

2025 Report. Joint Archaeological Mission at the Bronze Age Settlement of Togolok 1 North (Southern Turkmenistan)

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In 2025, a four-week excavation campaign was undertaken at the Bronze Age site of Togolok 1 North, located on the alluvial fan of the Murghab River in southern Turkmenistan. Fieldwork was conducted in collaboration with the University of Bern and involved an international team of specialists and students from multiple institutions, including Free University of Berlin, the Max Planck Institute of Geoanthropology (Jena), the German Archaeological Institute (Berlin), Johannes Gutenberg University Mainz, the University of Naples “L’Orientale”, and Northwest University (China) (**Fig. 1**).



Fig. 1. Members of the TAP team during fieldwork.

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Archaeological Excavations at Togolok 1 North

During the 2023–2024 field seasons, excavation activities focused on three main trenches (Trenches 1, 2, and 3 / Sectors A, B, and C) (**Fig. 2**). In 2025, fieldwork concentrated on Sectors B and C,

accompanied by the study of ceramic materials and the implementation of archaeobotanical analyses.

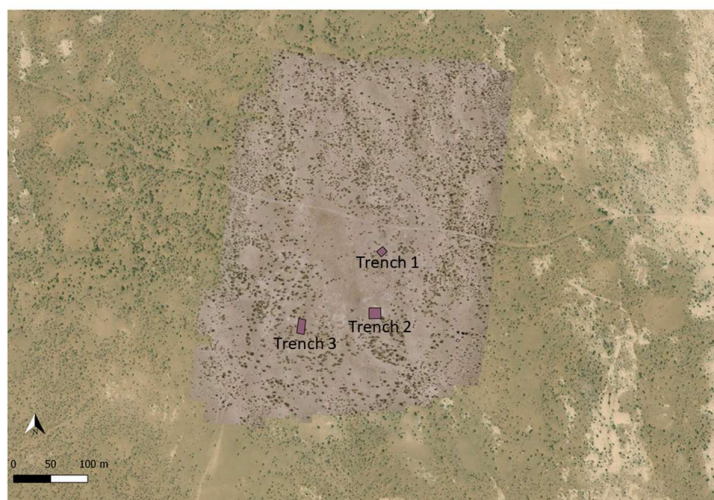


Fig. 2. Location of Sectors A, B, and C (Trenches 1, 2, and 3) on the main mound.

Sector B / Trench 2

The 2025 field season involved the northward extension (2 x 4 m) of the trench previously excavated by V. I. Sarianidi in the 1980s (10 x 10 m, with a depth of 3 m), with the aim of obtaining a continuous and reliable stratigraphic sequence based on ceramic typology and new sampling for radiocarbon dating (**Fig. 3**).



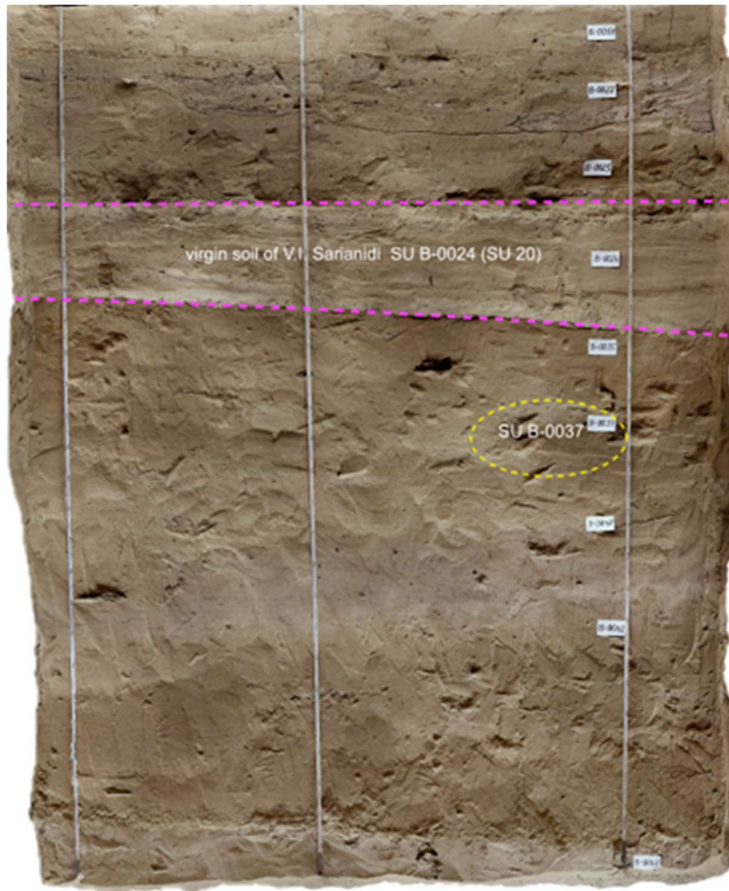


Fig. 3. View of Sector B / Trench 2 and the stratigraphical sequence of the northern section, at the end of the 2025 field season.

