

**The Italian Archaeological Mission in Sudan – Jebel Barkal**  
**University Ca' Foscari, Venice**

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***The royal district of Natakamani at Napata.***  
***Report of the Season 2015-2016***

*This report is in memory of Prof. Sergio Donadoni, founder and first director of the Mission (13<sup>th</sup> October, 1914 – 31<sup>st</sup> October, 2015)*

The 2015-2016 season of the Italian Archaeological Mission in Sudan – Jebel Barkal, was carried out between October 19<sup>th</sup> – December 18<sup>th</sup>. The team comprised: Emanuele M. Ciampini (Director, University Ca' Foscari, Venice); Grazyna Bakowska-Czerner (archaeologist, Jagiellonian University, Cracow); Viviana Civitella (student, archaeologist); Martino Gottardo (archaeologist, collection and analysis of the topographical data); Francesca Iannarilli (PhD student, University "Ca' Foscari", Venice, archaeologist); Martin Pittertschatscher (restorer); Alessandro Roccati (Emeritus Professor of Egyptology, field assistant); Alice Salvador (illustrator, photographer); Sara E. Zaia (student, archaeologist/photographer); Silvia Zauner-Mayerhofer (restorer). Mrs Afra Osman represented the National Corporation for Antiquities and Museums (NCAM); the crew was composed of about 35 workers, headed by Mr Abd el-Rauf Mohammad.

The activity of the Mission was supported by the funds of several Institutions. Since the season 2014-2015, the Italian Archaeological Mission in Sudan – Jebel Barkal is part of the Qatar-Sudan Archaeological Project (QSAP), with a four-years long program of excavations and documentation (project QSAP.A.34). At the same time, the Italian Ministry of Foreign Affairs and the University "Ca' Foscari" of Venice funded the excavations and offered their institutional support. To all these Institutions, the Italian Archaeological Mission in Sudan – Jebel Barkal would express his deepest gratitude; the Italian Mission would also thank the National Corporation for Antiquities and Museums of the Sudanese Republic (NCAM), the Sudan Embassy in Rome and the Italian Embassy in Khartoum for the support in the success of the season.

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**The activity of the season 2015-2016**

The program of the season was planned in a two-months long period, and comprised several activities (digging, restoration and documentation); the work of the season can be summed up as follows:

Excavations – The main field of the excavations was the South-West area of the Natakamani palace (B1500, fig.1), still missing in the map of the building; this investigation was already planned in the previous season, but some organizational reasons did not allow us to undertake this activity. Other two areas were sounded in order to mark the map of the site with other structures, connected with the main palace: the columned edifice B1800, already object of a survey in the season 2014, and the building B2100, dug in the season 2004, where

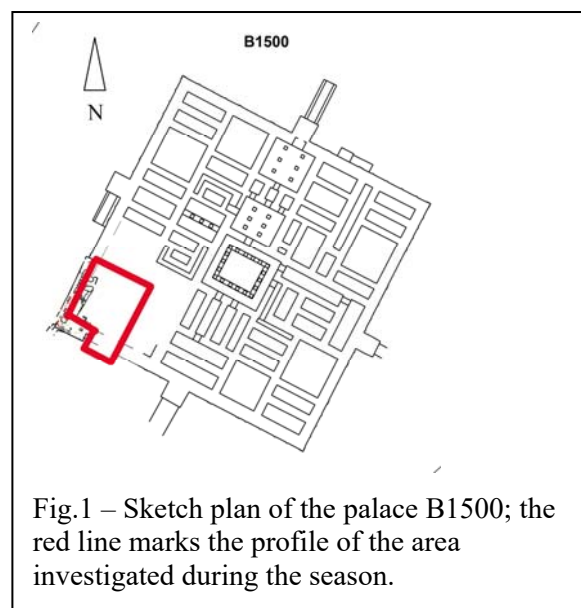


Fig.1 – Sketch plan of the palace B1500; the red line marks the profile of the area investigated during the season.

other architectural elements have been added to the structure.

