

■ SUDAN

Some Archaeological Remarks on Wadi el Tagar (Northern el- Mahas, Sudan)

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The Study Area

The region is situated in northern Sudan in el Mahas region as far north as Delgo town. The area is known locally as el Madigien (the two constrictions) comprising ten *Shiakhas* (Local Peoples Administrative Regions) on the eastern bank (Abu Sari, Sadinfanti, Ager, Koyamatto and Wawa) and the western bank (Gorgod, Tondi, Tinare, Koya, Agula and Soleb). Here the Nile is forced to turn slightly to the east and then sharply to the west bypassing the eastern edge of a volcanic basalt plateau and avoiding its high elevations (Figure 1).

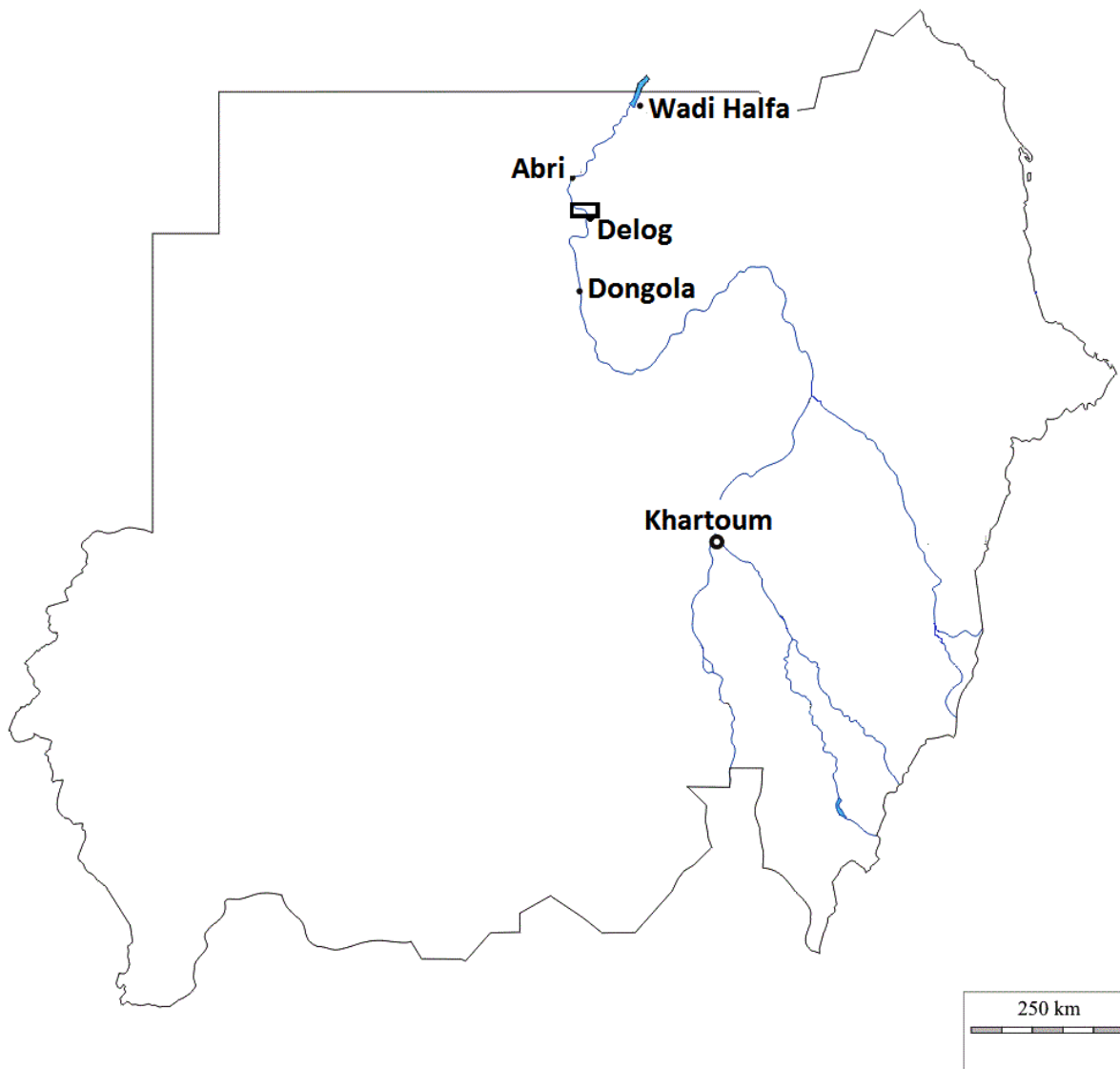


Figure 1: Map of the study area.

