

# Kerma presence at Ginis East: the 2020 season of the Munich University Attab to Ferka Survey Project

Julia Budka

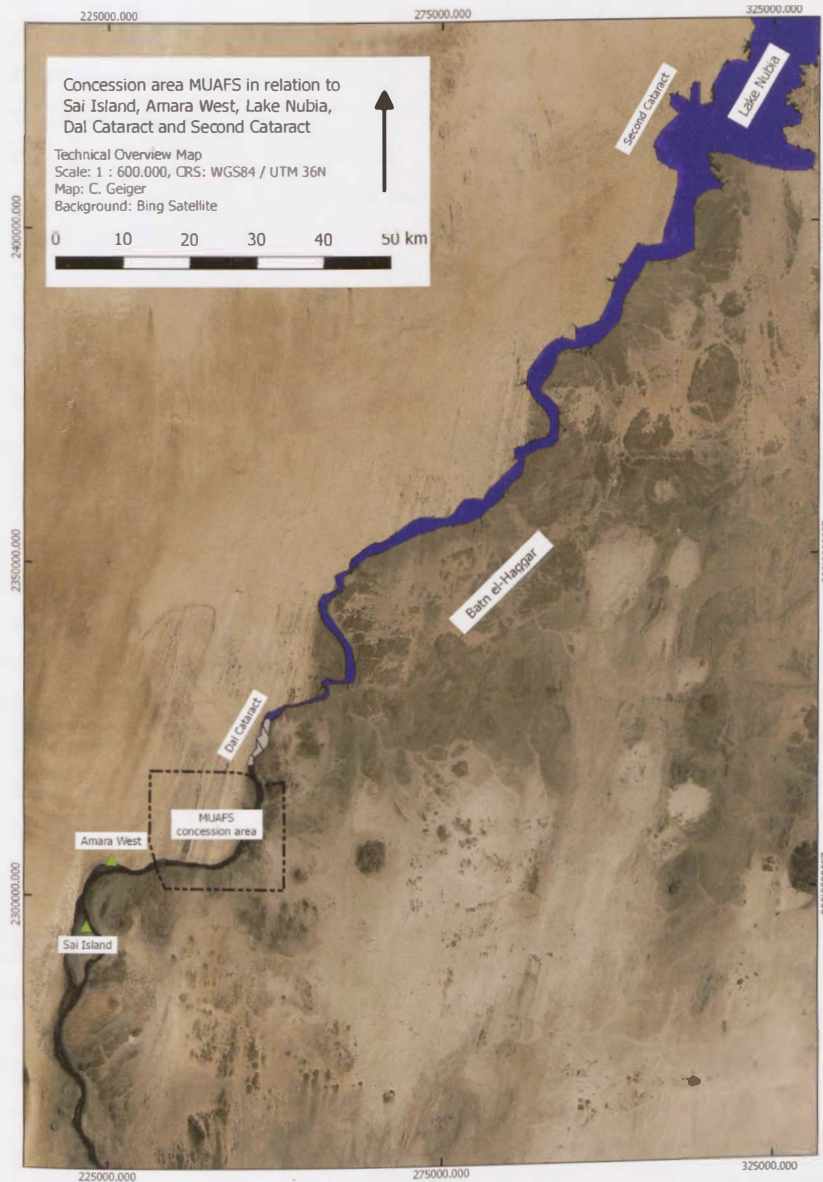


Figure 1. The location of the MUAFS concession area (map C. Geiger © MUAFS).

## Introduction

The area that is the focus of the Munich University Attab to Ferka Survey Project (MUAFS) is a stretch along the Nile including various islands in northern Sudan (see Budka 2019). Being located next to a cataract region and the natural frontier of the rocky outcrop of the Batn el-Haggar, the MUAFS research concession is a geological boundary zone (Figure 1) – this is also reflected in its being a frontier zone in terms of cultures. Throughout the ages, the area has been a contact zone between various cultural groups and either the northernmost realm (e.g. for the Kerma Kingdom) or the southernmost region of influence (e.g. for the Egyptians in the early New Kingdom, cf. Morris 2018, 119-120, or during Ottoman times when the fortress of Qalat Sai on Sai Island was the southernmost stronghold erected by the empire, see Alexander 1997). A strategic value of the area can also be illustrated by the Battle of Ferka in 1896 when the Anglo-Egyptian forces took an important Mahadist outpost on their way to Dongola and Khartoum (Barthorp 1984, 139).

The MUAFS concession was previously preliminarily surveyed by the Sudan Antiquities Service together with the

French Archaeological Research Unit under the direction of André Vila in the 1970s (Vila 1976a; 1976b; 1977a; 1977b) and multiple sites comprising settlement and funerary remains as well as rock art, fortresses and churches from Palaeolithic to Post-Medieval periods were documented (see Budka 2019).

The MUAFS project applies a landscape biography approach (see Kolen and Renes 2015), investigating encounters of humans and landscapes in a peripheral borderscape with a *longue durée* perspective, considering all attested finds from Palaeolithic times until the Islamic age. The major goal is to evaluate the living conditions in this contact space (following the concept of ‘contact spaces’ by Stockhammer and Athanassov 2018) with a special focus on humans, human activities, technologies and materiality as well as animals (Budka 2019).

A subproject (ERC DiverseNile) concerned with cultural diversity in the Attab to Ferka region during the Bronze Age started in April 2020 under the umbrella of the MUAFS project. The main objective of DiverseNile is to reconstruct Middle Nile landscape biographies beyond established cultural categories, enabling new insights into ancient

dynamics of social spaces. The project's aim of reconstructing 'contact space biographies' (see Budka 2020a) will most probably result in a revised and differentiated picture of the Middle Nile as social space being home to diverse groups and actors rather than as a static landscape.

## Results of the 2020 survey in the MUAFS concession

As a follow up of the successful 2018/2019 season (Budka 2019), the second MUAFS season was conducted from February 11<sup>th</sup> to March 10<sup>th</sup>, 2020. The survey, carried out by foot, was focused on the east bank around Ginis, including the districts of Kosha, Mograkka and Ferka (Figure 2). As in 2019, one particular interest of our survey was the current state of preservation of known sites – unfortunately, at almost all sites, we observed modern destruction and/or plundering (cf. Budka 2019, 16). Especially drastic were destructions because of road building, electricity posts and modern gold working, hampering in many cases the identification of sites documented by Vila.

One striking example is the large tumulus within the Post-Meroitic Site 3-P-1<sup>1</sup> at Kosha East (Vila 1976b, fig. 31.1). This monumental tumulus (measuring 35m in diameter at its base), comparable to the ones at Ferka, but also to the famous tombs at Qustul and Ballana, is completely gone now. According to information kindly provided by local villagers, it was removed in 2008. Large parts of Cemetery 3-P-1 are now located under modern fields; the line of electricity cuts the southern extension of the site. This example illustrates the urgent need to document the archaeology in the Attab to Ferka region according to modern standards as soon as possible.

## Character and dating of sites

Altogether 40 sites previously documented by Vila were identified in 2020 and registered by MUAFS with new photos, notes and GPS waypoints. These comprise eleven sites at Ginis East, eight at Kosha East, ten at Mograkka East and eleven at Ferka. Together with the results from 2018/19, MUAFS has now re-identified a total of 158 of the Vila sites (Figure 3).

The main categories of sites are campsites, villages, stone huts, tombs and cemeteries, rock art, churches and fortresses. The dating of the sites corresponds largely to the data collected by Vila and the majority of the sites (49 sites, 31%) can be attributed to Medieval times. Several so-called New Kingdom sites by Vila were identified by us as pre-Napatan and especially Napatan, postdating the New Kingdom (see Budka 2019, 19-21). The re-use of Meroitic burial grounds in Christian times was already noted by both Kirwan and Vila (Budka 2019, 21); all of these sites are by now very much affected by destruction, being located in the sandy plains close to the modern asphalt road.

In 2020, the large rock art site at the border between Mograkka and Kosha, Site 3-P-5, with more than 400 individual rock art pictures was documented (Vila 1976b, 79-87). The motifs comprise mostly cattle, antelopes, some human depictions, birds, dogs and other animals (Figures 4 and 5). While Vila left the dating as unclear, most of the rock art pictures seem to belong to the Kerma period. Post-Meroitic and Medieval ones are also present; the latter being well understood thanks to recent studies (see, e.g. Kleinitz and Olsson 2005). The tentative assessment of rock art as Post-Meroitic is based not only on stylistic reasons and the nature of the depicted motif (in this case cattle), but mainly on the relationship with neighbouring Post-Meroitic sites. In general, Site 3-P-5 is illustrative for the distribution of rock art in the MUAFS concession (Figure 6). Rock art is restricted to certain areas with fitting geology and large boulders, especially in the districts of Mograkka and Kosha.

