

ARCHAEOLOGICAL EXPEDITION AT AKSUM (ETHIOPIA) OF THE  
UNIVERSITÀ DEGLI STUDI DI NAPOLI “L’ORIENTALE”  
*2011 Field Season: Seglamen*

*Habtamu Makonnen*, Aksum University (AU)

*Laurel Phillipson*

*Luisa Sernicola*, Università degli Studi di Napoli “L’Orientale” (UNO)

with contributions by

*Marco Barbarino*, *Alfredo Carannante*, *Michela Gaudiello*, (UNO)

*Bar Kribus*, Hebrew University of Jerusalem

*Introduction*

In November 2011 the Italian Archaeological Expedition of the Università degli Studi di Napoli “L’Orientale” (UNO), Napoli, under the direction of Rodolfo Fattovich, conducted the 17<sup>th</sup> field season of investigations in the region of Aksum, Tigray, northern Ethiopia, the second in the area of Seglamen.

The project is implemented in collaboration with the Department of Archaeology of the Aksum University (AU), Aksum, Ethiopia, represented by Mrs Berhan Tekie, within the framework of a formal agreement between UNO and AU established since 2009 and aimed at conducting joint research programs and at providing undergraduate students in Archaeology with a theoretical and practical training in survey and excavation procedures and in laboratory analysis (Phillipson 2010, 88-91).

Archaeological researches at Seglamen are part of a broader project launched in 2010 and aimed at investigating a 100 sq km transect along the Mai Negus/Haselo river valley from Addi Hankara (Medegoy *woreda*) to Adet (Hawesta *woreda*) with the territories around the modern villages of Medogwe, Seglamen, Merina and Adet as major areas of investigation (Fig. 1). This transect has been selected as the Mai Negus/Haselo river valley represented an important traditional exchange route linking Aksum and the Tigrean highlands to the Tekeze river in the south-west and, through this, to the southern regions of the Ethiopian plateau. The research has been designed to provide:

- a reconstruction of the cultural and environmental history of the region to the south-west of Aksum;
- a detailed archaeological map of this region for the cultural heritage management of Central Tigray.

In 2011 investigations focused exclusively on the Pre-Aksumite site of Seglamen SG1 where a monumental area and a cemetery had been identified and partially excavated in 2010 (Fattovich *et alii* 2011). The topographic survey of the terrace, begun in 2010, has been completed in order to define the general morphology of the area of the site (Fattovich *et alii* 2011, 3-4), using a total station Trimble M3 5”.

Members of the 2011 expedition were Prof. Rodolfo Fattovich, archaeologist and research director, Dr. Luisa Sernicola, archaeologist and field director, Mr Marco Barbarino, surface surveyor, and Miss Michela Gaudiello, ceramic analyst (UNO, Italy); Dr. Laurel Phillipson, lithic analyst (UK); Mr. Habtamu Makonnen and Mrs Berhan Tekie, archaeologists (AU, Ethiopia); Mr Bar Kribus, assistant archaeologist (Hebrew University of Jerusalem, Israel). The Ethiopian Authority for Research and Conservation of the Cultural Heritage (ARCCH) was represented by Ato Kebede Geleda<sup>1</sup>.

---

<sup>1</sup> The members of the expedition are very grateful to: Ato Yonas Desta, Head, ARCCH, Addis Ababa, Ato Dessalegn Abebaw Andualem, Director, Cultural Heritage Directorate, ARCCH, Addis Ababa, Ato Tedros Abraham, Head, Bureau of Culture and Tourism, Central Zone, Aksum, Dr. Mebratu and Dr. Aklilu, President and Vice President, Aksum University, Aksum, H.E. Mario Rosso, Ambassador, Italian Embassy, Addis Ababa, Dr. Alessandro Ruggera, Director, Italian Cultural Institute, Addis Ababa, Dr. Francesco Saverio Polisenò, Poliass Srl Marine & General, and Dr. Enrico Semino, Cambiaso Risso Insurance Brokers, Naples, Italy, for their kind support to the expedition. The investigation could not have been conducted without the contribution of all the employed assistants, labourers, students and helpful landowners. The expedition has been funded by the Ministero Italiano degli Affari Esteri, Rome; Poliass Srl Marine & General, Naples; Cambiaso Risso Insurance Brokers, Naples; and the Università degli Studi di Napoli “L’Orientale”.

## Archaeological Excavations<sup>2</sup>

The modern village of Seglamen is located about 15 km to the south-west of Aksum along the Aksum-Adet road (Fig. 2), and is bounded by the Mai Negus/Haselo river gorge on the north and north-east, the Shetambo hill on the south, the Ferasit and Gerat Gabara hills on the south-west, Teenti hill on the west and Kesaad Addi Kerni hill on the north-west. In this area, three sites were recorded through surface survey in 2010: SG1, SG2, SG3 and SG4 (Fattovich *et alii* 2011, 8-17, 55-56).

Archaeological investigations in 2011 concentrated at SG1 where a Pre-Aksumite site, located and identified in 2006 and 2009, had been systematically surveyed during the 2010 field season (Fattovich *et alii* 2011, 8-17). Site SG1 extends for about 7 hectares on a remarkably flat cultivated terrace along the eastern edge of the village of Seglamen. The site is located at the confluence of the Mai Negus/Haselo river with a small tributary, Mai Mehelkal, and encompasses the localities of Amda Tsion and Mogareb where the remains of monumental buildings and graves respectively were partially excavated in 2010 (Fattovich *et alii* 2011).

In order to continue the investigation started in 2010, three excavation units were established in 2011: Seg V, Seg VI, and Seg VII (Fig. 3).

### SEG V AND SEG VI (by B. Kribus, Habtamu Makonnen and L. Sernicola)

Excavation units Seg V and Seg VI (10 × 10 m each, N/S oriented) were opened in the area of Amda Tsion, immediately to the east and to the north-east of EU Seg II, where the remains of a monumental area characterized by two main architectural phases and a poorly represented intermediate occupation were uncovered in 2010 (Fattovich *et alii* 2011, 23-45). Despite the limited extent of Seg II excavation, archaeological evidence suggested that this area was, at least initially, a ceremonial centre, the most ancient phases being characterized by the presence of a possible rectangular shrine or temple with a votive deposit beneath the foundations. To increase our knowledge about the different phases of use of the area and to expand the reconstruction of the general plan of the most ancient building, EUs Seg

---

<sup>2</sup> For a general description of the excavation procedures see Fattovich *et alii* 2011, 3.

V and Seg VI were established as showed (Fig. 3). Being adjacent to each other, in this report they have been treated as a single excavation unit.

### Structure and stratigraphy

Seventy-seven contextual units were distinguished during the excavation at Seg V/VI, which can be summarized and described as follows<sup>3</sup>:

SU1: ploughed topsoil, uniform throughout the excavation unit. Soft, brown soil with many large clumps, small stones and organic material. Fully excavated;

SU2: hard-packed, dark brown soil with small stones, in the central eastern sector of the excavation unit. Fully excavated;

SU3: wall, NW/SE oriented, located in the central sector of the excavation unit. Composed mainly of medium-sized field stones (sandstone), with a few examples of basalt, and a soil mortar. The larger stones were mostly used in the construction of the two faces, while the core is composed of slightly smaller stones and soil. A larger stone slab is apparent in the south-western face of this wall. Width 0.69 m, exposed length 11.46 m, preserved height 0.62 m;

SU4: wall, NE/SW oriented, located in the central eastern sector of the excavation unit. Construction technique similar to SU3. Width 0.70 m, exposed length 3.40;

SU5: thin layer of hard-packed dark brown soil at the interface between SU1 and SU22 in the eastern sector of the excavation unit. Fully excavated;

SU6: upper fill of the foundation pit of wall SU3 in the central sector of the excavation unit composed of dark-brown hard-packed soil. Partially excavated;

SU7: wall, ENE/WSW oriented, located in the southern sector of the excavation unit. Composed of small, medium-sized and large field stones and stone slabs (sandstone), with dark brown, hard-packed soil between them. The wall is partially eroded in square B4 only its lower courses being preserved. Width 0.75 m, length 9.50 m, preserved height 0.75 m;

SU8: possible fill of the foundation pit of wall SU4 in the central eastern sector of the excavation unit composed of dark-brown hard-packed soil with few small stones. Unexcavated;

SU9: wall, NE/SW oriented in the south-western corner of the excavation unit. Is the continuation of wall SU10, uncovered within Seg II in 2010 (Fattovich *et alii* 2011, 24). Exposed length 1.40 m;

---

<sup>3</sup> For the location of the main features within the excavation unit and the stratigraphic relations of the SUs (Figs. 4 - 5).

SU10: wall, NE/SW oriented located in the southwestern sector of the excavation unit. Composed of large and medium-sized stones (sandstone) with dark brown, hard-packed soil between them, and a core of smaller stones. Two large basalt stones: a grinding basin and a grinding stone are incorporated into this wall. While the western face of this wall is better preserved and has a regular layout, the eastern face currently visible seems very much eroded, and has a less regular form. Width 0.90 m, exposed length 2.40 m;

SU11: brown, hard-packed soil, east of SU9 and west of SU10, in the southwestern sector of the excavation unit. Fully excavated;

SU12: dark-brown hard-packed, dark brown soil with very few, small stones, east of wall SU10 in the southwestern sector of the excavation unit. Unexcavated;

SU13, SU18, SU22, SU35: clusters of the same layer located in the eastern, southwestern and western sector of the excavation unit, composed of small to medium-sized and field-stones and dark brown, hard-packed soil. Fragments of schist slabs have been recorded on top and within it. SU22 corresponds to SU15 of Seg II excavated in 2010 (Fattovich *et alii* 2011, 24); SU13 and SU18 are unexcavated, SU22 has been partially excavated, SU35 has been fully excavated. Living floor used in the later phases of occupation of the area;

SU14: wall, NE/SW oriented, located in the north-eastern sector of the excavation unit Same construction technique of walls SU3 and SU4. Width 0.65 m, exposed length 2.05 m, preserved height 0.35 m;

SU15: wall, NW/SE oriented, located in the southern sector of the excavation unit. Is composed of medium-sized and small field stones (sandstone) and dark brown, hard-packed soil. Width 0.65 m, exposed length 3.90 m, preserved height 0.60 m;

SU16: wall, NW/SE oriented, located in the north-eastern sector of the excavation unit. Same construction technique of walls SU3, 4, and 14. Width 0.65 m, exposed length 2.05 m, preserved height 0.35 m. Width 0.70 m, exposed length 2.20 m;

SU17: apparently regular stone arrangement in the north-eastern sector of the excavation unit, abutting SU 16, maybe a threshold or the remains of a stone bench. Partially exposed;

SU19: lowest level of the topsoil in the northeastern sector of the excavation unit, E of wall SU3 and W of wall SU16. Fully excavated;

SU20: lowest level of the topsoil in the northeastern sector of the excavation unit, E of wall SU16. Fully excavated;

SU21: Dark brown, very hard-packed soil, south of wall SU7 in the southern sector of the excavation unit. Unexcavated;

SU23: wall, NE/SW oriented located in the southwestern sector of the excavation unit. Composed of large and medium-sized stone slabs with dark brown, hard-packed soil between them. The slabs are flat, laid horizontally,

with little margin between them. The larger slabs were utilized in the faces, while the core contains smaller stones and more soil. The bottom course is composed of big, rounded stones. Width 0.82 m, exposed length 3.40 m, preserved height 0.60 m;

SU24: dark brown, hard-packed soil, south of wall SU23, north of wall SU7 and west of wall SU10 in the southwestern sector of the excavation unit. Fully excavated;

SU25: row of vertically placed stone slabs, some adjacent to each other, others five to 10 cm apart. The slabs are not worked, and vary in size from 10 to 25 centimeters in width. This SU, which is located in the central sector of the excavation unit, may have been erected during the construction of wall SU3. Fully excavated;

SU26: wall, NW/SE oriented, located in the northeastern corner of the excavation unit, possibly related with walls SU3, 4, 14, and 16. Exposed length 1.40 m;

SU27: orange-brown, hard-packed soil located in the eastern sector of the excavation unit. Within this layer, walls SU28, 41, 42, 43, and 47 were uncovered. Partially excavated;

SU28: cluster of stones, possibly part of a NE/SW oriented wall, composed of large and medium-sized stones, horizontally laid. This feature has not yet been sufficiently exposed to determine its stratigraphic association and function. It may be a southern continuation of wall SU38;

SU29: wall, NW/SE oriented, located in the central western sector of the excavation unit, composed of large and medium-sized stone slabs and brown, hard-packed soil. The larger slabs are utilized in the wall's faces, while the core contains more soil and smaller stones. The bottom course of the wall is composed of big, irregular stones. Width 0.93 m, exposed length 9.36 m, preserved height 0.60 m;

SU30: wall, NW/SE oriented, located in the northern sector of the excavation unit, made of medium-sized, roughly flat stones in a soil mortar. Width 0.65 m, exposed length 2.05 m, preserved height 0.35 m;

SU31: small cluster of stones in the central sector of the excavation unit, abutting SU 25;

SU32: lower fill of the foundation pit of wall SU3, consists of an orange-brown, hard-packed soil, located in the central sector of the excavation unit, under SU6, east of SU25 and west of W.SU3. Partially excavated;

SU33/37: dark orange-brown, hard-packed soil, uncovered under SU22, in the western sector of the excavation unit. Corresponds to SU16 of Seg II excavated in 2010 and may represent a phase of soil accumulation after a first phase of collapse of the structure brought to the light in Seg II *Phase III* (Fattovich *et alii* 2011, 25). Partially excavated;

SU34: wall, SW/NE oriented, located in the central sector of the excavation unit. Composed of large and medium-sized stones, with dark-brown, hard-

packed soil between them. The core is composed of smaller stones and a larger quantity of soil. Width 0.71 m, length 3.80 m, preserved height 0.53 m;  
SU35: Cluster of small and medium-sized fieldstones with brown, hard-packed soil, in the south-western sector of the excavation unit. Corresponds to SU22;

SU36: wall, NE/SW oriented, located in the northern sector of the excavation unit. The bottom course is made of big, irregular stones, the upper courses are composed of medium-sized stones on the external faces and small, irregular stones mixed to soil in the core. Width 0.70 m, exposed length 3.80 m, preserved height 0.70 m;

SU37: Cluster of small and medium-sized fieldstones with brown, hard-packed soil, in the western sector of the excavation unit. Corresponds to SU22;

SU38: SU42 and SU43: three segments of a single wall, NW/SE oriented, located in the northern and central sector of the excavation unit. Same construction technique of SU36. Width 0.60 m, exposed length 9.70 m, preserved height 0.60 m;

SU39: collapse located in the northeastern sector of the excavation unit. Partially excavated;

SU40/46: collapse located in the central and western sectors of the excavation unit. Composed of large and medium-sized field stones and slabs. Partially excavated. Corresponds to SU18 of Seg II;

SU41: wall, NE/SW oriented, located in the central eastern sector of the excavation unit. Width 0.63 m, exposed length 1.50 cm. Partially exposed;

SU45: small cluster of stone collapse in the western sector of the excavation unit, west of SU 25. Possibly corresponds to SU18 of Seg II excavated in 2010 and represents the first phase of collapse of the structure related to *Phase III* (Fattovich *et alii* 2011, 24);

SU47: wall, NE/SW, parallel to SU 41, located in the central eastern sector of the excavation unit. Width 0.55 m, exposed length 2.0 m. Partially exposed;

SU48: orange-brown, moderately hard-packed soil, uncovered within a semi-circular depression in the stone platform SU49/51, and west of wall SU29. Within this fill, a ceramic vessel which was placed as a votive offering was uncovered (Fig. 6). Under this fill, the bedrock was exposed. Fully excavated;

SU49/51: foundation platform composed of medium-sized stones mixed to an orange-brown, hard-packed soil between. Is situated in the western sector of the excavation unit, west of wall SU29 and north of wall SU54. On its southern part, a plaster floor, SU50, was uncovered. Corresponds to SU66/68 of Seg II (Fattovich *et alii* 2011, 27). Unexcavated;

SU50: remains of a living floor composed of a thin layer of yellowish-orange plaster uncovered in the western sector of the excavation unit, on the stone platform SU49/51. Unexcavated;

SU52/59/74: orange-brown, moderately soft soil with clusters of soft, fine, red material located in the western sector of the excavation unit. Some of the clusters are of disintegrated sandstone, but the majority are finer, and may also be eroded pottery. Fully excavated;

SU53: light-brown, moderately soft soil with few small, irregular stones, located in the northwestern sector of the excavation unit. Fully excavated;

SU54: wall, SW/NE oriented, located in the western sector of the excavation unit. Composed of large, medium-sized and small irregular stones and roughly flattened slabs with brown, hard-packed soil between them. The slabs were laid primarily in the two faces, while the core is composed of smaller stones and a greater quantity of soil. The bottom course of this wall is made of big to medium-sized rounded stones. Corresponds to wall SU29 of Seg II (Fattovich *et alii* 2011, 25). Width 0.71 m, exposed length 1.20 m, preserved height 0.50 m;

SU55: yellowish-brown, hard-packed soil, uncovered in the southwestern sector of the excavation unit, under SU11, east of wall SU9 and west of wall SU10. Unexcavated;

SU56: collapse composed of large and medium-sized stones, widely spaced, with dark brown, hard-packed soil between them. This collapse is situated in the western sector of the excavation unit, south of wall SU54 and west of wall SU29, under SU33. Fully excavated;

SU57: brown, soft soil in the northeastern sector of the excavation unit. Fully excavated;

SU58: collapse similar to SU56, located in the southwestern sector of the excavation unit, west of wall SU23, north of wall SU7 and east of wall SU29. Partially excavated;

SU60: wall, NW/SE oriented, composed of large and medium-sized flat stones and brown, hard-packed soil. Only a small section of the eastern face of this wall was uncovered;

SU61: living floor made of yellowish-brown, soft soil uncovered in the central sector of the excavation unit, under SU52, and immediately above the bedrock. A cluster of stones (SU62) is embedded in this fill. Unexcavated;

SU62: cluster of large and medium-sized stones, widely spaced, with yellowish-brown, soft soil between them. These stones are embedded within SU61, and form the shape of a crescent. Unexcavated;

SU63/75: "L" shaped stone bench composed of medium-sized stones, densely laid, with orange-brown, soft soil between them. Two complete ceramic vessels still *in situ* were discovered on top of this platform in square A3. Width 1.40 m;

SU64: orange-brown, soft soil between the upper layer of the stones of bench SU63. Designated with a different SU number in order to differentiate the finds. Fully excavated;

SU65: living floor made of soft, yellowish-brown soil with soft red clumps, immediately above the bedrock. Located in the central sector of the



excavation unit, south of wall SU34, north of wall SU7 and east of wall SU23 and SU29. Unexcavated;

SU66: human burial in the northeastern sector of the excavation unit. Unexcavated;

SU67: collapse composed of medium-sized stones with orange-brown, soft soil between them, located immediately above the southern part of SU63. Unexcavated;

SU68: collapse similar to SU67, composed of medium-sized stones with orange-brown, soft soil between them, located north of, and at the foot of SU63, and enclosed by SU29, SU54, SU63 and SU75. Fully excavated;

SU69: circular cluster of gray, hard packed ashy soil in the central sector of the excavation unit. Fully excavated;

SU70: bedrock in the central sector of the excavation unit at an average depth of 1.50 m;

SU71: roughly circular, elongated lens of dark brown soil in the central sector of the excavation unit. Unexcavated;

SU72: living floor made of soft, yellowish-brown soil with soft red clumps, immediately above the bedrock. Unexcavated;

SU73: collapse composed of medium-sized field stones and stone slabs, with orange-brown, very soft soil between them. Fully excavated;

SU76: bedrock in the northern sector of the excavation unit at an average depth of 1.70 m;

SU77: thick layer of brown soil below the first course of stones forming walls SU36 and SU38. Unexcavated.

The stratigraphic units recorded at Seg V/VI can be divided into four main phases of occupation marked by the overlapping of different architectural features and associated soil sediments.

*Phase IV* (orange color in the map and matrix) (Figs. 4, 5) is the last phase of occupation of the area; it is characterized by the remains of a rectangular or quadrangular structure with traces of an internal division located in the northeastern and eastern sectors of the excavation unit. This phase has been only partially exposed as the excavation mainly concentrated in the central western sector of the EU. On the basis of preliminary observations it comprises stratigraphic units 2, 3, 4, 6, 8, 14, 16, 17, 25, 26, 27, 30, 31, 32, 39, 53 and 57. It was excavated to a maximum depth of 0.47 m over a surface area of 90 sq m. It is worthy to notice that wall SU30 is clearly later than the main structure represented by walls SU3, 4, 14, 16, 26 as it abuts wall SU3. Future investigations will whether clarify if SU30 was built while the main structure was in use or whether it represents a later

phase of occupation. Presently, it is the last known construction at the site. No evidence of this phase was recorded in EU Seg II of 2010.

*Phase III* (violet color in the map and matrix) (Figs. 4, 5) equates to the same phase found at Seg II in 2010; it is represented by the remains of a monumental building characterized by massive walls over 1 m thick (Fattovich *et alii* 2011, 27). It is mainly located in the western and southern sectors of the excavation unit and is formed by stratigraphic units: 5, 9, 13, 18, 22, 33/37, 35 and 45. It was excavated to a maximum depth of 0.58 m over a surface area of 54 sq m.

*Phase II* (light-blue color in the map and matrix) (Figs. 4, 5) comprises a system of three orthogonal walls abutting one of the walls of the most ancient building. It is located in the southern sector of the excavation unit and is formed by stratigraphic units: 7, 10, 11, 12, 15, 21, 24 and 34 and was excavated to a maximum depth of 0.51 m over an area of 32 sqm. There is currently no evidence of a possible correlation with *Phase II* exposed at Seg II (Fattovich *et alii* 2011, 27).

*Phase I* (red color in the map and matrix) (Figs. 4, 5) represents the earliest phase of occupation of the area and is characterized by orthogonal walls directly constructed on the bedrock. It is located in the central western sector of the excavation unit and is formed by stratigraphic units: 23, 28, 36, 38, 40, 42, 43, 46, 48, 49, 50, 51, 52, 54, 56, 58, 59, 60, 61, 62, 63, 64, 65, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76 and 77. It was excavated to a maximum depth of 1.77 m over an area of 48 sq m. Corresponds to *Phase I* of Seg II (Fattovich *et alii* 2011, 28).

Stratigraphic units 41, 47, 55 and 66 have been exposed, but not yet excavated; their attribution to one of the identified phases will be established by future investigations.

### SEG VII (by L. Sernicola)

Excavation unit Seg VII was located in the area of Mogareb (Fig. 3), a flat cultivated terrace in the north-western sector of site SG1. Archaeological investigations conducted in this area in 2010 (Seg III) brought to light a roughly rectangular pit tomb (SG T1) cut into the bedrock,

associated with a sandstone carved *stela* (Fattovich *et alii* 2011, 45-53). In order to verify the possible occurrence of other tombs in the area, a 4 × 4 m, N/S oriented, excavation unit was established about 20 m to the west of Seg III, in an area where potsherds and few lithic were visible on surface.