The clay and silt terraces are poorly developed on the banks of the Nile except in the Wadi el Tagar area and west of the Agula-Soleb villages (Figures 2 and 3). The terraces are bordered with basalt and Nubian series bedrock. Many Nile constrictions are present in the area including at Abu Sari Village (160m) with an average width of 250-300m, and in the south, the sandstone zone of el Mahas where the Nile River width reaches 800m

in the Fareig-Defoi area (Tahir 2007).

The study area, Wadi Tagar, is a Holocene palaeochannel extending approximately 8km east-west with a maximum width of 240m, beginning at Sadinfenti village and ending at Ager village. The area is situated in the northern part of el Madigien region, 47km north of the Third Cataract. It is located in a depression in a basalt plateau that surrounds the

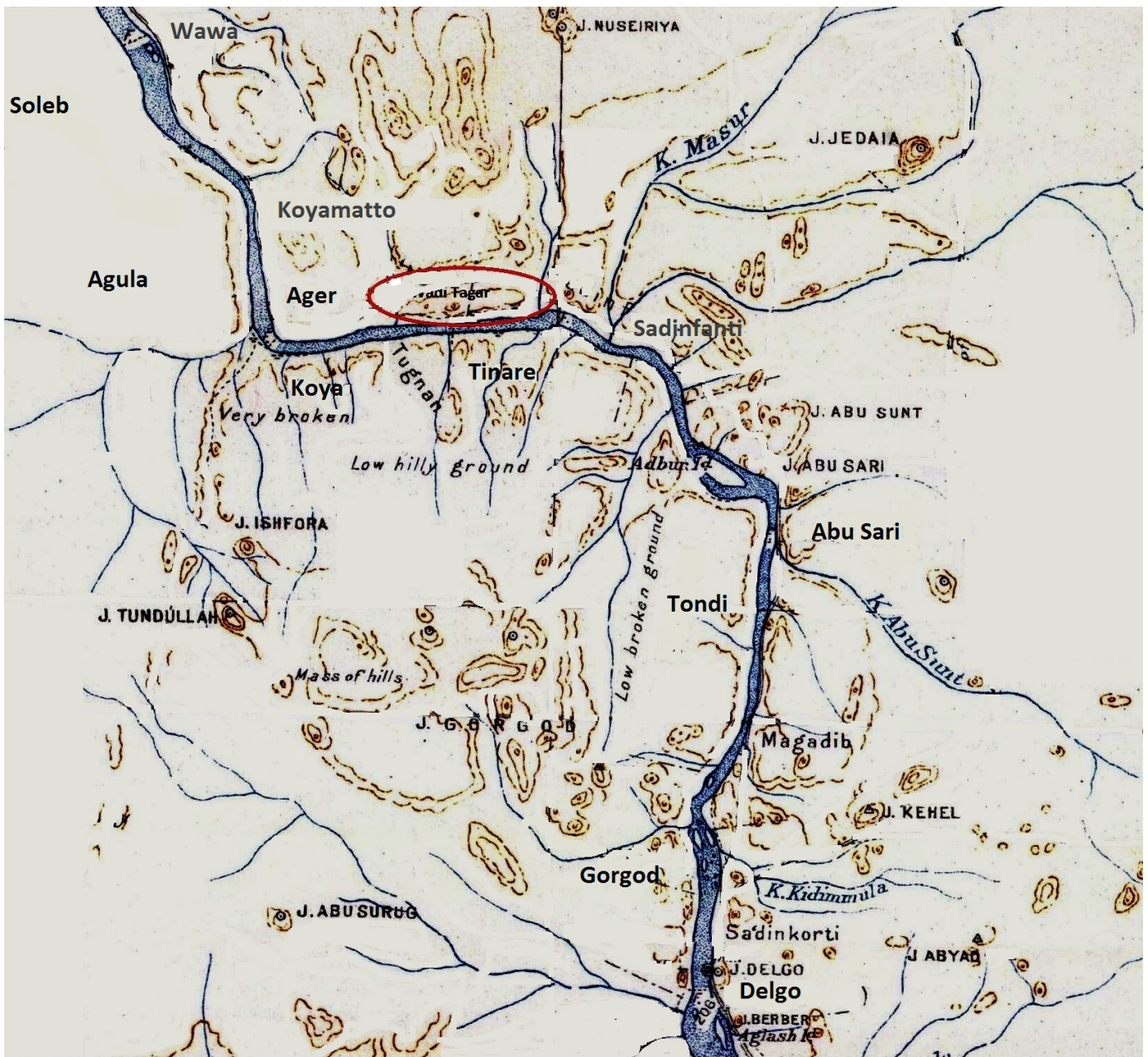


Figure 2: Map of Wadi el Tagar.