In addition to the sites documented by Vila, a number of artefact scatters and camp sites, mostly of Pre-Kerma or multiperiod date were documented by means of GPS waypoints. Some isolated tombs were also noted, and dry-stone architecture was recorded with surface material that implies a Napatan date. Some New Kingdom ceramics were found associated with isolated tombs. Medieval and Post-Medieval stone huts and stone walls were also documented, including evidence for the presence of the British army in the Anglo-Egyptian campaign (as already noted by Vila). In addition, one of the small stone pyramids built as a war memorial of the Anglo-Egyptian military operations marks the location of the battle of Kosha (Figure 7). Several of such small pyramid-shaped monuments were set up in northern Sudan, especially between the 2<sup>nd</sup> and 3<sup>rd</sup> Cataracts. In our case, there was an Anglo-Egyptian outpost at Kosha where

<sup>1</sup> For the geographic localisation and numbering of the sites by Vila, using the map NF-36-, Kosha, of the Sudan Survey Department see Hinterhuber 2019, 14.



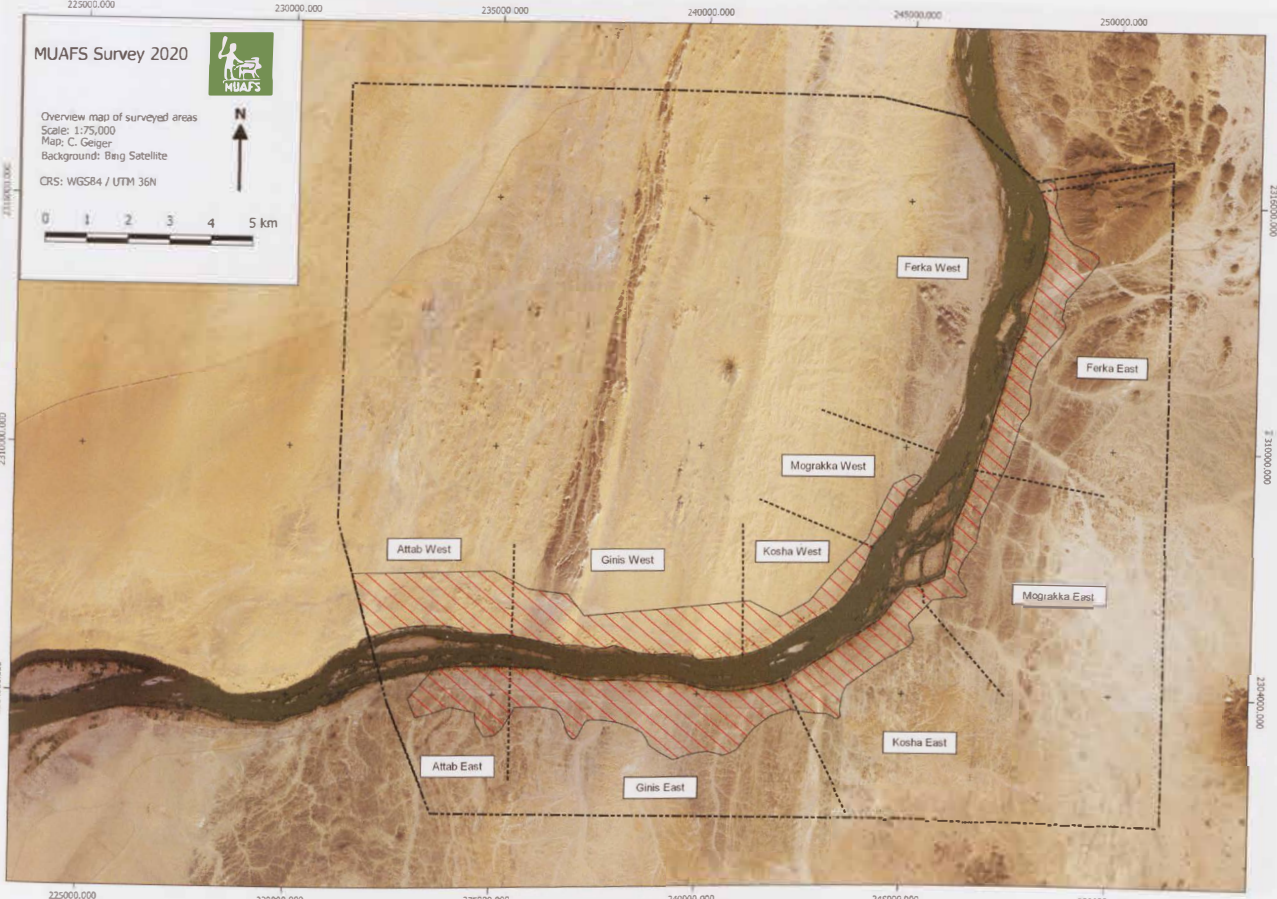


Figure 2. Surveyed areas in the MUAFS concession 2020 (map C. Geiger © MUAFS).

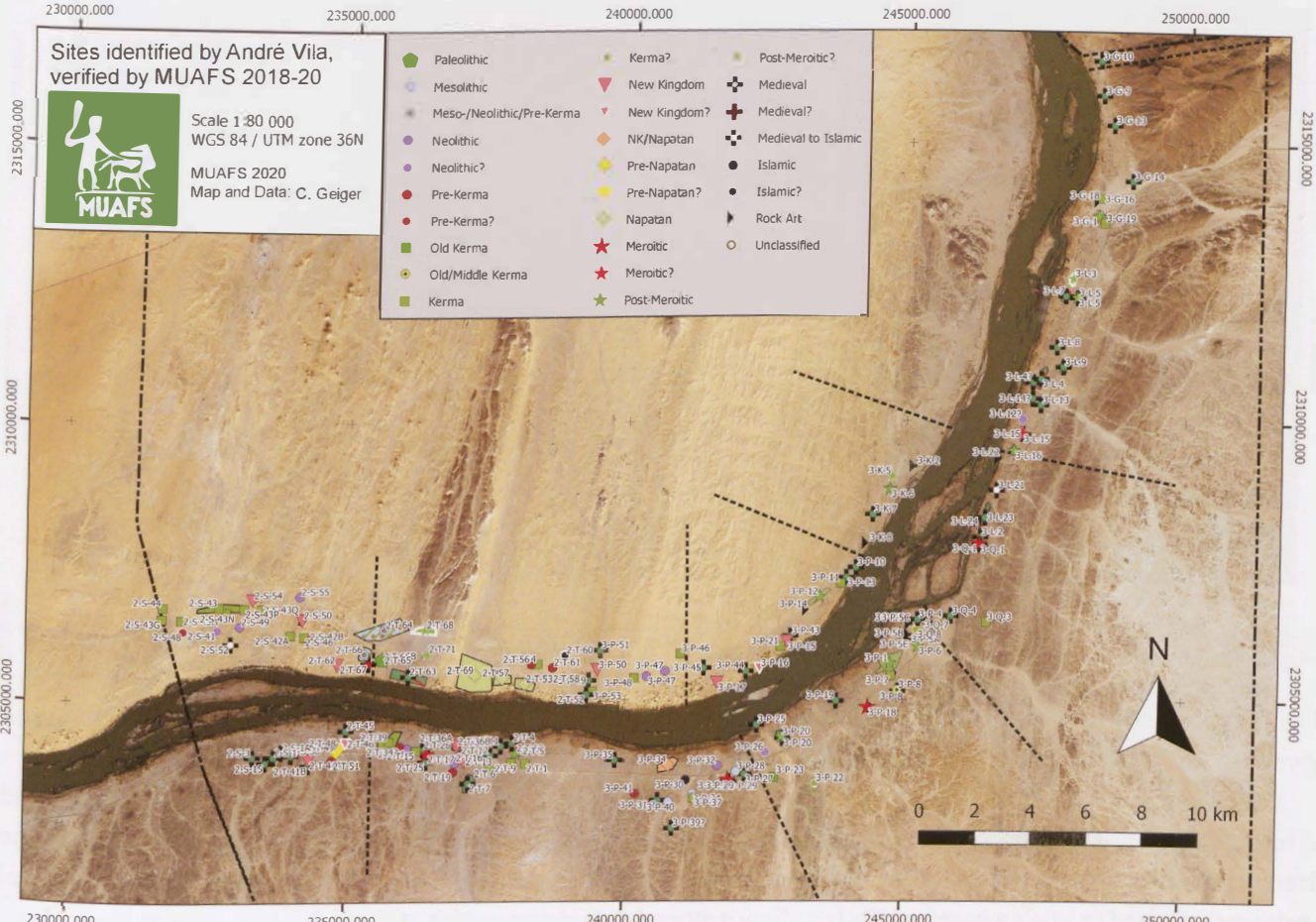


Figure 3. Re-located Vila sites in the MUAFS concession, status 2020 (map C. Geiger © MUAFS).





Figure 4. Rock art at Site 3-P-5E (photo J. Budka).



Figure 5. Rock art panel at Site 3-P-5D with images of cattle, antelopes, birds and two persons accompanied by dogs (photo J. Budka).

