

Report of the Project "Wadi Abu Dom Investigation"

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2. Proposed work

After finishing the survey of the Wadi Abu Dom in the campaign 2016, we planned the excavation at El Tuweina. El Tuweina is a Late Meroitic site in the northwestern part of the upper Wadi Abu Dom (UTM 36 N 453837E 1997126N) and discovered by the W.A.D.I.-team in 2012 (Fig. 1). In 2013 an architectural documentation of the visible structure was carried out (see the report for NCAM of campaign 2013 as well as the published article (Eigner & Karberg, 2013) and a charcoal sample was analyzed, which produced a presumable date range between 220 and 250 AD.

Since the structure is of modest size (35 x 65 m) and the layout seemed to be quite simple, we started with the excavation which we hoped to finish within this season.

Our main questions were: Are the three structures within the compound contemporary to each other, or are there indications for different building phases? What was the function of the complex? Therefore we planned few trenches at significant spots as well as the probing of soil samples for botanical and sedimentological analysis.

3. Realized work

3.1. Excavation at El Tuweina (Fig. 2)

3.1.1. Building 3

Within the first half of this year's spring campaign, excavation work concentrated on building object 3 in order to clarify its function, and to improve its ground plan. 3 trenches were opened within the rooms 2, 3 and 4 of this construction.

3.1.1.1. Trench 3-1

In trench 3-1 (room 3), we removed a heap of looters debris on top of the original sediment, afterwards

cleared the secondary debris the room was filled with, and finally opened a small planum at the original floor of the room. It turned out that the room was accessible through one door to the east, and had one single window to the west (Fig. 3). The original floor consisted of a hard, greyish layer immediately above the very narrow construction pits of the walls, and corresponding to the plastering of both walls. Interestingly, the base of both walls turned out to be not as wide as the wall itself, but almost 15 cm narrower (Fig. 4). Together with the fact that the base of the wall is not erected on the solid khor soil but on an aeolic, sandy surface above this might result in an faster and more efficient, but less stable and reliable structure of the finished building. It turned out that the floor level was not touched by the recent looting activities, but nevertheless disturbed near the western wall by some earlier intrusions.

Some interesting finds were made within the looters dump above the original soil on top of the trench: Some amount of rather fine ceramics, as well as traces of painted plaster colored red and white (Fig. 5). Most probably, the looters dump originates from the pit in room 2 directly adjacent to it; in this case, the layers of dump around the top of the heap must have originated from the ground levels of the sediment moved by the looters.

3.1.1.2. Trench 3-2

Trench 3-2 was set out within room 2 of object 3. Here, the large looters pit caused by heavy machinery and already reported in 2013 was cleaned and significantly enlarged in order to excavate the western half of the room down to the original soil. The stratigraphy in the western part of the trench was disturbed by the abovementioned looting pit done by caterpillar, but luckily it turned out that not in the center of the room, but to the left and right directly adjacent to both the northern and the southern wall some remains of the original soil was preserved. This fact allowed us to study the most important part of the stratigraphy close to both wall bases. In the eastern part of the trench, after cleaning the edge of the looters pit, the stratigraphy turned out to be undisturbed, therefore allowing us to document the original floor as well as secondary occupation and destruction phases of the building.

The original floor of the building consisted of the same hard, greyish soil like at the floor level in trench 3-1; both floors are at the same level. The construction technology of the northern and the southern wall are also the same: A very narrow construction pit, maybe just done by a turiah into the sandy ground, covered by the abovementioned hard floor level, with a wall base much narrower than the wall itself. According to the stratigraphy, both walls seem to be contemporary to each other, making at least the long walls of rooms 2 and 3 part of the same layout and construction phase of the building (Fig. 6).

Interestingly, the plastering of the northern and the southern wall of room 2 were done in a different way: At the southern wall, we only found traces of one, quite rough layer of plaster. At the northern wall, a similar (but better preserved) rough, mortar-like plaster functioned as the first level of plastering, afterwards covered by a second, much finer and smoother layer (Fig. 7). Obviously, these both layers are contemporary to each other, since they stick together until they reach the floor level, and even close to the wall base there is no additional sediment found between them. It is possible, but not very likely that the fact that no fine, second layer of plaster was found at the face of the southern wall is simply due to the state of preservation. Since until the floor level near the wall base no trace of a second plaster layer is preserved, we assume that there had never been one. Despite the fact that the remains of painted plaster from the neighboring heap of looters dump most probably originate from the floor levels of room 2, we have found no traces of painted plaster in situ.

