

# Qatar-Sudan Archaeological Project. Excavations and other activities at Kawa – the 2017-18 season

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This season is the last in the current project at Kawa, which began with a survey of the environs of the town in January and February 1993. Work was resumed on the site in the winter of 1997-8 but was disrupted in 1998 by a break in diplomatic relations between Sudan and UK and then by the necessity to conduct a season of survey at the Fourth Cataract at the behest of the National Corporation for Antiquities and Museums. The team returned to Kawa in January 2000 and in subsequent winters until 2002-3 when work was suspended while resources were focussed on the Fourth Cataract. The team again returned to Kawa in the 2007-8 season and has been on site annually since then apart from in 2010-11 when the *Kerma Ancien* cemetery at site H29, 40km to the south, was excavated (Welsby 2018). From 1993 until 2012 the project was undertaken by the Sudan Archaeological Research Society; since then it has been a British Museum project under the auspices of, and financed by, the Qatar-Sudan Archaeological Project. Throughout the work has been directed by Derek Welsby apart from the excavations in the cemetery from January to March 2017, which were directed by Andrew Ginns on behalf of SARS. The site remains a part of the SARS Northern Dongola Reach concession.

The 2017-18 season had three main foci, excavations in the cemetery and town, the extension of the fluxgate gradiometer survey and a study of the finds which were then transported for permanent curation to the Jebel Barkal Museum.

The team<sup>1</sup> arrived at Kawa on 17<sup>th</sup> December 2017 and departed for Khartoum on the 14<sup>th</sup> February 2018.

## Excavations

### *The cemetery*

Two graves were excavated in the north-eastern part of the cemetery. Both of these had been investigated in previous years but the work had then not been completed.

<sup>1</sup> Team membership: Grant Bettinson – archaeologist (for 1 month); Eliza Doherty – conservator (for 1 month); Haitham Mohammed Abdurahman Elimam – NCAM inspector; Tomasz Herbich – gradiometer survey (for 10 days); Mohammed Ibrahim Mohammed – cook; Alain Pascal – archaeologist, site planner, illustrator; Stephen Porter – archaeologist (for 1 month); Robert Ryndziewicz – gradiometer survey (for 10 days); Tatiana Vlemincq-Mendieta – small finds registrar, physical anthropologist; Derek Welsby – field director; Isabella Welsby Sjöström – assistant director, ceramic specialist.

**Grave (JD2)40** was covered by the best preserved of the mud-brick pyramids excavated at Kawa (Plate 1). It had a sloping descandary from the east which it was impossible to excavate fully. At its western end the descandary fill was cut by a large robber pit. Attempts to remove the sand fill of that pit resulted in the partial collapse of the eastern wall of the pyramid, forcing work to halt. A vertical pit dug down to the burial chamber within the pyramid only clipped the western end of the burial chamber. Not wishing to destroy the pyramid, and taking account of safety issues, the excavations were aborted.

**Grave (JG1)31** was marked on the surface by the smallest mud-brick pyramid noted so far on the site, at c. 2.4m square. Unusually at Kawa the descandary was from the west and its eastern end was overlain by the west wall of the pyramid which was left *in situ*. A vertical shaft was dug down to allow excavation of the burial chamber but only part of the torso and legs could be uncovered, it being deemed too dangerous to excavate the western end of the chamber. The adult male was buried in a supine position with the legs crossed at the ankle, the left hand on the femur and the right hand under the pelvis. Although not robbed, no grave goods were found.



Plate 1. The mud-brick pyramid associated with grave (JD2)40.

In the central area of the cemetery, where all tomb monuments have been removed by erosion, the grave cuts are visible on the surface. Five of these, all aligned east-west, were excavated.

**Grave (1058)** A sub-rectangular pit (2.48 x 0.52m) off which opened a shallow niche along the whole of its north side (1.98 x 0.5m) sealed by a wall formed of mud bricks set on end. The single inhumation, of a sub-adult, was in an extended supine position. The head and upper body had been disturbed by the robbers.

**Grave (1059)** A long, narrow descandary (4.22 x 0.76m, depth 1.17m) with well-cut steps at its eastern end which become very rough towards the west. Within the chamber was the extended supine skeleton of a sub-adult accompanied by a necklace of bi-conical glass beads and, on each leg, an anklet of faience ring beads. Extensive, but very fragmented, remains of the plaster which coated the coffin survived, some bearing



painted decoration (Plate 2). Most of the blocking wall, of mud bricks (c. 200 x 140 x 100mm) set at 45° or vertically, remained *in situ*, although pierced by a very small robber hole.