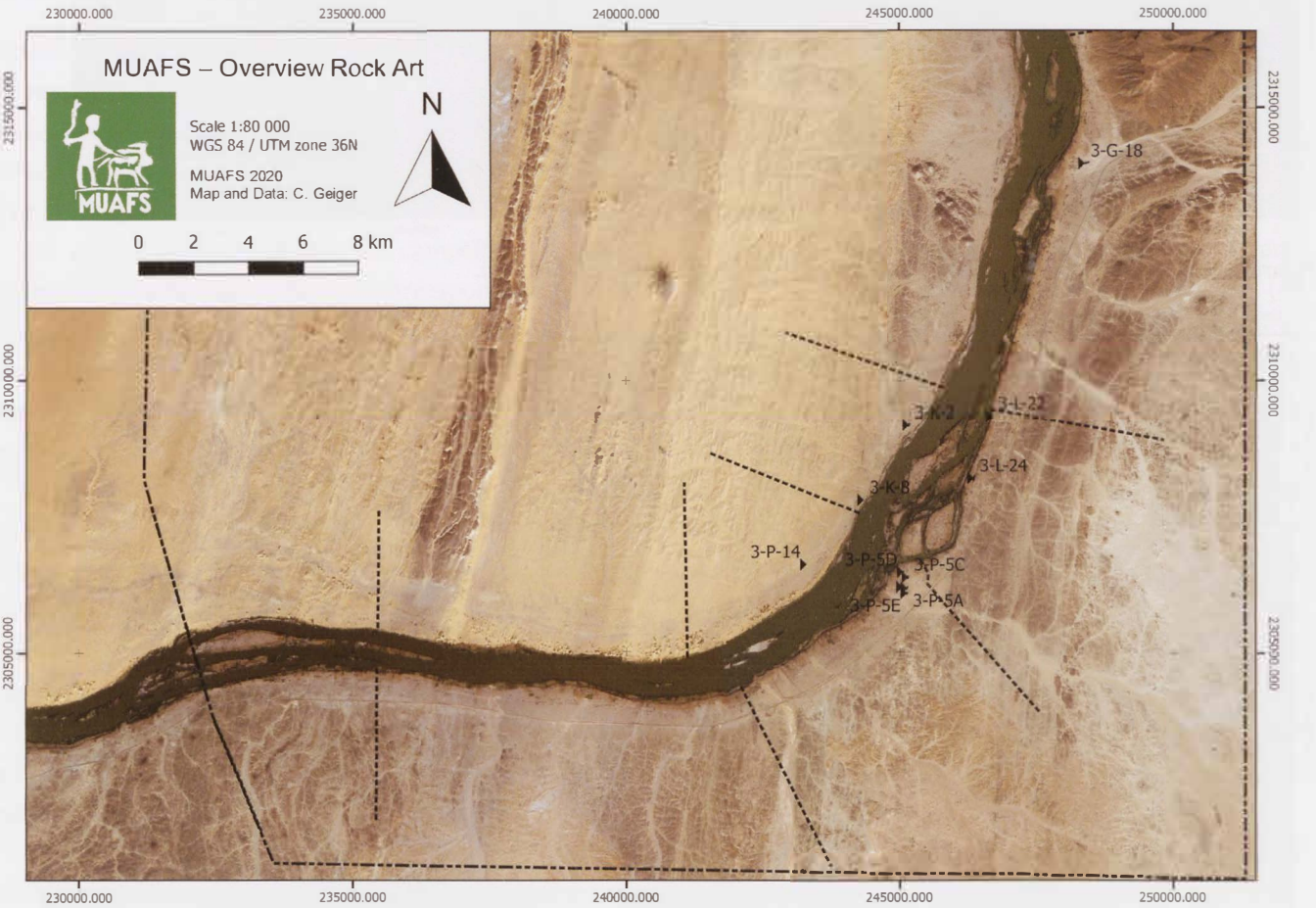


Figure 6. Distribution of rock art sites in the MUAFS concession, status 2020 (map C. Geiger © MUAFS).

fighters against the dervish forces happened in November/December 1885 (Rough 2008, xxv-xxvi). The label of the pyramid reads: ‘To the memory of British officers and men who died here in the Anglo-Egyptian campaigns’.

The newly recorded sites previously not registered by Vila are labelled as ‘MUAFS’ with consecutive numbers, and a total of 40 new sites were documented in 2019 and 2020 (Figures 8 and 9). 20% of these sites are associated with the Kerma period and 30% dated to the Medieval to sub-recent period (Figure 10). Thus, the new sites confirm the general patterns reflected in Vila’s survey results but allow a more detailed assessment of the individual districts throughout the ages.





Figure 7. War memorial from the Anglo-Egyptian campaign in 1885 at Kosha East (photo J. Budka).

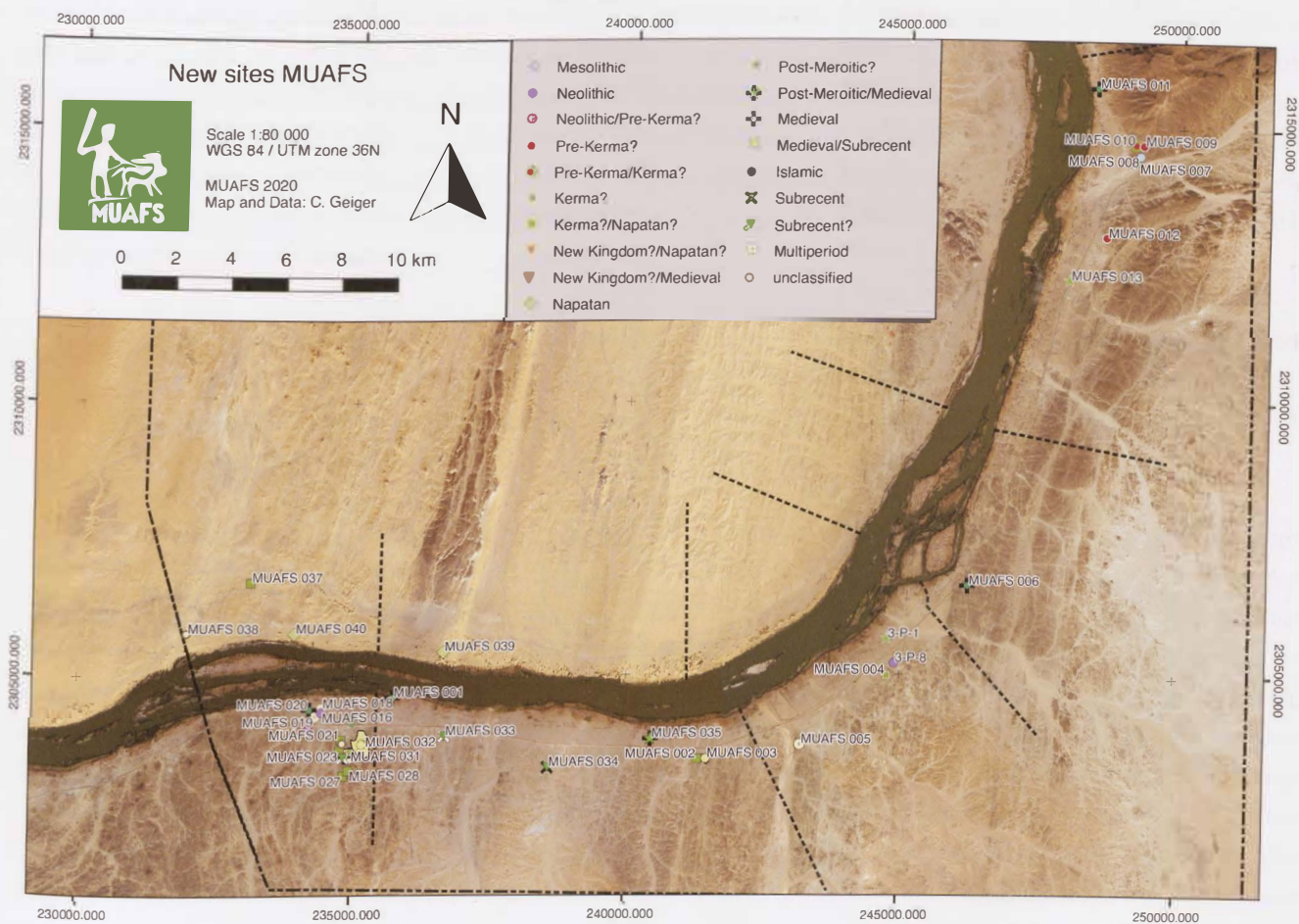


Figure 8. New sites registered in the MUAFS concession, status 2020 (map C. Geiger © MUAFS).