At the western side, room 2 was closed by a small, secondary wall. Between the original floor level

and the base of this wall there is a significant amount of sediment, so we assume that at least some time room 2 was not closed to the west, and formed rather a kind of aisle than a room during this period. Maybe the different techniques of plastering are connected to the different functions of these walls, since the connection between the long walls of the room and the small secondary western wall shows that at least during the first, original occupation phase room 3 was the only real closed “room” of the building at all.

The original floor planum of room 2 consisted of the abovementioned greyish layer, with some amount of ash concentrations distributed over it. Almost within the center of the room, one single post hole was found in the floor level. The function of this installation remains completely unclear until now, since the rather small width of the room does not make a secondary support for any roof construction necessary.

The floor level and the thin sandy layer directly above it contained a great amount of animal bones. According to a first preliminary analysis directly in the field it consists of goat, sheep, but also a significant amount of cattle bones. The sandy layer directly above the floor level also seems to contain other, quite disintegrated organic material. The soil was probed, and we hope that a chemical and botanical analysis of the sediment sample might help us to clarify the original function of the room. Most probably, the original idea of storage magazines must be abandoned because it does not fit to the archaeological record of the floor level, especially the bone concentrations, as well as the traces of painted plaster. Nevertheless, the architectural layout of the rooms does not support the idea of a kitchen as well as a dining room.

The upper layers of sediment within room 2 consisted of some soft, sandy strata, but mostly of large amounts of mud brick debris, indicating that some brick construction once was erected above the stone walls still standing today. This could have been either supplementary walls, or some kind of roof construction, maybe a vault. Since the debris is rather unstructured, this question is still open; but at least the quite large dimensions of the mud bricks indicate that they rather have formed a wall than a vault construction.

3.1.1.3. Trench 3-3

In addition to the mud brick debris documented within the trenches 3-1 and 3-2, another very small sounding was opened within room 2: trench 3-4 (Fig. 8)

At a level of roughly one half of the rooms actual elevation, some sandy layer was found within the mud brick debris, partly strengthened by flat stone slabs and obviously forming a secondary phase of usage, maybe simply by squatters. Interestingly, even in the uppermost levels of mud brick debris the find material, consisting of pottery and faience beads, indicates a late or post-Meroitic date of the layers. No traces of medieval or later pottery was found within the filling of the rooms, indicating that the building was not used over a long period, and at least in the post-Meroitic period already completely fallen to ruins.

3.1.1.4. Trench 3-4

In order to further clarify the ground plan of the building object 3, another trench (3-3) was opened within room 4, which quickly turned out to be rather a rectangular aisle surrounding at least the northern and the western face of rooms 3, 2, and 1 (closing the latter to the west with a small wall). The room was cleared until the sandy layer corresponding to the (presumably) squatter occupation phase within room 2; only in the northwestern corner of the aisle a small sounding was done until the original floor level and the base of the wall, proving that the floor of this aisle had also the same stratigraphic structure and a comparable level as both floor levels documented in trenches 3-1 and 3-

2. Less mud brick debris was found here than within rooms 2 and 3; maybe the supplementary mud brick construction was only set above the walls of these rooms (or maybe even just room 2). Additionally to the stratigraphic record, also the architectural construction proved that the walls of aisle (room) 4 were contemporary to the initial walls of rooms 1, 2, and 3; according to our actual knowledge of the layout of the building, only the closing wall of room 2 to the west belongs to a secondary building phase.

3.1.2. Enclosure 1 and building 2

Within the second half of the campaign, work was carried out mainly at the western wall of the enclosure object 1, its connection to room 1 of the building object 2, and additionally, to some lesser extent, at specific spots in the east and the north of the whole building complex.