### Structure and stratigraphy

During the excavation at Seg VII eleven stratigraphic units were recorded and described:

SU1, SU7: ploughed topsoil characterized by soft, dark-brown soil mixed to small, irregular stones. Covers the whole excavation unit and is between 10 and 15 cm thick. Covers SU2, SU, SU3, SU4, SU5, SU6, SU8, SU9, SU10. Contains knapped stones and ceramics, including a high quantity of miniatures of beakers and cups;

SU2: bedrock consisting of brown-yellowish, weathered, syenite with a foliated structure. Extends over the whole excavation unit. Covered by SU1 and SU7 and cut by SU4, SU6 and SU9;

SU3: soil fill characterized by soft, dark-brown soil mixed to small, irregular stones, located in the western sector of the excavation unit. Fills SU4, covered by SU1 and SU7. Contains ceramics (including few miniatures of beakers), knapped stones and beads;

SU4: roughly circular pit cut into the bedrock in the western sector of the excavation unit. Measures 1,10 m in diameter, and is 0.80 m deep. Covered by SU1 and SU7, cuts SU2, filled by SU3;

SU5: upper part of a soil fill consisting of soft, dark-brown soil with few small and medium-sized irregular stones. Located in the eastern sector of the excavation unit. Covered by SU1 and SU7, fills SU6, contains SU10, covers SU11. Contains ceramics, miniatures of beakers and knapped stones;

SU6: roughly rectangular pit tomb, north/south oriented, cut into the bedrock in the eastern sector of the excavation unit. Measures about 1.90x0.95 m, and is 0.65 m deep (Fig. 7). Covered by SU1 and SU7, cuts SU2, filled by SU5, SU10 and SU11. Designated as SG Tomb 2 (SG T2);

SU8: soil fill consisting of soft, dark-brown soil with few small irregular stones. Located in the southern sector of the excavation unit. Covered by SU1 and SU7, fills SU9. Contains ceramics, knapped stones, beads and the remains of a human jaw with few teeth;

SU9: roughly circular pit cut into the bedrock in the southern sector of the excavation unit. Measures about 1 m in diameter, and is about 0.40 m deep. Covered by SU1 and SU7, cuts SU2, filled by SU8;

SU10: carved, sandstone monolith, roughly cylindrical in section laying in pit SU6 in the northeastern sector of the excavation unit. Covered by SU1 and SU7, contained by SU5, covers SU11;

SU11: lower part of a soil fill consisting of dark-brown, soft soil with few small irregular stones. Located in the northeastern sector of the excavation unit. Covered by SU5 and SU10, fills SU6. Contains ceramics, knapped stones, beads, one metal tool and traces of human bones.

### *Pottery*<sup>4</sup>

#### Seg V/VI (by M. Gaudiello)

The study of the ceramics from Seg V and Seg VI still is at a preliminary stage of analysis insofar as only about 30% of the whole collected assemblage was examined during the 2011 field season. The first stage of work consisted in sorting the pottery material into body-potsherds and diagnostics groups with the help of the students of the Aksum University. Then the diagnostics fragments and a few bags of body-potsherds were described and classified. Potsherds at Seg V/VI were from: surface collection, SU1 (Seg V/VI), SU1/5 (Seg VI); SU2 (Seg V/VI); SU5 (Seg V/VI), SU6 (Seg V/VI); SU11 (Seg V); SU12 (Seg V); SU18 (Seg V); SU19 (Seg VI); SU20 (Seg VI); SU22 (Seg V/VI); SU24 (Seg V); SU25 (Seg VI); SU27 (Seg VI); SU32 (Seg VI); SU33 (Seg V/VI); SU39 (Seg VI); SU40 (Seg V); SU40/46 (Seg VI); SU48 (Seg V); SU52 (Seg V/VI); SU53 (Seg VI); SU58 (Seg V); SU59 (Seg V); SU64 (Seg V) and SU72 (Seg V). Not all the SUs have been analysed insofar.

The ceramics have been divided into four assemblages corresponding to the four phases of occupation on the area identified on the basis of different architectural features and associated soil sediments.

#### Topsoil (SU1, SU20, int. SU1/5)

SU1 [V/VI]: 2175 body-potsherds, 18 handles, 22 decorated potsherds and 115 rims were counted:

- 1 BrCW: Circular handle: 23 × 25 mm in section;
- 1 ROCW: everted rounded rim of a neckless jar with smooth surface, many big and small white inclusions and few small red ones in a compact clay: 210 mm in diameter, 11.17 mm thick;
- 1 RCWa.: yellowish red wall with handle: 8.08 mm thick, 34.35 mm high, 32.20 mm wide and 1.070 × 15.29 handle section;

---

<sup>4</sup> For a description of the procedures used for ceramics classification, Fattovich *et alii* 2011, 4-6.

- 2 BPCW: decorated potsherd with vertical impressions in rectangular shape and triangular upper edge: 15.40 mm thick, 69.20 mm high and 73.26 mm wide. Pointed rim with slipped burnished surfaces and many small-medium white inclusions in a very dense clay: 120 mm in diameter and 5 mm thick;
- 2 GCW: decorated potsherd with two molded eye-shaped decorations: 12.60 mm thick, 49 mm high and 75 mm wide. Rounded ledged rim with smooth surfaces: 230 mm in diameter and 8.42 mm thick;
- 4 BFW: one rounded rim with smooth surfaces: 160 mm in diameter and 6.36 mm thick. One rounded rim of a cup with smooth surface and low polishing treatment inside: 230 mm in diameter and 6.44 mm thick. One direct rim with flat external lip, smooth inside surface and polished outside: 140 mm in diameter and 8.83 mm thick. Rounded ledged rim of a small pot with smooth surfaces: 120 mm in diameter and 5.37 mm thick;
- 13 BPFW: a fragment of a small roughly made cup with finger impressions, direct rim and pointed ledged lip: 80 mm in diameter, 7.32 mm thick, 38.10 mm high and 39.62 mm wide. A fragment of horizontal molded decoration: polished surfaces, 7.35 mm thick, 37.40 mm high and 33.55 mm wide. 5 rounded rim: Two direct rounded rim with polished surfaces, brightened colors or slipped surfaces: 150 mm and 160 mm in diameter, 5.27 mm and 7.22 mm thick respectively. Two direct rounded rims with polished surfaces, one of them with brightened colors: 200 mm in diameter, 7.96 mm and 7.56 mm thick. One rounded rim with polished brightened surfaces: 270 mm in diameter and 7.45 mm thick. (2 almost rounded rim) One almost rounded rim with slipped brightened external surface and polished brightened internal one: 140 mm in diameter and 7.63 mm thick. One almost rounded rim with polished surfaces: 100 mm in diameter and 6.12 mm thick. (Pointed rim) One pointed rim with smoothed external surface and polished on the inside: 170 mm in diameter and 2 mm thick. One everted thickened rounded rim with polished surfaces: 240 mm in diameter 6.57 mm thick. One direct almost ledged rounded rim with polished surfaces and brightened exterior: 200 mm in diameter and 7.25 mm thick;
  - GPW fragment of cup's rim with decoration on the external surface composed by two parallel incisions on the rim and 3 oblique lines on the body: 14.16 mm thick, 42.55 mm high and 58.69 mm wide.
- 4 BrMFW: a fragment of decoration with wavy lines and horizontal lines above them and scraping on the internal surface. One slightly pointed ledged rim with smoothed surface: 210 mm in diameter and 6.50 mm thick. One direct

rounded rim of a deep bowl with rough external surface and smoothed interior: 180 mm in diameter and 4.48 mm thick. Everted ledged rim of a necked jar with smoothed surfaces and parallel incisions on the neck: 150 mm in diameter and 4.27 mm thick;

- 6 BrMPFW: handle with oval section  $6.99 \times 10.54$  mm. Three everted pointed rims with polished surface: 120 mm and 180 mm in diameter, 4.08 mm, 6.19 mm and 7.44 mm thick respectively. One everted rounded rim, almost thickened lip of a neckless jar with polished surfaces: 200 mm in diameter and 12.22 mm thick. One direct pointed rim with external flat lip of what is likely a lid with polished surfaces: 120 mm in diameter and 5.50 mm thick;
- 7 ROFW: base of almost circular handle  $18.45 \times 15.12$  mm. Oval handle  $22.06 \times 18.20$  mm in section. Potsherd with oval rocker decoration on external surface and scraping on the interior: 8.04 mm thick, 33.29 mm high, 38.20 mm wide. Sherd with two moulded decorations: rough surfaces, 9.84 mm thick, 51.93 mm high and 62.02 mm wide. Everted thickened rounded rim almost ledged of a small pot with smoothed surfaces: 110 mm in diameter and 6 mm thick. Flat rim with polished surfaces: 160 mm in diameter and 7.80 mm thick. One almost rounded thick rim, thinner around the rim on the external side, smoothed surfaces: 220 mm in diameter and 13.39 mm. Almost pointed rim of a necked jar with rough surfaces: 160 mm in diameter and 9 mm thick;
- 12 RBrFW: circular handle,  $9 \times 9$  mm. One thick horizontal handle with decoration on the external margin: one deep horizontal line and deep vertical lines crossed it, 11.35 mm thick. Potsherd with wavy incisions: 5.71 mm thick, 29.35 mm high and 16.58 mm wide. Potsherd with incised decoration on the external surface in a V shape, composed of two parallel lines. Three everted rounded rim with smoothed surface, probably one potsherd with slip on external surface: 120 mm and 160 mm in diameter, 7.37 mm, 8.35 mm and 5 mm thick respectively. One direct flat rim with smoothed to polished external surface and polished scraped internal one: 240 mm in diameter and 6.86 mm thick. One pointed rim with rough surface: 4 mm thick. One direct in-turned rim of a small cup with smoothed surfaces: 70 mm in diameter and 5.64 mm thick;
  - one direct rounded rim with notches on the lip until the inside surface and hole under the rim, probably fragment of a deep bowl with rough external surface

and polished internal one: 240 mm thick, 6.20 mm thick, 23.25 mm high and 27.38 mm wide. One thick flat rim with smoothed surfaces: 200 mm in diameter and 11.57 mm thick.

- 9 RBrPFW: oval handle with a groove on the slipped external surface: 17 × 26 mm. Potsherd of a bell with scraping on the internal surface: 7.61 mm thick, 33.49 mm high and wide. Potsherd decorated with parallel incised lines on two sides of the fragment: 4.98 mm thick, 38.28 mm high and 44.04 mm wide. Two direct rounded rim with polished surfaces: 130 mm and 260 mm in diameter, 7.42 mm and 7.64 mm thick respectively. One everted rounded rim with polished surfaces: 90 mm in diameter and 5.45 mm thick. One direct rim with thickened rounded lip with polished brightened surfaces and 9.04 mm thick. One everted thickened rounded rim of a jar with polished surface: 180 mm in diameter and 11.29 mm thick. One direct almost flat rim of a cup with polished surfaces: 260 mm in diameter and 5.74 mm thick;
- 4 LRPFW: fragment of base of oval handle: 32.09 × 30.83? mm in section. Oval handle 22.67 × 19.61 mm. Decorated potsherd with wavy lines and horizontal lines underneath: 7.38 mm thick, 21.64 mm high and 31.60 mm wide. One direct rounded rim with polished surface and 6.08 mm thick. One direct almost pointed rim with polished surfaces: 80 mm in diameter and 8 mm thick;
- 10 RFW: decorated potsherd with V shape impression on the internal surface: 6.70 mm thick, 27.16 mm high and 27.85 mm wide. One rounded rim with smoothed surfaces: 120 mm in diameter and 14.97 mm thick. One everted slightly thickened rounded rim with flat lip, smoothed external surface, probably with slip and rough interior: 200 mm in diameter and 10.31 mm thick. One direct rounded rim of a big deep bowl with polished surfaces: 360 mm in diameter and 7.96 mm thick. Direct rounded rim thickening under the rim, smoothed surfaces: 280 mm in diameter and 10.03 mm thick. Two flat rims, one with smoothed external surface and polished inside, the other with rough surfaces: 130 mm and 150 mm in diameter and 16.40 mm and 9 mm thick respectively. Direct thickened rounded rim with smoothed surfaces and probably with slip on the inside of a small pot: 100 mm in diameter and 7.98 mm thick;
  - oval handle: 24.62 × 17.76 mm in section. One direct rounded rim with light impression under the rim, smoothed surfaces: 320 mm in diameter and 12.13 mm thick.
- 7 RPFW: potsherd with two parallel bands of wavy lines: 8.10 mm thick, 22.53 mm high and 21.65 mm wide. Everted rim with thickened rounded lip of a deep bowl with polished

surfaces: 320 mm in diameter and 6.68 mm thick. One everted out-turned pointed rim with polished surfaces: 240 mm in diameter and 12.64 mm thick. One direct rim with an almost flat lip and circular handle under the rim directly;

- ROPW: decorated potsherd with parallel lines on the internal surface: 8.47 mm thick, 13.81 mm high and 22.96 mm wide. Pointed rim of a deep cup/dish with polished surfaces: 150 mm thick and 7.33 mm thick;
  - direct in-turned rim of a closed pot with slipped surfaces and 7.90 mm thick.
- 18 BTBrPFW: horizontal loop handle with slipped external surface and bright polished interior: 9.18 × 8.17 mm in section, 5.48 mm thick, 17.85 mm high and 42.39 mm wide. Two direct rounded rim with polished surfaces of the big bowls, one with polished surfaces and lightly brightened color inside, the other with polished surfaces and slip inside: 300 mm in diameter, 7.62 mm and 8.47 mm thick respectively. Four direct rounded rims of deep bowls: the first one with polished brightened surfaces, 260 mm in diameter and 7.30 mm thick; the second one with polished surfaces and slip outside, 200 mm in diameter and 5.45 mm thick; the third with polished brightened surfaces and slipped outside, 8.01 mm thick; the last one with polished surfaces, 240 mm in diameter and 6.40 mm thick. Four direct rounded rims of cups: one with polished surfaces and brightened slipped outside, 160 mm in diameter and 6.11 mm thick; the second one with polished surfaces and slip outside, 160 mm in diameter and 7.51 mm thick; the third with slipped external surfaces and brightened polished inside, 140 mm in diameter and 6.68 mm thick; the last one with smoothed outside surface and polished inside, 140 mm in diameter and 7.40 mm thick. One direct rounded rim of a flat bowl with smoothed to polished slipped external surface and smoothed inside, 220 mm in diameter and 9.26 mm thick. Five direct rounded rims of cups: three of them with polished surfaces and slipped outside surface, 180 mm and 120 mm in diameter, 5.94 mm, 5.90 mm and 6.11 mm thick respectively; the last two rims with polished surfaces, 160 mm and 220 mm in diameter, 8 mm and 7.10 mm thick respectively. One direct rim with handle under it: smoothed external surface, brightened polished inside, 220 mm in diameter and 8.81 mm thick;
  - 5 BTRPW: one direct rim of a big cup with slipped external surface and brightened polished internal one: 300 mm in diameter and 6.62 mm thick. Direct rounded rim of a small cup with polished surfaces: 100 mm in diameter and 5.58 mm thick. Three black mouth rims: direct rim of a big bowl with slipped surfaces, 300 mm in diameter and 5.51 mm thick; everted rounded rim with brightened slipped



external surface and polished interior, 5.62 mm thick; one direct rounded rim with flat external lip's ledge of a cylindrical pot with smoothed surfaces, 200 mm in diameter and 7.85 mm thick;

- 1 GFW: thick flat rim, coil made, with smoothed surface, 260 mm in diameter and 10.73 mm thick;
- 3 BrFW: thick flat rim with smoothed surface, 100 mm in diameter and 13.55 mm thick. Pointed rim with concentric incisions on the exterior below the rim and comb wavy line on the interior, smoothed surfaces: 150 mm in diameter and 5 mm thick. Almost flat rim of a dish with smoothed exterior and rough interior, 19 mm thick;
- 3 BrPFW: one direct rounded rim with polished surfaces: 150 mm in diameter and 6.08 mm thick. Lugged rounded rim of a pear-shaped jar with polished exterior and slipped internal surface: 200 mm in diameter and 5.69 mm thick;
  - direct rounded rim with slipped surfaces: 110 mm in diameter and 7.05 mm thick.
- 9 LBW: two oval handles:  $12.40 \times 17.80$  mm and  $12.29 \times 9.60$  mm in sections. The first one with polished surface. Two fragments of the base of a handle with oval section:  $19.48 \times 16.87$  mm. Fragment with coil molded decoration as handle around the body: 8.94 mm thick, 21.32 mm high and 16.25 mm wide. Decorated potsherd with two bands of parallel horizontal lines and one band of small strokes between the bands. Potsherd decorated with wavy lines on the external surface: 8.83 mm thick, 35.96 mm high and 38.76 mm wide. Direct rounded rim of a closed bowl with polished surfaces: 250 mm in diameter and 4.80 mm thick. Direct rounded rim of a closed cup with flat external edge of lip, slipped exterior, 8.57 mm thick. Thick everted rim of a big jar with slightly thickened rounded lip, smoothed external surface and polished interior: 160 mm in diameter and 14.82 mm thick;
  - pale brown base of oval handle  $18.71 \times 14$  mm in section.
- 6 OPW: oval handle:  $12.85 \times 11.08$  mm in section. Two thick rounded rim with smoothed or polished surfaces: 240 mm and 230 mm in diameter and 9.11 mm and 9.53 mm thick respectively. Direct rounded rim of a cup with polished surfaces: 130 mm in diameter and 5.59 mm thick. Pointed rim with flat internal part of the lip of a small cup with polished internal surfaces: 80 mm in diameter and 8.06 mm thick. Everted ledge rim of a jar with polished surfaces: 160 mm in diameter and 6.54 mm thick;
- 1 PW: almost circular handle:  $9.53 \times 8.67$  mm in section;
- 2 OrPW: possibly a fragment of a mould decoration in circular shape:  $16 \times 13.35$  mm in section. Direct almost pointed rim with polished surfaces: 130 mm in diameter and 4.90 mm thick;

- 8 BPW: decorated potsherd, probably fragment of rim of a small jar, with two parallel horizontal incised lines and two parallel almost vertical lines above. Two pointed rim: one with slipped surfaces, 110 mm in diameter and 3.81 mm thick; the second one with polished surfaces, 80 mm in diameter and 4.90 mm thick. One direct rounded rim with polished surfaces: 170 mm in diameter and 6.33 mm thick. Three rounded rims with slipped surface: 210 mm in diameter and 7.44 mm thick, 140 mm in diameter and 6.93 mm thick, 180 mm in diameter and 6.86 mm thick. One flat rim with thickened rounded lip, polished surfaces: 110 mm in diameter and 5.18 mm thick;
- 1 DRFW: direct rounded rim of a small cup with smoothed surfaces: 110 mm in diameter and 10 mm thick;
- 2 BrPW: direct rounded rim of a bowl with polished surfaces: 280 mm in diameter and 6.92 mm thick. Rounded rim of a cup with polished surfaces: 160 mm in diameter and 6.96 mm thick;
- 5 BTPW: direct rounded rim with rounded bulging decoration, smoothed exterior and polished inside: 90 mm in diameter and 5.48 mm thick. Direct rounded rim with brightened slipped surfaces: 180 mm in diameter and 6.98 mm thick. Two almost pointed rims of cups with polished surfaces, one with brightened color inside, the other one with slip outside: 150 mm and 130 mm in diameter, 4.23 mm and 5.20 mm thick respectively. Direct rounded rim of a small beaker with polished surfaces: 120 mm in diameter and 4.446 mm thick;
- 4 RPW: direct rounded rim with polished surfaces and burnishing outside: 190 mm in diameter and 7.31 mm thick. Direct rounded rim with polished surfaces and scraping inside: 130 mm in diameter and 5.91 mm thick. Rounded rim with brightened polished surfaces: 230 mm in diameter and 5.68 mm thick. Pointed rim with polished surfaces: 180 mm in diameter and 4.71 mm thick.

SU20 [VI]: 2084 body potsherds, 1 beaker, 2 rim with handle, 3 decorated potsherds, 14 rims were counted:

- 1 ROFW: decorated potsherd with rocker in drop shape: smoothed surfaces and 6.41 mm thick;
- 2 BPFW: everted rounded rim of a neckless jar with brightened surfaces: 200 mm in diameter and 8.80 mm thick;
- GFW thick everted pointed rim with brightened polished exterior and polished internal one: 270 mm in diameter and 13.93 mm thick.
- 1 RBrFW: very thick direct rounded rim with smoothed surfaces: 260 mm in diameter and 22.13 mm thick;

- 2 BrPFW: Direct rounded rim with impressions on the lip of a bowl with brightened polished surfaces: 290 mm in diameter, 6.41 mm thick;
  - direct rounded rim of a bowl with polished and rough exterior and polished interior: 240 mm in diameter and 8.62 mm thick.
- 3 BTBrPFW: big fragment of a deep bowl with horizontal handle on the body: smoothed to polished exterior and slipped interior, 300 mm in diameter, 8.15 mm thick, 137.04 mm high, 112.73 mm wide and 12.20 × 13.02 section of handle. Fragmentary beaker with flat base, slipped exterior and polished interior: 90 mm diameter of the base, 3.76 mm thick and 54.24 mm high. Direct rim with thickened rounded lip, brightened polished external surfaces with burnishing treatment and brightened polished interior: 160 mm in diameter and 6.16 mm thick;
- 1 BTRPFW: direct rounded rim of a bowl with brightened polished surfaces: 200 mm in diameter and 6.17 mm thick;
- 4 RBrPFW: big fragment of a storage jar with flat rim and vertical handle between the rim and the shoulder, smoothed to polished exterior and polished interior: 140 mm neck diameter, 8.27 mm thick. Thick direct rounded rim with brightened polished surfaces: 200 mm in diameter and 13.83 mm thick. In-turned rounded rim of a pot with polished surfaces: 200 mm in diameter and 10.40 mm thick. Two mending fragments of a decorated potsherd with two bands of a wavy lines and one of horizontal lines between them. One band is composed by overlapping wavy lines: polished surfaces and 7.80 mm thick;
- 1 BrMFW: direct rounded rim of a bowl with rough external surfaces and smoothed inside: 210 mm in diameter and 4.33 mm thick;
- 1 BrMPFW: direct rounded rim with slipped surfaces: 210 mm in diameter and 6.45 mm thick;
- 1 RFW: everted rim with thickened rounded lip with polished surfaces and vertical burnishing on the exterior: 240 mm in diameter and 8.9 mm thick;
- 1 BrPW: everted flat rim of a necked jar with polished surfaces: 140 mm in diameter and 5.73 mm thick. 1 BPW: Direct rounded rim of a necked pot with brightened polished exterior and polished interior: 140 mm in diameter and 5.22 mm thick.

SU1/5 [VI]: 80 body potsherds were counted.

#### Phase IV

Ceramics from stratigraphic units 2, 6, 20, 27, 32, 39, 53 from this phase have been analyzed.

SU2 [VI]: 166 body potsherds, 4 almost complete pots, 1 decorated potsherd, 11 rims were counted:

- 1 ROFW: small beaker with flat base slightly jutting and smoothed surfaces, few fine white and black inclusions in a compact clay: 50 mm in diameter, 5.64 mm thick, 49.83 mm high and 57.27 mm wide;
- 2 LRPFW: pot-stand with the base of a handle, polished surfaces, few white inclusions in a little compact clay: 80 mm upper diameter and 60 mm bottom diameter, 11.74 mm thick, 115.25 mm high (Fig. 8). Thick direct rounded rim of a bowl with polished surfaces: 300 mm in diameter and 11.33 mm thick;
- 3 BPFW: one decorated potsherd with incised line and polished surfaces: 7.50 mm thick, 52.97 mm high and 48 mm wide. One rounded rim slightly everted of a neckless jar with polished surfaces: 220 mm in diameter and 8.49 mm thick. One direct rounded rim of a bowl with brightened polished surfaces: 260 mm in diameter and 7.46 mm thick;
- 2 BTBrPFW: everted rounded rim of a small jar with polished surfaces: 65 mm in diameter and 4 mm thick. One black mouth direct pointed rim, thickened lip and flat upper part of the lip: polished surfaces, 200 mm in diameter and 5.26 mm thick;
- 2 RBrPFW: pointed slightly out-turned rim of a jar with brightened slipped surfaces: 90 mm in diameter and 5 mm thick. Pointed rim of jar with slipped and burnished exterior, slipped interior: 110 mm in diameter and 5 mm thick;
- 1 BTRPFW: pointed rim with flat inner lip: slipped surfaces, 55 mm in diameter and 2 mm thick;
- 2 RFW: fragment of a small necked decorated globular jar with polished external surface and smoothed interior, 3.08 mm thick. The decoration on the external surface is composed by two bands of parallel incised lines, three vertical strokes between the first band, one band of small horizontal strokes between the horizontal incisions and one molded decoration between the strokes. Rounded rim with rough to smoothed exterior and rough interior: 90 mm in diameter and 6 mm thick;

- 1 OPW: fragment of a small globular pot with decoration on the external surface: smoothed surfaces, 5.29 mm thick, 2 bands of thin almost horizontal lines and one band of circular impressions between the lines;
- 1 BrPW: almost flat rim of a possible lid with polished surfaces: 180 mm in diameter and 5.96 mm thick.;
- 1 BPW: direct rounded rim of a closed bowl with polished surfaces: 190 mm in diameter and 6.04 mm thick.