Site no.	District	Site type	Dating
MUAFS 001	Ginis E	Saia and chanel	Medieval
MUAFS 002	Ginis E	Camp site	Kerma
MUAFS 003	Ginis E	Camp site, settlement	Medieval; sub-recent
MUAFS 004	Kosha E	Cleft tomb	Kerma?
MUAFS 005	Kosha E	Camp site	Multiperiod
MUAFS 006	Mograkka E	Stone hut	Medieval
MUAFS 007	Ferka E	Stone wall	Sub-recent?
MUAFS 008	Ferka E	Camp site	Mesolithic
MUAFS 009	Ferka E	Camp site	Pre-Kerma?
MUAFS 010	Ferka E	Camp site	Pre-Kerma and Kerma?
MUAFS 011	Ferka E	Tombs and magazines	Medieval
MUAFS 012	Ferka E	Camp site	Pre-Kerma?
MUAFS 013	Ferka E	Tombs	Post-Meroitic?
MUAFS 014	Attab E	Tombs	New Kingdom?; Medieval?
MUAFS 015	Attab E	Stone shelters/huts	Medieval; sub-recent?
MUAFS 016	Attab E	Camp site	Neolithic
MUAFS 017	Attab E	Camp site	Multiperiod
MUAFS 018	Attab E	Camp site	Multiperiod
MUAFS 019	Attab E	Camp site	Multiperiod
MUAFS 020	Attab E	Camp site, settlement	Medieval
MUAFS 021	Attab E	Camp site	Kerma
MUAFS 022	Attab E	Tombs	unclear
MUAFS 023	Attab E	Tomb	Kerma
MUAFS 024	Attab E	Tomb	New Kingdom?; Napatan?
MUAFS 025	Attab E	Stone hut	Medieval
MUAFS 026	Attab E	Stone shelters/huts	Sub-recent?
MUAFS 027	Attab E	Stone hut	Kerma
MUAFS 028	Attab E	Tombs	Kerma
MUAFS 029	Attab E	Stone hut	unclear
MUAFS 030	Attab E	Tomb	Kerma?
MUAFS 031	Attab E	Stone shelter	Islamic/sub-recent
MUAFS 032	Attab E	Tomb	Kerma? Napatan?
MUAFS 033	Ginis E	Stone hut	Sub-recent?
MUAFS 034	Ginis E	Stone huts	Sub-recent
MUAFS 035	Ginis E	Cemetery	Post-Meroitic; Medieval
MUAFS 036	Ginis E	Camp	Neolithic?; Pre-Kerma
MUAFS 037	Attab W	Camp/occupation site	Kerma
MUAFS 038	Attab W	Structure	unclear
MUAFS 039	Ginis W	Stone architecture	Napatan
MUAFS 040	Attab W	Stone architecture	Napatan

Figure 9. List of new sites registered in the MUAFS concession, status 2020.



### Distribution of sites according to periods

The distribution of the sites in the MUAFS concession is highly interesting, illustrating not only general differences between the left and the right banks of the Nile (Figure 11), but also time-specific aspects. The only period in which sites are attested throughout the concession area on both riverbanks as well as the islands is the Medieval period (Figure 12). The distinctive pattern of site distribution in other periods seems to be relevant to address questions of cultural diversity. This is best illustrated by Kerma and New Kingdom sites (Figures 13 and 14), for which a classification as ‘Nubian’ and ‘Egyptian’ is well attested. However, the clusters of sites illustrated in the maps are only tentative because some of these sites seem to be firstly contemporaneous and secondly hold evidence of material and cultural entanglement. Thus, an attribution to cultural groups is not always reasonable and a label as Bronze Age sites seems more adequate. Therefore, both Kerma and New Kingdom sites of the MUAFS concession will be reassessed in the next years regarding their cultural classification and dating (see Budka 2019, 24–25).

For now, it is already striking that the New Kingdom sites are clustered within the southwestern part of the research area (Figure 14), thus close to Amara West and Sai Island, and there are almost no ‘Egyptian’ sites in the close neighbourhood of the Dal Cataract (Budka 2019, 25). It seems likely that we have to consider two main aspects influencing the variability of Bronze Age sites in the Attab to Ferka region: 1) a former bias in interpretation; and 2) an actual unevenness of sites, most likely reflecting diverse social/cultural groups and environmental factors, thus illustrating the varied use of the landscape as a complex social space (cf. Woodward *et al.* 2017 for the hydrological and geomorphological changes in the local riverine system). The role of the urban centres of Amara West and Sai Island also needs to be considered (cf. Spencer 2017; Spencer 2019; see also Stevens and Garnett 2017) and might be another reason for this pattern of site distribution (Budka 2019).

### In focus: Kerma remains

Camps, settlements and cemeteries of the Kerma culture were recorded at both riverbanks (Figure 13). Of particular interest are stone structures in the Attab West district associated with 18<sup>th</sup> dynasty pottery but of unclear cultural attribution (Budka 2019, 24–25) and various settlement sites in the district of Ginis East. Large Kerma tumulus cemeteries, most of them currently plundered and/or destroyed, are located at Kosha East and Ferka East and were already noted by Kirwan (1939, 19, 27). These Kerma sites north of Sai Island, and here especially the settlement sites in the MUAFS concession, are of much relevance to address the issue of the borders of the Kerma kingdom as well as the cultural manifestations of what has been labelled as ‘rural Kerma’. That which was written a few years ago by Brigitte Gratien still holds true today:

*‘As everybody knows, writing about Kerma north of the Third Cataract is not so easy. Most of the excavations were done a long time ago and the results come mostly from the Nile valley. Where are the borders of the Kerma state or kingdom? What are the stages in the expansion of Kerma to the north, and what was the nature of the links and relationship with the other Nubian cultures and with Egypt?’ (Gratien 2014, 95).*

The Attab to Ferka region and renewed excavations at Kerma sites in the area have much potential to address these questions and problems. Not only will it be possible to challenge well-established categorisations of sites as ‘Egyptian’ and ‘Nubian’, but also the question of cultural encounters will be investigated with a bottom-up approach considering the distribution of sites and their duration, settlement infrastructures, building techniques, productive activities and technologies, trade, diet, material culture, burial customs and religious practices as well as social structures. Aspects of acceptance, appropriation and ignorance/rejection of cultural symbols need to be considered not only in respect of the Egyptian culture but also for phenomena relating to the most prominent indigenous groups of the region, the Kerma culture and the C-Group (see Edwards 2004, 75–78; Näser 2013; Williams 2014). Complex refigurations of Nubian cultures have been addressed by means of cemetery analyses (de Souza 2013; de Souza 2019; Weglarz 2017) and ceramic studies (Raue 2018) and there is the urgent need for additional material from settlement sites. Our case studies from the MUAFS concession will allow a comparison of ‘provincial’ Kerma remains (cf. Gratien *et al.* 2003; Gratien *et al.* 2008; Ross 2014) with the capital of the Kushite kingdom, Kerma itself (Bonnet 2014). The first

Period	Quantity
Mesolithic	1
Neolithic	2
Pre-Kerma	3
Kerma	9
New Kingdom	2
Napatan	2
Post-Meroitic	2
Medieval	7
Islamic/sub-recent	5
Multiperiod	4
Unclear	3
	40



Figure 10. Dating of newly registered sites in the MUAFS concession, status 2020.

Figure 11. Drone aerial photo of the landscape at Attab, illustrating general differences between the right and the left riverbanks (photo C. Geiger).

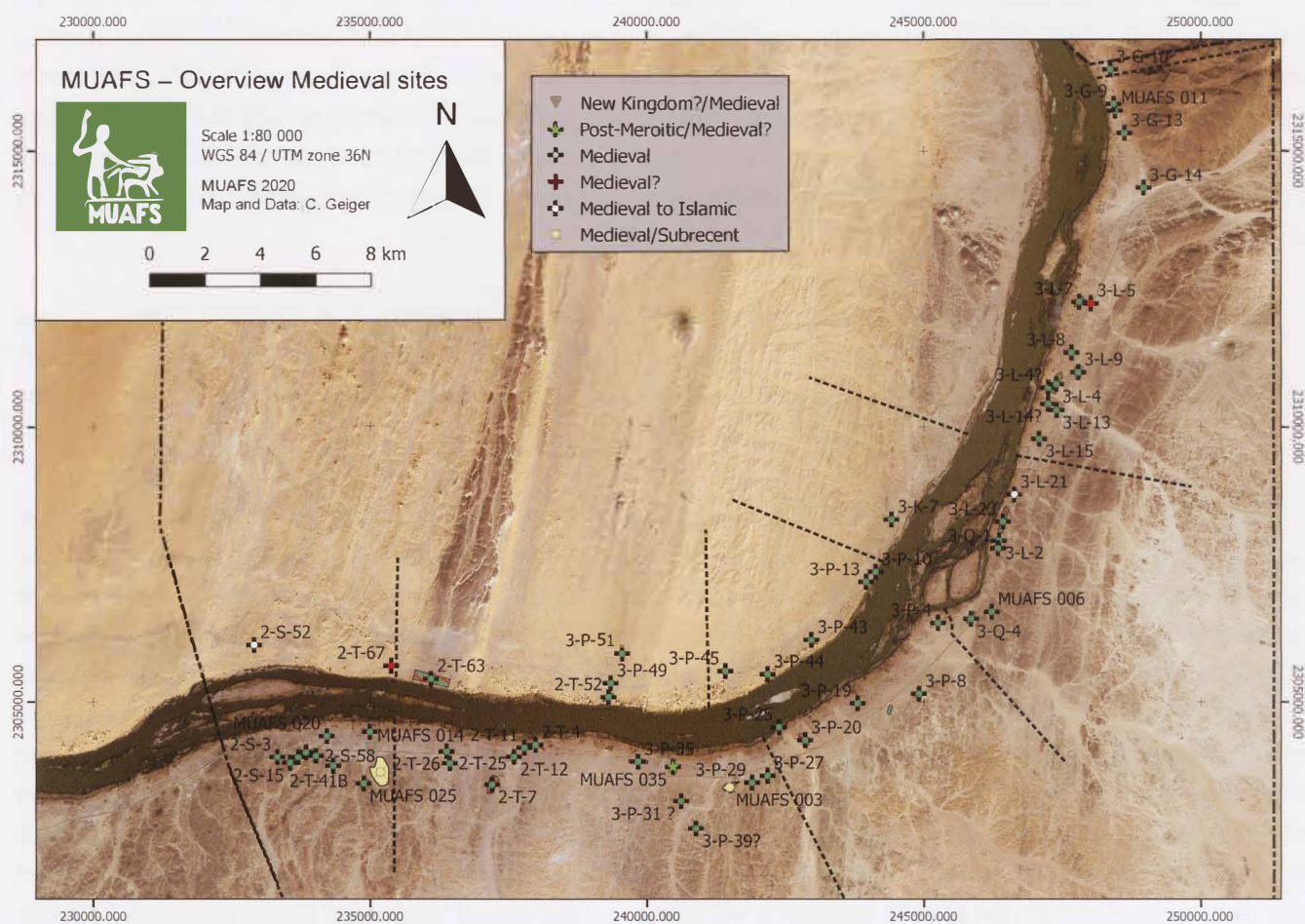


Figure 12. Distribution of Medieval sites in the MUAFS concession (map C. Geiger © MUAFS).