3.1.2.1. Trench 1-2

Along the western enclosure wall, trench 1-2 was set out in order to follow this wall until building object 2. What was intended to be a search trench just to prepare further work at the presumed corner between objects 1 and 2, turned out to be a quite complicated issue on its own. First, the trench revealed that the enclosure wall was not entirely built from stone slabs, but had also segments constructed from mud brick. Additionally, from the mud brick section of the enclosure wall, two additional orthogonal mud brick walls led to the east inside the courtyard of the enclosure. Adjacent to the mud brick part of the enclosure wall, a small, basin-shaped construction was found, completely constructed in mud brick and densely plastered until but not at its ground (Fig. 9). The basin was completely filled with mud brick debris; below the ground level there was a single, large piece of wood without any clear constructive function. Until now, it remains completely unclear what that basin was used for. Storage of any liquid would require a tightened floor (which is not present). Our first ideas are that it was either a rather elaborated storage pit (but without any traces of whatever was stored within preserved in the archaeological record), or a basin used to prepare a muddy substance not requiring a completely tightened floor – either plaster, mud mortar, or the mud for the bricks itself. Anyway, the two orthogonal mud brick walls continue further to the east into the courtyard of the enclosure, with (until now) unclear function – maybe a room structure.

North of the basin construction, different levels of usage were found, all of them associated with some ash accumulations and kitchen ceramics, but also some high quality small finds like a piece of a faience udjat amulet. One of these levels contained traces of a large, burnt mat, maybe from a rakuba or any other lightweight, vegetable architectural component. Interestingly, the lowest of these levels of usage is situated clearly below the base of the wall and thus predates the architecture of the enclosure (which was not the case below the wall bases at building object 3).

At the outer, western face of the mud brick wall, a thick, but inhomogeneous conglomeration of greyish material is concentrated outside the plaster of the wall. The purpose of this (for sure anthropogeneous and intentional) material is still unclear – maybe these are the remains of an attempt to color the wall, or to protect it from water or any other thread. The accumulation was probed; we hope that an analysis of the material sample might help us to clarify the character and function of this construction.

3.1.2.2. Trench 1-7

Prolonging trench 1-2 to the north towards the south-western corner of building object 2, trench 1-7 was set out. It turned out that the stone wall documented in the northern half of trench 1-2 was interrupted, and continues just after roughly two and a half meters. Between the two edges of the

stone wall, no further mud brick construction was found, but a solid, homogeneous layer of mud wider than the wall itself. Probably it was a former part of the wall, but badly disturbed by surface water; anyway, no traces of regular mud bricks were found inside. To the north, the enclosure wall continues as a stone wall, directly connecting to the western wall of room 1 of building object 2 (Fig. 10). It turned out that both walls were erected on sandy, aeolic material without a hard surface, thus only the comparable levels of the bases of the walls of both objects, and of the plastering of the outside (western) face of both walls indicate that they, most presumably, are contemporary to each other. The eastern face of the wall (as the westernmost part of the southern wall of building object 2) was disturbed by recent looting, done by caterpillar like in building object 3 and already reported in 2013. Like in trench 1-2, an occupation level below the base of the stone enclosure wall was documented, containing several ash concentrations. One of them continued from the eastern to the western side of the enclosure wall (Fig. 11).

3.1.2.3. Trench 2-1

Connected to trench 1-7, the looters pit within room 1 of building object 2 was cleaned. It turned out that at the southern wall the looters pit had reached the base of the wall (even destabilizing the wall itself), but at the northern wall sufficient remains of original stratigraphy were preserved to reconstruct that at least this wall (including the two short, protruding walls dividing the room in three sections) were erected in one building phase, and that between this walls (and, most probably, within the whole room before the looting) a layer of hard soil formed the original floor level. Unlike the plaster of the walls of building object 3 and enclosure object 1, this floor was directly connected to the plaster at the walls and made from the same mud material. This corresponds to the structures of Umm Ruweim 1 and Khor Shingawi, where similar floor levels directly connected to mud plaster at the walls were documented. Within building object 2, comparably few bones, but one iron arrowhead (Fig. 12) and two fragments of archer's rings were found.

3.1.2.4. Trench 1-8

Towards the south-western corner of enclosure object 1, trench 1-8 prolonged the initial trench 1-2, in order to clarify the connection of the mud brick section of the outer enclosure wall with the remains of a stone wall visible at the surface and leading to the south-western corner of the enclosure object 1. It revealed that the mud brick segment of the wall prolonged southwards. Outside the enclosure, a small, secondary mud brick wall (stratigraphically younger than the original wall) was built to the west, maybe just to provide a temporary shelter for a small cooking fire (as it is recorded by ash accumulations within the corresponding layer). Another mud brick wall leads eastwards inside the enclosure – presumably, another room structure along the enclosure wall was situated. At the eastern face of the mud brick enclosure wall, an irregular (but presumably anthropogeneous) setting of stones was found near the base of the wall (Fig. 13). The function of this installation remains unclear – maybe it was connected to some improvised attempt to stabilize the mud brick wall when affected by water on the ground.