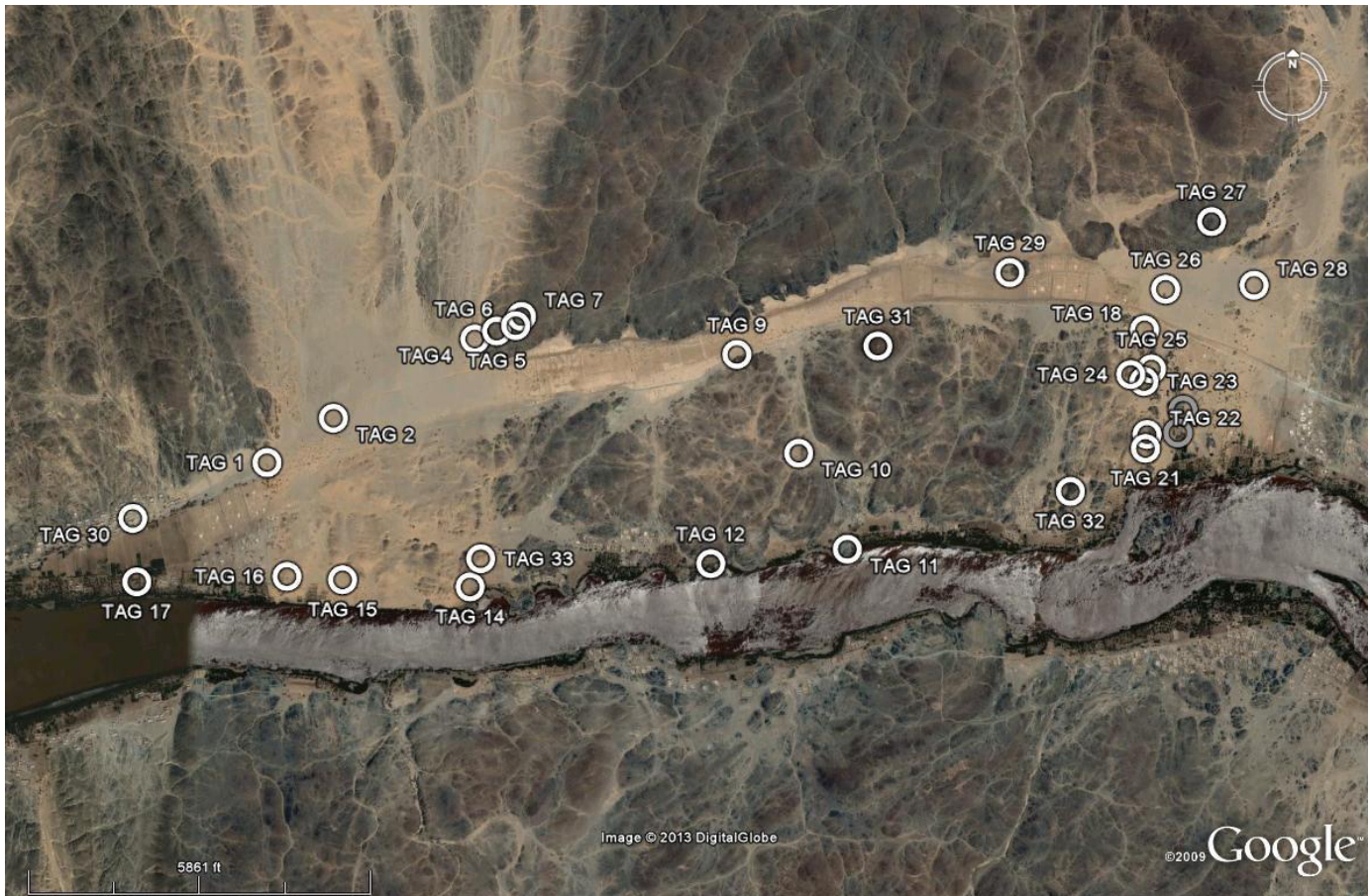


Figure 3: Satellite locations of sites.

rocky land from the south and constricts the Nile at both ends forming an island. The channel was a branch of the Nile during the Holocene, and alluvial sediment covers the base of the wadi. Many similar Holocene palaeochannels in the southern part of el Mahas at Wadi Farja were reported by Osman and Edwards (2012). Due to fertile alluvial deposits in Tagar channel, two agricultural schemes were established in this area in the 1980s, one in the Tagar main channel and the other in the channel delta in the vicinity of Ager village. The surface areas of these agricultural schemes are 350 and 70 feddans respectively. Postharvest farming and grazing over a long period of time has resulted in disturbance of archaeological sites and the disappearance of artifacts, especially biological materials such as fish bones and snails that were once distributed on the surface according to reports by local peoples.

Previous Studies in el Madigien Region

Evliya Çelebi, an official Ottoman Turkish traveler who visited Nubia in 1671-72, found a garrison of 800 men in the castle of Tinari under the command of Salih, who ruled a population of 40-50,000 Kerrarish nomads (Çelebi 1938:325). In his book *Travels in Nubia* (1819), Burckhardt (1819) mentions the castle of Tinari where he met the ruler Mohamed Kashef.