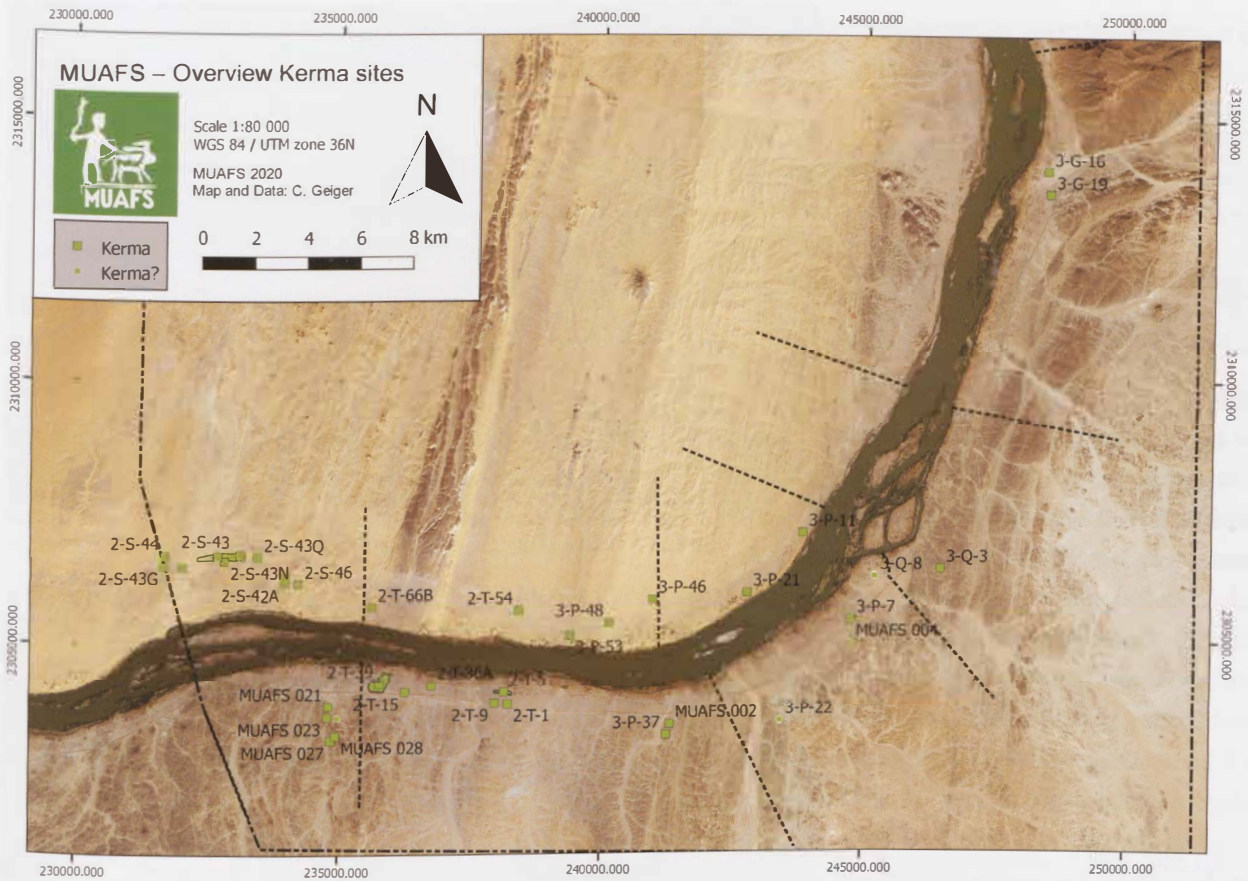


Figure 13. Distribution of Kerma sites in the MUAFS concession (map C. Geiger © MUAFS).

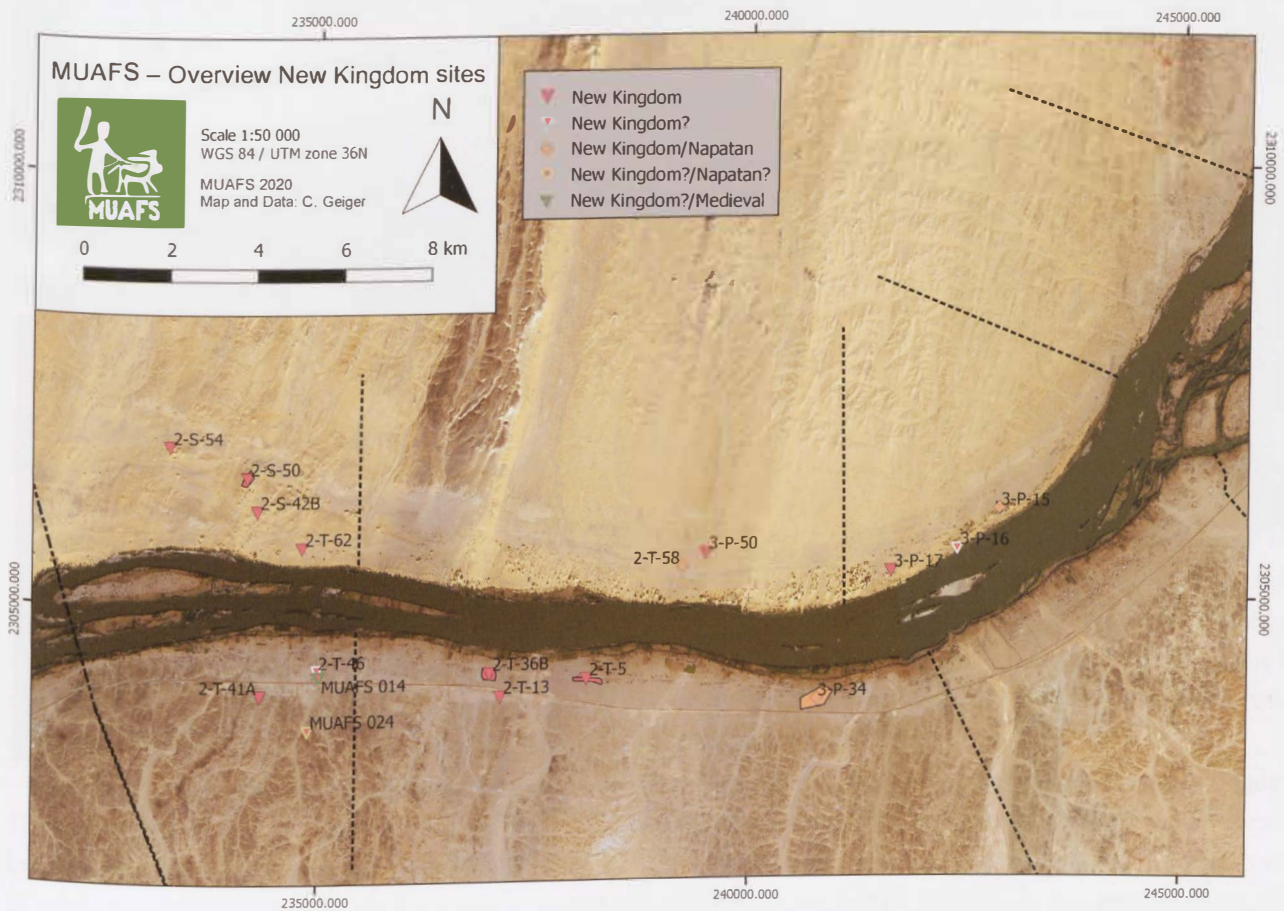


Figure 14. Distribution of New Kingdom sites in the MUAFS concession (map C. Geiger © MUAFS).



tentative steps towards this re-assessment were undertaken by means of test excavations in the 2020 MUAFS field season.

Test excavations at Ginis East

The ERC DiverseNile project will focus in the next five years on Kerma and New Kingdom remains in the Attab to Ferka region. In order to get familiar with the site formation processes and sedimentation in the area, we conducted small test excavations at four sites in the district of Ginis East. Based on the surface finds, all of these sites are associated with the Kerma culture. A total of eight trenches were excavated by the MUAFS team (Figure 15); local workmen will be engaged in the next season.