SU6 [V/VI]: 422 body potsherds, 1 base from Seg VI, 1 decorated potsherd from Seg VI, one rim with decoration from Seg V, 8 rims from Seg VI were counted:

- 1 BrCW: rounded bulge on the body potsherd: 9.12 mm thick;
- 2 BTBrPFW: direct almost pointed rim of a cup with polished surfaces: 150 mm in diameter, 5.70 mm thick. One flat base of a small cup with polished surfaces: 70 mm diameter of the base, 4.93 mm thick, 19.25 mm high;
- 1 RBrFW: direct rounded rim of a deep bowl, probably a cooking pot, with rough and smoothed external surfaces and smoothed internal one: 200 mm in diameter and 6.16 mm thick;
- 1 RBrPFW: rounded rim of a big pot with thickened lip with brightened polished surfaces: 200 mm in diameter and 13.45 mm thick;
- 2 LRPFW: direct rim with thickened everted lip of a necked jar with polished surfaces: 170 mm in diameter and 7.19 mm thick. One in-turned pointed rim with slipped external surfaces and polished scraped inside: 60 mm in diameter and 4.76 mm thick;
- 2 RFW: thick rounded rim with smoothed exterior and polished interior: 240 mm in diameter and 15.67 mm thick;
  - direct rounded rim of a bowl with polished surfaces and slip inside: 240 mm in diameter and 6.41 mm thick.
- 1 RPFW-ROPW: direct rounded rim with polished surfaces and 8.39 mm thick;
- 1 BrPFW: everted rounded rim of a small necked jar with polished surfaces, decoration and small vertical handle on the bell: 90 mm in diameter, 2.30 mm thick, 41.19 mm high and 59.21 mm wide. The decoration on the exterior was composed by two bands of horizontal lines and one of small strokes between them, small vertical handle in the middle of the decoration (Fig. 9).

SU27 [VI]: 42 body potsherds, 1 base, 1 handle, 1 rim with decoration, 5 pieces of “torpedo”, 8 rims were counted:

- 5 OPW: two big fragments of a cylindrical jar with polished surfaces and scraping outside: 140 mm diameter of the bell, 11.76 mm thick, 192.20 mm high and 165.15 mm wide. Two fragment of a jar, probably a pointed foot with polished surfaces and finger impressions inside: 170 mm bigger diameter, 16.19 mm thick, 101.12 mm high and 86.44 mm wide (Fig. 10);
- 1 RBrPFW: fragment of ring base with polished surfaces: 9.90 mm thick;
- 1 BrMPFW: horizontal bulged handle with polished exterior and smoothed interior: 7 mm thick, 67.77 mm high, 57.52 mm wide, 22.52x17.40x15.87 mm handle measurement;
- 4 BTBrPFW: one rounded rim of a bowl with brightened polished exterior and polished with burnishing interior: 200 mm in diameter and 5.19 mm thick. Pointed rim of a cup with scraping and slipped exterior and polished interior: 120 mm in diameter and 7.90 mm thick. Direct rounded rim of a deep bowl with smoothed to polished exterior and polished with burnishing interior: 260 mm in diameter and 8.62 mm thick. Black mouth direct rounded rim of a closed cup with brightened surfaces: 140 mm in diameter and 7.57 mm thick;
- 2 BTRPFW: black mouth direct rounded rim of a small cup with horizontal bulged decoration on the body: brightened surfaces, 150 mm in diameter and 5.26 mm thick. Direct rounded rim of a cup with slipped and burnished exterior and brightened internal surface: 160 mm in diameter and 8 mm thick;
- 1 GFW: almost pointed rim of a big open bowl with rough to smoothed exterior and rough interior: 380 mm in diameter and 7.22 mm thick;
- 1 BPFW: rounded rim of a cup with brightened polished surfaces: 160 mm in diameter and 6.19 mm thick;
- 1 BTPW: direct rounded rim with brightened polished surfaces: 160 mm in diameter and 7.48 mm thick.

SU39 [VI]: 13 rims were analysed:

- 1 BrCW: everted almost ledged rim with inflexed out-turned point in the internal part, scraped smoothed exterior, polished interior and red slip on the inner rim: 160 mm in diameter and 1017 mm thick;
- 1 RPFW: thick rounded rim of a bowl with brightened surfaces: 200 mm in diameter and 15.75 mm thick;

- 2 RBrPFW: direct rounded rim with polished external surface and brightened polished inside: 310 mm in diameter and 6.76 mm thick. Direct flat rim with polished exterior and brightened polished inside: 200 mm in diameter and 6.30 mm thick;
- 2 BrPFW: direct rounded rim with thickened lip, rough and polished exterior and brightened slipped inside: 190 mm in diameter and 6.42 mm thick. Everted pointed rim with polished surfaces: 200 mm in diameter and 9.15 mm thick;
- 1 BrMPFW: everted rounded rim with inner inflexed point, smoothed external surfaces and polished inside with slip on the internal rim: 210 mm in diameter and 7.92 mm thick;
- 3 BTBrPFW: black mouth rounded rim, made of two pieces, of a big bowl with brightened slipped exterior and brightened interior: 260 mm in diameter and 8.85 mm thick. Direct rounded rim with brightened slipped exterior and brightened polished interior: 200 mm in diameter and 7.07 mm thick;
- 1 BTRPFW: direct rounded rim of a bowl with brightened slipped exterior and brightened polished inside: 270 mm in diameter and 6.38 mm thick;
- 2 BPFW: direct rounded rim with slightly thickened lip, brightened slipped surfaces: 230 mm in diameter and 6.19 mm thick. Direct rounded rim of a cup with brightened polished exterior and brightened slipped inside: 100 mm in diameter and 5.97 mm thick.

SU53 [VI]: 76 body potsherds, 1 ring base, 1 polishing tool, 2 rims with decoration, 1 rim with notches on the lip, 1 rim with hole underneath and 26 rims were counted:

- 2 BrCW: one direct rounded rim with bulge under it: rough exterior and smoothed interior, 140 mm in diameter and 14.83 mm thick. Everted rim with thickened lip with smoothed surfaces: 280 mm in diameter and 12 mm thick;
- 2 LRPFW: polishing tool with three rounded sides: polished surfaces and brightened color outside, 7.88 mm thick, 55.66 mm high and 55.99 mm wide. One ledge rounded rim with applied decoration between the rim and neck made by rectangular shape and 3 circular impressions on it: polished surfaces and red slip on the internal part of the rim, 220 mm in diameter and 5.57 mm thick;
- 4 RPFW: one everted rim of a flask with polished brightened surfaces: 9.37 mm thick. One everted rim with flat lip of a small jar: slipped exterior and smoothed interior, 110 mm in diameter and 7.41 mm thick. Everted rounded rim of a jar with polished brightened exterior and polished interior with scraping: 280 mm in diameter and

7.95 mm thick. Direct rim with thickened out-turned lip of a closed cup: polished brightened surfaces, 160 mm in diameter and 5.53 mm thick;

- 2 DRPFW: thick everted rounded rim of a jar with polished surfaces: 190 mm in diameter and 13.63 mm thick. Direct rim with rounded thickened out-turned lip of a vase with slipped brightened surfaces: 140 mm in diameter, 8.35 mm thick;
- 2 RBrFW: direct pointed rim of a cup with notches on the lip: smoothed exterior and polished interior, 140 mm in diameter and 5.31 mm thick. Direct pointed rim with flat external lip: rough to smoothed exterior and smoothed interior, 180 mm in diameter and 5.45 mm thick;
- 3 RBrPFW: direct rounded rim with polished brightened surfaces: 150 mm in diameter and 7.28 mm thick. Thick rounded rim of a big bowl with slipped surfaces: 260 mm in diameter and 13.17 mm thick. Direct rounded rim of an open bowl with hole under the rim: polished surfaces, 380 mm in diameter and 8.99 mm thick;
- 2 BTRPFW: direct rounded rim of an open cup with polished surfaces: 200 mm in diameter and 7.70 mm thick. Ring base with polished surfaces: 145 mm upper diameter, 14.05 mm thick;
- 4 BTBrPFW: direct rounded rim of a cup with polished brightened surfaces: 100 mm in diameter and 5.56 mm thick. Two direct almost pointed rim with polished surfaces: 180 mm and 220 mm in diameter and 7.71 mm, 8.90 mm thick respectively. Direct flat rim of a bowl with slipped surfaces: 270 mm in diameter and 6.97 mm thick;
- 4 BPFW: direct rounded rim of a small cup with knob on the body: polished surfaces, 110 mm in diameter and 4.40 mm thick. Direct rounded rim of a closed cup with slipped surfaces: 190 mm in diameter and 5.81 mm thick. Two direct pointed rims of a beaker and a cup with polished brightened surfaces: 160 mm and 6.02 mm, 6.13 mm thick;
- 1 BrMFW: direct pointed rim with flat sides and triangular section: rough exterior and smoothed interior, 130 mm in diameter and 5.18 mm thick;
- 2 BrPW: direct rounded rim with polished brightened surfaces and scraping inside: 180 mm in diameter and 9.60 mm thick. Direct rounded rim with two parallel impressions under the rim: polished brightened surfaces, 200 mm in diameter and 5.63 mm thick;
- 3 BPW: two direct rounded rims with polished surfaces: 140 mm and 190 mm in diameter and 5.54 mm, 5.70 mm thick respectively. Direct rounded rim with polished brightened surfaces and scraping inside: 230 mm in diameter and 6.60 mm thick;



- 1 BTPW: direct rounded rim of an open cup with polished brightened surfaces: 180 mm in diameter and 5.24 mm thick.

### Phase III

The ceramics analysed come from stratigraphic units 5, 22, 33.

SU5 [V/VI]: 125 body potsherds from Seg V and VI, 1 handle and 4 rims from Seg VI were counted:

- 3 BTBrPFW: body potsherd with circular handle: smoothed surfaces, 9.54 mm thick, 23x21 mm in section. Two black mouth direct rounded rims: one with smoothed exterior and polished interior, 160 mm in diameter and 9.11 mm thick; the second one, composed by two potsherds, has smoothed to polished external surface and polished interior, 210 mm in diameter and 7.64 mm thick;
- 1 BPFW: almost pointed rim of a big deep bowl with polished surfaces: 300 mm in diameter and 9.42 mm thick;
- 1 RFW: direct rounded rim of a vase with smoothed surfaces: 280 mm in diameter and 8.70 mm thick.

SU22 [V/VI]: 427 body potsherds, 2 handles from Seg VI, 3 decorated potsherds from Seg V, 14 rims from Seg V and VI were counted:

- 1 ROCW: thick pointed rim with smoothed surfaces: 210 mm in diameter and 14.07 mm thick;
- 1 RCW: out-turned ledged rounded rim of a necked pot with smoothed surfaces: 280 mm in diameter and 7.71 mm thick;
- 1 GFW: Oval handle with polished surfaces: 14.76 × 17 mm in section;
- 3 ROFW: two direct rounded rim with smoothed surfaces: 140 mm and 160 mm in diameter, 9.44 mm and 10.24 mm thick respectively. Direct rim with triangular lip of a necked pot with smoothed surfaces: 80 mm in diameter and 7.30 mm thick;
- 2 LRPFW: direct rounded rim of a big bowl with polished surfaces: 390 mm in diameter and 7.26 mm thick. Direct pointed rim with thickened out-turned rounded lip with polished surfaces: 240 mm in diameter and 7.77 mm thick;
- 1 RBrFW: small potsherd decorated with parallel incisions on the interior, smoothed external surfaces and polished internal one: 10.24 mm thick;

- 3 RFW: oval handle with smoothed surface:  $23.73 \times 17.82$  mm in section. Direct rounded rim with smoothed surfaces: 200 mm in diameter and 7.26 mm thick;
  - direct rounded rim of a big bowl with smoothed surfaces: 310 mm in diameter and 10.28 mm thick.
- 1 RPFW: direct rim with thickened out-turned rounded lip with polished surfaces and scraping inside: 220 mm in diameter and 7.64 mm thick;
- 1 BTRPW: thick direct rounded rim with polished surfaces: 230 mm in diameter and 10.42 mm thick;
- 2 BTBrPFW: two black mouth direct rounded rim with smoothed surfaces: 180 mm and 220 mm in diameter, 6.67 mm and 8.15 mm thick respectively;
- 1 OPW: decorated potsherd with smoothed surfaces: 6.77 mm thick, 20.55 mm high and 29.10 mm wide. The decoration is composed by two bands of parallel lines and rows of points overlapping on the first band;
- 1 LRFW: decorated potsherd with smoothed surfaces: 10.55 mm thick, 31.36 mm high and 30.90 mm wide. The decoration is composed by parallel horizontal lines and wavy comb lines below;
- 1 BTPW: direct rounded rim with polished surfaces: 160 mm in diameter and 6.44 mm thick.

SU33 [V/VI]: 1310 body potsherds, 2 decorated potsherds from Seg V, 1 rim with handle from Seg V, 10 rims were counted:

- 1 BrMFW: rounded rim of a bowl with polished rim and rough external surface, polished internal surface: 220 mm in diameter and 4.25 mm thick;
- 1 BrMPFW: everted rounded rim with two inflection points of a neckless jar with polished surfaces: 130 mm in diameter and 5.57 mm thick;
- 1 BrPFW: Direct rounded rim of a cup with polished surfaces: 160 mm in diameter and 6.53 mm thick;
- 1 LRPFW: one direct rim with thinning rounded lip of a bowl with brightened slipped exterior and polished interior: 200 mm in diameter and 5.55 mm thick;
- 1 RPFW a-ROPW: direct pointed rim with slipped exterior and polished internal surface: 180 mm in diameter and 6.66 mm thick;
- 1 BTRPFW: pointed rim with internal flat lip and almost rectangular handle: polished surfaces, 200 mm in diameter and 6.18 mm thick;

- 1 BPFW: direct rounded rim of what seems to be a neck with polished surfaces: 60 mm in diameter and 2.81 mm thick;
- 2 LBW: fragment of a decorated small globular jar with everted rounded rim, polished exterior and smoothed to polished surface: 100 mm in diameter, 3.03 mm thick, 62.48 mm high and 67 mm wide. The decoration is composed by two bands of horizontal lines, one band of small horizontal strokes between the bands, two vertical lines and one molded decoration separate the previous groups. Direct rounded rim with slipped surfaces: 160 mm in diameter and 4.91 mm thick;
- 2 BTPW: one direct in-turned rounded rim of a cup with slipped exterior and brightened polished interior: 180 mm in diameter and 7.27 mm thick. One out-turned thickened rounded rim of a small pot with brightened surfaces: 120 mm in diameter and 5.55 mm thick;
- 1 BrFW: decorated potsherd with smoothed surfaces and oval impressions in a V shape: 7 mm thick, 26.72 mm high and 23.09 mm wide;
- 1 OrPW: direct rounded rim with smoothed to polished surfaces: 3.50 mm thick.

## Phase II

No ceramics have been presently analysed for this phase.

## Phase I

The ceramics from this phase come from stratigraphic units 40, 40/46, 51, 52, 53, 58, 59, 64, 72.

SU40 [V]: 58 body potsherds were counted.

SU40/46 [VI]: 1 base of “torpedo jar” and 7 rims were counted:

- 1 OPW: pointed foot of a jar with polished surfaces and concentric impressions inside: 14.67 mm thick, 75 mm high and 61.67 mm wide;
- 1 BTRPFW: direct black mouth rounded rim of big necked pot with brightened polished surfaces: 210 mm in diameter and 6.07 mm thick;
- 1 BTBrPFW: everted rounded rim of a neckless big storage jar with brightened surfaces: 380 mm in diameter and 9.54 mm thick;
- 1 BrMFPW: very damaged everted rounded rim with polished surfaces;
- 2 BTPW: black mouth direct rounded rim of a bowl with brightened slipped exterior and brightened polished interior: 290 mm in diameter and 7.64 mm thick. Direct rounded rim of a neckless jar with

brightened slipped exterior almost overlapped to the rim and brightened polished interior: 160 mm in diameter, 6.35 mm thick;

- 2 BrPW: almost pointed rim of a closed pot with brightened polished surfaces: 260 mm in diameter and 5.84 mm thick. Everted rounded rim of a neckless flask with polished surfaces and brightened red slip on the exterior surface toward the internal part of the rim: 140 mm in diameter and 7.08 mm thick.

SU48 [V]: 113 body potsherds, 1 half small jar, 2 handles, 1 decorated potsherd, 10 rims were counted:

- 1 BPFW: everted rounded rim of a jar with brightened surfaces: 190 mm in diameter and 7.15 mm thick;
- 3 RBrPFW: everted rim of a pot with brightened slipped exterior and scraped polished internal surface: 170 mm in diameter and 5.70 mm thick. Direct rim with thickened rounded lip of a neck with brightened polished surfaces: 110 mm in diameter and 7.57 mm thick. Everted in-turned rim of a closed cup with impression under the rim, smoothed external surface and smoothed scraped inside: 160 mm in diameter and 7.42 mm thick;
- 3 BrPFW: direct rounded rim of a bowl with brightened slipped outside and brightened polished inside: 220 mm in diameter and 6.21 mm thick;
  - Big fragment of a bowl made by 4 pieces with protuberance around the body, direct rounded rim, polished surfaces: 260 mm in diameter and 4.63 mm thick. Big fragment of a big bowl made by 8 pieces, smoothed external surface and polished inside: 380 mm in diameter and 4.69 mm thick.
- 1 BrMPFW: Oval handle with polished surface: 14.79 × 10.90 mm in section;
- 3 BTRPFW: Direct rounded rim of a small open cup with brightened polished surfaces: 120 mm in diameter and 4.31 mm thick. Big fragment of a globular jar with decoration on the neck: brightened polished exterior and smoothed to polished inside, 90 mm diameter of the mouth, 5.14 mm thick, 20.50 mm high and 15.50 mm wide. The decoration is composed by a molded rounded bulge and oblique strokes at the side of it (Fig. 11). Black mouth direct rounded rim of a bowl with brightened polished surfaces: 260 mm in diameter and 4.46 mm thick;
- 2 BPW: Direct out-turned pointed rim with brightened polished surfaces: 120 mm in diameter and 6.78 mm thick. Big fragment of a small pear-shaped jar with decoration on the shoulder: brightened

polished outside and rough inside: 4.73 mm thick, 83.77 mm high and 46.77 mm wide. The decoration is composed by molded oval decoration and beside it two bands of parallel lines and one zig-zag line between them;

- 1 LBW: Circular handle with polished surface: 6.22 × 7.03 mm in section.

SU51 [V]: 30 body potsherds were counted.

SU52 [V/VI]: 151 body potsherds, 2 handles from Seg VI, 1 half jug from Seg V, 1 painted potsherd from Seg V, 1 flat base from Seg V, 1 decorated potsherd from Seg VI, 1 fragment of bell from Seg V, 3 burnished potsherds from Seg VI, 24 rims were counted:

- 1 BTBrCW: black mouth direct rounded rim with polished brightened surfaces: 280 mm in diameter and 8.54 mm thick;
- 4 RBrPFW: fragment of a cylindrical jug with bases of a vertical handle: polished brightened external surface and rough to smoothed internal one, 4.76 mm thick, 107 mm high, 60.95 mm wide and 13.90 × 13.10 mm handle section. One body sherd with vertical burnishing on the external surface: slipped surfaces, 8.70 mm thick, 36.31 mm high and 40 mm wide. Two direct rounded rims of a cup with polished brightened surfaces: 150 mm and 160 mm in diameter, 7.72 mm and 6.77 mm thick respectively. Everted rounded rim with bulge under the rim;
- 1 DRPFW: rounded rim slightly everted with polished surface: 200 mm in diameter and 8.52 mm thick;
- 2 LRPFW: flat base of a small cup with polished exterior and smoothed interior: 40 mm in diameter and 8.60 mm thick. Decorated sherd with complex rocker impression (rectangular shape and one edge with two points) on the external surface: 8.22 mm thick, 41.80 mm high;
- 1 RFW: fragment of a “tulip” pot with rounded rim, smoothed exterior, rough interior and white grid painted on the external surface: 140 mm in diameter, 7.28 mm thick;
- 6 RPFW: one circular handle with polished brightened surface: 25 × 25.62 mm in section. One neck with oblique and vertical overlapped burnishing: polished surfaces and 8.05 mm thick. One bell or bulge with polished surfaces: 7.69 mm thick and 45.11 mm high. Direct thickened rounded rim with polished brightened surfaces and irregular burnishing on the exterior: 160 mm in diameter and 7.60 mm thick. Two almost rounded rims, one with slipped surfaces, the

other one with smoothed to polished exterior and polished brightened interior: 180 mm in diameter, 5.84 mm and 7.56 mm thick respectively;

- 6 BPFW: three rounded rim with polished brightened surfaces: 300 mm, 210 mm and 140 mm in diameter, 6.83 mm, 6.92 mm and 6.48 mm thick respectively. Two direct rounded rims with thickened out-turned lips with brightened surfaces: 180 mm, 120 mm in diameter and 5.70 mm, 5.05 mm thick respectively. One direct almost pointed rim with polished surfaces: 210 mm in diameter and 10.15 mm thick;
- 3 BTRPFW: small fragment of a direct rounded rim with polished brightened exterior and smoothed interior. One body potsherd with polished surface, brightened color exterior and burnished interior: 9.20 mm thick, 43.10 mm high and 58.70 mm wide. Fragment of body potsherd with oval base of handle: polished brightened surfaces, 6.02 mm thick and 31.80 mm high;
- 2 BTBrPFW: two direct rounded rims of open bowls with slipped surfaces: 320 mm and 260 mm in diameter, 6.33 mm and 5.98 mm thick respectively;
- 1 BrMFW: small fragment of everted rounded rim with smoothed surfaces: 7.76 mm thick;
- 4 BrMPFW: two potsherds of an everted rounded rim with horizontal comb incisions on the neck: polished surfaces, 240 mm in diameter and 7.40 mm thick. Direct rim with ledge rounded lip with polished surfaces: 6.30 mm thick. Everted pointed rim with polished surfaces: 150 mm in diameter and 5.55 mm thick;
- 1 BTPW: black mouth direct rounded rim of a bowl with slipped surfaces: 240 mm in diameter and 7.58 mm thick;
- 1 BPW: direct rounded rim with slipped surfaces: 140 mm in diameter and 5.85 mm thick.

SU58 [V]: 21 body potsherds, 1 polishing tool, 3 decorated potsherds, 1 rim with decoration, 6 rims were counted:

- 2 LRPFW: direct flat rim with polished surfaces and impressed decoration on the exterior: 160 mm in diameter and 8.94 mm thick. Decorated potsherd with polished exterior and smoothed interior: 7.48 mm thick, 21.58 mm high and 25.04 mm wide. The decoration is composed by two overlapped wide incisions X-shaped and one thin horizontal incision under the first ones;
- 1 RPFW: direct ledged out-turned thickened rounded rim with flat upper part of a small cup with slipped brightened exterior and polished scraped interior: 170 mm in diameter and 6.66 mm thick;

- 3 BTRPFW: two rounded rims of a cup with slipped brightened surfaces: 120 mm and 180 mm in diameter, 5.98 mm and 4.97 mm thick respectively. One decorated potsherd with oval knob and polished brightened surfaces: 4.76 mm thick;
- 1 BTBrPFW: direct rounded rim with polished brightened surfaces: 180 mm in diameter and 7.54 mm thick;
- 2 RBrPFW: one body potsherd with scraping treatment outside: polished exterior, slipped brightened interior, 6.44 mm thick. One direct rounded rim of a bowl with polished surfaces and scraping inside: 210 mm in diameter and 6.92 mm thick;
- 1 BrPFW: body potsherd with vertical burnishing inside: slipped brightened exterior and polished inside, 11.48 mm thick;
- 1 BPFW: polishing tool with two rounded sides: polished surfaces, 6.24 mm thick;
- 1 BPW: everted rounded rim of a small vase with polished brightened surfaces: 100 mm in diameter and 4.62 mm thick.