After the removal of the surface layer, levels characterized by ash deposits and fireplaces were exposed (**Fig. 4**). Within this context, the complete lower mandible of a child was recovered at a depth of approximately 0.50 m, confirming the Russian archaeologist's interpretation of the area as an infant burial zone. At a depth of approximately 2.40 m below the surface, Sarianidi excavated three child burials. Beneath these layers, artificial platforms and an east–west–oriented mudbrick structure—previously documented during earlier excavation campaigns—were identified. These features were associated with another compact platform containing a posthole, likely related to a wooden pole supporting a vegetal roof structure (**Fig. 5**).

Further excavation revealed other alignments of mudbricks (23 x 43 x 18 cm) with different orientations (east–west and north–south), sequences of artificial platforms, and a compact grey-sandy layer containing ceramics and animal bones. Within this level, a semicircular hearth constructed with small red bricks was identified.



Fig. 4. *Stratigraphic levels with ash deposits and hearths revealed in Trench 2 / Sector B.*



Fig. 5. *Mudbrick platform with associated posthole in Trench 2 / Sector B.*

In a lower layer, rich in ceramic and bone fragments, where a large funerary jar had been recovered during the 2024 excavation, additional ceramic fragments, an almost complete vessel, and a spindle whorl were recovered (**Figs. 6–7**).



Fig. 6. Flotation sample from the northern section of Trench 2 / Sector B.



Fig. 7. The figure shows the group of ceramics recovered during the excavation of the northern section of Trench 2 / Sector B, along with a chlorite spindle whorl.

To verify the depth of the steril soil, a new trench (North Trench 2) was opened (**Fig. 8**). The deepest layers, yellowish sandy loams, contained few archaeological materials, indicating proximity to sterile soil. At approximately 4 m depth, stratigraphic units devoid of anthropogenic materials were encountered, confirming the presence of sterile soil at a greater depth than previously reported by Sarianidi (ca 3 m).



Fig. 8. The image shows the exact location of North Trench 2.

Sector C / Trench 3

In 2023, the Sector C / Trench 3 was divided into a northern area (T3A) and a southern area (T3B) (**Fig. 9**). In the southern area (T3B), a compact yellowish clay platform over 20 cm thick was identified, containing fine ceramics, large bone fragments, and a fireplace. Within a structure interpreted as a rounded pit-house (2 x 1.5 m), large quantities of coarse ceramics, bones showing butchery marks, mudbrick fragments, and plaster remains with organic inclusions were recovered (**Fig. 10**). The upper layers show clear evidence of exposure to fire, while the lower layers are unaffected. The finds mainly consist of unfinished *cretulae* or *bullae* (**Fig. 13**). The floor of the structure, containing numerous postholes, suggests the presence of a vegetal roof structure (**Fig. 11**). Sediment samples yielded a high quantity of charred seeds. Beneath this, another grayish clay platform was identified, containing higher-quality ceramics and few traces of burning.