The earliest archaeological attention to the region was of Cailliaud in 1823 when he visited the temple of Soleb. In the Wawa area, Arkell (1949:43) recorded pebble tools of the pre-Chelles-Acheul type and rough artefacts of the Chellean type (Middle Pleistocene Age) in an area 15ft above the present flood level. Arkell also found one hand-axe that is either Late Chellean or Early

Acheulian in type. Arkell (1950:34) collected incised herringbone and impressed dot decorated pottery sherds from Wawa village and he mentions that O.H. Myers and P.L. Shinnie found two Kerma settlement sites and a cemetery in Agula village. The temple of Soleb was excavated by Giorgini in 1957 and the results were published in 1971.

Leclant (1963:204-205) found rock drawings of animals in a cave south of Tugnan hamlet, and in Tinari village he recorded a different theme, possibly of men dancing with sticks. In Agula village he found a depiction of a ram on a rock related to the Pharaohs of Soleb. Leclant (1977:276) found rock drawings between Koyamatto and Sadinfanti as well as in the Wadi Tagar that depicted cattle, dogs and giraffes. Allard-Huard and Huard (1982) recorded elephant and giraffe drawings at Gebel Gorgod.

Said (2005:138-146) studied the Fort of Tinari, which faces the Nile in Tinari village, and is built partly of stone, mud bricks and mud. Said found surface collections and excavated test pits that produced Christian and Islamic pottery sherds. Said was able to date the fort to the Christian period when it was a settlement that controlled the Nile trade and it was used later as a ruler's castle in post-medieval times.