SU59 [V]: 135 body potsherds, 5 decorated potsherds, 1 painted potsherd, 1 fragment of ring base, 1 rim with handle, 1 polisher tool, 1 fragment of small flask with handle, 12 rims were counted:

- 4 LRPFW: fragment of decorated potsherd with polished surfaces and wavy lines and horizontal lines on the exterior: 5.70 mm thick. Fragment of ring base with polished surfaces: 9.28 mm thick. Thickened rounded rim with polished brightened surfaces: 260 mm in diameter and 15.91 mm thick. Direct almost pointed rim with handle under it: polished surfaces, 7.62 mm thick;
- 2 RPFW: polisher tool with two rounded sides and polished surfaces: 8.99 mm thick. Direct rounded rim almost everted on the top with polished brightened surfaces: 170 mm in diameter and 9.17 mm thick;
- 3 RBrFW: direct rounded rim slightly out-turned lip of a bottle with polished exterior and rough interior: 120 mm in diameter and 5.55 mm thick;
  - Body potsherd with polished surfaces and parallel burnishing outside: 5.16 mm thick Direct pointed rim with flat inner part of the lip: smoothed exterior and polished interior, 140 mm in diameter and 4.19 mm thick.
- 1 BrMPFW: decorated potsherd with polished surfaces: 6.16 mm thick. The decoration is composed by two bands of wavy lines and one band of horizontal lines in the middle of them;

- 3 BrPFW: decorated potsherd with polished surfaces and two bands of zig-zag pattern and three parallel lines in the middle of the bands: 5.57 mm thick. Direct rounded rim of a small cup with polished surfaces: 100 mm in diameter and 6.35 mm thick. Slightly everted rounded rim with slipped brightened exterior and polished interior: 130 mm in diameter and 7.46 mm thick;
- 3 BPFW: fragment of a small flask with vertical handle: polished exterior, smoothed interior, 7.11 mm thick, 67.67 mm high and  $6 \times 5.72$  mm section of handle. Direct almost rounded rim with polished surfaces and scraping inside: 150 mm in diameter and 6.03 mm thick;
  - GPW decorated potsherd with two horizontal lines and two lines in zig-zag pattern below: polished surfaces, 5.22 mm thick.
- 1 BTBrPFW: direct almost pointed rim of an open bowl with polished brightened surfaces: 240 mm in diameter and 6.46 mm thick;
- 2 BrPW: direct rounded rim of a cup with slipped brightened surfaces: 100 mm in diameter and 5.19 mm thick. Decorated potsherd with polished surfaces, scraping inside and parallel lines painted in black: 7.47 mm thick;
- 3 BTPW: three direct rounded rims, with polished surfaces, two of them with brightened colors: 110 mm, 140 mm in diameter, 5 mm, 3.40 mm, 6.76 mm thick respectively.

SU64 [V]: 1 pot-stand, 1 fragmentary bowl, 1 fragmentary deep bowl and 1 rim were counted:

- 1 BTRPW: fragmentary bowl with polished brightened exterior and smoothed interior with scraping: 190 mm upper diameter, 5.94 mm thick (Fig. 12);
- 2 RPFW: fragmentary deep bowl with slipped brightened exterior and polished scraped interior; 180 mm diameter of the bell, 3.38 mm thick. Ledge rounded rim with smoothed to polished exterior and polished brightened interior: 320 mm in diameter and 9 mm thick;
- 1 OW: fragmentary pot-stand with polished surfaces: 110 mm in diameter, 8.53 mm thick, 82.36 mm high.

SU72 [V]: 83 body potsherds, 6 decorated potsherds, 1 rim with decoration, 1 handle, 9 rims were counted:

- 2 BPCW: body potsherd with circular handle: polished exterior, polished to smoothed interior, 9.22 mm thick and  $23.03 \times 22.49$  mm



handle section. Decorated potsherd with brightened polished exterior and smoothed interior: 12.65 mm thick, irregular opposite triangles lightly impressed;

- 1 BrPFW: direct rim with thickened out-turned lip of a open vase with polished surfaces and brightened interior: 240 mm in diameter and 10.25 mm thick;
- 1 RBrPFW: direct rim with flat upper part and everted rounded out-turned lip with polished slightly brightened color: 280 mm in diameter and 8.42 mm thick;
- 2 RPFW: direct flat rim with polished surfaces: 7.43 mm thick. Body potsherd with polished and scraped surfaces: 8.49 mm thick;
- 1 BTRPFW: direct rounded rim of a open bowl with polished brightened surfaces: 200 mm in diameter and 7.90 mm thick;
- 3 BPFW: two potsherds of a direct rounded rim of a bowl with polished brightened surfaces: 220 mm in diameter and 6.07 mm thick. Direct slightly thickened rounded lip with impressions under the rim and vertical burnishing on the exterior: polished exterior and smoothed to polished interior, 160 mm in diameter and 7.09 mm thick;
- 1 BrPW: direct rounded rim with lightly impression under the rim: polished brightened surfaces, 220 mm in diameter and 6.07 mm thick;
- 1 LBW: Direct rounded rim with slightly everted lip: polished brightened surfaces, 160 mm in diameter and 8.08 mm thick;
- 1 RGPW: decorated potsherd with polished brightened exterior and smoothed interior: 6.68 mm thick, 4 parallel impressions and dashes impression below;
- 1 RPW: decorated potsherd with polished surfaces and burnishing outside: 6.66 mm thick;
- 3 BTPW: decorated potsherd with polished brightened exterior and polished burnishing interior: 7.38 mm thick. Direct rounded rim with slipped exterior and polished interior: 200 mm in diameter and 5.65 mm thick. Decorated potsherd with polished brightened exterior and smoothed to polished interior: 3.14 mm thick and horizontal incision on the exterior.

### Seg VII (by L. Sernicola)

The pottery from Seg VII included one complete and one almost complete pot, 94 diagnostic potsherds (rims, bases, necks, shoulders, handles, decorated potsherds) and 97 body-potsherds. On the basis of their

spatial distribution within the excavation unit, they can be grouped into five main assemblages:

- a. pottery from surface collection;
- b. pottery from the topsoil;
- c. pottery from the upper fill of the grave, which were most likely associated with a funerary ritual;
- d. pottery from the lower fill of the grave which formed part of the grave goods;
- e. pottery from the pits related to the tomb.

### Surface collection

No diagnostic potsherds were recovered.

Body-potsherds:

- 1.A.2 (Red Coarse Ware): 3 frgs., thickness between 0.6 and 0.7 cm;
- Brown Coarse Ware: 3 frgs., thickness between 0.2 and 0.9 cm;
- 2.A.1 (Red-Orange Fine Ware): 26 frgs., thickness between 0.5 and 0.7 cm;
- 2.A.2 (Orange-Gray Fine Ware): 6 frgs., thickness between 0.2 and 0.5 cm;
- 3.A.1 (Orange Ware): 9 frgs., thickness between 0.3 and 0.6 cm;
- Black Fine Ware: 2 frgs., thickness between 0.2 and 0.6 cm;
- Black Topped Red Ware: 11 frgs., thickness between 0.3 and 1.1 cm.

### Topsoil (SU1, SU7, int. SU1/3)

Diagnostic potsherds:

- 1.A.1 (Red-Orange Coarse Ware): 1 fgr. neck/rim of a jar with continuous profile, cylindrical neck, everted rim and rounded lip, abundant mineral inclusions, smoothed interior, red slipped exterior, dia. 9 cm, thickness 0.5 cm; 1 fgr. rim of an open bowl with oblique profile and rounded rim, abundant mineral inclusions, smoothed interior and exterior, dia. 32 cm, thickness 0.3 cm; 1 fgr. wall-potsherd, abundant mineral inclusions, smoothed interior and exterior, 3 horizontal, parallel incisions on the internal surface, thickness 0.4 cm;
- 2.A.1 (Red-Orange Fine Ware): 5 frgs. rims of open bowls with rounded rim, abundant, medium and few mineral inclusions, smoothed interior and exterior, dia. 8-16 cm, thickness 0.1-0.4 cm, 1 fgr. has a circular knob molded below the rim; 3 frgs. rims of open

bowls with concave profile and rounded or flattened rim, abundant, medium or few mineral inclusions, smoothed interior and exterior, dia. 21-30 cm, thickness 0.4-0.6 cm; 5 frags. rims of globular jars with continuous profile, everted neck and rounded rim, medium and abundant mineral inclusions, smoothed interior and exterior, dia. 10-16 cm, thickness 0.2-0.65 cm, one fragment shows and incised decoration on the external surface; 3 frags. rounded straight rims, abundant and few mineral inclusions, smoothed interior and exterior, dia. between 14 and 17 cm, thickness 0.4-0.6 cm; 2 frags, rounded everted rims, abundant mineral inclusions, smoothed interior and exterior, dia. 10 and 24 cm, thickness 0.3 and 0.7 cm; 1 fgr. pointed everted rim, abundant mineral inclusions, smoothed interior and exterior, thickness 0.2 cm; 1 fgr. of everted flaring rim, medium mineral inclusions, smoothed interior and exterior, dia. 18 cm, thickness 0.6 cm; 1 fgr. of decorated wall-potsherd and vertical cylindrical handle, abundant mineral inclusions, smoothed interior and exterior, thickness 0.3 cm; 1 fgr. of decorated wall-potsherd, few mineral inclusions, smoothed interior and exterior, incised horizontal line and rocker quadrangular impressions on the external surface, thickness 0.4 cm; 1 fgr. f decorated wall-potsherd, abundant mineral inclusions, smoothed interior and exterior, "Y" shaped decoration molded on the external surface, thickness 0.3 cm; 1 fgr. of decorated wall-potsherd, few mineral and organic inclusions, smoothed interior and exterior, circular knob molded on the shoulder, thickness 0.3 cm; 1 fgr. wall-potsherd, abundant mineral inclusions, smoothed interior and exterior, traces of scraping on the external surface, thickness 0.2 cm; 1 fgr. of ring-base, abundant mineral inclusions, smoothed interior and exterior, thickness 0.8 cm; 1 fgr. of flattened base of a quadrangular basin, medium mineral inclusions, smoothed exterior, rough interior, thickness 0.8 cm; 1 fgr. flattened base, medium mineral inclusions, smoothed interior and exterior, thickness 0.7 cm; 1 fgr. of vertical cylindrical handle, medium mineral inclusions, smoothed surfaces, vertical lines incised, thickness 1.1 cm;

- 2.A.2 (Orange-Gray Fine Ware): 1 fgr. rim of an open cup with continuous profile, straight and slightly flattened rim, abundant mineral inclusions, smoothed interior, smoothed red slipped exterior, dia. 12 cm, thickness 0.4 cm; 1 fgr. neck/rim of a jar with continuous profile, everted neck and rounded rim, few mineral inclusions, smoothed interior and exterior, dia. 16 cm, thickness 0.4 cm;
- 2.A.3 (Red-Brown Fine Ware): 1 fgr. neck/rim of a jar with continuous profile, short cylindrical neck, everted rim and pointed lip, abundant mineral inclusions, smoothed interior and exterior, thickness 0.3 cm; 2 frags. rim of open bowls with continuous profile and rounded rim, abundant mineral inclusions, smoothed interior,

burnished exterior, horizontal incision on the external surface below the rim, dia. 22 cm and 15 cm, thickness 0.6 and 0.7 cm;

- 2.A.4 (Grey Fine Ware): 1 fgr. rim of an open bowl with oblique profile and flattened rim, fine mineral inclusions, smoothed interior and exterior, thickness 0.4 cm;
- Black Fine Ware: 1 fgr. of decorated potsherd, abundant mineral inclusions, smoothed interior and exterior, horizontal incised line on the external surface, thickness 0.5 cm;
- 3.A.1 (Orange Ware): 1 fgr. rim of an open bowl with rounded rim, very few mineral inclusions, polished exterior and interior, red slip on the internal surface, dia. 21 cm, thickness 0.6 cm; 1 fg. rim of a jar with continuous profile, short everted neck and rounded rim, very few mineral inclusions, smoothed interior and exterior, dia. 32 cm, thickness 0.6 cm; 1 fgr. neck/rim of a bottle with continuous profile, long everted neck and rounded rim, very few mineral inclusions, smoothed interior and exterior, thickness 0.25 cm; 1 fgr. flattened rim, very few mineral inclusions, smoothed interior and exterior, thickness 1.5 cm; 1 fgr. decorated wall-potsherd, very few mineral inclusions, smoothed interior and exterior, four combed horizontal line and two lines of circular impressions, thickness 0.3 cm; 2 frgs. decorated wall-potsherds, very few mineral inclusions, smoothed interior and exterior, molded vertical coil with notches, thickness 0.3 cm; 1 fgr. decorated wall-potsherd, very few mineral inclusions, polished interior and exterior, horizontal line impressed on the external surface, thickness 0.6 cm; 1 fgr. wall-potsherd, very few mineral inclusions, smoothed exterior, wiped interior, thickness 0.5 cm;
- BTRCW (Black Topped Red Coarse Ware): 1 fgr. rim of an open bowl with straight profile and flattened thickened rim, abundant mineral inclusions, smoothed interior and exterior, black color on the internal surface and on the external rim, dia. 24 cm, thickness 0.5 cm;
- BTOCW (Black Topped Orange Coarse Ware): 1 fgr. rim of an open bowl with straight profile and slightly pointed rim, abundant mineral inclusions, smoothed interior and exterior, black color on the internal surface and on the external rim, thickness 0.5 cm; 1 fgr. rim of an open bowl with straight profile and rounded thickened rim, abundant mineral inclusions, smoothed interior and exterior, black color on the internal surface and on the external rim, thickness 0.3 cm;
- BTBrCW (Black Topped Brown Coarse Ware): 1 fgr. rim of an open bowl with straight profile and rounded rim, medium mineral inclusions, smoothed interior and exterior, black color on the internal surface and on the external rim, thickness 0.4 cm;
- BTRFW (Black Topped Red Fine Ware): 1 frs. rim of an open bowl with straight profile and rounded rim, abundant mineral inclusions,

smoothed interior and exterior, black color on the internal surface and on the external rim, thickness 0.2 cm;

- BTOFW (Black Topped Orange Fine Ware): 2 frgs. rim of open bowls with straight profile and rounded rim, abundant mineral inclusions, smoothed interior and exterior, black color on the internal surface and on the external rim, 1 dia. 30 cm, thickness 0.2 and 0.8cm; 1 frs. rim of an open bowl with straight profile and rounded rim, abundant mineral inclusions, smoothed interior and polished exterior, black color on the internal surface and on the external rim, dia. 24 cm, thickness 0.6 cm;
- “Torpedo jar”: base and wall-potsherds, abundant organic mineral inclusions, few fine mineral inclusions, smoothed interior and exterior, thickness 0.8 cm.

### Body- potsherds:

- 1.A.1 (Red-Orange Coarse Ware): 10 frgs., thickness 0.3-0.6 cm;
- 1.A.2 (Red Coarse Ware): 7 frgs., thickness 0.1-0.5 cm;
- 1.B.1 (Black Polished Coarse Ware): 10 frgs., 0.07-1.2 cm (smoothed interior and exterior);
- Brown Coarse Ware: 3 frgs., 0.4 cm, abundant micaceous inclusions;
- Black Topped Red Coarse Ware: 3 frgs., thickness 0.4-0.6 cm;
- 2.A.1 (Red-Orange Fine Ware): 147 frgs., thickness 0.2-1.9 cm (8 frgs. with external red slip, 5 frgs. with internal wiping);
- 2.A.2 (Orange-Gray Fine Ware): 6 frgs., thickness 0.3-0.5 cm;
- 58 frgs. orange on the exterior, gray on the interior, thickness 0.02-1 cm, may belong to group 2.A.1 or 2.A.2;
- 2.A.3 (Red-Brown Fine Ware): 27 frgs., thickness 0.3-1.3 cm;
- 2.A.4 (Gray Fine Ware): 3 frgs., thickness 0.2-0.5 cm (1 frg. with burnished external surface);
- 2.B.1 (Light Red Polished Fine Ware): 11 frgs., thickness 0.4-0.5 cm, red slip on the exterior;
- Black Topped Red Fine Ware: 16 frgs., thickness 0.07-0.9 cm;
- 2.B.3 (Black Topped Red Polished Ware): 3 frgs., thickness 0.3-1.4 cm;
- Black Topped Brown Fine Ware: 1 frgs., thickness 0.5 cm;
- Black Fine Ware: 18 frgs., thickness 0.3-0.9 cm;
- 3.A.1 (Orange Ware): 5 frgs., thickness 0.1-0.5 cm.

### SG T2

#### Upper fill of the grave (SU5)

### Diagnostic potsherds:

- 2.A.1 (Red Orange Fine Ware): 1 frg. wall-potsherd, medium mineral inclusions, smoothed exterior, wiped interior, thickness 0.5 cm; 1 frg. decorated wall-potsherd, abundant mineral inclusions, smoothed interior and exterior, wavy lines impressed and incised on the external surface below the rim, thickness 0.7 cm;
- 3.A.1 (Orange Ware): 1 frg. decorated wall-potsherd, few mineral inclusions, smoothed interior and exterior, combed wavy decoration on the external surface, thickness 0.3 cm;
- 3.A.4 (Light Brown Ware): 1 frg. rim of an open bowl (or beaker) with straight profile and rounded rim, fine mineral inclusions, smoothed interior and exterior, horizontal line incised on the external surface below the rim, dia. 14 cm, thickness 0.5 cm.

### Body-potsherds:

- 1.A.1 (Red-Orange Coarse Ware): 1 frg., 0.6 cm;
- 2.A.1 (Red-Orange Fine Ware): 28 frgs., thickness 0.2-0.6 cm;
- 2.A.4 (Gray Fine Ware): 1 frg., 0.4 mm;
- 2.B.1 (Light Red Polished Fine Ware): 1 frg., 0.5 cm;
- 2.B.3 (Black Topped Red Polished Ware): 1 frg., 0.3 mm;
- 3.A.4 (Light Brown Ware): 3 frgs., thickness 0.4-0.5 cm;
- Black Topped Red Ware: 7 frgs., 0.2-0.5 cm;
- Black Fine Ware: 2 frgs., thickness 0.3-0.8 cm (1 frg. with orange interior).

### Lower fill of the grave (SU11)

#### Diagnostic potsherds:

- 1.B.1 (Black Polished Coarse Ware): almost complete jar with continuous profile, rounded base, everted neck and rounded lip, abundant mineral inclusions, smoothed exterior and rough interior, single wavy line incised on the external surface between two horizontal lines, rim dia. 7 cm, body dia. 9 cm, height 10.7 cm, thickness between 0.2 and 0.5 cm;
- 2.A.1 (Red Orange Fine Ware): 1 frg. wall-potsherd, few mineral inclusions, smoothed exterior and scraped interior, thickness 0.4 cm;
- 3.A.1 (Orange Ware): 2 frgs. rim of one or two open bowls (or beakers) with straight profile, rounded rim, very few mineral inclusions, smoothed interior and exterior, incised horizontal line

below the rim, dia. 17 cm, thickness 0.4-0.5 cm; 1 frg. rim of an open bowl with concave profile, rounded rim, very few mineral inclusions, smoothed interior and exterior, dia. 12 cm, thickness 0.5 cm; 1 frg. rim of an open bowl with flattened rim, very few mineral inclusions, smoothed interior and exterior, dia. 13 cm, thickness 0.2 cm; 1 frg. rounded rim, very few mineral inclusions, smoothed interior and exterior, dia. 17 cm, thickness 0.4 cm;

- 3.A.5 (Brown Ware): 1 frg. wall-potsherd, very few mineral inclusions, polished interior and exterior, traces of internal scraping, thickness 0.3 cm;
- BPFW (Black Polished Fine Ware): 1 frg. rounded rim, very few mineral inclusions, burnished interior and exterior, dia. 24 cm, thickness 0.3 cm.

### Body-potsherds:

- 2.A.1 (Red-Orange Fine Ware): 2 frgs., thickness 0.6-0.9 cm (1 frg. with internal wiping);
- 3.A.1. (Orange Ware): 11 frgs., thickness 0.4-0.5 cm;
- Black Topped Red Fine Ware: 1 frg., thickness 0.4 cm.

### Pits around SG T2 (SU3, SU8)

#### SU3

#### Diagnostic potsherds:

- 2.A.1 (Red Orange fine Ware): 1 frg. rim of an open bowl with concave profile and rounded rim, medium mineral inclusions, smoothed interior and exterior, dia. 25 cm, thickness 0.2 cm; 1 frg. flattened base of a jar or bottle, medium mineral inclusions, smoothed interior and exterior, dia. 7.6 cm, thickness 0.4 cm;
- Black Fine Ware: 1 frg. rim of a jar with continuous profile, short everted neck and rounded rim, abundant mineral inclusions, smoothed interior and exterior, dia. 26 cm, thickness 0.5 cm; 1 frg. decorated wall-potsherd, abundant mineral inclusions with mica, smoothed interior and exterior, combed wavy decoration on the exterior, thickness 0.3 cm;
- 2.B.3 (Black topped Red Polished Ware): 1 frg. rim of a bowl with convex profile and rounded, thickened rim, few mineral inclusions, polished interior and exterior, dia. 24 cm, thickness 0.6 cm;
- 2.B.5 (Black Polished fine Ware): 1 frg. rim of an open bowl with pointed rim, few mineral inclusions, polished interior and exterior,

- dia. 25 cm, thickness 0.5 cm; 1 frg. rim of an open bowl with convex profile and rounded rim, few mineral inclusions, polished interior and exterior, thickness 0.4 cm; 1 frg. rim of an open bowl with concave profile and rounded rim, few mineral inclusions, polished interior and exterior, thickness 0.3 cm;
- 3.A.1 (Orange Ware): 1 frg. rim of an open bowl with concave profile and rounded rim, very few mineral inclusions, smoothed interior and exterior, dia. 31 cm, thickness 0.2 cm; 1 frg. rim of a bottle with continuous profile, short everted neck and rounded rim, very few mineral inclusions, smoothed interior and exterior, dia. 5 cm, thickness 0.35 cm; 1 frg. rim of a jar with continuous profile, short everted neck and flattened rim, very few mineral inclusions, smoothed interior and exterior, dia. 18 cm, thickness 0.5 cm; 1 frg. decorated wall-potsherd, very few mineral inclusions, smoothed interior, polished exterior, rocker quadrangular impressions on the external surface, thickness 0.5 cm;
  - 3.A.4 (Light Brown Ware): 1 frg. rim of a small jar with continuous profile, short everted neck and rounded rim, very few mineral inclusions, smoothed interior and exterior, dia. 11 cm, thickness 0.3 cm;
  - 3.A.6 (Dark Red Fine Ware): 1 frg. wall-potsherd, very few mineral inclusions, smoothed and wiped interior, burnished and scraped exterior, thickness 0.7 cm.

### Body-potsherds:

- 2.A.1 (Red-Orange Fine Ware): 2 frgs., thickness 0.6-1.5 cm (1 frg. with internal scraping);
- 2.B.1: 4 frgs., thickness 0.2-0.5 cm (1 frg. dark-red slipped on the exterior);
- Black Topped Red Fine Ware: 5 frgs., thickness 0.5-0.8 cm;
- 2.B.3 (Black Topped Red Polished Ware): 7 frgs., 0.4-0.6 cm;
- Black Topped Brown Fine Ware: 11 frgs., thickness 0.5-0.9 cm;
- Black Fine Ware: 7 frgs., thickness 0.1-0.5 cm (1 frg. with orange scraped interior);
- 2.B.5 (Black Polished Fine Ware): 3 frgs., thickness 0.3-0.9 cm;
- 3.A.1 (Orange Ware): 3 frgs., thickness 0.3-0.6 cm (1 frg. with internal scraping);
- 3.A.2 (Orange-Pink Ware): thickness 1 frg., 0.6 cm;
- 3.A.4 (Light Brown Ware): thickness 6 frgs., 0.1-0.6 cm;
- 3.A.6 (Dark-Red Fine Ware): thickness 9 frgs., 0.5-0.7 cm, burnished/polished on the exterior.



## SU8

## Diagnostic potsherds:

- 2.A.1 (Red Orange Fine Ware): 1 frg. rim of an open cup (or beaker) with straight profile and rounded rim, medium mineral inclusions, smoothed interior and exterior, incised horizontal line on the external surface below the rim, dia. 9 cm, thickness 0.5 cm; 1 frg. rim of an open small bowl with rounded rim, medium mineral inclusions, smoothed interior and exterior, dia. 14 cm, thickness 0.7 cm; 1 frg. rim of an open bowl with concave profile, thickened rim and rounded lip, medium mineral inclusions, smoothed exterior and scraped interior, dia. 30 cm, thickness 0.6 cm; 1 frg. rim of a jar with continuous profile, everted neck and rounded rim, medium mineral inclusions, smoothed interior and exterior, dia. 7 cm, thickness 0.6 cm;
- 3.A.1 (Orange Ware): 1 frg. rim of an open bowl with concave profile and pointed rim, very few mineral inclusions, smoothed interior and exterior, dia. 27 cm, thickness 0.5 cm;
- 3.B.2 (Orange Polished Ware): 1 frg. rim of an open bowl with pointed rim, very fine mineral inclusions, smoothed interior and exterior, red slip on the internal surface, dia. 24 cm, thickness 0.6 cm; 1 frg. rounded rim, very few mineral inclusions, smoothed interior and exterior, red slip on the external surface, dia. 20 cm, thickness 0.5 cm; 1 frg. rounded rim, very few mineral inclusions, smoothed, red slipped interior and exterior, dia. 16 cm, thickness 0.7 cm; 1 frg. pointed slightly everted rim, very few mineral inclusions, smoothed interior and exterior, red slip on the external surface, dia. 22 cm, thickness 0.5 cm;
- Black topped Red Coarse Ware: complete bowl with rounded base and rounded rim, abundant mineral inclusions, smoothed interior and exterior, black colour on the internal surface and the external rim, dia. 24 cm, thickness 0.5 cm.