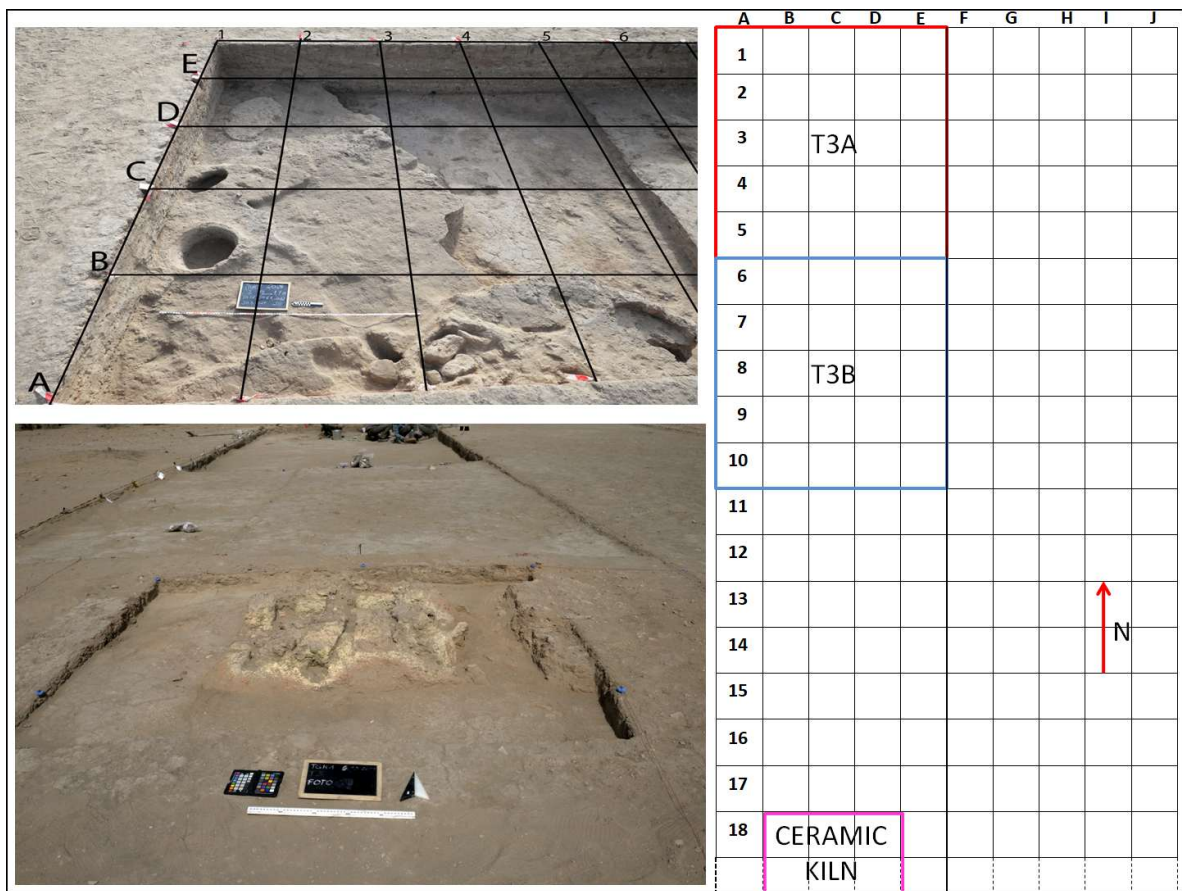


Fig. 9. Overview of the 2023 excavation of Trench 3 / Sector C (left) and the division of the trench into two areas: northern (T3A) and southern (T3B) (right).





Fig. 10. Overview of the pit-house excavated in the southern area (T3B) of Trench 3 / Sector C.



Fig. 11. Floor of the pit-house with postholes.

In the northern area (T3A), beneath a surface layer of approximately 10 cm, building structures and pits were exposed (**Fig. 12**). A hearth bounded by mudbricks was identified, and at a lower level, a single-course wall structure was documented. Another pit contained burnt clay and ceramics. Among the finds were fragments of terracotta figurines (one zoomorphic and two anthropomorphic), a small piece of lapis lazuli, a bulla with a perforation and a bulla with geometric decoration, similar to GKC culture material found in other urban centers such as Gonur and Adjikui (**Figs. 13–14**). Additionally, a three-course brick wall with traces of soot was identified, extending north beneath an artificial platform. The structures, uncovered during the final days of excavation, were documented using orthophotography and 3D modeling.



Fig. 12. Wall structures in the northern area (T3A) of Trench 3 / Sector C.



Fig. 13. Bullae made of unfired clay.



Fig. 14. Zoomorphic terracotta figurine.

Laboratory Activities

Pottery Analyses



Fig. 15. Ceramic drawing and washing activities at the base camp in the “Ancient Merv” Archaeological Park.

During the 2025 campaign, ceramic materials from the 2024 excavation were documented and studied (**Fig. 15**). Activities included counting fragments by stratigraphic unit and type, identifying and cataloguing diagnostic sherds, drawing, photographic documentation, and technological and morphological description. In parallel, the preparation of materials from the 2025 excavation was initiated; these will be studied during the 2026 spring campaign. Preliminary observations indicate the presence of fine wheel-made ceramics and medium-to-coarse hand-made ceramics, with significant variations between sectors in both quantity and function.

Archaeobotanical Analyses

In 2025, 124 sediment samples (approximately 1,335 liters) were collected from Sectors B and C using both systematic and targeted sampling. The samples were processed through mechanical flotation at the Merv base camp (**Fig. 16**). The recovered material includes bones, ceramics, charcoal, charred seeds, eggshells and mollusk shells, lithic artifacts, metal objects, and other items of interest. Organic remains were documented and prepared for specialized analyses, while other materials were assigned to the respective specialists.





Fig. 16. Flotation and sorting activity of archaeobotanical material.

Conclusions

For the first time in protohistoric Margiana, the redefinition of the Greater Khorasan Civilization (GKC) will be based on a robust chronological sequence derived from stratigraphically controlled excavations in **Sector B**, combined with material from the two previous campaigns.

Excavations in **Sector C**, together with preliminary analyses of the recovered material, once again confirmed that the southwestern area of Togolok 1 North served residential and craft-related functions. The presence of a ceramic production kiln, extensive courtyard spaces with fireplaces and postholes, and a medium-sized pit-house containing numerous unfinished artifacts – such as cretulae and bullae – demonstrates the significance of Togolok 1 North within a broad trade network connecting the site to both intra- and extra-regional areas.