3.1.2.5. Trench 1-1

Besides the series of trenches opened along the western wall of the enclosure object 1, small scale soundings were conducted at the eastern and the northern edges of the complex. To the north of the building object 3, some remains of a wall structure not visible in 2013 were investigated by opening trench 1-1. First, we got the impression that this might be the northern wall of enclosure object 1, but further investigations revealed that the wall is not connected to the enclosure wall, and forms a corner

which leads under the northeastern debris khom of building object 3 (Fig. 14). Since there are just sandy layers connected to the wall but neither a plastering nor a solid floor, the stratigraphic connection between this isolated wall and the other building structures must remain unclear until further archaeological investigation.

3.1.2.6. Trench 1-6

Along the eastern wall of the enclosure, another test sounding was opened to clarify the question whether the wall itself continues to the north. It turned out that at the spot of the test sounding there is a corner, and the wall turns westwards (Fig. 15). Nevertheless, the wall is interrupted after less than two meters. The two different sandy levels connected to the wall contained some ash accumulations.

3.1.3. General conclusions from this season's excavations

In general, this season's excavations at El Tuweina showed that at least parts of the enclosure object 1 and the building object 2 seem to be contemporary to each other. The finds within all trenches indicate that the initial dating of the site to the late Meroitic period seems to be correct, and that the building was not in use any more at the beginning of the medieval period. The function of the elongated rooms of building object 3 remains unclear – the initial idea of storage magazines seems to be falsified by the archaeological record. The newly discovered stone slab and mud brick wall structures show that the overall layout of the building complex is more complicated than expected. Most presumably, there are additional room structures built in mud brick along the enclosure wall as well as inside the enclosure itself. This fact resembles the buildings of Umm Ruweim 2 and Umm Khafour, which also were estimated as open, empty courtyards, but it turned out in 2012 that both enclosures contained several mud brick room structures inside.

Besides the general size and complexity of the site, indicators like the presence of painted plaster, luxury goods like faience objects (Fig. 16), and large amounts of (prestigious) cattle show an elite character of the complex. Nevertheless, traces of a direct dependency to the central Meroitic culture like inscribed material are still missing, thus the already known archaeological record from the site is indicating rather the seat of a local 'big man' and a regional variant of the late Meroitic culture than any kind of outpost of an official representative of the central Meroitic state.

3.2. Reconnaissance of recent settlement

Dr. Dieter Eigner mapped the recent settlement structures in 2015 (see map, Fig. 17) and identified different types of houses which are inhabited today. To preserve the traditional housing of the people in the Wadi Abu Dom we decided to make an architectural documentation of examples of each type. Last season he started this task, which he finished in this campaign.

He produced a detailed map of Sultaniya which is the largest village in upper Wadi Abu Dom. Furthermore, he collected data on constructional and functional peculiarities. Moreover, he documented guest houses in central Wadi Abu Dom (Fig. 18-19) and finalized the survey of galoos buildings in el Beida (Fig. 20-21).

3.3. Pottery and small finds documentation

Unfortunately our regular pottery specialist was not able to accompany us this year. Nevertheless it was possible to do at least some basic pottery documentation. All pottery from this season's excavations in El Tuweina as well as all remaining pottery from the 2016 survey season were washed, described and photographically documented. Further pottery documentation, like fabric analysis, is planned for next spring's season.

4. Proposal for future activities

Since it turned out that the layout of El Tuweina is quite complex, a geophysical investigation is planned prior to continuing the excavation. With the results of georadar and geomagnetometry we hope to reduce the pure excavation to essential points. Moreover, an archaeobotanical as well as an archaeozoological study should help to clear the function, as we found a lot of animal bones and organic strata. Depending on the amount of funding the different steps (geophysics, excavation, archeobotanic and archaeozoology) can work on a smaller or broader basis, beginning in spring 2018.

Another site of interest within the Wadi Abu Dom, which deserves deeper investigation, is the structure of Umm Ruweim. With a limited funding by the University of Muenster we plan a preliminary (exploratory) campaign already in autumn 2017. We will apply for funding at the German Research Foundation for the excavation of Umm Ruweim which should start in 2018.