## Body-potsherds:

- Black Topped Red Coarse Ware: 3 frgs., 0.2-0.4 cm;
- 2.A.1 (Red-Orange Fine Ware): 19 frgs., 0.3-0.6 cm.

### *Ceramic miniatures and other clay objects* (by L. Sernicola)

#### Seg V/VI

The following ceramic miniatures and clay objects were recorded in 2011 at Seg V/VI:

- miniature of a ceramic bowl: rounded base and open profile, *Red Orange Fine Ware* (2.A.1), smooth interior, rough exterior, rim diameter 3.2 cm, height 1.3 cm, thickness 0.2 cm (Seg VI, int. SU1/3, A3);
- ring pot-stand: *Orange Ware* (3.A.1), roughly smoothed surfaces, diameter 7.5 cm, thickness 1.9 cm (Seg VI, SU19, C3);
- pottery disk (token?), maybe intentionally reshaped from a broken pot: black ware with high quantity of mineral inclusions, smoothed internal and external surfaces, diameter 4.1 cm, thickness 0.8 cm (Seg V, SU1, B2);
- fragment of a ceramic human figurine (Fig.13): *Red Orange Fine Ware* (2.A.1) with small mineral inclusions, square section slightly tapered at the top, a hole, probably used to fix the upper part, is visible on the upper face, a punctuated decoration covers entirely the object except for the upper and lower faces, a combination of incised lines is visible on what can be interpreted as the frontal face, the object measures  $6.6 \times 2.6 \times 2.2$  cm (Seg V, SU22, B2);
- asymmetric ceramic fragment: *Red Orange Fine Ware* (2.A.1) with a dark-gray core and low quantity of mineral inclusions, traces of a red slip and a depressed boss are visible on the external surface (Seg V, SU33, B1). The fragment may be part of the head of an animal-like figurine as the decoration resembles the shape of the ears and the eyes recorded on clay figurines from the Pre-Aksumite levels at D site, Kidane Mehret (Aksum) (Phillips 2000, 334) and Mezber (Addigrat) (A. Manzo, personal communication), and the stone statues exposed in the small museum of Enda Abuna Aftse, Yeha, tentatively interpreted as snake-heads or lion-heads.

#### Seg VII

Many complete and almost complete ceramic miniatures of cups and beakers were collected during the excavation at SegVII, from stratigraphic units 1, 3,7 and 5.

#### SU1, SU7

Nine complete or almost complete miniatures of pots have been collected from SU1/7, mainly concentrated in the eastern, southern and

western sector of the excavation unit. They consist of small beakers with a rounded or flattened base, straight profile and rounded or slightly pointed rim. A circular knob or a short vertical grip can be sometime modelled on one of the sides, below the rim. Fabrics are *Red Orange Coarse Ware* (1.A.1), *Red Orange Fine Ware* (2.A.1) and *Orange Ware* (3.A.1) with rough or smoothed external and/or internal surfaces. Rim diameter varies between 1.8 and 3.2 cm, height between 2 and 5.9 cm, thickness between 0.3 and 0.8 cm (Fig.14).

A conical *Orange Ware* lid with a cylindrical extension to the base, possibly used to close one of the small beakers, has been also collected from this stratigraphic unit (Fig. 14). It is 3.2 cm high, its diameter varies between 1.7 and 2.4 cm.

### SU3

Three fragments and three complete miniatures of beakers have been collected from SU3, characterized by a flattened or ring base, straight profile and rounded rim with a short vertical grip modelled below the rim. Fabrics are *Red Orange Fine Ware* (2.A.1), *Orange Ware* (3.A.1) and *Brown Fine Ware* with smoothed surfaces. Rim diameters measure between 2.8 and 3.3 cm, height between 5.4 and 6.3 cm and thickness between 0.3 and 0.6 cm.

One fragment of a miniature of cup has been also collected. The cup has a flattened base, everted continuous profile and pointed rim. Fabric is *Orange Ware* (3.A.1) with smoothed internal and external surfaces. Height measure 3.6 cm, thickness at the base 0.4 cm.

### SU5

One fragment and one almost complete miniature of beaker have been collected from SU5, characterized by a straight profile and rounded rim. A short vertical grip modelled below the rim are attested in one specimen. Fabrics are *Red Orange Fine Ware* (2.A.1) and *Orange Ware* (3.A.1). Surfaces are smoothed on the external and rough on the internal or, in the other case, smoothed on both the external and the internal. Rim diameters measure 2.8 and 3 cm, thickness 0.3 and 0.4 cm.

*Bricks*

In 2010 and 2011 several brick-like objects were recovered from the excavations at Seg II, Seg V and Seg VI. These are orange to light brown ware with fine or abundant mineral and/or organic inclusions; surfaces are smoothed or sometimes burnished. Despite the thickness of the recovered specimens, colour is interestingly uniform throughout the whole section suggesting a different firing technique from the one used for pottery making. It may suggest the adoption of a different type of kiln characterised by a more controlled atmosphere and capable to reach higher temperatures in the firing area, or by a longer exposure to heat within the traditional open systems of firing. The shape of these objects is difficult to define as most of them are in a fragmentary state of preservation. In general, they have square or circular section and a tapering, roughly pointed or rounded end; three specimens, one of which almost complete, show a slightly curved profile. Due to the shape, their use as construction material can be excluded; they might have been most likely used as decorative elements.

Hereafter a tabulated summary of all the recovered “bricks” is provided.

Provenience	Inventory	Fabric and surface treatment	Shape	Dimensions
Seg II, A3, SU38	2010/24	Orange ware, fine mineral inclusions, burnished surface.	Square section, one roughly pointed end preserved.	15 × 6.5 × 8 cm <sup>5</sup>
Seg II, A3, SU25	2010/15	Orange ware, abundant fine mineral inclusions, burnished surface.	Square section, one roughly pointed end preserved.	6 × 4.4 × 3.5 cm
Seg II, A3, SU25 (Fig. 15)	2010/139	Orange ware, fine mineral inclusions, burnished surface.	Square section, curved profile.	15 × 4.5 × 4.5 cm
Seg VI, E4, SU2	2011/42	Orange-pink ware, abundant mineral inclusions and traces of organic inclusions, smoothed surface.	Circular section.	5 × 5 × 6 cm
Seg VI, E4, SU2	2011/43	Orange-pink ware, very few mineral inclusions, smoothed surface.	Square section.	4 × 5 × 4.5 cm
Seg V, D3, int. SU1/5	2011/28	Orange ware, very few mineral	Square section.	4.5 × 4.5 × 4.5 cm

<sup>5</sup> Measurements in the form a × b × c are for length, width and thickness.

		inclusions, traces of organic inclusions, smoothed surface.		
Seg V, A1, SU33	2011/44	Red ware, few fine mineral inclusions, smoothed surface.	Curved profile, circular section?	Length 6 cm
Seg V, B2, SU33 (Fig. 16)	2011/45	Light brown ware, abundant fine mineral inclusions, smoothed surface.	Rounded section, curved profile, roughly pointed end.	18 × 9 × 7 cm

A selection of these objects has been exported in Italy and is presently stored in the Museo Scerrato of the Università degli Studi di Napoli “L’Orientale”. Archaeometrical analysis are in progress at the Laboratory of Mineralogy of the Università degli Studi di Napoli “Federico II”, Dipartimento di Scienze della Terra, dell’Ambiente e delle Risorse. When the analyses are completed, they will be returned to the collections of the Aksum Archaeological Museum.

### *Knapped and other lithic artefacts* (by L. Phillipson)

This report gives a tabulated summary of the excavated and surface-collected knapped lithic plus a few other stone artifacts recovered from Seglamen Excavation Units V and VI in November 2011. Lithic that were excavated from Unit II in 2010, but not analyzed until 2011 have been reported separately. A separate study of grindstones, hand-stones and related artifacts recovered in 2011 has given important insights into a significant aspect of pre subsistence by documenting a gradual transition from the predominant cultivation of glume wheat and barley to free-threshing wheat during the Pre-Aksumite period. The information in this work, which is published (Phillipson 2012), is not repeated here. Another study, on the use of knapped and other lithic tools to assist in the formation of Pre-Aksumite ceramic wares is in preparation. The few knapped lithic artifacts recovered from the burial site that comprises Excavation Unit VII, Mogareb, are described separately at the end of this report.

Artefact terminology in this report is as used in Phillipson 2009. Measurements in the form  $a \times b \times c$  are for length, breadth and thickness in standard orientation. Where a single dimension is given, this is for a whole flake’s length or for a broken artifact’s maximum measurement in any

direction. The symbol > indicates the actual extant length or breadth of a broken artifact. Some cores are described as being Levallois-style (abbreviated L-S). This is a technique in which cores are first prepared and shaped by circumferential trimming around the edge of a single platform, usually at a steep angle, and then struck at approximately right angles to the initial flake removals in order to produce useful flakes of pre-determined shapes and sizes. Levallois-style cores are apparently more characteristic of Pre-Aksumite than of Aksumite assemblages. Bipolar Likanos flakes, which were found at Kidane Mehret and demonstrated to have been parts of composite harvesting knives, are a functionally related sub-set of rectangular flakes (Phillipson 2009, 110; 2000, figs. 311d, 311e, 320). Many of the Levallois-style cores found at Seglamen may have produced flakes that served a similar purpose.

Cores described as single-platform, circumferential, and Levallois-style (L-S in the table) can be regarded as various stages in a single pattern of working which was not always carried through to completion. Removal of up to 3 flakes from a piece of raw material produces casual cores; removal of additional flakes in no systematic pattern yields irregular cores; continued flake removals in varied directions produces multi-platform cores or polyhedrons. Alternatively, a potential core may be rested on a firm surface or anvil while it is struck only at one end. Removal of a few flakes produces a single-platform core; removal of additional flakes while the core is slightly rotated between blows produces a hemi-circumferential or circumferential core. Usually such cores have a high-backed or sub-conical profile, a steep platform edge angle ( $\geq 75^\circ$ ), and a circular or sub-rectangular to rectangular plan. Some circumferential cores have heavily stepped platform edges: a feature that may assist in controlled knapping and/or be desired in order to produce flakes with deliberately stepped and shouldered butts, to facilitate hafting. This pattern of working may be used to produce sub-triangular or parallel-sided flakes suitable for varied uses. Subsequently, the cores may be struck at right angles to the initial direction of working in order to produce Levallois-style circular, rectangular or triangular flakes of pre-determined shapes and sizes. Radial cores are usually hand-held while they are worked centripetally on one or both faces to produce somewhat irregular, frequently side-struck flakes, usually with a relatively low platform edge angle.

The predominant pattern of flake production in all phases was based on approximations of an idealized strategy as follows: 1) split an ovate lump or small cobble to produce two high-backed or sub-conical pieces, each with a flat surface that bears either a positive or a negative flake scar; 2) use the flat surface as a striking platform to remove preparatory flakes from the cortex in order to adjust the size and shape of the striking platform and to produce an edge angle  $\geq 75^\circ$ ; 3) then use the preparatory flake removal scars as new striking platforms in order to remove the remainder of the original striking platform and a series of flakes parallel to (behind) it, all of a similar pre-determined size and shape. This is a Levallois-style of flake production. Alternatively, and somewhat more opportunistically, stage 2) was omitted and the unmodified cortex was used as a striking platform from which a number of more-or-less irregular flakes struck in a plane approximately parallel to the first flake removed, without deliberate platform preparation. Usually, such flakes and cores have platform edge angles  $\leq 70^\circ$ . If flakes were struck centripetally as the core was rotated, the resultant cores are described as radial; they are usually plano-convex or biconvex in profile. Particularly with circular and ovate plano-convex cores, it is not always possible to determine whether they had been worked by the Levallois-style or radial method. Parallel-sided, rectangular and sub-rectangular flakes were mainly produced from Levallois-style cores, but elongated blades and bladelets were produced by bi-polar knapping. This technique was most commonly used for working obsidian.

Chert and obsidian core edge flakes were struck at right angles to the principal direction of flake removals on their parent cores. Such flakes are a product of re-configuring core edges in order to facilitate their continued use. Their presence indicates the use of skilled and careful knapping techniques. Considerable variation in the detailed core and flake morphologies found in all phases at Seglamen makes it clear that these were the work of numerous skilled, but non-specialist knappers. Systematic core exploitation and the exhaustive working of some cores demonstrate that multiple flakes of similar sizes and shapes were frequently-desired end products.

SEG V/VI

## Surface

All artifactual material was collected from the surface of Seglamen excavation units V and VI before the topsoil was removed. The lithic included 3 heavily weathered chert pieces which, if they are not natural pseudo-morphs, must belong to an older series that pre-dates the Pre-Aksumite. These are a polyhedron ( $85.3 \times 73.5 \times 53.8$  mm), a chordate bifacial or core ( $68.1 \times 59.3 \times 25.8$  mm), and a biconvex core ( $58.9 \times 49.4 \times 30.4$  mm). Similarly weathered and undoubtedly pre Pre-Aksumite chert flakes were recovered from Seglamen II in 2010, where they had been incorporated in a foundation layer underlying some paving slabs. The only definitely retouched piece among the surface finds is a finely-worked chert convex scraper ( $35.5 \times 27.6 \times 16.7$  mm) with a  $55^\circ$  edge angle.

Other surface artifacts include: 1 high-backed hemi-circumferential and 4 irregular tending towards plano-convex chert cores (51.9 - 40.2 mm); 1 chert Levallois-style core with steep ( $75^\circ$  -  $85^\circ$ ) circumferential edge trimming has a sub-rectangular plan ( $38.2 \times 35.8 \times 18.8$  mm). A chalcedony multi-platform core and a chalcedony casual core have maximum dimensions of 24.6 mm and 38.7 mm. There are also 1 chalcedony bipolar core ( $22.4 \times 21.3 \times 11.8$  mm) and a chalcedony geode which has served as a casual core for a few flake removals ( $58.7 \times 56.6 \times 39.2$  mm). Three parallel-sided and 12 irregular chert flakes have maximum dimensions of 50.1 to 13.2 mm. There are also 1 chalcedony bi-polar flake ( $31.3 \times 20.6 \times 10.0$  mm) and 2 obsidian flakes ( $23.2 \times 35.0 \times 4.9$  mm, &  $16.4 \times 20.3 \times 5.0$  mm). Among the fragments collected, some of which may not be artifacts, are 32 chert fragments (70.0 - 13.2 mm), 6 of chalcedony (36.5 - 18.8 mm), and 5 of tabular green schist (63.2 - 32.7 mm). One of the schist fragments ( $53.5 \times 48.4 \times 12.9$  mm) may have been deliberately cut and polished.

## Topsoil (SU1)

The topsoil was excavated over a surface area of 200 square meters, to an average depth of 15cm. As with all excavated units, the lithic recovered from SU1, the topsoil, were individually measured, described and the square from which they were recovered was recorded. Much of this information is not given here, since the material was evidently affected by



ploughing and by soil erosion and may not have been found in primary contexts.

### *Tools*

A mono-facial-backed obsidian crescent from V C3 [ $16.8 \times 7.0 \times 3.2$  mm] has probable use-modification on its long edge and on both tips. Similar heavy utilization may have affected a mono-facial-backed chalcedony crescent found in V B4 [ $>11.5 \times 7.0 \times 0.9$  mm] which is missing both of its pointed tips. A bifacial backed obsidian flake knife [ $29.8 \times 18.1 \times 6.4$ ] from V A4 has been heavily used on the distal portion of its long edge (Fig. 17). Such use-wear may have resulted from incising lines or decorative marks in unfired clay (Phillipson 2009, pls 13, 14; in press). Also recovered from V A4 was a slate knife [ $61.8 \times 38.8 \times 10.0$ ] with one edge blunted, the opposite edge use-worn and the tip broken. Casual experiment has demonstrated that similar replica knives made of thin tabular pieces of hard slate are particularly effective in skinning or flensing an animal carcass as they slip between and part layers of tissue without cutting into the flesh or the hide. This is the first example of this tool type which I have seen in some western Tigray; they are not uncommon in some eastern Tigray assemblages, but may have been more commonly used in Aksumite and Late Aksumite than in Pre-Aksumite times.

A somewhat weathered obsidian triangular flake, probably a point, from VI B1 has a slightly stepped and shouldered butt and a broken tip ( $22.1 \times 21.6 \times 4.8$  mm). A finely trimmed chalcedony scraper with a splayed plan ( $18.9 \times 20.1 \times 7.8$  mm) comes from VI A1. Each of these artifacts resembles an Aksumite type: Mai Agam points and Gudit scrapers. Two other scrapers are more characteristically Pre-Aksumite: a chert convex scraper ( $37.3 \times 30.6 \times 18.8$  mm) from VI E3, and a chert much-reduced circumferential core ( $36.3 \times 31.6 \times 10.6$  mm) from VI D2 that had apparently been reused as a scraper. Also from VI D2 was a battered quartzite lump (67.7 mm) that may perhaps have been utilized as a hammerstone.

A sub-spherical, heavily battered basalt hammer-stone ( $67.6 \times 51.7 \times 45.2$  mm) from trench VI square A4, may have been used for stone dressing, for re-tooling grindstones, as a tamper for forming ceramic vessels in concave moulds. A vascular basalt handstone ( $65.4 \times 58.8 \times 27.1$  mm) from

V square D4 has an almost circular plan, with a slightly biconvex profile and a utilized, worn flatter face. A small, burnt, coarse sandstone handstone ( $56.2 \times 40.8 \times 27.1$  mm) from V D5 has a plano-convex profile and a sub-rectangular plan. A disc-shaped, fine basalt hand-stone from VI D5 ( $>39.9 \times >22.4 \times 13.9$  mm) has a reconstructed diameter of about 50 mm and a bi-plane profile (Fig. 18). It is exceptionally smooth on both faces, and the circumferential edge has been neatly ground (or worn) to shape. Surface scratches suggest that this implement had served to smooth the surfaces of hardened, but unfired ceramic wares. If the stone's flat utilized faces may be interpreted as indicating its use to assist in the formation and polishing of flat baking trays, which are locally known as *metad*, this would predate the all other (Late Aksumite) evidence for such artifacts. However, other uses for a flat hand-stone may also be postulated. Phillipson 2012 reports in more detail on grindstones, hand-stones and related artifacts from Seglamen; an article in preparation will report on artifacts from Seglamen 2011 used in the production of ceramic wares.

Stratigraphic units 19 and 20 are from the lowest portion of the topsoil so, perhaps, less disturbed by cultivation than were other portions of the excavated topsoil. An obsidian mono-facial backed, tanged crescent ( $22.2 \times 8.1 \times 3.8$  mm) was recovered from A1 SU19 and an obsidian Likanos flake ( $24.9 \times 18.4 \times 6.1$  mm) with one edge blunted by unifacial backing from square A2 of SU19 (Fig. 19); this may have been part of a composite harvesting knife. A blade-like obsidian fragment ( $32.5 \times 15.9 \times 8.4$  mm) from D1 SU19 has utilization scars on one long edge and its opposed edge somewhat blunted. Also from this phase, a tabular basalt pebble that may have been at least partly deliberately shaped ( $>40.2 \times 33.6 \times 14.1$  mm) has worn striations showing its probable use as a whetstone.

Tools from SU20 include a bifacial backed obsidian crescent ( $20.7 \times 7.5 \times 3.8$  mm) from E2 SU20 with light use wear along 3/4ths of its long edge, with no impact-damage or significant wear at its tip; it had perhaps served as a diagonally-mounted arrow point or spear barb. Recovered from B2 SU20 is a deliberately snapped or truncated mid-section of an obsidian bladelet ( $13.5 \times 9.1 \times 2.8$  mm) with possible slight use wear on one edge, though this may be the result of incidental field damage. A very fresh obsidian spall ( $45.4 \times 7.9 \times 4.8$  mm) from B1 SU20 has edge damage suggesting that it had been used as an informal knife. A quartz pebble ( $47.4 \times 32.4 \times 16.7$ ) from C1 SU20 has a flattened facet and other wear marks

suggesting its persistent use as a pot-burnishing tool. A chert shouldered triangular flake ( $47.6 \times 27.3 \times 8.3$ ) from C1 SU20 had been utilized along the distal portion of both long edges; its tip is missing.

### Cores

Core types and dimensions are summarized in table 1, below. Because of the natural fracture patterns of the raw materials, it is possible that some pieces recorded as casual or irregular cores were in fact natural; conversely some minimally modified artifacts may have been mistaken for natural pieces and so not recorded. It is notable that 15 out of the 26 chert cores recovered from the topsoil can be regarded as part of a continuum from single-platform to circumferential, to Levallois-style, to exhausted, and that at least 5 of these had been used for the production of rectangular or sub-rectangular flakes.

	casual/ irregular	polyhedral/ multi-platform	other	dimensions mm
chert (26)	4	4 (?natural)	1 (1-platform) 1 (1-platform) 1 (bipolar/opposed platform) 1 (radial plano-convex) 1 (radial biconvex) 1 (circumferential sub-conical) 1 (circumferential sub-conical) 1 (circumf., early stage) 1 (circumferential, ovate, L-S) 1 (hemi-circumf., ovate, L-S) 1 (hemi-circumf., ovate) 1 (rectangular, L-S) 1 (rectangular, L-S) 1 (sub-rectangular) 1 (sub-rectang., exhausted, L-S) 1 (rectangular, L-S, exhausted) 1 (triangular, L-S) 1 (plano-convex, exhausted)	52.9 - 46.7 75.2 - 38.0 42.4 $\times$ 44.5 $\times$ 18.9 & 40.8 $\times$ 31.1 $\times$ 24.0 92.5 $\times$ 55.7 $\times$ 30.0 28.7 $\times$ 22.4 $\times$ 7.2 51.3 $\times$ 41.0 $\times$ 15.6 68.8 $\times$ 51.3 $\times$ 33.2 44.1 $\times$ 39.2 $\times$ 22.1 41.648.3 $\times$ 24.3 50.1 $\times$ 41.2 $\times$ 24.6 35.7 $\times$ 37.3 $\times$ 19.4 50.8 $\times$ 41.8 $\times$ 22.6 37.9 $\times$ 37.1 $\times$ 19.0 56.4 $\times$ 45.5 $\times$ 36.2 33.6 $\times$ 28.8 $\times$ 14.4 37.3 $\times$ 35.6 $\times$ 16.2 50.0 $\times$ 37.5 $\times$ 13.8 38.6 $\times$ 36.8 $\times$ 12.9 40.0 $\times$ 34.6 $\times$ 20.1
chalcedony (16)	5 3 (geode)	1 1 1 1 1	1 (opposed platform) 1 (rectangular, L-S)	38.9 - 23.5 60.5 - 50.7 43.4 $\times$ 38.8 $\times$ 34.0 51.2 $\times$ 42.6 $\times$ 34.4 41.5 $\times$ 24.0 $\times$ 25.1 24.9 $\times$ 24.7 $\times$ 25.3 28.0 $\times$ 21.5 $\times$ 17.4 34.1 $\times$ 27.2 $\times$ 22.3 39.6 $\times$ 38.7 $\times$ 21.3

			1 (bipolar, bladelet) 1 (bipolar, fragment)	25.9 × 14.4 × 14.4 20.9
obsidian (1)			1 (bipolar)	26.9 × 23.3 × 8.5
white quartz (1)	2			60.0 - 44.9
quartzite (2)	1		1 (sub-radial, biconvex)	89.4 59.8 × 54.0 × 26.5

Table 1 - Seglamen V/VI, Topsoil (SU1), cores

*Flakes and fragments*

While the frequencies of chert flakes of several shapes and sizes correspond well with the cores recorded for this stratigraphic unit, the total incidences of whole flakes, and to a lesser extent of fragments, correspond less well. In particular, there are dearths of chalcedony flakes and of obsidian cores. If we estimate a conservative average of 5 whole flakes produced from each chert core and 3 from each chalcedony and white quartz core, these being more difficult materials from which to strike unbroken flakes, it appears that fewer flakes were recovered than had been produced.