In 2008 the National Corporation for Antiquities and Museums (NCAM) surveyed the region that was endangered by the Dal Dam Project. In el Madigien, a team of NCAM registered about eight sites on the western bank: undated and Post-Meroitic cemeteries in Wawa, two Christian buildings including a fort at Koyamato, rock drawings at Ager-Sadenfanti and an Islamic Qubba in Abu Sari. There is a greater concentration of archaeological sites on the western bank. Here they reported about 34 sites: eight New Kingdom sites at Soleb; nine prehistoric to Islamic dates at Agula including four Post-Meroitic cemeteries; 12 sites of different dates (but six are Christian); three Post-Meroitic cemeteries at Koya; and five sites in Tinari (most are Christian buildings and cemeteries)

(Ahmed *et al.* 2008:25-30).

Wadi Tagar Archaeological Survey

From previous studies it is clear that Wadi Tagar was not properly surveyed, except brief surveys by Leclant and NCAM. In this area the Holocene channel contains many sites. As in the Third Cataract region, such lands were suitable territories for human settlement during Neolithic-Kerma. Both banks of the wadi and the rocky island were surveyed, in addition to the Nile bank parallel to the wadi. The survey revealed the presence of about 31 sites. The sites are dated to the Paleolithic, Neolithic (5000-3000 BC), Kerma (2500-1500 BC), New Kingdom (1500-1000 BC), Post-Meroitic (350-500 AD), Christian (500-1500 AD) and Islamic periods. Stone and mud forts were observed in addition to bases of stone structures. However, many graves of different substructures were reported. One of the archaeological features of the area is the dense concentration of rock drawings on wadi walls. Lithic tools, potsherds, grinding stones and animal bones were collected from the surface (Table 1).

Paleolithic Site

In an extended area (TAG 6) a large number of stone tools dating to the Paleolithic period were spread on the surface. This supports Arkell's (1949:43) findings in Wawa village (Figure 4).

Neolithic and Kerma Sites

Many Neolithic and Kerma sites were registered. Two Neolithic and Kerma sites overlapped (TAG 2 and TAG 18). A large amount of pottery sherds were spread on the surface of the sites that date to the Neolithic, Pre-Kerma (or Early C-group?) and Kerma periods (Figures 5, 6 and 7) with observations of imported pottery sherds. However, animal bones, stone tools and grinding tools were reported. In site TAG 18 on the top of the mountain there are square and circular-shaped rooms built of stones.

New Kingdom Site

Site code	Position	Type	Date
TAG1	N 20 21 746 E 30 26 792	Grave	Kerma?
TAG2	N 20 21 727 E 30 26 990	Settlement	Kerma
TAG3	N20 21 957 E 30 27 199	Hearth	?
TAG4	N 20 21 955 E 30 27 411	Graves	Kerma
TAG5	N 20 21 977 E 30 27 477	Graves	Kerma?
TAG6	N 20 21 993 E 30 27 534	Settlement?	Paleolithic
TAG7	N 20 22 019 E 30 27 551	Graves	Post- Meroitic, Medieval
TAG8	N 20 21 769 E 30 27 861	Rock Drawings	Prehistory?
TAG9	N 20 21 919 E 30 28 199	Grave+ Rock Drawings	Medieval
TAG10	N 20 21 643 E 30 28 388	Graves	?
TAG11	N 20 21 375 E 30 28 537	Fortress	Medieval
TAG12	N 20 21 330 E 30 28 128	Rock Drawings +Unknown building	Prehistory?
TAG13	N 20 21 319 E 30 27 667	Wall	?
TAG14	N 20 21 257 E 30 27 406	Settlement	Medieval
TAG15	N 20 21 273 E 30 27 023	Graves	Medieval
TAG 16	N 20 21 355 E 30 27 394	<i>Banyya</i> (Islamic barrier chamber)	Post- Medieval
TAG17	N 20 21 261 E 30 26 405	<i>Diffi</i> (mud fort)	Post Medieval
TAG18	N 20 22 001 E 30 29 422	Settlement, mining	Neolithic-Kerma, New Egyptian Kingdom
TAG19	N 20 21 777 E 30 29 540	Graves	?
TAG20	N 20 21 712 E 30 29 525	Stone Structures	?
TAG21	N 20 21 679 E 30 29 413	Stone Structures	?
TAG22	N 20 21 707 E 30 29 433	Graves	Kerma?
TAG23	N 20 21 856 E 30 29 422	Graves	A-Group
TAG24	N 20 21 875 E 30 29 382	Graves	?
TAG25	N 20 21 891 E 30 29 444	Rock Drawings	Prehistory?
TAG26	N 20 22 116 E 30 29 484	Settlement	Neolithic?
TAG27	N 20 22 308 E 30 29 620	Graves	?
TAG28	N 20 22 130 E 30 29 750	Graves	?
TAG29	N 20 22 158 E 30 29 015	Graves+ Rock Drawings	?
TAG30	N 20 21 439 E 30 26 391	Shrine	Post- Medieval
TAG 31	N 20 21 945 E 28 27 609	Wall+ structure	?
TAG 32	N 20 21 757 E 28 27 529	Wall+ structure	?
TAG 33	N 20 22 123 E 28 27 416	Wall+ structure	?