**Restoration** – This part of the activity had been planned at first on the materials stored in the Museum of Karima and in the storage room of the Mission; part of the work had also been undertaken on the archaeological materials, unearthed during the current season.

**Documentation** – A fundamental activity of the Mission has been the update of the documentation on the archaeological materials. The general frame of this work perfectly respects the standard established in the past seasons, so to ensure a regular collection of data in the Mission database.

The activities of the Mission were exposed at the end of the season in a workshop, planned together with the Italian Embassy in Khartoum and the National Corporation for Antiquities and Museums, held in the National Museum of Khartoum (17<sup>th</sup> December, 2015).

## Excavations

**a) The Palace of Natakamani (B1500)** – The main field of the season was planned in the south-western corner of the palace, where a large sector of the platform was still awaiting for a complete investigation. The work started just east of the restored peripheral wall, next to the corner dug in the season 2013. The whole area was covered by a high layer of sand and materials from the collapsed structures (mainly red bricks); thus the first days of the season were spent removing this debris, in which a quantity of sporadic pottery have been collected (fig.2). Thanks to this preliminary work, the investigation could reach the deep level of the building, where a protective layer in red bricks was found at the bottom of the peripheral wall foundations (fig.3); this layer was clearly visible because of the quite complete destruction of the southern peripheral wall, which was in some part totally removed.



Fig.2 – The removing of the debris at the beginning of the excavations.



Fig.3 – The red brick layer under the foundations of the outer wall.

The remains of the structures were better preserved in the inner part of the building, dug in the current season; here, a complex system of casemates outlined by large mud bricks wall was investigated (fig.4). As well known in the previous diggings, the use of these foundations let the Meroitic architects build a system of compounds, that identified the parts of the building; the field of the season can be divided in two main areas: the casemates system at the corner of the platform, and the open area, just east of the casemates, which could be the evidence for a court in the ground layer of the palace. The inner structure of the south-western part of the platform is characterized by five casemates, organized according to a careful plan: the western ones (nn.4-5) were built along the peripheral wall; the central ones (nn.1-3) were oriented starting from the southern wall. The casemates closed, at East, an open area, where the digging could not find any evidences of

architectural remains dated at the time of Natakamani (fig.5); this planning seems to stress the organization of the elements in the proximity of the peripheral wall, while the central area was left free of foundation wall, probably because of the presence of an open court.



Fig.4 – The three inner casemates (from the foreground: casemates nn. 1, 2, 3; at left, along the peripheral wall: casemates nn. 5 and 6).

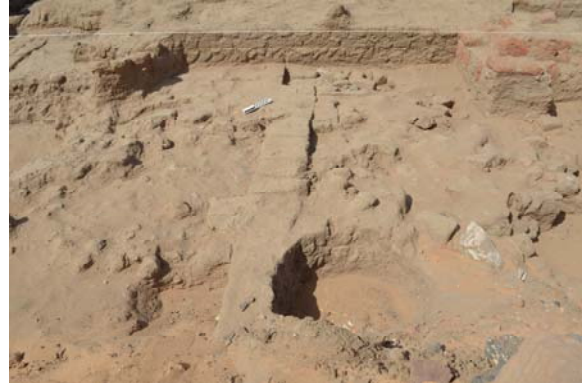


Fig.5 – The open area, east of the casemates nn. 1-3, with the mud brick walls of the pre-palatial structures.



Fig.6 – The red and mud bricks foundation at the north-eastern corner of the open area, dug in the season.

The only notable element in the eastern area is a red brick foundation, with a deep layer of vertical red and mud bricks, built in the north-eastern corner of the open space (fig.6); the meaning of this small foundation is yet not clear; its particular masonry texture, with the mix of mud and red bricks, can testify the presence of a massive element in the high layer of the building, but the elements collected during the excavations do not allow us, at the moment, to offer any concrete interpretation.

The height of the casemates walls is bigger moving to north; this archaeological situation seems to respect the destruction layer of the palace, which is very sensible in the area of the outer southern wall, while the center of the building seems to be better preserved. The digging

identified a typical masonry, with the use of a double vertical foundations row of mud bricks (fig.7).