The discrepancy between the estimated quantities of flakes produced and what was recovered approximate what would have been removed for use elsewhere. The scattered presence of cores and flakes on what appears to have been some form of a public-access or communal site substantiates other lines of evidence in suggesting that, unlike in the classical and later Aksumite periods (Phillipson 2009, 113-5), knapping skills were not confined to a restricted number of specialist workshops and practitioners.

	irregular	circular L-S	triangular	rectangular & sub-rect.	core edge	fragment	dimensions mm
chert (304)	72	1 1 1 1					55.8 - 10.9 50.4 × 48.9 × 22.4 36.3 × 39.6 × 13.2 30.1 × 31.7 × 10.9 32.7 × 33.8 × 9.7



basalt (6)						6	62.7 - 20.1
green schist (13)						13	73.6 - 24.5
pink sandstone (1)						1	48.3

Table 2. Seglamen V/VI, Topsoil (SU1), whole flakes and fragments

Only a few specific comments need be made concerning these flakes and fragments. Owing to the difficulty in distinguishing between the patterns of naturally and of artificially fractured chert, perhaps up to one in five of the tabulated chert fragments may not be artifacts. One of the chert triangular flakes ( $31.2 \times 27.6 \times 9.3$  mm) has dorsal thinning scars on its butt end, suggesting that it may have been intended for hafting onto a shaft. About half of the chert rectangular and sub-rectangular flakes were probably produced from Levallois-style cores. Several of the chert Levallois-style cores and two of the chert core-edge flakes have stepped platform edges with angles of  $80^\circ - 90^\circ$ . Circumferentially struck cores with similarly steep platform edges have been noted as a characteristic feature of Pre-Aksumite surface collections in the Aksum area (Phillipson 2009, 109-11). A chalcedony geode had been opened by the removal of a substantial flake from one end, but was apparently rejected when it was found that the interior contained very little usable material. A fine pink sandstone fragment is of the same material as had been used for several carvings and architectural elements. Tabular fragments of a relatively soft green schist were locally frequent on the surface and in SU1; only a few were collected and retained (Fig. 20). The material has not yet been geologically identified. Since it does not occur naturally on the site, it will have been brought for some specific use. A similar markedly laminar stone is used by some present-day Tigray people as capstones between house walls and roofs (Lyons 2007, fig. 6). Schist slabs were also used as pavement in Aksumite churches at Adulis (Paribeni 1908, 438-560) and Matara (Anfray 1974, 756). Scratch and cut marks on some pieces of this material may have been deliberately made, and a few pieces were perhaps deliberately polished.

A few very weathered and/or heavily patinated chert pieces from SU20 apparently belong to an older series of artifacts of unknown age. These are: 1 ovate radial Levallois-style core ( $44.7 \times 51.6 \times 13.2$  mm) and 4 irregular flakes ( $58.8 \times 31.2 \times 17.3$  mm;  $41.7 \times 50.0 \times 15.3$  mm;  $39.8 \times 40.3 \times 18.7$  mm;  $30.2 \times 40.5 \times 13.3$  mm).

#### Phase IV (latest Pre-Aksumite)

This phase comprises stratigraphic units 2, 3, 4, 6, 8, 14, 16, 17, 25, 26, 27, 30, 31, 32, 39, 53, and 57. It was excavated to a maximum depth of 0.47 m over a surface area of 90 sq m.

#### *Tools and utilized pieces*

A smooth chert river pebble ( $26.9 \times 19.2 \times 6.1$  mm;  $65^\circ$ ) from D5 SU2 may have been brought to the site to serve as a pot-burnishing too (Phillipson in prep.). A pebble-shaped fine basalt artifact ( $>23.4 \times 29.7 \times 30.3$  mm) from B1 SU6 has a use-worn facet that is less smooth than those found on pot burnishers; it is probably a small whetstone. A chert flake ( $48.6 \times 44.3 \times 17.5$  mm) from C4 SU2 has a mono-facial retouched, convex scraper edge. Particular interest attaches to a rectangular, bipolar-struck obsidian flake ( $22.6 \times 13.8 \times 4.3$  mm) from D1 SU2. It closely resembles the Likanos flakes recovered from Kidane Mehret, near Aksum (Phillipson 2000, fig 320), except that it is more delicate and neatly made and may have been used less robustly than they.

The distal portion of an obsidian backed flake ( $>23.0 \times 13.9 \times 4.4$  mm) from E5 SU6 may be a fragment of a small knife. Both it and a chert fragment ( $54.0 \times 46.2 \times 15.5$  mm;  $75^\circ$ ) with a scraper-like edge, from C1 SU6, are probably chance occurrences in the soil in-filling the foundation trench of a dry-stone wall (SU3). A chert flake knife ( $>80.6 \times 47.2 \times 18.0$ ) with a broken tip and a utilized edge comes from the soil surrounding a feature (SU25) of upright stones that is perhaps associated with SU3.

Particular interest attaches to an obsidian stemmed crescent ( $22.7 \times 5.9 \times 2.9$  mm) with a broken tip, found in C2 SU27 (Fig. 21). While its deliberate association with a near-by human burial is not demonstrable, it is noteworthy that micro-lithic crescents were found as deliberate inclusions in several Proto-Aksumite graves at Chankwa Mender, at the foot of Beta Giyorgis, near Aksum, excavated by A. Manzo and F. Sulas in 2007 (unpublished report submitted to ARCCH). Two similar crescent recovered from the burial site Seglamen VII, Mogareb, are described below. The burials at Mogareb, excavated in 2010 and in 2011 correspond, on the basis of ceramic comparison, to phase four at Seg V/VI.

### Cores

Relatively few cores were found in only two stratigraphic units of the latest Pre-Aksumite phase: SU2 and SU6. In each of these phases their presence is most likely due to chance occurrences, although the freshness of several of the chert cores implies that the pieces had not suffered much disturbance, but had been worked very close to their actual find-spots. The cores were apparently randomly and sparsely distributed in squares A2, C4, D5, E1, and E4 of SU2, and in squares B1, B5, and E5 of SU6. A rectangular, circumferential chert core from A2 SU2 had apparently been abandoned because its 95° edge angles were too steep to work. The white quartz core from E4 SU2 had, unusually for this site, been made on a thick flake.

	SU	casual/ irregular	polyhedral/ multi-platform	other	dimensions
chert (14)	2	1	3	1 (1-platform) 1 (circumf., rectangular, L-S) 1 (plano-convex, rectangular) 1 (plano-convex, sub-rectang.)	46.4
	2				58.2 - 43.7
	2				47.3 × 33.6 × 22.9
	2				33.3 × 29.6 × 20.9
	2				65.2 × 53.0 × 23.3
	2				38.8 × 32.0 × 23.0
	6	1		1 (bipolar) 1 (plano-convex, sub-circular) 1 (plano-convex, sub-circular) 1 (plano-convex, ovate) 1 (plano-convex, sub-rectang.) (Fig. 22)	53.9
	6				39.2 × 29.9 × 18.0
	6				50.5 × 46.8 × 25.5
	6				43.8 × 39.6 × 27.0
	6				59.4 × 37.6 × 26.1
	6				53.3 × 51.8 × 21.2
chalcedony (1)	2			1 (broken geode)	not recorded
white quartz (1)	2			1 (plano-convex, rectangular)	41.5 × 40.4 × 28.2

Table 3. Seglamen V/VI, Phase IV, cores



### Flakes and fragments

While the presence of fresh chert flakes and fragments, including two flakes from the same parent core found in E2 SU2, are sufficient to indicate that some lithic knapping occurred *in situ* in this phase, it was obviously on a small scale. Particularly with the chert artifacts, a low ratio of recovered flakes plus *debitage* fragments to cores (less than 5:1) suggests that many pieces were removed from the site for use elsewhere. Three obsidian core edge flakes are spalls from bipolar cores that appear to have been used for the production of parallel-sided bladelets. The single basalt flake is likely to have resulted from shaping a block or boulder for some architectural purpose or, perhaps, for manufacture of a grindstone; there is no evidence that basalt was used for the production of lithic tools. In addition to the flakes listed in table 4, there are 3 heavily weathered and patinated irregular chert flakes from SU2 and 1 from SU6 that derive from a probably much older series of artifacts; their maximum lengths are 49.4 to 31.7 mm.

	SU	irregular	circular	triangular	rectang./ sub-rect.	core edge	fragments	dimensions mm
chert (74)	2	14			1 1 (L-S) 1 (bladelet)		17	45.7 - 26.1 42.0 × 31.6 × 7.8 44.0 × 31.6 × 18.0 26.2 × 8.1 × 3.5 59.5 - 19.2
	6	10			1		16	52.0 - 21.6 35.1 × 27.9 × 8.2 61.0 - 26.5
	27						2	35.9; 22.7
	32	2					5	35.0; 41.3 55.5 - 23.9
	39						4	46.8 - 16.1
chalcedony (2)	2						1	20.7
	6						1	12.8
obsidian (16)	2	1				1	3	14.1 16.5 × 5.4 × 4.3 16.3 - 12.7
	6					1 1	3	39.0 × 13.3 × 9.6 31.2 × 6.2 × 5.8 26.0 - 15.5
	27						1	16.4
	32						3	23.1 - 15.4

	39					2	20.5; 14.2
white quartz (4)	6					4	34.3 - 17.6
slate (1)	27					1	67.5
basalt (1)	6	1					51.4

Table 4. Seglamen V/VI, Phase IV, whole flakes and fragments

### Phase III

This phase is represented by stratigraphic units 5, 9, 13, 18, 22, 33, 33/37, 35, and 45. It was excavated to a maximum depth of 0.58 m over a surface area of 54 sq m.

#### *Tools and utilised pieces*

A variety and relative abundance of lithic tools and utilized pieces recovered from squares A1, A2, A3, A4, A5 and B4 of SU22 is more indicative of the general commerce of daily life than of any specialized activities. If the as yet unexcavated portions of SU22, which is relatively rich in lithic, is excavated and recorded in sufficient detail, it may be possible to uncover an intact living surface with artifacts in their primary contexts. A chert flake ( $66.2 \times 30.5 \times 15.8$  mm) from B4 SU22 has a mono-facial trimmed convex edge and a distinctive pattern of use-wear that identifies it as a tool used to assist in shaping ceramic wares; a chert flake ( $42.8 \times 26.0 \times 8.8$ ) with a constricted, nosed distal end, from A5 SU22 had probably been used to gouge decorative marks in unfired clay (Phillipson in prep). An obsidian Likanos flake ( $22.8 \times 22.7 \times 6.3$  mm) from B4 SU22, an obsidian, rectangular, truncated blade segment ( $20.9 \times 14.9 \times 3.6$  mm) from A1 SU22, and the rectangular, distal portion of an obsidian notched-and-snapped bladelet ( $14.7 \times 14.0 \times 3.6$  mm) from A5 SU22 may all have been intended for a similar purpose, as components of harvest-knives that were similar to, but less robust than, those inferred at Kidane Mehret (Phillipson 2000, 360-1). The only other obsidian retouched piece from this phase is a bifacial-backed crescent ( $25.1 \times 6.7 \times 2.6$  mm) from B4 SU22. A chert triangular flake ( $35.8 \times 25.1 \times 7.2$  mm) from A4 SU22, and a chert foliate flake with a shouldered butt ( $43.8 \times 29.8 \times 12.3$  mm) from A2 SU22 each have knife-like use wear along one long edge. Although their sizes and

shapes would have been suitable for hafting as spear points, neither has any evidence that they had been used as such, and neither has any sign of impact damage at their tips. Two chert flakes ( $37.7 \times 35.2 \times 14.3$  mm from B4 SU22;  $30.6 \times 30.5 \times 9.5$  mm from A5 SU22) have mono-facial trimmed convex edges ( $60^\circ$ ) that may be the result of deliberate retouch or accidental field damage; the second of these pieces is lightly patinated on all surfaces. What is probably a high-backed convex scraper ( $32.9 \times 34.3 \times 18.6$  mm) comes from A3 SU22, and a similar piece ( $54.3 \times 42.3 \times 22.3$  mm) from A1 SU22, but either or both of these may have been shallowly-struck ( $75^\circ - 80^\circ$ ) semi-circumferential cores. It is not clear whether the pieces recovered or the flakes struck from them had been the knapper's intended product. A chert chunk ( $48.0 \times 39.7 \times 25.2$  mm) from A3 SU22 has scraper-like edges on two opposed faces.

Additional retouched knapped lithic from phase three are two chert convex scrapers ( $35.4 \times 43.4 \times 4.5$  mm,  $60^\circ$ ;  $46.7 \times 28.4 \times 17.9$  mm,  $65^\circ$ ) from A1 SU33; the first of these is on a flake, the second on a chunk. Two remarkably similar chert convex scrapers ( $38.7 \times 30.4 \times 21.2$  mm;  $38.7 \times 30.4 \times 15.8$  mm), both from A5 SU33, have edge angles of  $65^\circ-70^\circ$  and  $70^\circ-75^\circ$ .

Other lithic artifacts from this phase include a longitudinally broken half of a roughly carved sandstone cylinder, 76 mm long with a diameter of approximately 103 mm, from A1 SU22, and a broken portion of a carved basalt architectural fragment, possibly the upper portion of a small stela with a curved top (84 mm high  $\times$  120 mm wide  $\times$  65 mm thick) from B3 SUs1/5. Two neatly shaped rectangular schist slabs ( $280 \times 140 \times 45$  mm;  $280 \times 60 \times 45$  mm) from C1 SU22 had originally been a single piece that parted along a natural cleavage plane. While the schist is too weak to serve as a building material, schist slabs could have served in a non load-bearing capacity, perhaps as floor paving, wall capping, or as decorative elements. Since the material does not occur naturally at Seglamen, it must have been brought in for some specific purpose; possible local sources are located within 2 km from Seglamen.

### *Cores*

A chert proto-core from A4 SU22 represents an early stage in the production of Levallois-style flakes; it is a split pebble with a positive flake scar serving as a platform and its cortex largely intact. Two obsidian bipolar cores from B4 SU5 may be non-contiguous parts of the same parent core. A

chert Levallois-style core from A5 SU22 has a finely trimmed convex portion of its circumference with an edge angle of approximately 60°; this suggests that after a number of desired flakes had been produced from the core, it may have been recycled to serve as a tool. The pieces tabulated as pre-cores are sub-rectangular to cuboidal, multi-faceted stones weighing between 0.7 and 1.2 kg. They closely resemble stones which have been identified as the a transportable form of raw material for knapping (Phillipson 2009, 123-4; Sernicola & Phillipson 2011); it is not clear whether their shaping artificial or entirely natural.

	SU	casual/ irregular	polyhedral/ multi-platform	other	dimensions mm
chert (38)	5			1 (plano-convex, ovate)	36.1 × 27.3 × 16.2
	5			1 (blade)	57.3 × 32.1 × 22.3
	22	5	1 (pre-core)		81.0 - 62.9
	22			49.8	
	22			1 (proto-core)	48.8 × 41.4 × 26.0
	22			1 (biconvex, ovate)	42.4 × 34.5 × 26.5
	22			1 (plano-convex, radial)	41.7 × 35.6 × 22.8
	22			1 (biconvex, rectangular)	56.7 × 48.1 × 21.7
	22			1 (circumferential, rectangular)	39.6 × 37.6 × 21.3
	22			1 (circular, L-S)	44.6 × 34.2 × 16.2
	22			1 (circular, L-S)	50.1 × 46.2 × 16.1
	22			1 (circular, L-S)	36.6 × 34.6 × 15.7
	33	3	1 1 (?natural) 2 (pre-cores) (Fig. 23)		55.5 - 46.1
	33			58.0	
	33			46.5	
33	130.2; 106.8				
33	1 (plano-convex, circular)			53.8 × 50.3 × 20.7	
33	1 (plano-convex, ovate)			61.5 × 57.0 × 28.3	
33	1 (triangular, L-S)			57.9 × 55.3 × 33.2	
33	1 (bipolar)			52.8 × 31.5 × 22.0	
33	1 (hemi-circumferential )			36.7 × 32.9 × 21.6	
chalcedony (10)	22	4 (geode)			68.3; 33.3
	22	4			41.6 - 32.8
	22		2		48.7; 35.4
obsidian (3)	5			1 (bipolar)	23.5 × 22.5 × 7.6
	5			1 (bipolar)	32.2 × 25.4 × 10.3

	22			1 (bipolar)	34.5 × 14.2 × 4.4
quartzite (1)	33		1 (pre-core)		84.4

Table 5. Seglamen V/VI, phase three, cores

### *Flakes and fragments*

The incidence of whole flakes and fragments from SU22 confirms the evidence provided by the relative abundance of tools and cores, that this stratigraphic unit represents an occupation surface on or near which various activities were conducted. Five very fresh, irregular flakes and two fragments from B5 SU22 are of similarly coloured and patterned chert. Although they were not contiguous, they may have derived from a single parent core. Unfortunately, the excavation strategy did not record whether they had lain in close proximity to one another within the excavated square. As with the cores, stratigraphic unit 33 also yielded a moderate abundance of flakes.

It may be significant that, as in phase four, it has been easier to recognize and designate cores as being Levallois-style, than to identify the flakes struck from them. While this may be in part a weakness of the classification system being used for the present lithic assessment, it seems likely that most of the regularly shaped flakes were removed from the excavated area, for use elsewhere. While a few side-struck sub-ovate flakes are subsumed in the class of irregular flakes, the absence of any that could be classed as circular suggests that this was not a generally desired flake shape. Probably, radial non-Levallois-struck cores were used primarily for the production of triangular and sub-triangular flakes which might have been used as spear points or - as demonstrated by use-wear evidence - as small knives. An absence of core edge flakes recovered in phase three suggests that there may have been some difference in knapping techniques as compared to phase four.

Heavily patinated, weathered irregular chert flakes, probably attributable to an older series of artifacts, were recovered from B5 SU22 (32.7 × 20.9 × 6.9 mm) and from B2 SU22 (53.6 × 31.8 × 18.5 mm). Three heavily patinated and weathered rectangular chert flakes were recovered

from A5 SU33 (49.1 × 30.0 × 14.2 mm) and from A4 SU33 (40.1 × 25.9 × 12.0; 39.6 × 22.1 × 7.7 mm). These are not included in table 6.

	SU	irregular	circular	triangular	rectang./ sub-rect.	core edge	fragments	dimensions mm
chert (146)	5	4			1		7	35.0 - 22.2 × 7.927.2 × 29.9 31.5 - 18.6
	18	2			1		1	23.1; 18.1 33.8 × 31.2 × 12.4 27.7
	22	33			1 1		46	67.8 - 16.9 29.8 × 29.2 × 8.5 26.1 × 19.0 × 7.4 60.6 - 14.7
	33	10	1 (L-S) 1 (L-S)	1 1 1 (L-S) 1 (L-S)	1 1	1	30	59.8 - 21.9 42.1 × 40.6 × 11.2 43.4 × 33.6 × 13.1 39.2 × 29.2 × 8.1 24.4 × 18.2 × s?? 7.5 33.9 × 21.8 × 8.0 27.0 × 22.8 × 5.5 48.1 × 29.8 × 14.5 38.6 × 25.6 × 9.1 38.3 × 15.6 × 8.8 62.4 - 16.6
chalcedony (20)	5	2			1 1 (blade)		4	37.1; 20.2 37.6 × 31.1 × 7.3 19.3 × 8.5 × 4.2 40.2 - 24.2
	22	4					6	33.4 - 17.6 39.7 - 18.0
	33	1					1	24.7 50.8
obsidian (27)	5						1	19.2
	22	3					8	25.1 - 18.1 39.4 - 11.9
	33	1			1	1	12	13.8 23.3 × 18.8 × 28.3 20.6 × 10.4 × 5.3 34.7 - 12.2
white quartz (7)	22	2					1.	32.0; 25.9 25.1
	33	2					2	25.4 - 24.4 37.3 - 25.4
basalt (1)	33						1	67.2

Table 6. Seglamen V/VI, Phase III, flakes and fragments.

## Phase II

Phase II was excavated to a maximum depth of 0.51 m over an area of 32 sq m. It comprises stratigraphic units 7, 10, 11, 12, 15, 21, 24, and 34, most of which were devoid of lithic artifacts. A chert flake from A5 SU12 has fine mono-facial retouch use wear on the arrises behind, but not on, its convex, scraper-like edge, indicating that it had served as a pot-former, a tool used to assist in shaping ceramic wares, (Phillipson in prep). Also from A5 SU12 came a single chert rectangular flake ( $47.1 \times 40.8 \times 11.8$  mm). Further investigation of this partially-excavated stratigraphic unit may yield additional lithic artifacts. A chert fragment (35.6 mm) was recovered from A4 SU24.

## Phase I

The earliest phase comprises stratigraphic units 23, 28, 36, 38, 40, 42, 43, 46, 48 - 52, 54, 56, 58 - 65, and 67 - 77. It was excavated to a maximum depth of 1.77 m over an area of 48sqm. A few knapped lithic were recovered from units 40, 40/46 interface, 48, 49, 52, 58, 59, 61/70 interface, 68, 69, and 73, but none from the other units in this phase. While the production and use of lithic tools was clearly a significant part of the phase one material culture, a paucity of cores and of flakes and fragments indicates that tool use, but little or no knapping took place in or near the area of the phase one excavations.

### *Tools and utilized pieces*

A mono-facial backed obsidian crescent ( $22.1 \times 6.9 \times 2.4$  mm) comes from C1 SU40, another ( $26.3 \times 7.7 \times 2.6$  mm) from C1 SU53, and another ( $>16.2 \times 6.4 \times 1.7$  mm) from A4 SU69. An obsidian sub-triangular flake knife ( $29.7 \times 27.4 \times 9.4$  mm) from A5 SU52 has one long edge lightly blunted and utilization scars on the opposed edge. Chert flakes with convex scraper-like edges and  $55^\circ$  -  $65^\circ$  degree edge profiles were recovered from C1 SU52 ( $43.8 \times 35.0 \times 15.3$  mm), B1 SU53 ( $56.9 \times 44.8 \times 27.8$  mm), B4 SU59 ( $71.0 \times 51.7 \times 16.3$  mm), and A4 SU69 ( $44.8 \times 49.5 \times 20.7$  mm). Several of these may have served as pot-formers. A circular obsidian flake with a possibly utilized edge, from B1 SU53, tabulated below, derives from a circular Levallois-style core. An obsidian flake from A4 SU61/70, listed in

table 7 as a core edge, may perhaps have been a tool edge. The only other tool recovered from this phase is a slate flake knife ( $62.6 \times 54.6 \times 17.6$  mm) from A2 SU73 with use wear on one long edge and slight blunting on the opposed edge.

### *Core*

The only core recovered from this phase is a quartzite casual core ( $45.9 \times 44.0 \times 25.1$ ).

### *Flakes and fragments*

A paucity of knapped lithic recovered from this earliest phase does not allow for much observation of general trends. It may, however be significant that the ratio of obsidian to chert flakes and fragments is approximately 33 per cent in phase one, 18 per cent in phase three, and 21 per cent in phase four. In the Aksum area, there was a general tendency for the use of obsidian to be greater in earlier than in later Aksumite assemblages, and greater in Pre-Aksumite than in subsequent assemblages. Future research may perhaps reveal greater use of obsidian in the earlier than in the later phases of the Pre-Aksumite.



	SU	irregular	circular	triangular	rectang./ sub-rect.	core edge	fragments	dimensions mm
chert (24)	40				1		1	53.0 × 34.3 × 10.8 47.9
	48	1						58.6 × 37.7 × 11.7
	52	1						58.7 × 59.1 × 16.4
	53				1		4	42.5 54.8 × 36.2 × 5.5 65.2 - 31.6
	58				1 1		6	34.8 × 23.2 × 10.5 26.8 × 23.8 × 9.1 49.4 - 17.6
	59	3					3	50.4 - 29.1 52.8 - 40.7
	68					1		>44.0
	obsidian (8)	40/46				1 (blade)		1
49							1	15.4
52							2	23.7; 19.5
53				1			1	44.5 × 48.9 × 9.3 15.9
61/70						1		31.4 × 14.0 × 4.8
white quartz (1)	58	1						21.4 × 23.4 × 5.1

Table 7. Seglamen V/VI, Phase I, flakes and fragments

## SEG VII

Excavation Unit VII was located in an area of Pre-Aksumite burial pits and associated minor, undressed or roughly dressed sandstone *stelae*, about 150 metres northwest of Excavation Units V and VI. Highly disturbed and badly preserved human interments in two separate burial pits/shafts were uncovered in an excavation area of 4 × 4 metres, to a depth of 0.65 meters. All of the excavated material of Seglamen VII may be equated to phase four of Excavation Units V and VI.