Table 1: Lithic tools, potsherds, grinding stones and animal bones collected from the surface.



Figure 4: Hand axe (Paleolithic) - TAG 6.



Figure 5: Neolithic and Early Kerma (bottom left) pottery sherds from site TAG 18.



Figure 6: Kerma pottery sherds from site TAG 2.



Figure 7: Pre-Kerma pottery sherd OK.

North east of Sadinfenti village (TAG18) on the southern bank of the Palaeochannel there is a stone wall built between two rock outcrops. There were many large grinding stones that were probably used by the Egyptians to grind gold, and there are many Egyptian pottery sherds that were recovered at the site. Two circular rooms built of stones on the top of the mountain were reported; these types of rooms were always accompanied with gold mining activity.

Christian Sites

In one of the sites (500x250m) Christian pottery sherds were collected. It is registered as a settlement site at sites TAG 14 and TAG 26 (Figure 8).

Graves

The area contains cemeteries and some solitary graves. Different substructures were

distinguished. A circular grave substructure ringed with black stones (Figure 9) of different sizes and diameters (ranging from 1-4m) were reported at sites: TAG 1, TAG 5 and TAG 22. According to substructure shapes, these tombs belong to the Kerma civilization. Other graves similar to Kerma are reported at sites: TAG 9, TAG 10, TAG 20 and TAG 28. One of the graves with engraving between the rocks has been robbed (Figure 10), and the grave contents are scattered on the top including human skeletal fragments and pottery sherds. The pottery sherds are difficult to identify.

Post-Meroitic graves with stone kom substructures (Figure 11) and diameters ranging from 2 to 6m are reported at TAG 7. In some sites, sets of oval-shaped graves are classified as Christian graves (Figure 12) at TAG 4, TAG 15, TAG 19, TAG 24 and TAG 27. A different type of substructure is noted. This is a tomb cut in the rock



Figure 8: Christian pottery sherds.



Figure 9: Kerma grave or C-group?

and covered with stone slabs with a diameter of 3m at TAG 27. The last type of grave has a crescent-shape substructure that is not classified.

Buildings

Many types of buildings were reported from the area:

Forts (TAG 11). This is a large stone fort. It has several collapsed rooms inside. There are other rooms outside. The fort has a tower in the northwest. The main entrance opens towards the Nile. This fort faces Tinari Fort on the opposite bank of the Nile (Figure 13).

Medieval Diffi. This building is built of mud (40x20m) and the wall height is approximately 6m and the walls are about 1.5m thick. It has

four towers at the corners. There is a soldier's footpath on the walls and in the upper parts of the walls there are firing holes for the use of firearms (Figure 14). The door of the Diffi was made of a huge palm trunk and there was a well in the yard. One man from Egyptian Nubia called Borou, resided here and controlled the region (perhaps an Ottoman ruler), and he attacked the kings of Argo (Oral history: Idris Salah, 75 years old).

Islamic Benia (TAG30). A rectangular mud building (7x5m) has a *mehrab* in the eastern wall (Qibla direction). In the entrance there are holes in the walls (skylights). Seven graves are present that belong to Sheikh Imam and his sons.



Figure 10: Robbed A-group (?) tomb-cut.



Figure 11: Post-Meroitic grave.



Figure 12: Robbed Christian oval-shaped grave.



Figure 13: Stone built fort.



Figure 14: Medieval Diffi.