Plate 2. The skeleton and remains of the lime-plastered and painted coffin in grave (1059).



Plate 3. The descender and blocking wall in grave (1098) looking east.

**Grave (1066)** A long, narrow descender (4.5 x 0.7m, depth 1.54m) with well-cut steps. In the chamber was the extended supine skeleton of an adult female with the right hand on the pubis, and the left under the pelvis. Traces of the lime-plaster coating of the coffin survived. Only on the north side of the ‘arched’ entrance to the chamber does the mud-brick blocking wall survive, the rest having been destroyed by the robber pit.

**Grave (1093)** A narrow sub-rectangular grave (1.02 x 0.46m) which only survived to a depth of 290mm below the present ground surface. The whole of the upper body of an adult, including most of the pelvis, had been removed by the robbers.

**Grave (1098)** The long, narrow descender (c. 3.24 x 0.74m, depth 1.97m) with well-cut steps, the lowermost markedly curved (Plate 3), gave access to the burial chamber, the roof of which had collapsed. Nothing remained *in situ* of the body, bones of which were found in the robber pit fill. The mud-brick blocking wall was much disturbed.

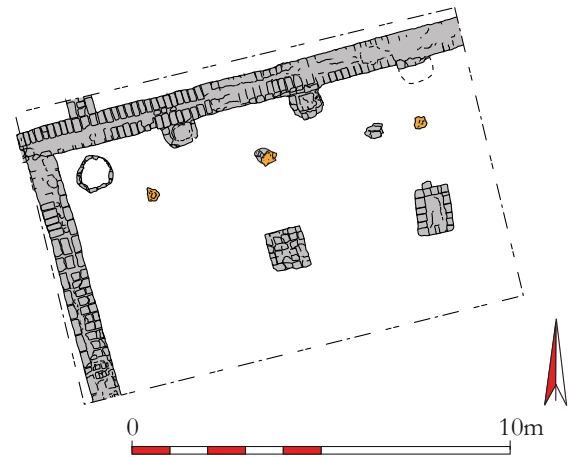


Figure 1. Area (FZ1); scale 1:200.

### The town

Excavations were undertaken in two areas in the lower town where interesting features had been located during the previous gradiometer surveys in 2007-08 and 2008-09 (Welsby 2008, 39; 2009, 76).

**Area (FZ1)** – This lay within the large courtyard at the eastern end of the complex of mud-brick buildings, Buildings F4/F5/F10, which extended over a length of more than 60m. The gradiometer survey had picked up a number of features set at regular intervals parallel to the north wall. On excavation (Figure 1, Plate 4) these were revealed as rectangular mud-brick piers, 4m apart centre to centre, presumably supporting an arcade. Against the inner face of the north wall were three engaged piers set at intervals of 3.4m and 3.1m centre to centre, perhaps also associated with an arcade, but these were not in line with the piers mentioned above. Set approximately



Plate 4. General view of area (FZ1) looking east – the engaged piers, post-pads and free-standing piers.

1.4m to the south of the north wall and spaced at intervals of 3.2m and 4.1m centre to centre was a line of stone post-pads. These were neither in line with the engaged piers nor with the free-standing piers. Excavations also revealed a poorly constructed mud-lined pit, or the base of a storage bin, and evidence for burning on the floor surface at the level of which the trial excavation was terminated.

**Area (FZ2)** – 300m<sup>2</sup> was excavated over two lines of features which were revealed by the 2007-08 gradiometer survey. The features were found immediately below the present ground surface (Figure 2, Plate 6). Four of those, on the north-western side of what is assumed to have been a street, 5.5-6.5m wide, were rectangular with rounded external corners, approximately 1 x 0.8m in size, and were built of mud brick coated with a mud render (Plate 7). They were not in a straight line but formed a shallow curve, each on a slightly different orientation to conform to the curve. Within each was a rectangular void extending down to the surface on which they were built – a depth of about 380mm. On the other side of the street three features were uncovered and a fourth was glimpsed in the

southern section of the excavation trench. Each was roughly oval in shape, again with a central void (Plate 8). They were constructed of mud bricks and reused mud bungs – one incorporated a rough piece of stone. The southernmost of the rectangular and oval features reflected a marked change of direction in the street towards the south east. Most of the features had been set in construction pits. All appear to be preserved to their original height. They were associated with a compact sand surface with harder areas of sand along the middle of the street. On this surface were groups of mud bungs, that at the northern end extended out of the excavation area (Plate 9). In some cases it was clear that the bungs had been carefully placed – some upright and others inverted between them. Throughout the area, as sand layers were deposited presumably through natural wind action, other bungs were



Plate 6. Area (FZ2) – general view looking north east along the 'street'.