Disregarding twenty-one probably natural chert fragments (58.8 - 17.6 mm) that were not retained, a few lithic artifacts were found on the surface prior to excavation. The most interesting is a mono-facial backed obsidian crescent (13.7 × 5.8 × 1.6 mm) whose broken tip and modified

edge are at least partly the result of incidental field damage. A chalcedony multi-platform core ( $39.1 \times 27.6 \times 18.2$  mm) and a chert flake fragment (30.7) were also collected from the general surface area. In addition, a chalcedony geode fragment (38.3 mm) was collected from the surface of square E1, and 2 chert irregular flakes ( $29.9 \times 28.5 \times 11.1$  mm;  $19.3 \times 17.6 \times 4.3$  mm) from the surface of square D2. Two heavily weathered chert rectangular flakes ( $40.7 \times 28.2 \times 9.0$  mm;  $25.1 \times 19.7 \times 6.0$  mm) found in pit 5 E1 SU4 were clearly unintentional inclusion in the pit's fill; they belong to an older series of artifacts.

Much greater interest attaches to two broken, bifacial backed obsidian crescents. One of these ( $>15.8 \times 8.4 \times 2.9$  mm) is from E1 SU5, which is the fill of a roughly rectangular grave shaft (SU6). The other crescent ( $>17.7 \times 8.6 \times 2.3$  mm) is from E2 SU8. This is the fill of a roughly circular pit (SU9) that had probably been used as an offering place related to an interment; it also contained several miniature clay beakers and cups. In both cases the crescents were collected in the in-fill of their respective pits. The burial was apparently disturbed and the grave goods probably displaced.

In view of the multiple associations at sites on Beta Giyorgis (Fattovich 1994, 49-55; Bard & Fattovich 1993, 41-71, 1995, 5-35) and elsewhere near Aksum of finely made micro-lithic crescents with Proto-Aksumite burials, the recovery of crescents in Pre-Aksumite grave shafts at Seglamen seems to imply a significant continuity in Pre- and Proto-Aksumite burial customs. Such a practice has not yet been reported from Pre- or Proto-Aksumite burials from areas further removed from Aksum. Nor have micro-lithic crescents been found as deliberate associations with Aksumite burials.

## Report on lithic excavated in 2010<sup>6</sup>

A small number of knapped and other lithic artifacts recovered in 2010, but not recorded until 2011 are reported here. Their totals should be added to those already recorded. Comparison with the lithic recovered from several excavated contexts in 2011 suggests that the amount of obsidian recovered from EU I is probably disproportionately high. This is likely to reflect a low recovery rate for chert lithic due to the inexperienced student excavators' difficulty in recognizing them.

### *Small finds*

A blue-grey, pointed ovate chalcedony river pebble ( $35.0 \times 22.7 \times 17.3$  mm) from EU I square A2 SU4 has what appears to be a drilled hole, 6.6 mm deep and 3.7 mm in diameter, near one end and the start of a second hole or dimple, just 0.6 mm deep. Neither hole fully pierces the stone, and it is possible that both may be natural. The stone, which may perhaps have been artificially shaped, has an overall thin white cortex.

### *Grindstones and related artifacts*

Among the artifacts excavated in 2010, but not recorded until 2011 are four members of the general class of grindstones and related objects, two of which are of particular interest.

A broken whetstone ( $[33.1] \times 22.8 \times 11.7$  mm) of a highly silicified siltstone has a rounded rectangular plan and a wedge-shaped profile. Both faces have been worn flat and there is a drilled dimple, probably made with a metal tool, on either face. The dimples are not aligned with one another, and neither pierces the thickness of the whetstone.

A sandstone circular hand-stone ( $72 \times 70 \times 22$  mm) from EU Seg I C5 SU30 has been carefully shaped to a regular outline and bi-planar

---

<sup>6</sup> In the final report on knapped and other lithic artifacts from Seglamen, the artifacts reported here will need to be amalgamated with the much more numerous lithic from Excavation Units Seg I and Seg II reported in 2010 (Fattovich et alii 2011, 21-23, 37-44). General comments, preliminary observations on the grindstones and related artifacts and on the knapped lithic, and bibliographic citations given in the 2010 preliminary report also apply to the material reported here (Fattovich et alii 2011, 6-8, 21-23, 37-44, 61-63).

profile, with both faces rubbed or worn flat. A pock-marked dimple in one face post-dates its use as some form of a rubbing or smoothing stone. The dimple may have resulted from use for an activity such as nut cracking, or as an anvil for positioning stones to be knapped by bi-polar percussion. The hand-stone, which is entire, weighs 150 gm. Its primary use, whether for dressing fine skins, as a muller for the preparation of foodstuffs or cosmetics, or for some other purpose could not be determined from its worn surfaces. The use of such stones to assist in compacting the walls of large or shallow clay vessels as they are constructed is another possibility.

Another complete hand - or topstone (84 × 62 × 48 mm) of fine, dense basalt, from EU Seg I A2 SU4, must have served a very different function. It weighs 350 gm and is sub-rectangular in plan, minimally convex - almost flat - on its smooth-worn obverse or ventral face, but unworn on its convex reverse or dorsum.

A fragment of a coarse, granitic basalt<sup>7</sup> top-stone ([60] × 72 × [60] mm) from EU Seg II D4 SU1 has a plano-convex profile and may have had an ovate or long-ovate plan. It is slightly worn on its flat obverse and unworn on its reverse.

#### Knapped lithic from Locus 4

A single irregular chert flake (36.9 × 35.0 × 12.3 mm) surface collected from locus 4 is of no particular significance.

#### Knapped lithic from EU Seg I

An obsidian knife (41.0 × 16.7 × 8.0 mm) from square D3 SU1 has one edge modified by rough unifacial backing; the opposed edge has been heavily utilized and its tip is missing. It does not appear to have been hafted.

Probably part of a similar knife is represented by the rectangular, proximal portion of a truncated obsidian bladelet ([15.3] × 17.0 × 5.6 mm) from C3 SU1. It had been steeply blunted on one edge and has light utilization scars on the other.

A chert plano-convex core (40.1 × 37.0 × 21.5 mm) with a sub-circular plan shape comes from E2 SU1.

---

<sup>7</sup> The stone described here as “granitic basalt” has not been identified by a competent geologist; it may be syenite.

A similarly shaped obsidian core ( $29.8 \times 23.1 \times 10.8$ ) is from E5 SU1.

From several squares of EU I SU1, a total of 2 obsidian rectangular flakes ( $21.3 \times 26.9 \times 8.6$  &  $22.7 \times 13.1 \times 6.2$  mm), 1 obsidian irregular flake ( $24.9 \times 23.0 \times 8.3$  mm) and 1 chert rectangular flake ( $28.4 \times 16.7 \times 6.4$  mm) were recovered together with 17 obsidian fragments (8.9 - 26.9 mm), 5 chert fragments ( $20.5 \times 42.4$  mm), and 1 white quartz fragment (25.2 mm).

From B1 SU2 came 1 obsidian core-edge flake, sometimes called a core rejuvenating flake, ( $36.3 \times 10.7 \times 10.7$  mm), 1 chert rectangular flake ( $44.0 \times 25.5 \times 7.4$  mm) and 4 obsidian fragments (27.4 - 11.4 mm). Three obsidian fragments (29.4 - 19.9 mm) come from C1 SU2.

An obsidian fragment (23.5 mm) from A2 SU6 is the mid section of a small blade.

A rectangular obsidian flake ( $27.8 \times 21.2 \times 3.5$  mm) was recovered from E3 SU16.

From B2 SU22 came 2 chert irregular flakes ( $42.3 \times 35.6 \times 10.2$  and  $23.0 \times 31.4 \times 6.3$  mm) and 3 chert fragments (44.9 - 34.4 mm).

Also from EU I SU1 and SU2, some large stone slabs had been horizontally bedded on a stratum of broken chert which the excavators thought might have been knapped, quarried or deliberately broken. Three large buckets of this material were collected. Examination of the contents of one of the buckets showed that without exception all pieces were weathered, abraded and/or patinated on all surfaces. Although some size selectivity had been exercised in its collection to serve as a foundation for the sandstone slabs, the material is identical in all respects to the immediately available local field stone. No pieces were knapped, quarried or freshly broken.

A random selection of 100 pieces of this bedding material comprised: 82 angular chunks of naturally broken weathered chert (87.8 - 28.0 mm); 6 weathered basalt chunks (61.1 - 41.4 mm); 1 chalcedony nodule (45.2 mm); and 3 sandy ferruginous concretions (50.9 - 39.5 mm). There were also 4 very weathered and patinated chert flakes ( $35.2 \times 38.0 \times 10.2$  to  $57.5 \times 34.4 \times 13.0$  mm) and 4 equally weathered fragments (56.2 - 34.5 mm) which must represent an older series of artifacts predating the site's Pre-Aksumite occupation.

## Knapped lithic from EU Seg II

A mono-facial backed obsidian crescent ( $17.8 \times 6.6 \times 1.2$  mm) from square B3 SU1 was utilized along the entire length of its long edge. Its tip is intact.

Two obsidian irregular flakes ( $22.4 \times 14.8 \times 4.3$  &  $24.6 \times 21.7 \times 6.2$  mm), 4 obsidian fragments (23.9 - 14.8 mm), a chert irregular flake ( $64.8 \times 59.7 \times 13.7$  mm), and 3 chert fragments (35.8 - 13.9 mm) derive from several squares of EU II SU1.

From A2 SU2 a chert casual core, tending towards a plano-convex orientation of flake scars ( $52.4 \times 38.9 \times 21.7$  mm) was recovered together with 3 chert flakes of commensurate sizes ( $49.4 \times 47.3 \times 9.4$ ;  $29.7 \times 32.5 \times 9.5$ ;  $20.9 \times 25.0 \times 5.7$  mm) and 5 chert fragments (42.0 - 15.5 mm). Also from this locus are 4 obsidian fragments (22.4 - 11.9 mm).

There is a single obsidian fragment (23.6 mm) from B3 SU3.

A chert irregular flake ( $20.2 \times 18.6 \times 6.3$  mm) is from E1 SU13.

A chert irregular flake ( $34.6 \times 27.0 \times 9.0$  mm) and a chert fragment (22.1 mm) are from E2 SU15.

E1 SU16 has yielded 1 irregular chert flake ( $18.6 \times 26.2 \times 7.2$  mm) and 1 chert fragment (40.8 mm). Five additional chert fragments ( $54.7 \times 26.3$  mm) come from E2 SU16.

Five chert fragments ( $46.8 \times 23.3$  mm) are from B2 SU17.

B4 SU22 has yielded 1 irregular chert flake ( $36.8 \times 24.8 \times 7.5$  mm) and 3 obsidian fragments (21.7 - 16.4 mm). Four more obsidian fragments ( $25.1 \times 10.3$  mm) come from B5 SU22.

An obsidian fragment (26.0 mm) is from E2 SU26.

A chert fragment (14.0 mm) comes from B2 SU31.

A3 SU43 has yielded 1 chert irregular flake ( $35.2 \times 29.5 \times 10.5$  mm)

A chalcedony fragment (38.8 mm) was recovered from B4 SU51.

## Directions for future lithic research at Seglamen

Continued work at Seglamen will, it is hoped, provide additional new insights into temporal changes in the local Pre-Aksumite subsistence economy and the technological and craft activities of the site's non-elite inhabitants. Such studies will be very much advanced if living floors can be recognized, isolated and excavated in ways that enable the actual associations of small finds to be recorded.

Another important area for future research is study of the Pre-Aksumite and Aksumite procurement and use of obsidian as a raw material, including location of possible quarry sites. In view both of the immediately local availability of other high-quality lithic materials whose use could have substituted for obsidian, and of the relative abundance of obsidian artifacts and debris, it is unlikely that the material was imported over any large distance. However, its use primarily for very small artifacts and the working out of obsidian cores to smaller sizes than was characteristic of chert cores implies that somehow its availability may have been restricted. Geochemical assessments and comparisons of relatively dated obsidian artifacts could give suggestive evidence as to whether the obsidian used at Seglamen derives from a single or from multiple sources. If from a single source, it could be postulated that this was a traded commodity, access to which was closely controlled. If the obsidian artifacts can be shown to have derived from multiple sources, some other factors may have determined the extent to which this material was used. Various lines of evidence suggest that an as yet un-located, significant source of obsidian may be situated south of Seglamen within the boundaries of the present study area.

Finally, in much of the study area there are continuing traditions of using stone technologies: for house and wall building, grindstone production, knife sharpening, fire lighting, wood-working, minor surgical procedures, probably also for hide and leather production, and in the formation and decoration of ceramic wares. There are also reports of the re-use by some present-day farmers of surface finds of ancient tools and flakes. Except for studies of stone hide-working tools used in various communities in southern Ethiopia, these traditions and technologies are largely undocumented and unrecorded. Their study would add significantly to our understanding of Ethiopia's past and present and could have much wider implications for lithic studies in general.

### *Metals* (by L. Sernicola)

#### Seg V/VI

Metal artifacts at Seg V/VI were notably abundant and well preserved, mainly consisting of copper alloy tools from the topsoil and from stratigraphic units ascribable to *Phase III* and *Phase IV*:

- small truncated fragment, possibly a nail head, measuring  $0.6 \times 0.7$  cm, 0.4 cm thick (Seg V, SU22, A2);
- complete awl: pointed ends and square section, 5.8 cm long (Seg V, SU22, B4);
- fragment of an awl or applicator: rounded section (0.4 cm), 3.7 cm long (Seg V, int.SU1/7, E3);
- complete awl: pointed ends and square section, 4.5 cm long (Seg VI, SU19, A2);
- length of rod bent to a U-shape: straight ends and square section, thickness 0.03 cm (Seg VI, SU19, A2);
- complete awl: pointed ends and square section, 10.9 cm long (Seg VI, SU32, B3);
- complete rod: one pointed end, one rounded pierced end, 8.3 cm long (Seg VI, SU53, C1);
- fragment of unidentified metal artefact with incised lines on one side and a spur on the other face; incised lines were probably made when the metal was still hot,  $5.9 \times 3.9$  cm, thickness 1.1 cm, (Seg VI, SU1, C2);
- composite tool comprising a 5.4 cm long pointed awl with a bone haft (Seg VI, SU6, C5) (Fig. 24).

## Seg VII

The only specimen of metal object recorded at Seg VII comes from SU11 and consists of a fragment of an iron, unidentified tool (possibly a blade or a spatula) measuring  $2.6 \times 1.2$  cm and 0.2 cm thick.

## *Glass, beads and other ornaments (L. Sernicola)*

### Seg V/VI

The following glass fragments, beads and other ornaments have been collected during the excavations at Seg V/VI:

- one small fragment of white translucent glass (thickness 0.01 cm) (Seg VI, SU1, B2);
- dark-orange, circular, slightly flattened, carnelian bead (diameter 0.7 cm) (Seg V, SU6, C1);
- bone, cylindrical, elongated bead (diameter 1 cm), smoothed internal and external surfaces, incised lines are visible on the external (Seg VI, SU1, C1);



- biconical, stone ear- or lip-stud (length 1.9 cm, maximum diameter 0.7 cm) (Seg VI, SU1, C1).

### Seg VII

Different types of beads have been recorded at Seg VII from stratigraphic units 3, 8 and 11:

#### SU3:

- violet, short, rounded, glass bead, 0.03 cm thick with a diameter of 0.2 cm;
- rounded bead of weathered faience, 0.1 cm thick with a diameter of 0.3 cm;
- white, short, rounded, stone bead (sandstone or quartzite), 0.01 cm thick with a diameter of 0.1 cm.

#### SU8:

- two complete black, short, rounded, stone beads with well smoothed surfaces, 0.1 cm thick with a diameter of 0.2 cm.

#### SU11:

- four fragments of the same rounded bead of weathered faience, 0.2 cm thick;
- blue glass ring bead with ribbed surface, 0.1 cm thick with a diameter of 1.2 cm and a hole of 0.8 cm.

### *Shell* (by A. Carannante)

A marginal fragment of the upper valve of a pearly oyster (*Pinctada margaritifera*) specimen has been found at Seg VI square B1 SU 53. The *Pinctada margaritifera* is a marine species living in the Red Sea and Indo-Pacific Ocean, commonly used in the Nile Valley for making ornaments or inlay. The fragment measures  $2.6 \times 2.7 \times 0.3$  cm and shows an abraded edge and a polished surface (Fig. 25) suggesting it was part of a mother-of-pearl pendant similar to those widespread in Egyptian and Nubian contexts (Aldred 1979, 124, 131; Andrews 1990, 65; Bourriou 1988, 154; Winlock 1932).

### *Archaeozoology* (by L. Sernicola)

A great quantity of faunal material has been recorded at Seg V/VI in SUs 1, 2, 5, 6, 11, 12, 19, 20, 22, 24, 27, 32, 33, 39, 40, 48, 52, 53, 56, 58, 59, 64, 66, 68, 69, 72, 73. All the bone specimens have been collected and are presently stored in the store rooms of the Archaeological Museum of Aksum for archaeozoological analysis. A selected sample of bones from layers associated to the different architectural phases has been exported to Italy for radiocarbon dating.

### *Human skeletal remains* (by L. Sernicola)

Traces of badly preserved human bones were recorded in SU11, at the bottom of pit SU6 but, due to the high acidity of the soil in the area, they could neither have been identified nor sampled.

Remains of a jaw with few teeth were also recorded in the soil fill SU8, apparently contained in a red ware, open bowl found upside down in pit SU9. The teeth, better preserved than the other bones, have been sampled for further analysis and are now stored in the Museo Scerrato of UNO.

### Overview (by L. Sernicola)

In November 2011 the joint UNO/AU research project conducted the second field season of archaeological investigations in the village of Seglamen. During this season, the research activity was exclusively focused at site SG 1, in the areas of Amda Tsion and Mogareb where the remains of a Pre-Aksumite monumental area and cemetery were respectively identified and partially excavated in 2010 (Fattovich *et alii* 2011, 23-53). In order to expand the area investigated in 2010, in 2011 two excavation units (Seg V and Seg VI) were established at Amda Tsion and one excavation unit (Seg VII) was established at Mogareb.

Archaeological excavations conducted at Seg V/VI uncovered the remains of several rectangular structures contiguous to the ones exposed in 2010 and ascribable to four main architectural phases. While the later phases (*Phase II, III, and IV*) are currently poorly represented, the most ancient structure is fairly well defined, although it requires further investigations. Current evidence consists of the remains of a rectangular building, east/west

oriented, comprising a rectangular hall and two small quadrangular rooms located in the eastern sector of the structure (Fig. 26). The northern of the two small quadrangular rooms, excavated in 2010 and 2011, revealed two pots located within the stone foundation platform beneath the living floor, possibly related to a ritual performed during the construction of the building. In the southernmost room, an “L”-shaped stone bench with two complete pots still *in situ* was recorded below the collapse. The building was possibly surrounded by a rectangular precinct made of small- to medium-sized irregular field stones joined with a clay mortar.

Excavations conducted at Seg VII brought to the light the remains of a roughly rectangular pit tomb (SG T2) cut in the weathered syenite and located about 20 m to the west of Tomb 1 discovered at Seg III in 2010 (Fattovich *et alii* 2011, 44-53). The tomb, north/south oriented, measures about  $1.90 \times 0.95 \times 0.65$  m. Similarly to Tomb 1, it was directly associated with a roughly cylindrical, carved, sandstone *stela*. The *stela* lay almost horizontally in the pit, but originally it most likely stood on its southern side, as suggested by a negative trace left in the weathered syenite bedrock which perfectly matches with the shape and the width of the monolith. Under the *stela*, a few very badly preserved human bones were recorded. Together with the *stela*, two different layers of soft, dark-brown soil filled the pit. Ceramics, knapped stones, a few beads and one fragment of an unidentified iron object constitute what remains of the grave good.

To the south and to the west of the tomb, two roughly circular pits were uncovered: SU9 and SU4 respectively, each measuring about 1 m in diameter. From the western pit and from the topsoil of the western, southern and western sectors of the excavation unit, several miniatures of beakers and cups have been collected; glass and stone beads were also found in both pits. These can be interpreted as small offering places related to the tomb where people probably placed votive objects and offerings, as already suggested for Tomb 1 at Seg III 2010 (Fattovich *et alii* 2010).

Interestingly, a jaw with few teeth was found in pit SU9 apparently contained in a bowl found inverted. This, together with the *stela* laying in a displaced position, may suggest that the whole complex had been disturbed, sometime before the formation of the present day topsoil, by robbers looking for valuables from the grave good.

Chronologically, Tomb 2 can be preliminarily ascribed to the latest phase of the so-called “Pre-Aksumite period” (ca. 500-400 BCE), as the

occurrence of a blue glass ring bead with ribbed surface and of a bifacially backed obsidian crescent from the filling of the tomb resembles to Proto-Aksumite grave goods recorded on the hilltop and slopes of Bieta Giyorgis hill at Aksum (Fattovich 1994, 49-55; Bard & Fattovich 1993, 41-71; 1995, 5-35). This evidence also implies a significant continuity in Pre- and Proto-Aksumite burial customs which deserves further investigations.

Dealing with Seg V/VI, the ceramics from *Phase IV* are similar in terms of fabric, surface treatment, forms and decoration to those from Tombs 1 and 2, suggesting that the latest face of occupation of the monumental area at Amda Tsion is contemporary to the tombs investigated insofar. In both cases, radiocarbon dating remains necessary for a reliable chronological attribution of the different contexts.

Finally, a significant quantity of imported items (torpedo jars and Red-Sea shell) at site SG 1, if compared to the relatively scarce evidence of exotic specimens recorded in the Pre-Aksumite contexts excavated at Aksum (Phillipson D.W., ed., 2000, 393-352), seems to confirm that, during the 1<sup>st</sup> half of the 1<sup>st</sup> millennium BCE, this area was a quite important node in the network of trade routes linking the Red Sea to the internal regions of the Horn of Africa. At that time, as also suggested by the analysis on settlement pattern (Sernicola 2008), Aksum was a minor centre which only later, during the 2<sup>nd</sup> half of the 1<sup>st</sup> millennium BCE, progressively emerged among all other polities of the Tigrean plateau due to political and economic changes occurred at interregional scale on both sides of the Red Sea.

Future researches at site SG 1 will be focused on extending the excavations at both the cemetery and monumental area, and, it is hoped, on locating and investigating domestic and/or specialized activity areas within the site. The survey of selected areas of the territory under concession started in 2010 will be continued and laboratory analysis will be conducted on the exported samples for radiocarbon dating of charcoals, species identification of organic materials, and archaeometric studies of selected artifacts. This will provide new insights into diachronic changes occurred in the local Pre-Aksumite subsistence economy and additional information on the role that this area played within the social, political and economic scenario of the Tigrean plateau during the 1<sup>st</sup> half of the 1<sup>st</sup> millennium BCE.

An important aspect of the project will continue to be the training of local students in Archaeology of AU on theories and field practice in archaeological survey, excavation and laboratory procedures.