Fig.8 – One of the late oven, located in the Meroitic structures of the palace.



Fig.7 – The double row of the mud brick foundations, wall north of the casemate 2. In the middle of the casemate, the late ovens.



All the area dug in the season was used in post-Meroitic period by squatter communities, that left some proofs of their presence (above all ovens, with large evidences of ashes and pottery sherds: fig.8). Few fragments of the palace outer decoration were unearthed during the excavations; all these elements perfectly fit with the materials collected during the previous seasons. We also found many fragments of glazed tiles with several decorative motives (the lion representation of Apedemak, *s3*-signs and royal representation in Dionysian style). During the digging of the area of the southern façade, several fragments of the plaster cover of the wall were found, in some cases still covering the red bricks; despite the lacking of the remains of buttresses, some plaster fragments testify the presence of these architectural elements of the façade, decorated with the traditional polychromy, well known in the Meroitic palaces (yellow, red, blue) (fig.9). The investigations also discovered a double layer of painting of the plaster cover (red over blue), which could testify at least a double phase in the decoration of the royal palace, perhaps due to a refreshing of the outer façade.



Fig.9 – The peripheral wall, south side of the palace, with remains of the plastered cover.

The digging had also investigated an area at North and at East of the casemates complex. This work was undertaken in order to define the sector of the foundations next to the south-west corner; at the same time, the work also offered some suggestions for the next season, during which all this area will be dug. The aim on the work in this part of the palace was the complete identification of the walls system of the foundations and the reconstruction of the architectural features of the palace planning.

**b) Pre-palatial structures under the Natakamani foundations** – An important result of the season was the discovery of a mud brick walls system under the foundations of the palace (fig.10); these walls testify the presence of some monumental structures in the same area, later chosen by the Natakamani architects for the palace and the related buildings. The walls identified in the current season are at the moment the largest evidence of the use of the area before the planning of the Natakamani palace, and offer an important parallel to another older building, i.e. the palace B2400.<sup>1</sup> At the moment, it is difficult to identify the relations of the structures investigated during the season 2015, and the late Napatean / early Meroitic buildings of the area; at the same time, also the chronology of the new walls is not sure. Doubtless, their size offer a clear proof of the use of the area in a monumental city-planning of Napata; we deal with one of the most striking questions of the archaeological site, linked with the history of the city and, above all, with its role in the ideological mind of the Kushite kingdom. The evidences unearthed during the season probably belonged to several edifices, whose interconnections are at the moment not clear; we hope to investigate these ancient layers in the future, so to outline an embryonal chronology in the use of the area North of the temples. What seems to be clear enough, is the deep layer of these architectural structures, that are at least in one case badly removed so to create the background for the palace foundations. The removing of the older structures is particularly striking in the open sector, East of the casemates nn. 1-2: despite the probable use of the area as open court, some mud brick walls are still visible under a sand layer (fig.11).

<sup>1</sup> The presence of monumental buildings in the area, before Natakamani, can be confirmed by the structures dug by the University of Karima just east of the palace B2400.



Fig.10 – The pre-palatial mud brick wall along the western peripheral wall of the palace.



Fig.11 – The layer sand between the pre-palatial walls and the Natakamani's foundations.

**c) Post-Meroitic use of the palace** – In the sector investigated during the current season, as in other parts of the royal buildings, several evidences of a post-Meroitic use of the palace have been found. The use of the ancient structures is well known in the site of ancient Napata, and testify the presence of communities that dwelt in the same area where the ancient buildings stood. The casemates of the south-west corner hosted about 10 fires, where some ancient pots were used as ovens; these structures used to be located among the surviving walls of the palace, so to protect the fire from the wind. Several post holes (fig.12) also testify the presence of temporary structures, probably to be connected with the same fires. Another evidence of the post-Meroitic frequentation of the palace is also given by the destruction of the walls, above all the mud brick ones. The practice of removing the mud bricks in search for *sebbakh* also allowed the temporary dwellers of the area to have places for fires; this use is clear in the deep destruction of the northern wall of the casemate n.1, where a fire was located after the removing of the mud bricks (fig.13); here, a rich collection of objects was found, among the others a Meroitic bronze oil lamp, which probably was one of the few survivors of the ancient precious equipment of the palace.