Plate 9. Bungs carefully placed on the surface in the middle of the 'street'.



Plate 7. One of the rectangular features on the north-western side of the 'street'.



Plate 8. One of the oval features on the south-eastern side of the 'street'.



Figure 2. Area (FZ2); scale 1:200.  
grey area – rubble; orange areas – hard-packed sand

found. Some of the bungs were very large with diameters of up to 350mm and had sealed pottery vessels with rim diameters of 300mm. Among them were examples with seal impressions and string marks. A spread of mud-brick rubble occupied the north-eastern corner of the excavation trench.

The function of the mud-brick features is unclear. They were filled usually with sand and the internal voids came down to the hard surface on which they were built. Initially considered as tree pits, as seen lining the streets in the Royal City at Meroe (Török 1997, 193), this hypothesis seems no longer to be tenable. It is unlikely that they were structural, as sockets for timber uprights for example.<sup>2</sup> Another puzzling feature is that, although they are well preserved, the excavations and the gradiometer survey picked up no trace of other structures in the area apart from the continuation of the street. All associated pottery was of typical early Kushite forms.

### Gradiometer survey

A total of approximately 7ha was surveyed, split equally between the town and the cemetery. In the town survey was conducted on the high mound in the centre of the site to the south of the Taharqo temple (Figure 3). The area was very much disturbed, but traces of buildings were found

<sup>2</sup> For what may be similar features recorded by magnetic gradiometry at Sanam Abu Dom see Tucker and Emberling 2016, 53-4, pl. 10.

throughout. Of note was a stone building, almost certainly a temple, facing west towards the river – a few column drums of this building are visible on the surface. Also of interest were two very clearly defined circular structures about 6m in diameter. No trace of the southern temenos wall was noted although the survey must have extended over its line.

In the cemetery the survey covered the north-eastern part of the site and revealed a dense spread of graves throughout most of the area (Figure 4). These several hundred graves do not, in almost every case, relate to the visible surface features which appear as pebble-covered mounds. Many of the graves have descendaries although, interspersed amongst them, other graves may have been of simple slot type. The dense nature of the graves, and the known presence of pyramidal tomb monuments on the site, suggest that it was very similar to the better preserved cemetery at Sedeinga currently under excavation (Rilly and Francigny, this volume).

### Building conservation

In Temple T the conservation work over the last few seasons has largely been successful in protecting the original stonework and burying it beneath windblown sand. However, there is still a problem with tour guides removing the sand to expose the reliefs and then leaving them uncovered which puts their survival at serious risk.

Conservation work was undertaken this season of the western kiosk (Plates 10 and 11). As with the temple the walls have been capped by modern brickwork to a height of 400mm, the lowermost course set in mud mortar to allow for its easy removal in the future should that be deemed desirable. The highest surviving part of the kiosk was above the level of a cavetto cornice moulding on both the inner and outer faces of its walls. To have placed the modern brickwork on the edge of this would have put undue strain on the stonework. To avoid this the modern brickwork has been set on the line of the lower part of the building's walls.



Plate 10. The western kiosk before conservation.