Site GiE 001

Recorded by Vila as 2-T-36B, this domestic site at Ginis East can be assigned to the Egyptian New Kingdom, showing also an intriguing Kerma presence according to the surface finds. Magnetometry was conducted by MUAFS in 2019 (Scheiblecker 2019, 21-22, figs. 2-3). In the 2020 season, two trenches were laid out above promising anomalies in the magnetometry in the north-eastern part of the site.

Trench 1 (6x4m) yielded – apart from surface finds that were mixed and dated from the Kerma Period, the New Kingdom, the Napatan Period and Christian times – some *Kerma Classique* sherds from lower levels. However, no structures were found and the magnetometry seems to show natural features, especially more sandy areas that contrast with clay layers/alluvial sediments.

Trench 2 (10x4m) generated large quantities of ceramics and stone tools from the surface (see below). The main archaeological features found in this trench were sub-recent pits deriving from *marog* activities. The largest of these pits in Trench 2, Feature 1, is 2.40m in diameter and 0.75m deep (Figure 16). It was filled with fine sand and traces of the tools used by the *marog* diggers are clearly visible on the sloping edges. We documented everything in 3D according to our standard procedure (see Figure 17, Trench 2 with Feature 1).<sup>2</sup> The find material comprised mostly mixed pottery from the New Kingdom, Napatan and Medieval era as well as some recent date seeds and small pieces of charcoal and bone.

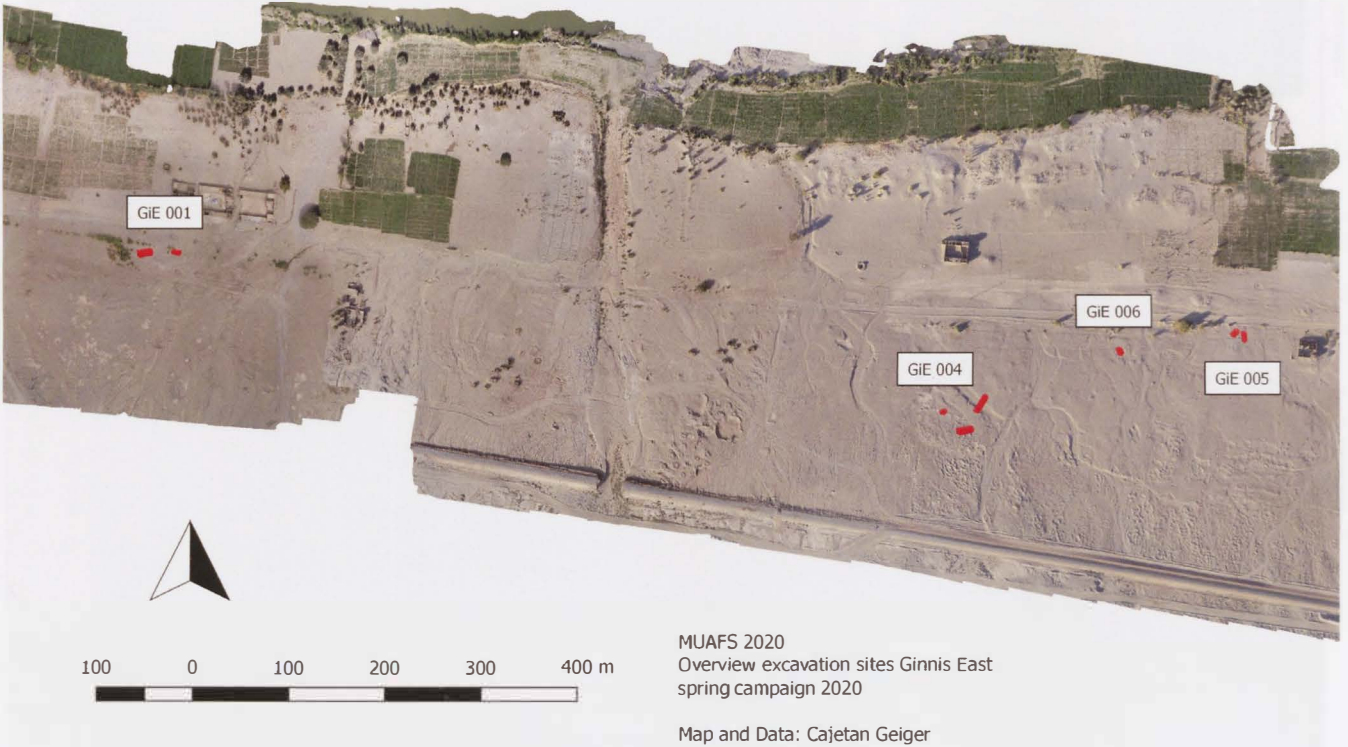


Figure 15. Location of the test excavation trenches at Ginis East (map C. Geiger © MUAFS).

<sup>2</sup> For this documentation technique see Fera and Geiger 2018.





Figure 16. Marog pit Feature 1 in Trench 2 at GiE 001 (photo J. Budka).

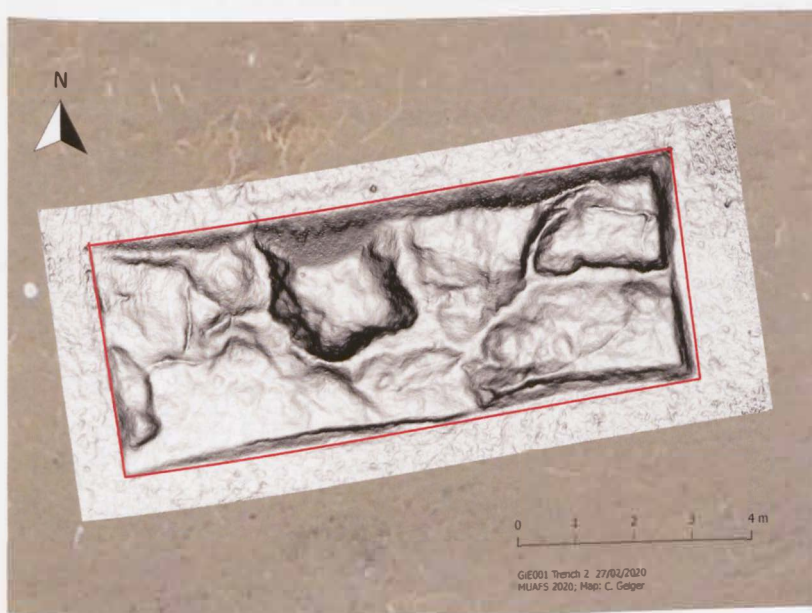


Figure 17. Surface of Trench 2 in GiE 001 with a *marog* pit along the northern edge as prominent feature (map C. Geiger © MUAFS).

village. Rounded huts, fences and walls seemed to be visible. The borders of the *wadi* systems were also clearly visible in the magnetogram (Scheiblecker 2019, 22, figs. 4-5). Our 2020 test trenches at GiE 004 were chosen to clarify whether there was a kind of fortification along the *wadi* and if the interpretation of the anomalies was correct (Figure 18).

Three trenches were laid out (Figure 18; Trench 1: 18x3m, at the edge of a *wadi*; Trench 2: 14x4m, at the top of the plateau of the site; Trench 3: 2x3.5m, within a circular depression around the central part of the site). After a shallow, sandy surface layer with many finds, no sedimentation and no structures were found across all three trenches. All features documented were alternating areas of sand and clay and were completely natural (Figure 19). Thus, the clear result of the 2020 test excavation at GiE 004 was that the anomalies of the magnetometry were over-interpreted as structures and are natural features rather than settlement remains.

Since the character of the site was difficult to assess, we opened two more areas for surface cleaning (Figure 18, Trench 4: 10x9m; Trench 5: 7x10m). Within the finds from GiE 004, *Kerma Classique* material dominates the ceramics, but Egyptian New Kingdom pottery is also present, including imported Canaanite amphorae, a very limited number of marl clay sherds and some Medieval ceramics (Figure 20). The quantities of stone tools and pottery from all five trenches at GiE 004 support the interpretation that Trenches 1 and 3 are located at the edges or even outside the site;

Neither of the trenches in GiE 001 yielded mud bricks or any structures from the New Kingdom; it is likely that the part with the trenches is located outside the former settlement area. That the area was inhabited and used during both the 18<sup>th</sup> dynasty and the Ramesside period becomes nevertheless evident from the find assemblages we collected.

Excavation and processing of data at GiE 001 will continue in the next years but based on its material culture, the site seems to be associated with the gold exploitation in the periphery of Sai Island and Amara West. The cultural assessment and evaluation of the Kerma remains in conjunction with New Kingdom Egyptian material at GiE 001 needs to await further material evidence and extended excavation.

#### Site GiE 004

In 2019, we assumed that Site GiE 004 was documented by Vila as Site 2-T-5. However, new georeferenced data and fresh GPS waypoints made it clear that this needs to be corrected and that GiE 004 was actually not recorded by Vila, but that the site is located further to the south than 2-T-5 (see the new map, Figure 3).