Fig.12 – The post holes in the re-used sector of the casemate n.1.



Fig.12 – A late oven in the casemate n.1.



**d) B2100** – During the season, some investigations were undertaken in the building B2100, already partially dug by the Italian Mission, and previously identified as a square open area with several column basements. Here the digging also unearthed few remains of foundation walls; the aim of the current work has been the identification of a possible link of this structure with the main palace and the Edifice of the Basins (B2200), which lies just West of B2100. The area is characterized by the massive presence of sand, with few pottery sherds; the cleaning has confirmed the information of the past seasons, but also offered a new sample of architectural element: a probably unfinished sandstone capital, whose style seems to be similar to others, known in Meroitic Napata (fig.13).<sup>2</sup>



Fig.13 – The capital found during the digging in B2100.

The short work undertaken in the current season let us suppose a wider extension of the edifice, so that its position fits in well the area between the palace and the Edifice of the Basins; a new extensive digging could explain the nature of the building, and its actual position in the royal district of Natakamani.

**e) B1800** – During the first half of the season, a general cleaning of the building B1800 was undertaken; the survey of the season 2014 let us suppose the monumental nature of the edifice, so we started the work hoping to define its plan and its main architectural features. The work comprised some deep soundings, which offered several interesting data concerning the architecture of the edifice. Despite the lack of a plan, the building seems to have a N-S structure, characterized by massive columns, perfectly plastered; their capitals seem to repeat the campaniform model, with some few variations (fig.14), while only one Egyptian composite capital lay at north of the edifice. The sounding in the foundations unearthed the use of red bricks layers on a layer of irregular stones, some of which probably reused from older edifices (fig.15).



Fig.14 – Some column capitals from B1800.



Fig.15 – Red brick and stone foundations in B1800.

<sup>2</sup> It is notable the technical feature of this architectural element, which joins the capital with the top of the column.

Such a peculiar structure of the foundations needs a careful analysis, and a deep excavation: the use of irregular stones seems to be similar to the platform erected close to the western façade of the palace (season 2012), and could be the main evidence of a specific technique used in the building. At the same time, the architectural elements testify the monumental feature of the structure, which seemed to mark this part of the royal district, open to the temples area.

### Protection of the architectural structures

The activities undertaken in the field also comprised some works for the protection of the structures. As in the previous seasons, these activities were planned so to mark on the ground the main profile of the walls of the palace (inner and outer), respecting the original use of red and mud bricks (fig.16). The main result of this activity was the reconstruction of the still lacking part of the peripheral wall; thanks to it, the whole profile of the platform and the complete extension of the palace is now recognizable on the site. The extent of the digging also offered the possibility of a complex work of reconstruction in the inner casemates of the foundations; these structures were outlined in the ground thanks to their profiles, marked by mud bricks (fig.17). As in the previous seasons, the reconstructed peripheral wall also offered a protection for those materials (fragmentary red bricks, no diagnostic pottery, etc.), collected during the excavations.



Fig.16 – The restoration of the red- and mud brick walls of the palace.



Fig.17 – The site at the end of the season, with the restoration of the red- and mud brick walls.

### The restoration of the materials

A fundamental support in the work of the season was granted by a program of restoration on the archaeological materials. This activity was recommended for several reasons: the conservation of the materials was surely the main goal, but the clearance and the consolidation of the objects was also censed to be preliminary for their presentation in the Museum of Karima. The restoration was planned in a frame of activities connected with the excavations and the documentation; in order to get this goal, the team comprised two restorers who already were part of archaeological missions in the site of Jebel Barkal, and who worked on the field and the storage room as well.

The main field for the restoration has been the Museum, where some architectural elements are kept. A preliminary survey let the restorers identify some objects that needed a careful work of cleaning and consolidation (fig.18); the sandstone and the lime plasters of some architectural elements had became very brittle, because of the long period contact with the humid ground of the site. A careful cleaning allowed to reveal the colorful original paint layers. All the architectural

elements moved to the new sheds were fully documented, with the description of the conservation treatments.