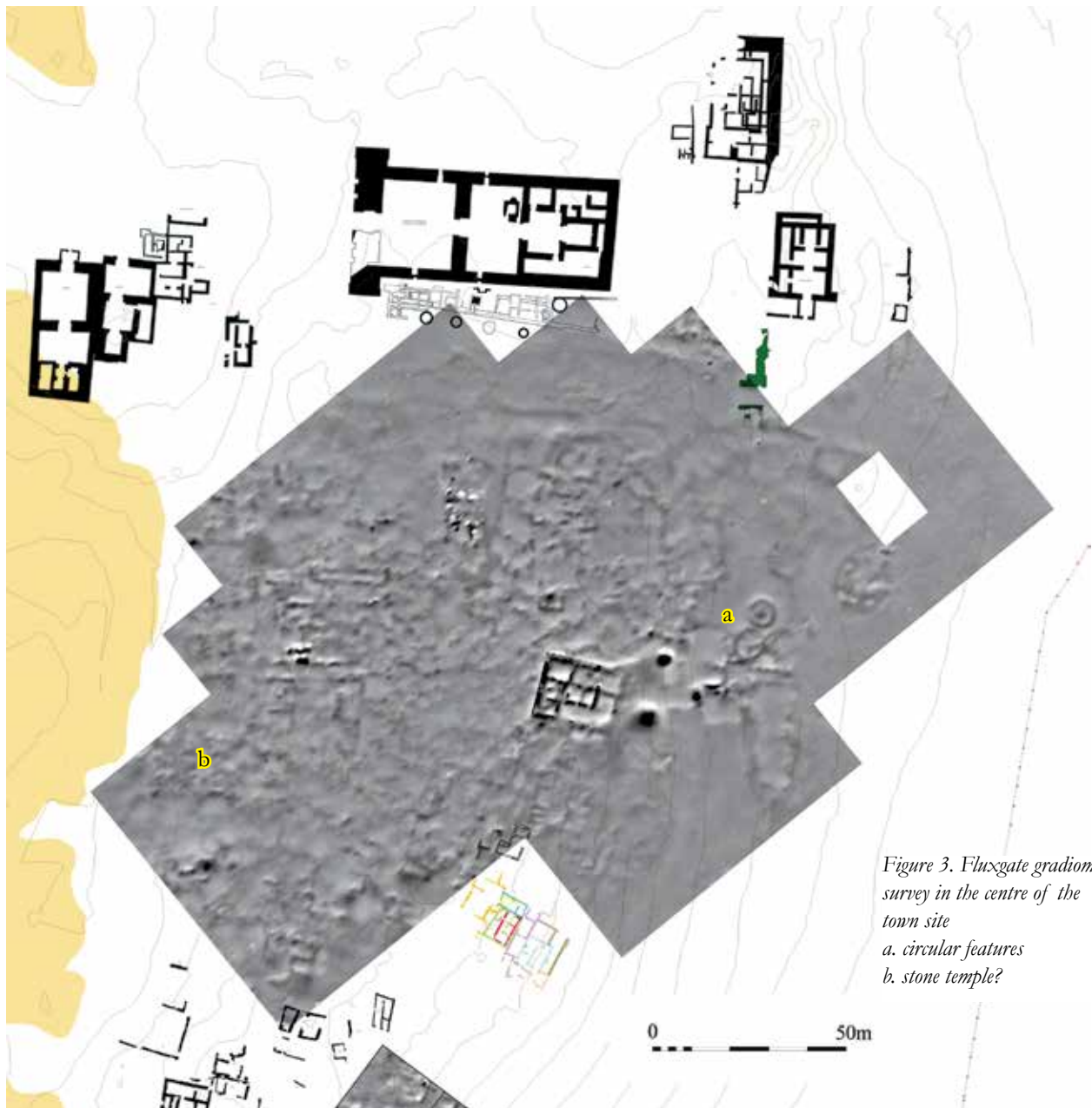


Figure 3. Fluxgate gradiometer survey in the centre of the town site  
*a.* circular features  
*b.* stone temple?



Plate 11. The western kiosk after conservation.