5. Endangered sites

There seems to be new construction work (digging a channel directly north of the ridge) at the dam in the Wadi Abu Dom near Bir Merwa. At the cemetery exactly in front of the dam, two box graves were opened – the traces hint to big machines and not to turiah. This destruction was already reported to NCAM (see report of Tim Karberg) and the police in Atbara. Two policemen visited the site and made a report on it. Moreover, we met the deputy of the Omdar in Merwa and discussed this incidence. He will explain to his people to inform the police if they come across traces of looting at archaeological sites.

In the lower Wadi Abu Dom, military shooting training took place at the beginning of March. Since this area is now a Wildlife Park, this should be stopped immediately. Moreover, military actions can cause accidents with the inhabitants of that region as well as for tourists and, of course, the antiquities. Mohammed el Toum already informed NCAM as well as the police and tourist police in Merawi about that actions.

6. Final remarks

We would like to thank Mr. Mohammed el Toum and Mr. Loai Shamsola very much for all their indispensable help and smooth organization! They have acted as good mediators to the people in the Wadi Abu Dom as well as experts for organization and especially as good friends to us!

Karima, 16.3.2017

Angelika Lohwasser

Report of the Project "Wadi Abu Dom Investigation"

Figures

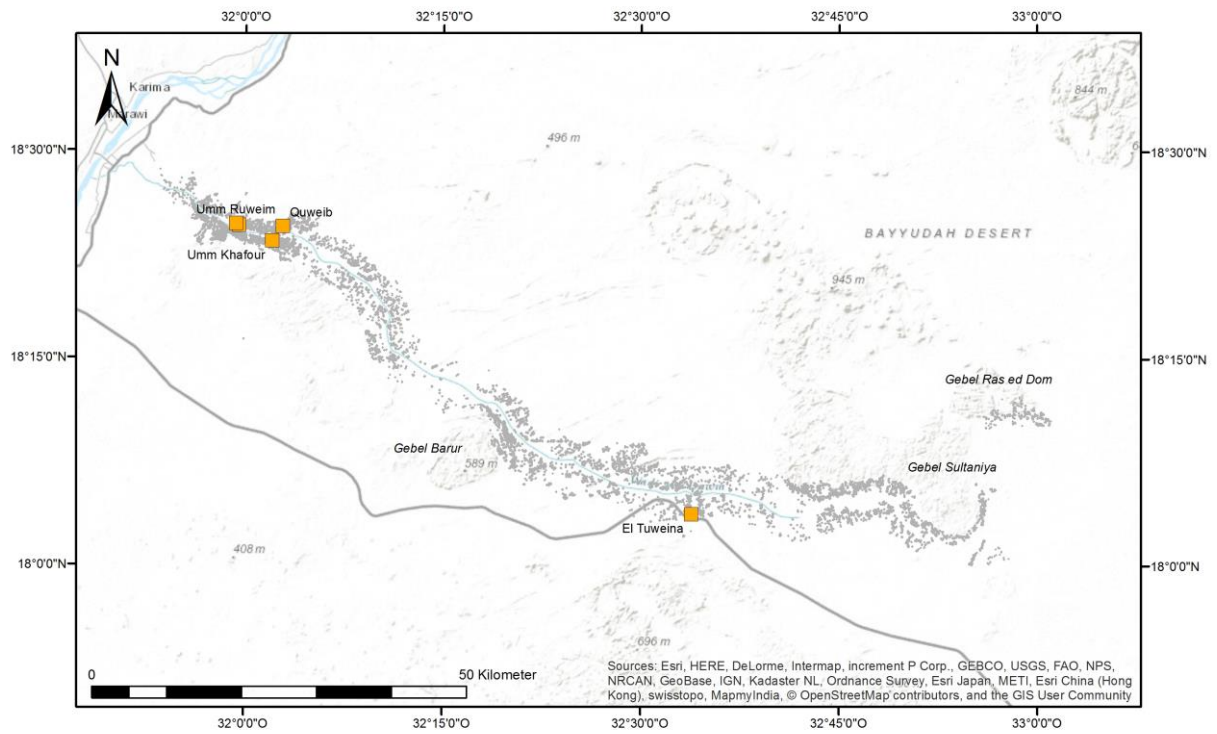


Fig. 1: Location of El Tuweina in Wadi Abu Dom

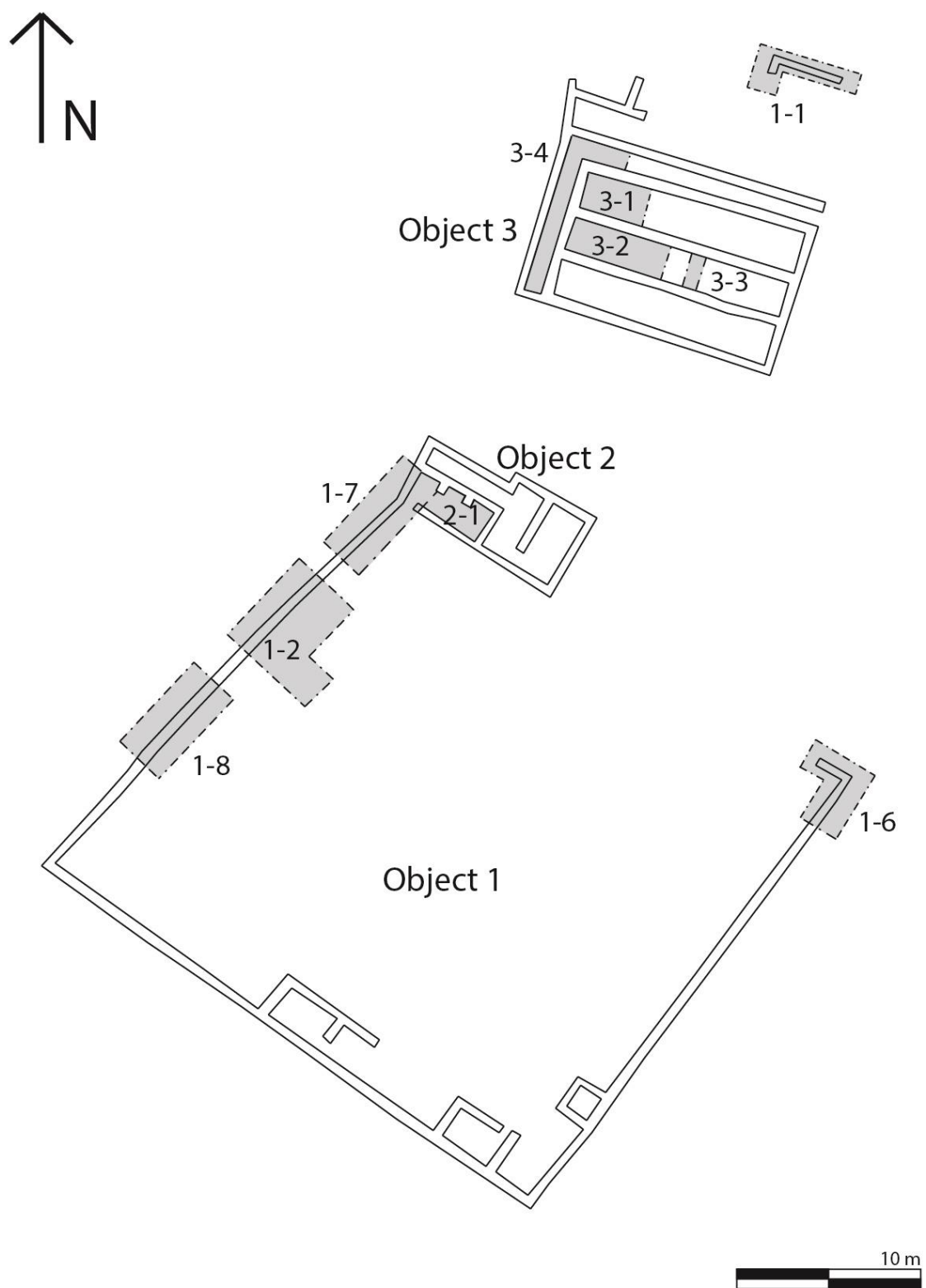


Fig. 2: El Tuweina, trenches 2017



Fig. 3: Window in room 3 of object 3

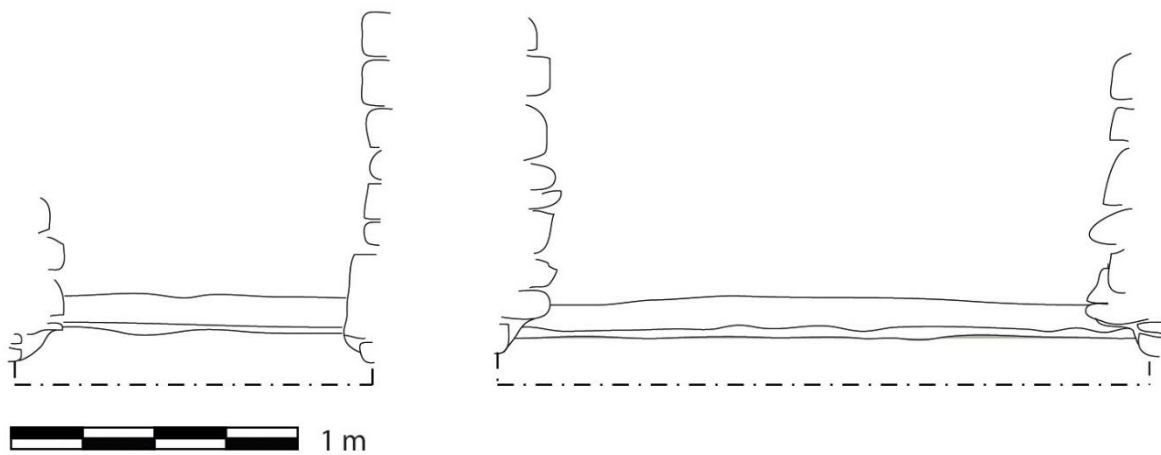


Fig. 4: Base of wall of room 3 in object 3



Fig. 5: Painted plaster



Fig. 6: Room 2 of object 3, floor layer in profile



Fig. 7: Plaster in room 2 of object 3



Fig. 8: Mudbrick debris in room 2 of object 3



Fig. 9: Basin-shaped construction in trench 1-2



Fig. 10: Stone-wall between object 1 and 2

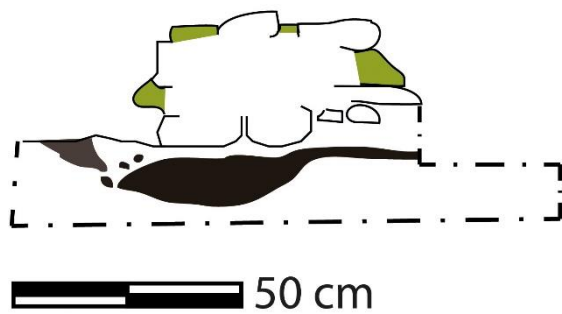


Fig. 11: Ash concentration under enclosure wall