## GENERAL REFERENCES

- Aldred, C. (1979) *I gioielli dei faraoni*. Milano (Italian translation of *Jewels of the Pharaohs*, London 1978).
- Andrews, C. (1990) *Ancient Egyptian Jewellery*. London.
- Anfray, F. (1974) Deux villes Axoumites: Adoulis et Matara, *Problemi attuali di scienza e cultura, IV Congresso Internazionale di Studi Etiopici*, Quaderno n° 191, 745-772.
- Bard, K. A. (1999) *Encyclopedia of the Archaeology of Ancient Egypt*, London: Routledge.
- Bernard, E., Drewes, A.J. and Schneider, R. (1991) *Recueil des inscriptions de l'Éthiopie des périodes pré-axoumite et axoumite*, I-II, Académie des Inscriptions et Belles Lettres. Paris.
- Bonnet, Ch. (ed.) (1990) *Kerma, royaume de Nubie*. Genève: Musée d'Art et d'Histoire.
- Bourriou, J. (1988) *Pharaohs and Mortals. Egyptian Art in the Middle Kingdom*. Cambridge.
- Fattovich R. (1975) *Materiali per lo studio della ceramica Pre-Aksumita etiopica*, *Annali*, 35 (Supplemento n.2 al vol. 35, fasc. 1), Istituto Universitario Orientale. Napoli.
- Fattovich R. (1994) Scavi archeologici nella zona di Aksum. D. Ona Enda Aboi Zaguè (Bieta Giyorgis), *Rassegna di Studi Etiopici*, 36, 49-55.
- Fattovich, R., and Bard, K.A. (1994) Scavi archeologici nella zona di Aksum. C. Ona Enda Aboi Zaguè (Bieta Giyorgis), *Rassegna di Studi Etiopici*, 35, 41-71;
- Fattovich, R., and Bard, K.A. (1995) Scavi archeologici nella zona di Aksum. E. Ona Enda Aboi Zaguè e Ona Nagast (Bieta Giyorgis), *Rassegna di Studi Etiopici*, 37, 5-35.
- Fattovich, R., Hiluf Berhe, Phillipson, L. and Sernicola, L. with contributions by Bar Kribus, Michela Gaudiello and Marco Barbarino (2011) *Archaeological Expedition at Aksum (Ethiopia) of the University of Naples "L'Orientale" - 2010 Field Season: Seglamen*, il Torcoliere. Napoli,
- Harris, E.C. (1979) *Principles of Archaeological Stratigraphy*. London: Academic Press.
- Leclant J. (1959) Haoulti-Melazo (1955-1956), *Annales d'Éthiopie*, 3, 43-57.

- Lyons, D. E. (2007) Building Power in Rural Hinterlands: An ethnoarchaeological study of vernacular architecture in Tigray, Ethiopia, *Journal of Archaeological Method and Theory*, 14-2, 179-207.
- Paribeni, R. (1908) Ricerche nel luogo dell'antica Adulis, *Monumenti antichi*, 18, 438-560.
- Phillips, J. (2000) *D Site at Kidane Mehret - Pottery and clay objects*, Phillipson, D.W. (ed.) *Archaeology at Aksum, Ethiopia, 1993-97*, London: The British Institute in Eastern Africa & The Society of Antiquaries of London.
- Phillipson, L. (in press) *Lithic Tools used in the Manufacture of Pre-Aksumite Ceramics*.
- Phillipson, L. (2012) Grindstones and Related Artefacts from Pre-Aksumite Seglamen, northern Ethiopia and their wider implications, *Azania: Archaeological Research in Africa* DOI:10.1080/0067270X.2012.693793.
- Phillipson, L. (2010) The First Joint Archaeological Field School of the University of Axum and the University of Naples "L'Orientale", *Nyame Akuma*, 73, 88-91.
- Phillipson, L. (2009) *Using Stone Tools: the evidence from Aksum, Ethiopia*, Cambridge Monographs in African Archaeology 77. Oxford. Archaeopress;
- Phillipson, L. (2000) *Lithic from the D Site at Kidane Mehret: Lithic Industries; Surface Collections of Aksumite Lithics*, Phillipson, D.W. (ed.) *Archaeology at Aksum, Ethiopia, 1993-7*, 217-22, 316, 408-11, 433-48, 449-53, London: The British Institute in Eastern Africa & The Society of Antiquaries of London.
- Schneider, R. (1976) Documents épigraphiques de l'Éthiopie - V, *Annales d'Éthiopie*, 10, 81-93.
- Sernicola, L. (2008) *Il modello d'insediamento sull'altopiano tigrino tra I millennio a.C. e I millennio d.C.: un contributo da Aksum*, PhD dissertation, Università degli Studi di Napoli "L'Orientale", Napoli.
- Sernicola, L., and Phillipson, L. (2011) Aksum's Regional Trade: new evidence from archaeological survey, *Azania*, 46, 2, 190-204.
- Wilkinson, R.H., *The Complete temples of Ancient Egypt*. Cairo: AUC Press.
- Winlock, H.E. (1932) Pearl Shells of Sean-wosert I, *Studies presented to F.Ll. Griffith*, 388-392. London.

## FIGURES



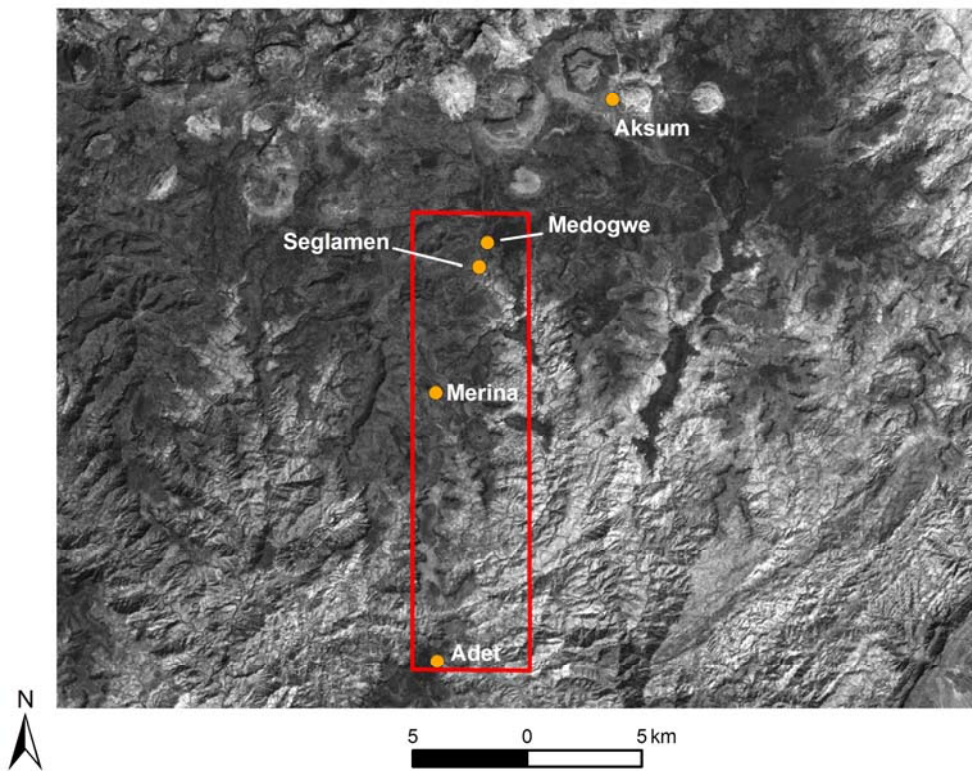


Fig. 1 - The UNO-AU study area

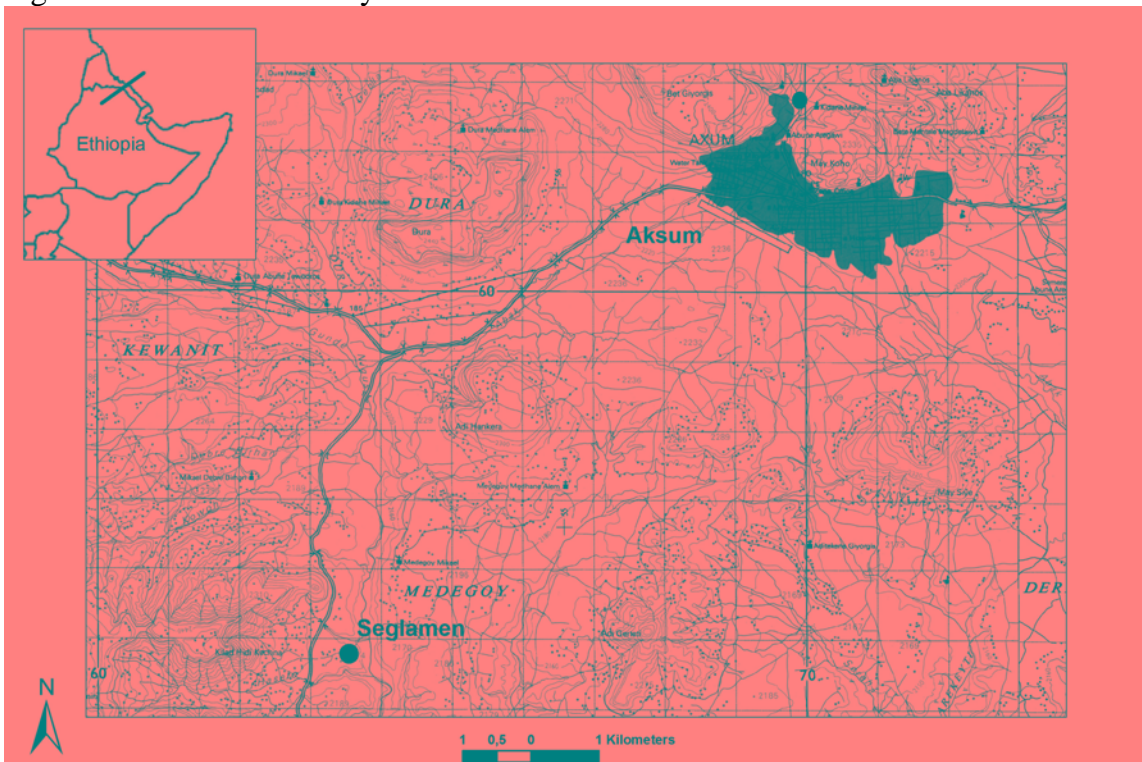


Fig. 2 - The village of Seglamen



**Legend**

**Excavation units by year**

■ 2010

■ 2011

▭ Surveied area outline

**Contours**

----- by 1 meter

———— by 5 meters

Fig. 3 - Site SG1 with the excavation units established in 2010 and 2011

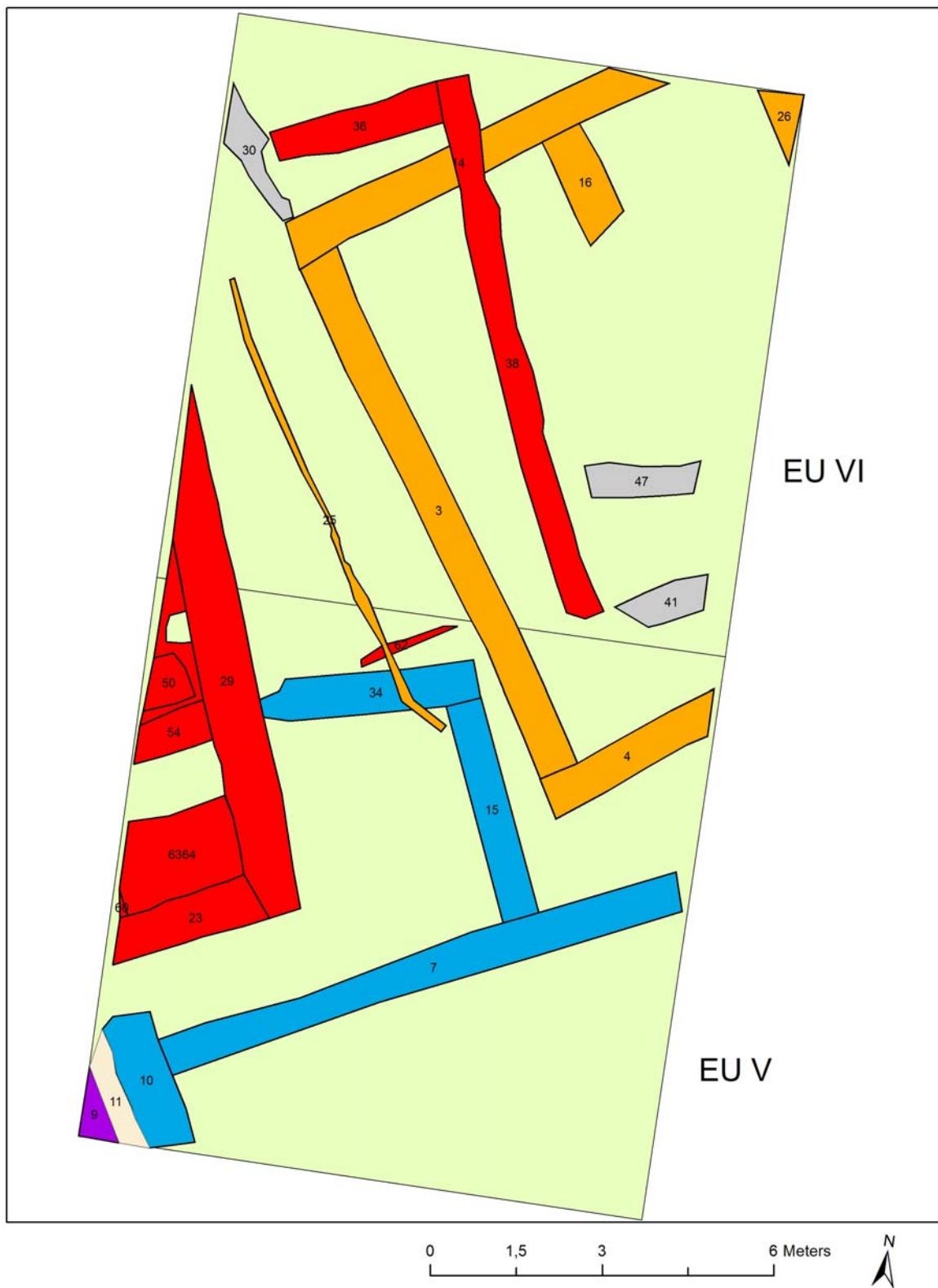


Fig. 4 - Main architectural phases exposed at Seg V/VI

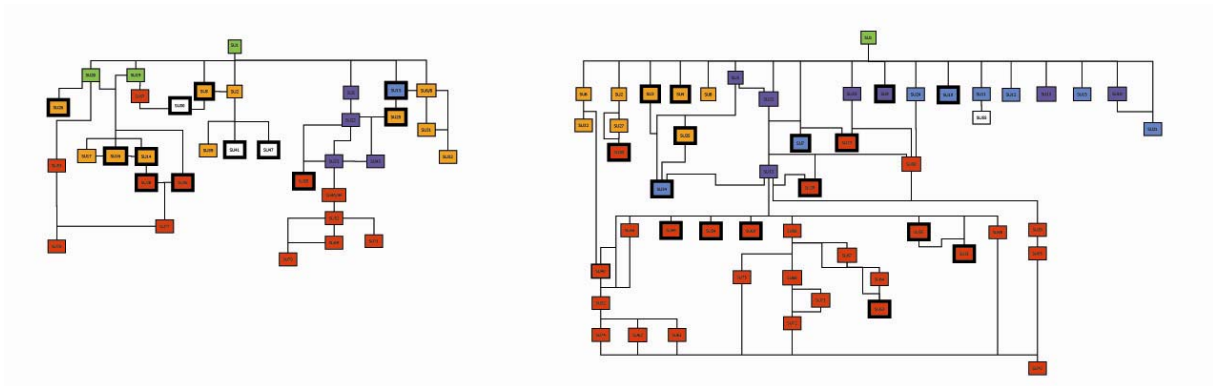


Fig. 5 - Matrix of the stratigraphic units recorded at Seg V/VI



Fig. 6 - Broken pot beneath the foundation platform of the most ancient building at Seg V/VI

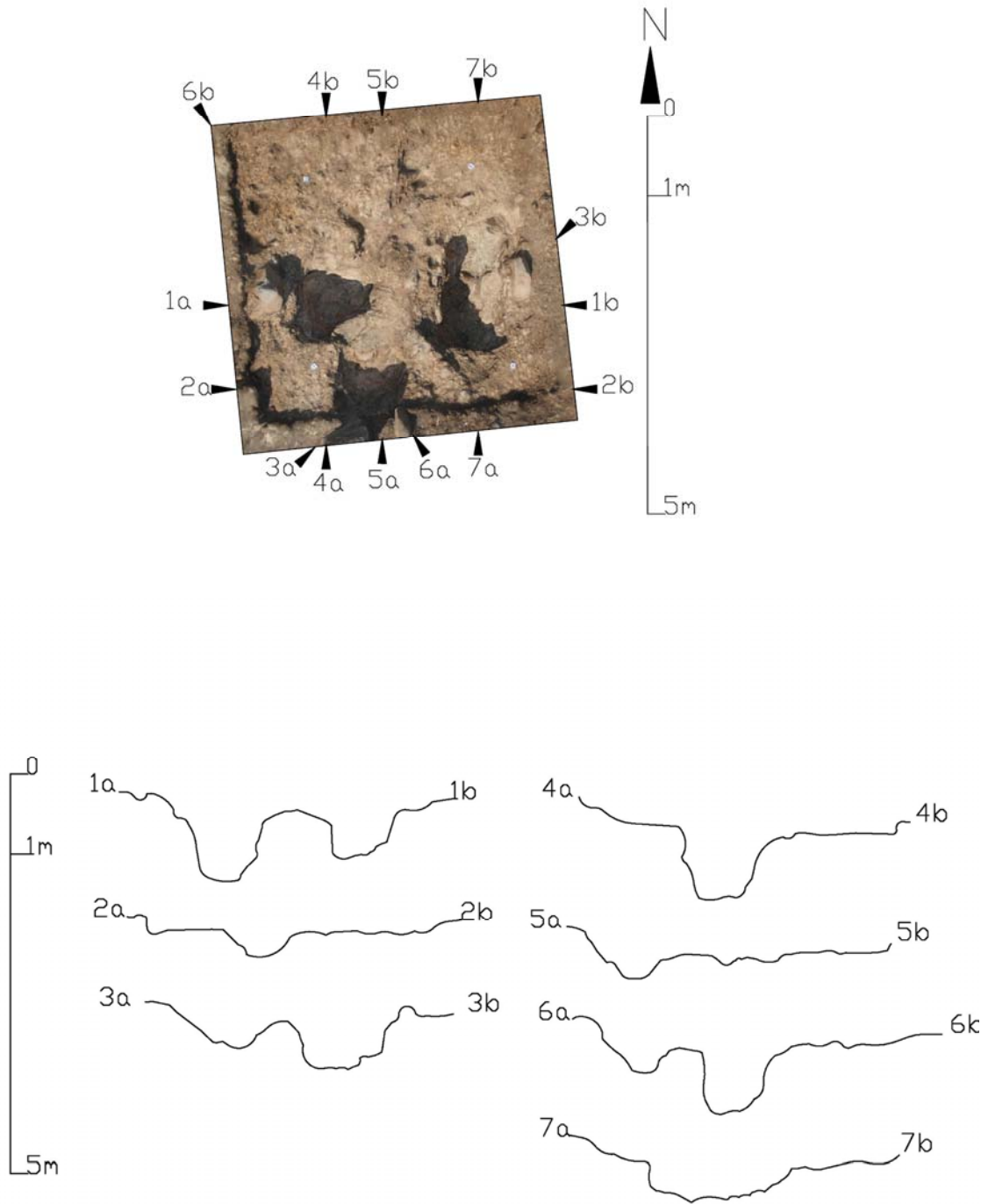


Fig. 7 - Plan and sections of Tomb 2 and related pits at Seg VII



Fig. 8 - LRPFW, pot-stand (Seg VI SU2)



Fig. 9 - BrPFW, small decorated jar (Seg V SU6)



Fig. 10 - OPW, fragments of a “Torpedo shape” cylindrical jar (Seg VI SU27)



Fig. 11 - BTRPFW, globular jar (Seg V SU48)



Fig. 12 - BTRPW, bowl (Seg V SU64)



Fig. 13 - Clay figurine (Seg V B2 SU22)





Fig. 14 - Ceramic miniature of a beaker and possible lid (Seg VII SU1)



Fig. 15 - Brick (Seg II A3 SU25)



Fig. 16 - Brick (seg V B2 SU33)



Fig. 17 - Obsidian knife (Seg V A4 SU1)



Fig. 18 - Basalt hand-stone, perhaps used to smooth an unfired clay surface (Seg VI D5 SU1)



Fig. 19 - Likanos flake (Seg VI A1 SU19)



Fig. 20 - Tabular schist slab (SU1)



Fig. 21 - Obsidian crescent with long tang and broken tip (Seg V C2 SU27)



Fig. 22 - Selection of chert cores (Seg VI B5 SU6)



Fig. 23 - Chert pre-core (Seg V B2 SU33)



Fig. 24 - Metal pointed awl with a bone haft (Seg VI C5 SU6)



Fig. 25 - Abraded and polished upper valve of a pearly oyster (Seg VI B1 SU53)



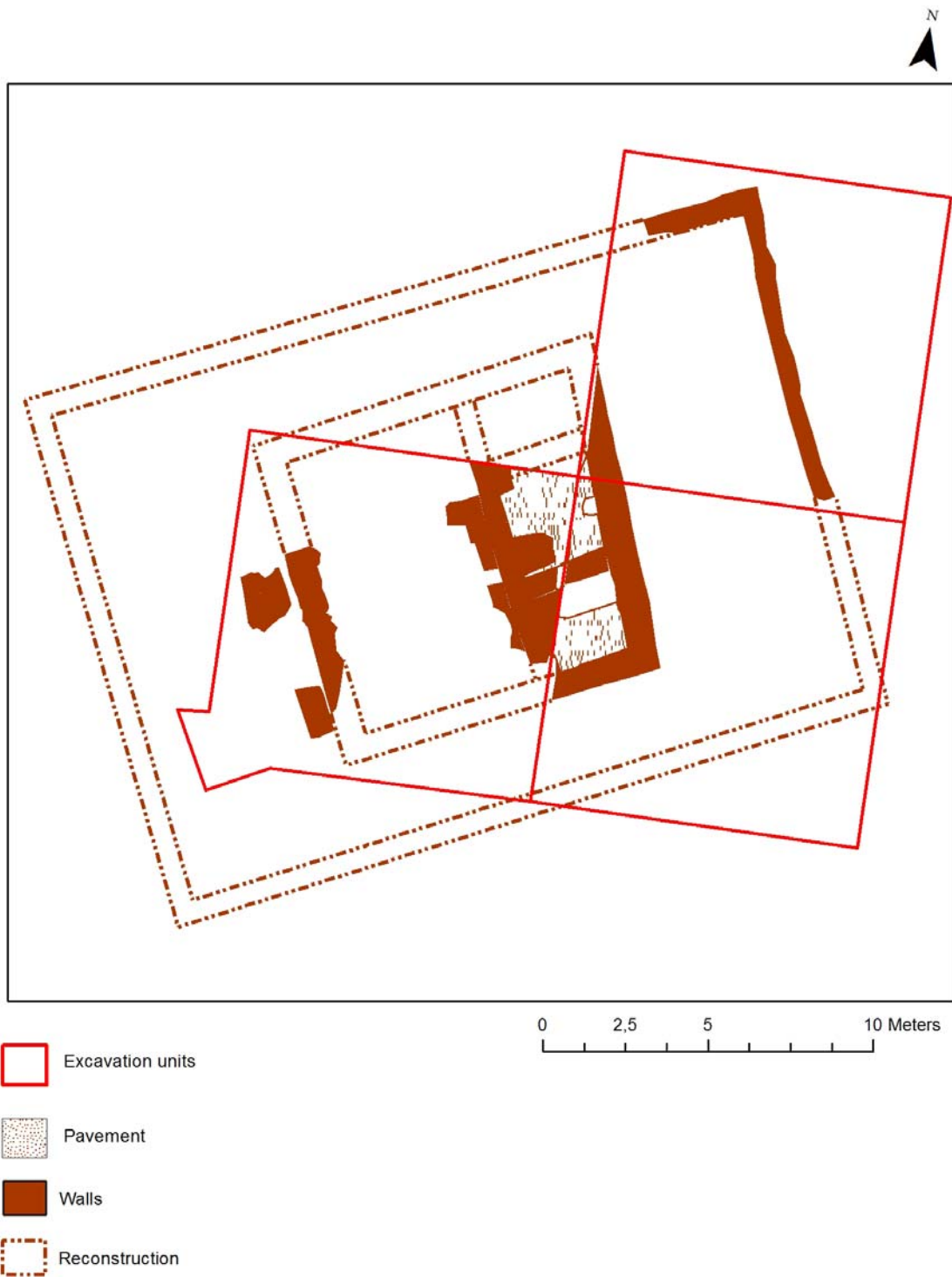


Fig. 26 - Reconstruction of the most ancient building at SG 1