Figure 15: Stone structures (TAG 21).

Undated Building (TAG 12 N). A square-shaped building built of mud and stone with unknown function and date was reported. East of the site there is a rocky wall with a drawing of a camel.

Stone structures (TAG 20, TAG 21). On the mountains, there are a number of rooms and stonewall structures of different shapes and sizes, including oval and square shapes having a length of 2-6m. A few hand-made pottery fragments were collected from the stone structure but their date and function are unclear (Figure 15).

Walls (TAG 31, 32, 33)

Many walls of 1-0.5m in height and approximately 76-130m long are reported (Figure 16) from the area. One is near the Nam hamlet (TAG 20) and on a small jebel at site TAG 31 (Figure 17).

Rock drawings

One of the most abundant archaeological site types is rock drawings. A large number of animal depictions are identified as cattle, dogs, birds, giraffes, rabbit, hyena etc. One of the most

interesting themes is a man riding an elephant, which may be related to the Kushite elephant taming culture mentioned by Hintze (1962) (Figure 18) (TAG 8, TAG 12, TAG 25 and TAG 29).

The later prehistoric rock art in the Third Cataract region includes a large proportion of zoomorphic designs especially those with cattle and herders. There is little to suggest an earlier (Neolithic) date for these images (Edwards *et al.* 2012:459).

Hearth

In the extended area in the bed of the valley (TAG 3) there are small burned mounds called hearths, which are probably natural spark burnings of large trees that had colonized the muddy wadi during the Holocene. This would explain the tree line on the bank of the channel. It is believed that most hearths are disturbed by contiguous field plowings. Such hearths are a common feature in the palaeochannel of Wadi Farja (Edwards *et al.* 2012: 454).

Remakes

The ground in the area is rugged with



Figure 16: Wall.

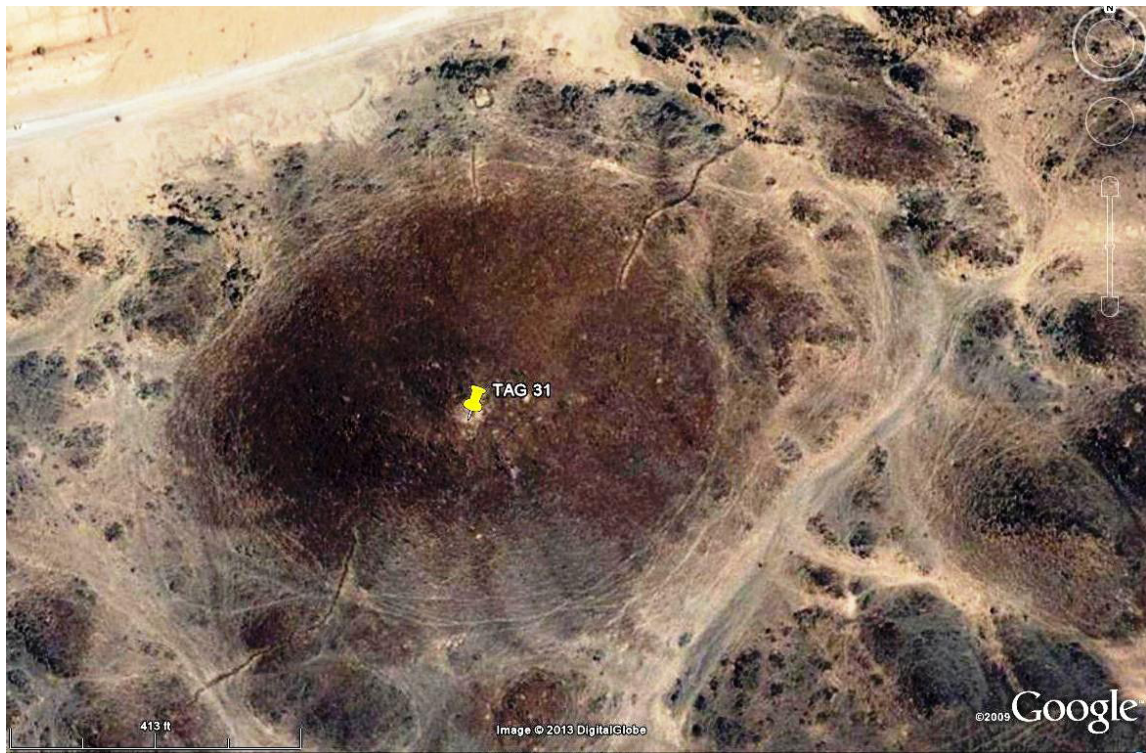


Figure 17: Walls in Wadi Tagar- satellite image (TAG 31).