Fig. 12: Iron arrow head

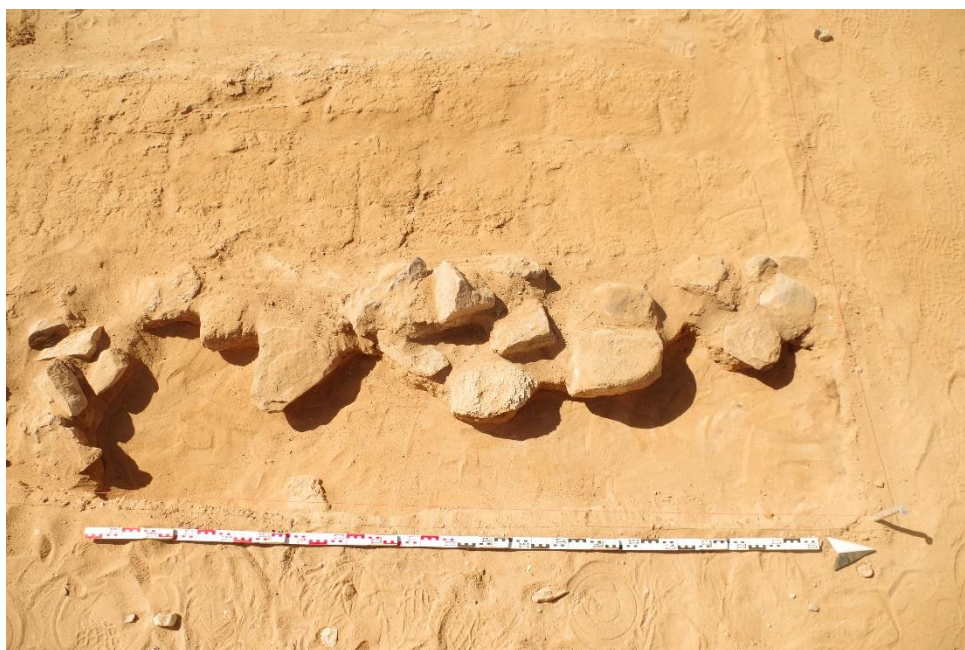


Fig. 13: Stone setting (to fix the enclosure wall?)



Fig. 14: Wall north of building 3



Fig. 15: Corner at the eastern enclosure wall



Fig. 16: Various finds of the excavation

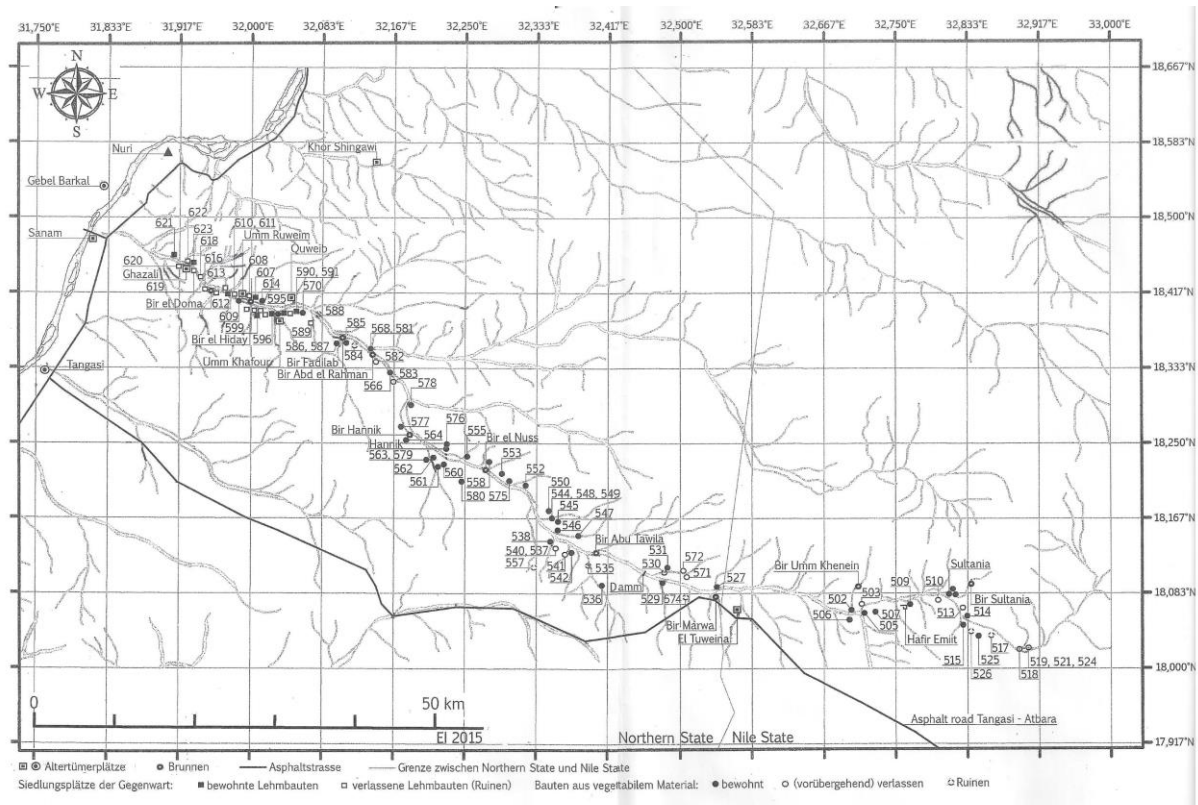


Fig. 17: Map of the recent settlement in Wadi Abu Dom



Fig. 18: Guest house from vegetable material (El Beida)



Fig. 19: Guest house in metal (next to Bir Merwa)



Fig. 20: Simple shelter with stone construction for a bed (west of Bir Merwa)



Fig. 21: Small hamlet near Bir Beida with house in traditional vegetable construction and another house in galoos technique