The magnetometry survey of the site by MUAFS in 2019 yielded promising results which, according to the finds and the structures visible on the magnetogram, were interpreted as remains of a Kerma



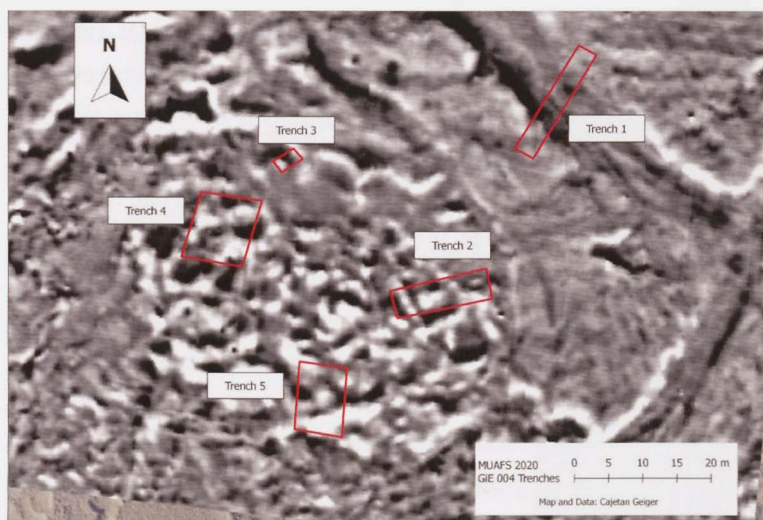


Figure 18. Location of test trenches at GiE 004 above the magnetometry (map C. Geiger © MUAFS).

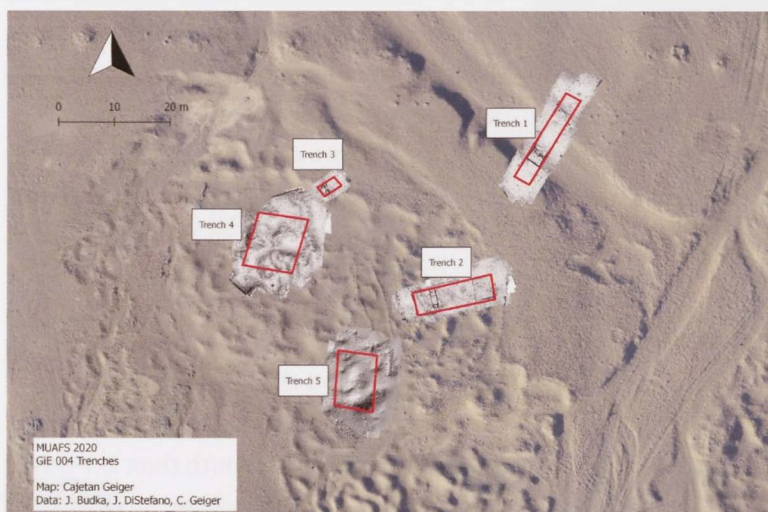


Figure 19. Surfaces in the test trenches at GiE 004 (map C. Geiger © MUAFS).



Figure 20. Selection of pottery sherds from Trench 4, GiE 004 (photo J. Budka).

Trenches 2, 4 and 5 are very similar to each other and all yielded much *Kerma Classique* material as well as Egyptian wheel-made pottery of the New Kingdom. The majority here comes from Trench 4 where almost 50% of the pottery from GiE 004 was found. Trench 4 also yielded nice stone tools, including a small arrowhead (Figure 21).

Overall, although much of the surface material in these trenches from GiE 004 was wind-worn and eroded as well as mixed (of course, there were also Medieval pieces present), both the pottery and lithics/stone tools speak for a domestic character of the site with different activity zones. Like at GiE 001, grinding activities and quartz crushing are well attested. The ceramics cover a large variety from Kerma fine ware to Egyptian and Nubian storage vessels and Canaanite amphora.

#### Site GiE 005 (Vila 2-T-5)

The Kerma site documented by Vila as 2-T-5 was labelled by MUAFS as GiE 005. It is located in the neighbourhood of GiE 004 (see Figure 15) at a distance of 200m to the Nile. The site is situated on the alluvial plain and extends c. 500m east west on the remains of a shallow, barely visible terrace (250-400mm high). Two test trenches were laid out in 2020 in the eastern part of GiE 005 and were excavated.

Trench 1 (8x2m) yielded some small depressions and pits below a shallow sandy surface. Very few Kerma sherds were discovered in a lower muddy level, without evidence of structures or stratigraphy. Trench 2 (6x3m) comprised a small sandy hill with many schist stones scattered around. Here again, no structures and no sedimentation or stratigraphy were observed. The sandy hill seems to be a sub-recent assemblage of wind-blown sand. Interestingly, the same muddy layer like in Trench 1 below the sand yielded one single artefact, a Kerma sherd lying on a clay surface.

Overall, the camp site of 2-T-5 is poorly preserved, and no stratification is present, as already observed by Vila (1977a, 30). One important result of our work in 2020 is a tentative dating to the *Kerma Classique* period and the presence of 18<sup>th</sup> dynasty Egyptian





Figure 21. Stone tools from Trench 4, GiE 004 including an arrowhead (photo J. Budka).

material, which has not been noted before. New Kingdom beer jar fragments were present among the ceramics and support also the settlement character of the site.

#### The Site GiE 006 (south of Vila 2-T-5)

Surface finds suggest that the camp site 2-T-5 might also extend further to the south, south of the barely visible terrace. In order to test this, a trench was opened at a site now labelled as GiE 006. Trench 1 (3x5m, Figure 15) only yielded surface finds and showed an irregular muddy, natural surface below the sandy surface layer. As in GiE 005, no stratification is preserved. Although the finds are mixed and can also be explained with a multi-period use of the site, most of the material belongs to the Kerma horizon.

Thus, this is probably an extension of a Kerma camp identical or similar to GiE 005.

### **Material culture from the test excavations**

Most finds were unearthed in 2020 at GiE 001 and GiE 004. The following is a short assessment of the material culture at GiE 001, which compares well to what was discovered at GiE 004. The main categories found are ceramics and stone tools.

At GiE 001, Trench 1 only yielded a total of 328 pottery sherds, of which 13 are diagnostic pieces (4%). 271 pieces from all sherds (83%) can be dated to the Kerma/New Kingdom period. This pattern is repeated in Trench 2, but here a larger quantity of pottery was found. A total of 3709 sherds were collected, 177 of which are diagnostic pieces (5%). In this trench, 3203 sherds belong to the Kerma/New Kingdom horizon (86% and thus the clear majority).

Especially relevant is that within the last muddy layer comprising finds, only 13 small pottery sherds were found. All of these are New Kingdom in date, six are wheel-made and of Egyptian tradition, seven are handmade Nubian wares. This seems to underline the complex cultural background of the site and/or to represent evidence for material entanglement.

The second most frequent category of finds from GiE 001 after pottery are stone tools and lithics. These were quite numerous, especially in Trench 2, where, for example, 102 pieces were collected from the surface layer. The stone artefacts are mostly flakes and here predominately quartz flakes; very frequently occurring were also fragments from sandstone grindstones and handmills. A few chert flakes and some pounders and hammer stones were also noted.

All in all, the stone artefacts seem to attest quartz working and grinding of materials. This fits perfectly to the topographical situation of the site – just south of GiE 001, there is a large quartz vein visible on the surface. This might relate to ancient gold working as is well attested in the general region of Upper Nubia and especially around the main centres of the New Kingdom empire like Sai, Sesebi and Amara West (see Klemm and Klemm 2013; Klemm and Klemm 2017).

In the 1970s, Vila documented a gold working site further to the east at Ginis East where New Kingdom and Napatan ceramics on the surface next to a quartz vein resemble the evidence from GiE 001 (Vila 1977a, 94; see Budka 2019, 21). This gold extraction site with both Ramesside and Napatan remains, 3-P-34, shows numerous artefact concentrations and deposits of crushed quartz on the surface. Like GiE 001, it represents an important new addition to New Kingdom gold working activities in the Batn el-Hagar region and is especially relevant for the continuation of these activities into Napatan times.

In conclusion, the material culture from both GiE 001 and GiE 004 compares very well with the find assemblage from the New Kingdom town at Sai Island (Budka 2020b, 183-268), stressing the need for a close assessment of all factors shaping the character of these sites that comprise both 'Egyptian' and 'Nubian' features.

## Summary and outlook

In summary, the second MUAFS season resulted in important new data with which to evaluate the area as a complex contact space in the periphery of Amara West and Sai Island. The new test excavations in the district of Ginis East provided important fresh data on 1) the character of the sites; 2) the dating of the sites; and 3) clarification that the interpretation of the magnetometry survey from 2019 showed no man-made structures, but different natural layers at the sites of GiE 001 and GiE 004. As observed by Vila, at many sites on the east bank in the MUAFS concession there is little or no sedimentation preserved. This is an important aspect to consider in our next field seasons.