Conservation work was also undertaken in the site, where some materials needed some consolidation activities, due to the vulnerability of the architectural elements emerging from the surface: sandstone and plaster were consolidated in building B2300 while the adhesion of the plaster cover, where necessary, was improved using injection grouts made of hydraulic lime and appropriated fillers; the edges of the plaster were saved by means of a lime based mortar (fig.19).

In the building B1800 some architectural elements with special characteristics were documented by stereophotogrammetry; during this work, an element was preconsolidated on site and later moved to the museum, where it was consolidated.



Fig.18 – A capital from the palace B1500, before the restoration.



Fig.19 – The plastered cover of the architectural elements (B1800).

A program of restoration was also planned for the pottery and the finds; the work was particularly important for the pottery sherds, which was part of large vessels used in ovens (fig.20); at the same time, also some finds were object of cleaning and restoration, such as the bronze oil lamp, found in a post-Meroitic context (fig.21).



Fig.20 – The restoration of a vessel from a post-Meroitic oven



Fig.21 – The bronze oil lamp after the restoring.

## The Finds

As usual, the digging offered a wide range of materials, that add to the inventory of antiquities processed by the Mission; the number of the records is now to be updated thanks to the work on the new materials, and the documentation on the older seasons. Their typologies can be summed up as follows:



- Pottery: The pottery sherds unearthed during the season confirmed the typologies of the Meroitic production in the royal palace (fig.22). The presence of these sherds depends on the sector of the palace: indeed, the pottery seems to be more abundant in some part of the excavated area (i.e. in proximity of the southern entrance, or in the northern casemate dug during the season); this concentration may be connected with the presence of storage sector for the goods of the palace. Among these materials, we can mention some painted sherds that fit with the traditional Meroitic styles, together with other more common typologies. The processing of these new materials can support the elaboration of a study on the typologies of the Meroitic Napata, planned by the Mission as part of the study of the royal district of Natakamani. Few pottery come from the other soundings of the season (i.e. B1800); some sherds collected present a painted decoration, perfectly coherent with the styles of the Natakamani palace.