## Finds

### *Ceramics*

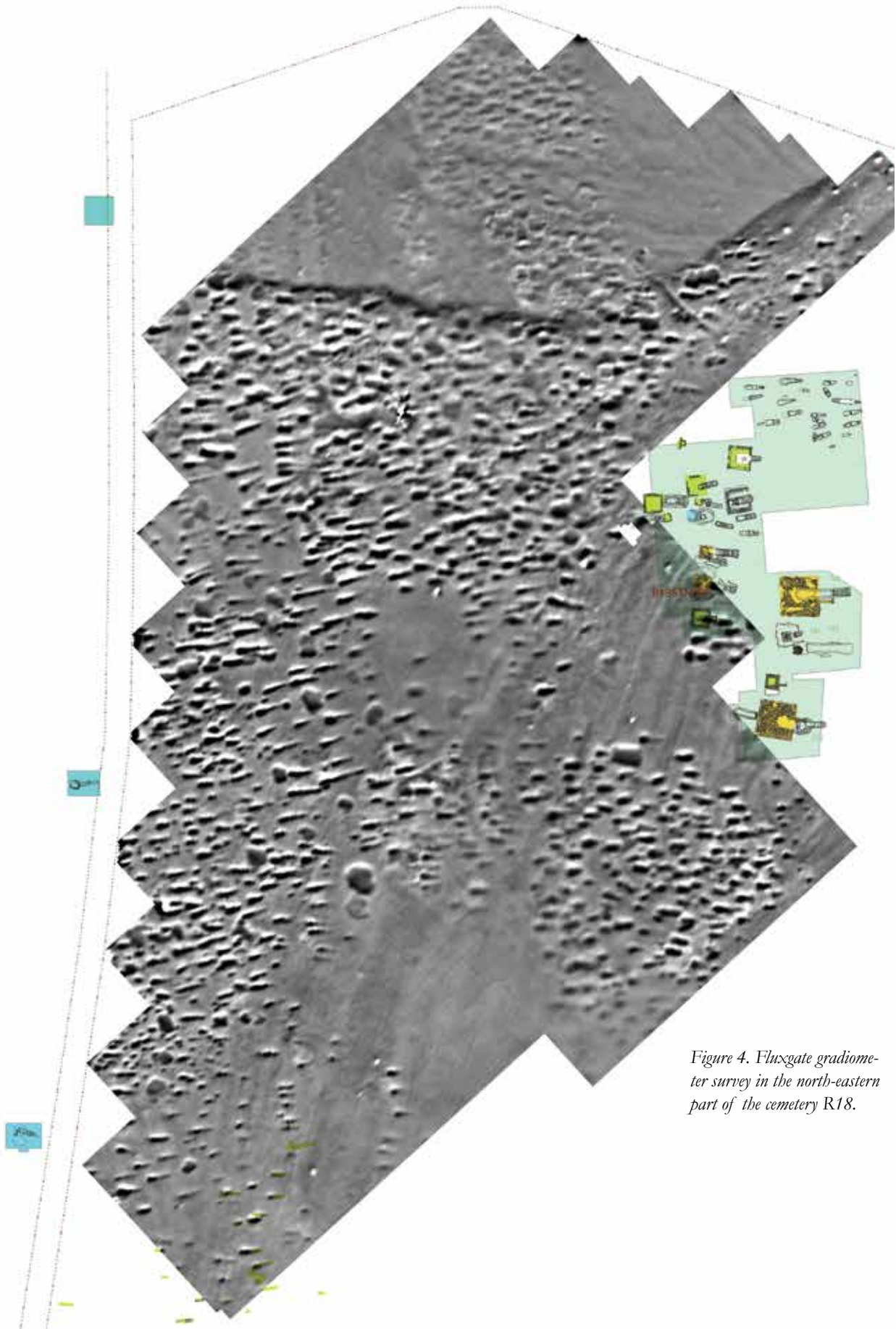
All the pottery from the current season's excavations was processed. The type series of pottery – several thousand sherds – was reorganised with the complete and almost complete vessels being taken to the store in the Jebel Barkal Museum.

### *Small finds*

A very large number of small finds have been recovered at Kawa over the years both from the town and the cemetery. All the records of these were checked and enhanced as required and many were drawn and photographed as appropriate.

### *Conservation*

A number of the small finds were cleaned and conserved in particular the copper-alloy bowls and beakers.



*Figure 4. Fluxgate gradiometer survey in the north-eastern part of the cemetery R18.*

Many pottery vessels required some plaster filling to provide additional support.

#### *Location of the finds*

Almost all the small finds, the complete and largely complete pottery vessels, a small sample of the pottery type series, the painted stone blocks from the chapel of Pyramid S5, the painted wall plaster from Buildings A1 and F1 and the barque stand bearing the painted inscription of Taharqo from Building A1, are now stored in the magazine at Jebel Barkal Museum. Two of the decorated stone blocks found in the spoil heaps from the 1930s excavations of the Taharqo temple are on display in the Visitors' Centre at Kawa, along with the two large sandstone lintels found amongst the rubble associated with Pyramid S5. A few of the most impressive objects from the excavations are in the Sudan National Museum. These include those which were displayed in London in the Sudan Ancient Treasures exhibition in 2004 (Welsby and Anderson 2004, 151ff. cat. nos 128-135, 137-143) along with a few other choice objects, including the copper-alloy offering table (Welsby 2010, col. pl. XIX) and beaker with incised decoration.

#### **Post-excavation and publication**

A number of specialists are now actively working towards producing the final publication of the excavations at Kawa in the SARS monograph series. It is to be hoped that, following on from the publication and subsequent consideration of the importance and potential of the site, a new campaign of excavations will be undertaken on this, one of the best preserved and most interesting of Sudan's archaeological sites with remains spanning from the *Kerma Classique* through to the end of the Kushite period.

#### **Acknowledgements**

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