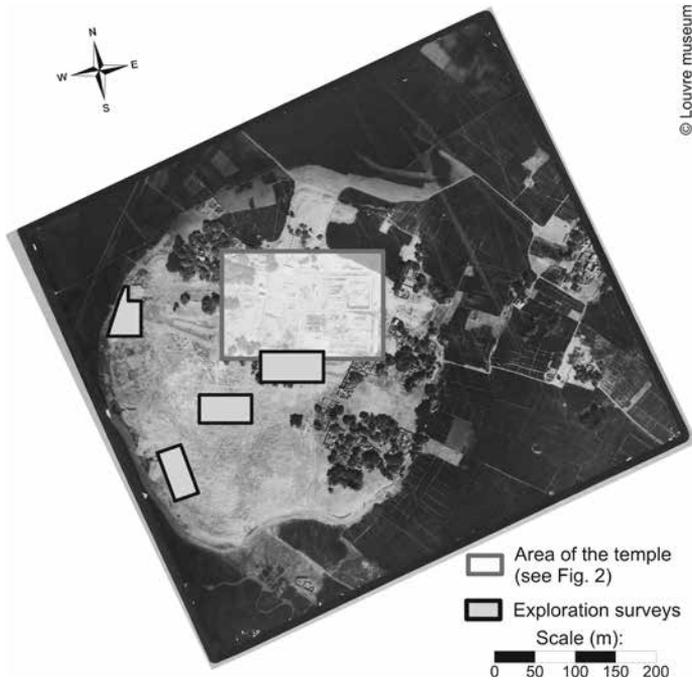


Fig. 1. Aerial image taken in the late 1920s showing the excavated areas and the anticipated geophysical surveys

ARCHAEOLOGICAL POTENTIAL OF THE SURROUNDING AREA

As the excavations have concerned mainly the temple itself and its entrances, the protected area of nearly 15,5 ha around it has never been explored, except for a Byzantine pottery workshop discovered in 1928, but never published. The excavations in the temple area proved that a Coptic settlement had been located there, giving reason to believe that it extended probably over the entire area of the kôm. The Greco-Roman and pharaonic settlements may have been located there as well. The hatched areas on the plan show where the survey will be carried out (Fig. 1).

AREA OF THE TEMPLES

Excavation reports describing work by the French Institute for Oriental Archaeology (IFAO) in 1922–39 are the main source of information (Bisson de la Roque 1946). Although the kôm of the ancient city of Madou was known from the 18th century (Pococke 1743: 96), no excavations were undertaken until 1925, when the Louvre Museum initiated its project. The excavations yielded significant results and many artifacts from the Greco-Roman temple and the Coptic settlements, but the accuracy of the descriptions (annual reports concerned the seasons between 1925 and 1933, while the last campaigns were published only in part, see Robichon, Varille 1940) leaves much to be desired and information is missing. A new study of the archeological archives, in particular with regard to the so-called “Temple Primitif”, will accompany the survey (Relats Montserrat 2014).

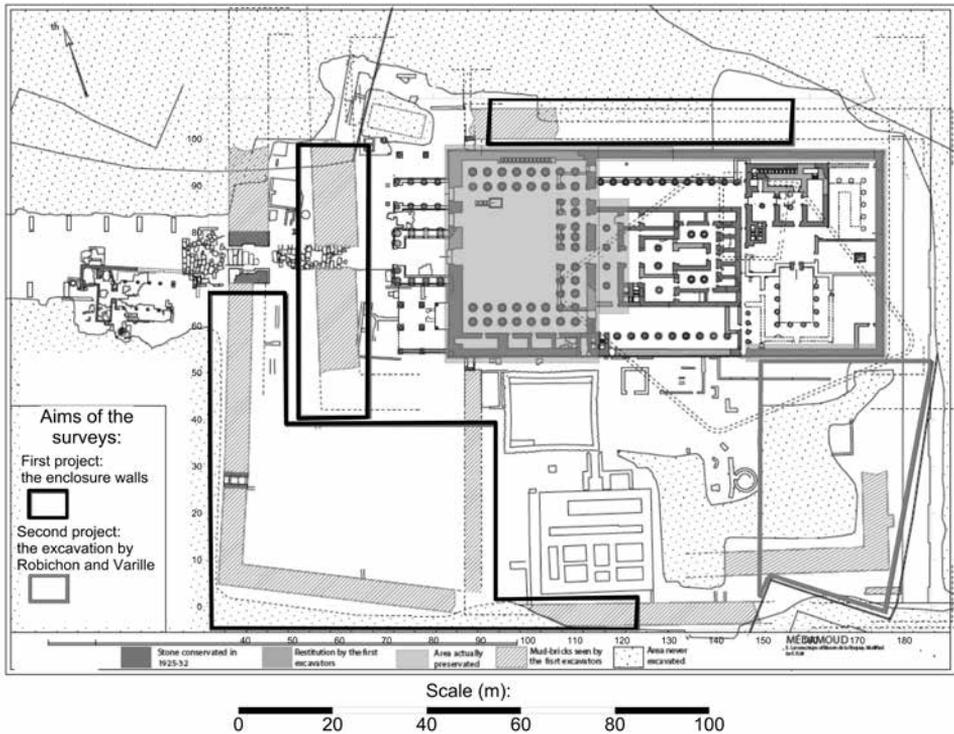


Fig. 2. Map of the structures known from earlier excavations to be confirmed by the survey

The enclosure walls are of particular interest. A separate set of walls existed for each temple stage, but during the excavations finds were not associated with the different stages. Consequently, various plans were proposed by archaeologists without an accurate match. The synthetic plan (Fig. 2) indicates that the layout of the surrounding walls needs to be confirmed. The areas in blue will be covered by a geophysical survey and excavations will be carried out to determine the date of the features found.

RESULTS

The surveys are part of a project funded by the ComUE Sorbonnes Universités to be conducted in May 2015. The results will be presented at the conference.

REFERENCES

- Bisson de la Roque, F. 1946. Les fouilles de l'institut français à Médamoud. *Revue d'Égyptologie* 5: 25-44.
 Pococke, R. 1793. *A description of the East I*. London.
 Relats Montserrat, F. 2014. La redécouverte du temple primitif de Médamoud. *Gottingen Miszellen* 240: 123-4.
 Robichon, C. and Varille, A. 1940. *Description sommaire du temple primitif de Médamoud*. Cairo.