The MUAFS 2020 survey yielded the imperative result that the modern destruction of sites, especially due to gold digging, is ongoing and endangers the archaeology of the region. Some sites visited by us in 2019 are by now plundered (e.g. a cemetery close to the church 2-G-9 at Ferka East). This new data from 2020 will help us to decide which sites are of prime priority to undertake rescue excavations in the near future. Within the upcoming season, we will investigate Site GiE 001 further and we will also start excavating one of the Kerma or New Kingdom cemeteries of the area of Ginis East. Furthermore, the survey will continue, especially in the hinterland and on the west bank of the Nile as well as on major islands like Ferkinarti with well-preserved Medieval remains (see Vila 1976a, 90-94).

## Acknowledgments

This paper was written during the timespan of the ERC DiverseNile project. This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No. 865463).

Funding for fieldwork was kindly granted to the MUAFS project in 2020 by LMU Munich's Faculty for the Study of Culture. Permission to work in the field was received by the National Corporation for Antiquities and Museums, Sudan (NCAM) and sincere thanks go to Hatim al-Noor (Director General), El-Hassan Ahmed Mohamed (Director of Fieldwork) and Huda Magzoub (NCAM inspector). Many thanks are due to all team members of the 2020 season, Giulia D'Ercole, Jessica Distefano, Cajetan Geiger and Veronica Hinterhuber.

## References

- Alexander, J. 1997. 'Qalat Sai, the most southerly Ottoman Fortress in Africa', *Sudan & Nubia* 1, 16-20.
- Barthorp, M. 1984. *War on the Nile*. London.
- Bonnet, C. 2014. *La ville de Kerma: une capitale nubienne au sud de l'Égypte*. Paris.
- Budka, J. 2019. 'Towards Middle Nile Biographies: The Munich University Attab to Ferka Survey Project 2018/2019', *Sudan & Nubia* 23, 13-26.
- Budka, J. 2020a. 'Cultural diversity in the Middle Nile: New approaches towards "contact space biographies",' *The Project Repository Journal* 4, 20-23.
- Budka, J. 2020b. *AcrossBorders 2. Living in New Kingdom Sai*. Archaeology of Egypt, Sudan and the Levant 1. Vienna.
- Edwards D. N. 2004. *The Nubian Past. An Archaeology of the Sudan*. London.
- Fera, M. and C. Geiger 2018. 'Image Based Modelling and Kite Aerial Photography on Sai Island', in J. Budka and J. Auenmüller (eds), *From Microcosm to Macrocosm. Individual households and cities in Ancient Egypt and Nubia*. Leiden, 127-134.
- Gratien, B. 2014. 'Kerma north of the Third Cataract', in J. R. Anderson and D. A. Welsby (eds), *The Fourth Cataract and Beyond. Proceedings of the 12th International Conference for Nubian Studies*. British Museum Publications on Egypt and Sudan 1. Leuven, 95-101.
- Gratien, B., Marchi, S., Thuriot, O. and J.-M. Willot 2003. 'Gism el-Arba, habitat 2. Rapport préliminaire sur un centre de stockage Kerma au bord du Nil', *Cahiers de Recherches de l'Institut de Papyrologie et d'Égyptologie de Lille* 23, 29-43.
- Gratien, B., S. Marchi, D. Sys and R.-P. Dissaux 2008. 'Gism el-Arba – Habitat 2, Campagne 2005–2006', *Kush* 19 (2003-2008), 21-35.
- Hinterhuber, V. 2019. 'Previous work in the area: results of Vila's survey', in J. Budka, 'Towards Middle Nile Biographies: The Munich University Attab to Ferka Survey Project 2018/2019', *Sudan & Nubia* 23, 13-15.
- Kirwan, L. P. 1939. *The Oxford University Excavations at Firka*. London.
- Kleinitz, C. and C. Olsson 2005. 'Christian period rock art landscapes in the Fourth Cataract region: the Dar el-Arab and et-Tereif rock art surveys', *Sudan & Nubia* 9, 32-39.
- Klemm, D. and R. Klemm 2017. 'New Kingdom and early Kushite gold mining in Nubia', in N. Spencer, A. Stevens and M. Binder (eds), *Nubia in the New Kingdom. Lived experience, pharaonic control and indigenous traditions*. British Museum Publications on Egypt and Sudan 3. Leuven, 259-270.



- Klemm, R. and D. Klemm 2013. *Gold and Gold Mining in Ancient Egypt and Nubia. Geoarchaeology of the Ancient Gold Mining Sites in the Egyptian and Sudanese Eastern Deserts*. Natural Science in Archaeology. Heidelberg.
- Kolen, J. and J. Renes 2015. 'Landscape Biographies: Key Issues', in J. Kolen, J. Renes and R. Hermans (eds), *Landscape Biographies: Geographical, Historical and Archaeological Perspectives on the Production and Transmission of Landscapes*. Amsterdam, 21-47.
- Morris, E. F. 2018. *Ancient Egyptian Imperialism*. Hoboken.
- Näser, C. 2013. 'Die C-Gruppe: Unternubien im 3. und 2. Jahrtausend v. Chr.', in S. Wenig and K. Zibelius-Chen (eds), *Die Kulturen Nubiens – ein afrikanisches Vermächtnis*. Dettelbach, 105-120.
- Raue, D. 2018. *Elephantine und Nubien vom 4.-2. Jahrtausend v. Chr. Band 1*. Deutsches Archäologisches Institut Abteilung Kairo Sonderschrift 40 (1). Berlin.
- Raugh, H. E. 2008. *British military operations in Egypt and Sudan: a selected bibliography*. Lanham/Plymouth.
- Ross, T. I. 2014. 'El-Eided Mohamadein (H25): A Kerma, New Kingdom and Napatan settlement on the Alfredda Nile', *Sudan & Nubia* 18, 58-68.
- Scheiblecker, M. 2019. 'Magnetometry', in J. Budka, 'Towards Middle Nile Biographies: The Munich University Attab to Ferka Survey Project 2018/2019', *Sudan & Nubia* 23, 21-22.
- Souza, A. M. de 2013. 'The Egyptianisation of the Pan-Grave Culture: a new look at an old idea', *The Bulletin of the Australian Centre for Egyptology* 24, 109-126.
- Souza, A. M. de 2019. *New Horizons: The Pan-Grave Ceramic Tradition in Context*. Middle Kingdom Studies 9. London.
- Spencer, N. 2017. 'Building on new ground: the foundation of a colonial town at Amara West', in N. Spencer, A. Stevens and M. Binder (eds), *Nubia in the New Kingdom. Lived Experience, Pharaonic Control and Indigenous Traditions*. British Museum Publications on Egypt and Sudan 3. Leuven, 323-355.
- Spencer, N. 2019. 'Settlements of the Second Intermediate Period and New Kingdom', in D. Raue (ed.), *Handbook of Ancient Nubia*, vol. 1. Berlin, 433-464.
- Stevens, A. and A. Garnett 2017. 'Surveying the pharaonic desert hinterland of Amara West', in N. Spencer, A. Stevens, and M. Binder (eds), *Nubia in the New Kingdom. Lived Experience, Pharaonic Control and Indigenous Traditions*. British Museum Publications on Egypt and Sudan 3. Leuven, 287-306.
- Stockhammer, P. W. and B. Athanassov 2018. 'Conceptualising Contact Zones and Contact Spaces: An Archaeological Perspective', in S. Gimatzidis, M. Pieniżek and S. Mangaloğlu-Votruba (eds), *Archaeology across Frontiers and Borderlands. Fragmentation and Connectivity in the North Aegean and the Central Balkans from the Bronze Age to the Iron Age*. OREA 9. Vienna, 93-112.
- Vila, A. 1976a. *La prospection archéologique de la Vallée du Nil, au Sud de la Cataracte de Dal (Nubie Soudanaise). Fascicule 3: District de Ferka (Est et Ouest)*. Paris.
- Vila, A. 1976b. *La prospection archéologique de la Vallée du Nil, au Sud de la Cataracte de Dal (Nubie Soudanaise). Fascicule 4: District de Mograkka (Est et Ouest), District de Kosha (Est et Ouest)*. Paris.
- Vila, A. 1977a. *La prospection archéologique de la Vallée du Nil, au Sud de la Cataracte de Dal (Nubie Soudanaise). Fascicule 5: Le district de Ginis, Est et Ouest*. Paris.
- Vila, A. 1977b. *La prospection archéologique de la Vallée du Nil, au Sud de la Cataracte de Dal (Nubie Soudanaise). Fascicule 6: Le district de Attab, Est et Ouest*. Paris.
- Weglarz, L. R.-M. 2017. *Continuity and Change: A Reevaluation of Cultural Identity and "Egyptianization" in Lower Nubia during the New Kingdom*. PhD thesis. Chicago.
- Williams, B. 2014. 'Some geographical and political aspects to relations between Egypt and Nubia in C-Group and Kerma times, ca. 2500-1500 BC', *Journal of Ancient Egyptian Interconnections* 6 (1), 62-75.
- Woodward, J., M. Macklin, N. Spencer, M. Binder, M. Dalton, M., S. Hay and A. Hardy 2017. 'Living with a changing river and desert landscape at Amara West', in N. Spencer, A. Stevens and M. Binder (eds), *Nubia in the New Kingdom. Lived Experience, Pharaonic Control and Indigenous Traditions*. British Museum Publications on Egypt and Sudan 3. Leuven, 227-257.