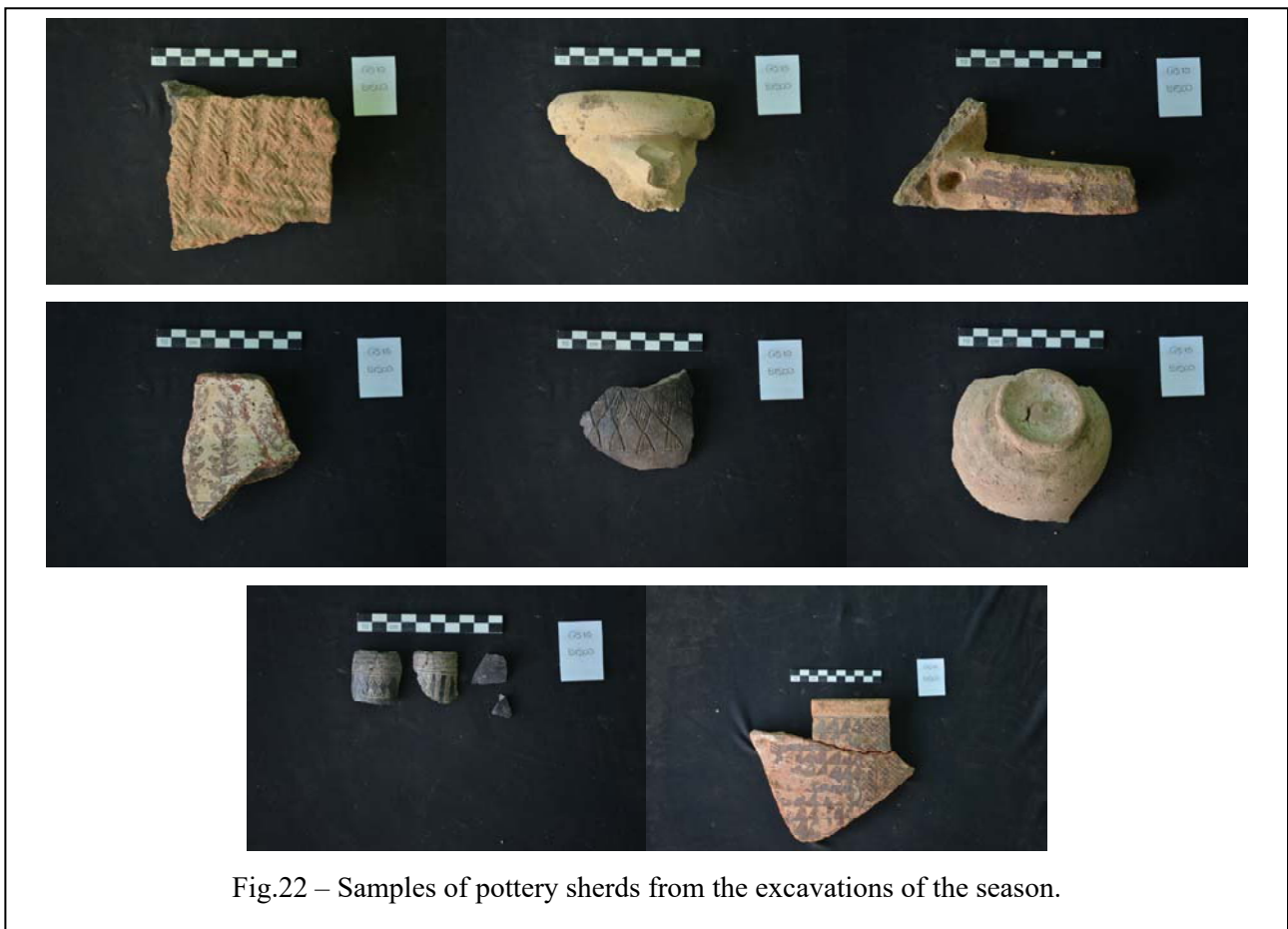


Fig.22 – Samples of pottery sherds from the excavations of the season.

- Post-Meroitic period: As in other sectors of the Meroitic foundations dug by the Italian Mission, some post-palatial fires have been investigated. These domestic structures used to employ ancient pots as ovens, and several pottery sherds on their ground; together with the pots-ovens, many animal bones testify the presence of squatter communities dwelling in the ruins of the ancient palaces.

- Other materials / finds: The excavations unearthed some other materials, that can here be mentioned. The investigation of the southern façade of the peripheral wall let us collect many fragments of the plastered cover from the outer red brick wall of the palace; many of these fragments are painted white, the traditional color of the palace, while some others still preserved the original painting: yellow, red and blue. Despite the severe destruction of the façade, which in some parts is completely disappeared, these painted fragments could be the evidences of the original architectural decoration of the façade, comprising simple and composite buttresses. Some fragments also offer another information about the history of the palace, because of the presence of a double layer of painting; indeed, in some cases we found an original blue painting, later covered by a layer of red painting (fig.23); this red refreshing seems to confirm the works in the palace, which was probably newly painted in occasion of its use by the king, and also a possible shifting in the chromatic trend of the decoration of the building. Also the glaze tiles found in correspondence of the façade belong to the outer decoration; among the others, we mention some fragments of a lion on lunar crescent, the traditional protective motif of the *s3*-sign, and some fragments of Dionysian iconography (fig.24). A second group of glazed tile fragments was found in correspondence of an inner context; it is difficult to be sure in the interpretation of this finding, which could proof the existence of a decorated part of the building; but they could also be the evidence of the wide diffusion of some fragments of the decoration in the area, after the destruction of the palace.



Fig.23 – Fragments of plastered cover with a double layer of painting, from B1500.



Fig.24 – Samples of glazed tiles from the outer decoration of the palace (B1500).

Among the other finds, we can here mention the representation of a cow (?) from a fire located in the casemate n.2 (fig.25), a stone model of an offering table (fig.26), a scarab with a geometric decoration on the base (fig.27) and a bronze oil lamp, whose cleaning let us recognize some typical stylistic features of a Meroitic production (see above, fig. 20).