Figure 18: Rock drawings.

numerous small jebels and islands. These natural barriers were the determining factor for human secured settlements. The rocks were also used as materials for different purposes in the area.

Conclusions

The Tagar area has the largest fertile alluvial soil in the rocky region of el Madigein. The presence of densely concentrated archaeological sites leads to the suggestion that the wadi was a seasonal stream during the wet Holocene. Samples of *Etheria elliptica* were dated from Wadi Farja to the mid-Holocene (7617±50 bp) (Tahir 2009b). The surface area of the palaeochannel and its delta is estimated to be approximately 170 fedans. It was attractive to pastoralists and farmers during the wetter Holocene; hence the area witnessed a lot of human activities that left remains. The area provides both ephemeral channels such as the Tagar, and the perennial Nile water. This natural blending made the area attractive to human settlement. It is very clear that the human settlement pattern in the Wadi was relatively intensive from the Neolithic to Kerma periods. The similarities between the southern parts of the Third Cataract region, especially the Holocene Wadi Farja, are very apparent. The two areas have the same landscape of rocky land, and the peak of human settlement in both areas was during the Neolithic-Kerma times. Other common factors are stone structures, the super-structurally stone ringed graves, the wadi walls and rock drawings. Sub-circular stone structures are associated with Pre-Kerma (3000-2500 BC) sites while rectangular ones are reported in the vicinity of Kerma sites. Tahir (2012:1) suggests that these features were adopted during Pre-Kerma or Kerma times. Here in Wadi Tagar similar features were reported suggesting the prevalence of Wadi Farja culture in Wadi Tagar.

The Wadi walls are numerous in Wadi Farja (Edwards *et al.* 2012; Tahir 2009b: 126) and in Wadi Tagar. Wadi walls are one of the conspicuous economical-social archaeological features of the wadi. These walls are not associated with artefacts

or other evidence which might aid in dating them as do those in the Libyan Desert (Hobler and Hester 1969), but it is suggested that the walls belong to C-Group (1690 BC± 180), while Riemer (2004) dated the walls back to the mid-Holocene in Egypt (6500-4900 BC). Osman and Edwards (2000) suggest that they correlate with a water-harvesting system in Wadi Farja. Edwards (2006) suggested that the walls are used for hunting. However research revealed that wadi walls in this area are of different types and functions. Most wadi walls encircle a certain land that uses rock out crops and water to enclose herds or hamlets (TAG 31) such as Jebel Ali Baris in the Third Cataract region (Tahir 2012:200). The discovery of walled enclosures by Smith (2005) in South Africa and Mauritania (Dhar Tichitt) date to 2000-800 BC and coincides with the Pre-Kerma and Kerma periods (Tahir 2012:200).

According to sites discovered in the current survey, the prehistoric and Kerma sites are abundant along the channel. The number of medieval sites occurs at the same frequency as prehistoric and Kerma sites, but the sites tend to be located closer to the Nile. The so-called Post-Meroitic graves pose problems in identification and it is suggested that most of the unclassified graves belong to this period. The crescent-shaped grave sub-structure and the engravings between rocks reported from Wadi Tgar are mentioned by Tahir (2009a: 15) in el Ga'ab depression (west of Dongola Reach).

The find of an A-Group grave north of the Third Cataract region extends the border of A-group southwards and raises the question of the spatial and temporal relationship between Pre-Kerma and A-group. This area may have served as a buffer zone for Pre-Kerma and A-group and later for Kerma and C-group populations. The area is known for gold mining in Abu Sari village and from the gold working site with both Kerma and Egyptians pottery sherds. More expeditions should reveal more such sites.

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