Fig.25 – A cow model.



Fig.26 – Stone model of an offering table.



Fig.27 – Scarab with geometric decoration.

### The storage of the materials

As in the previous seasons, one of the main goals of the Italian Mission has been the safe of the archaeological materials unearthed during the excavations. During the current season, some armchairs have been organized, so to collect the storage room held by the Mission next to the archaeological site. The result of the work is now an ordered space, where the materials (pottery, finds and architectural elements) are collected and organized according to their area of provenance (fig.28); this processing of the antiquities let us join the materials from the previous seasons, and the finds of the last excavations, creating an unique database for the inventory. The next step in this processing work is the access to the materials of the Italian Mission stored in the Museum of Karima; thanks to the restoration undertaken during the current season, it was possible to start with the organizing of the antiquities in the Museum (at first the architectural materials, but also the pottery and the finds), so to arrive at their complete inventory. At the end of the season, all the materials from the Italian excavations were collected in one sector of the storage room of the Museum (figg.29-30); this location can ensure the processing of the antiquities data, which could start in the next season, and we hope that this ordering could be censured to be definitive.



Fig.28 – The storage room of the Italian Mission.



Fig.29-30 – The materials from the excavations of the Italian Mission stored in the Museum of Karima.



The work in the Museum needed a particular care: due to the current situation in the room, the materials were sometime mixed with the antiquities of other missions, and it would be hoped a coordination in the activities undertaken by the different Missions in the organizing of the materials.

### **Presentation of the site**

The reconstruction of the architectural structures dug in the current season is part of a wider program for the presentation of the site; the aim of all these activities is to facilitate the access to the antiquities of the royal district. As noted in the previous reports, the investigation on the field is strictly linked with the storage and the safe of the archaeological materials in the Museum; thus, the presentation of the site can not be planned without the work on the archaeological materials, that could ensure their comprehension. During the current season, and thanks to the support granted by the QSAP, the work of presentation has been undertaken in two different topics: a fuller reconstruction of the structures investigated, and a presentation of the site in a short guide.

The protection of the architectural remains is part of the works regularly undertaken after the digging. Since the first excavations, the Mission used to protect the ancient walls with a new cover, which should respect the original shape of the buildings; at the end of the current season, the reconstructive cover has been planned also for the mud brick walls of the inner casemates, linking the outer façade of the palace with its inner foundations. The result is a recognizable plan of the edifice, with the complete profile of the outer wall and the complex inner texture of the foundations (see above, fig.16); we hope to continue this work in the future, so to present the main features of the palace.

Before starting the season, the Mission also worked on a short presentation of the site (pamphlet), which is now available in the site (Museum of Karima, Italian Nubian House) and in Khartoum. The aim of the pamphlet is to offer the main information on the Meroitic sector on Napata and its treasures, part of which are exposed in the local Museum.

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At the end of the report, we would like to thank all the people and the institutions, that supported the Mission during the season in Sudan; it is their assistance and help that have allowed us to carry out the work during this long period, and to get the many goal of the activities. We are in special debt of gratitude with Dr Abelrahman Ali Mohammed (General Director of the National Corporation for Antiquities and Museum), Dr Alhassan Ahmad (National Corporation for Antiquities and Museums), Dr Salah Eldin Mohammed Ahmed (Qatar Sudan Archaeological Project) and Dr Fabrizio Lobasso (Italian Ambassador in Sudan).

We would like to close the report remembering the founder of the Italian Archaeological Mission in Sudan, Prof. Sergio Donadoni, who passed away the 31<sup>st</sup> October, 2015: the birth of the Italian Mission in Jebel Barkal depends on the choice made by the scholar just after the end of the work undertaken in the frame of the UNESCO project for the rescue of the Nubian monuments threatened by the Aswan reservoir; after several years of work on the site, he retired from the active research in Jebel Barkal, but was always interested in the activity of the Mission; thus, we would like to remember him from the Sudan, a country that he felt as a “place of the heart...”.