

Kurgans of the Eastern Kugitang Piedmonts: Preliminary Report for Season 2017

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ABSTRACT

The valleys of the Kugitang piedmont (Sherabad District, Surkhandarya Province, Uzbekistan) have been investigated by the Czech-Uzbekistani expedition since 2011. Over the last three years, hundreds of stone features have been detected and preliminarily interpreted as kurgans (i.e. burial mounds); the purpose of these features, however, still remains unclear. Consequently, the kurgans started to be systematically investigated in 2017. This report presents preliminary results of the field survey, a morphological description and a basic spatial analysis of the kurgans within clusters, and the clusters themselves within the surrounding landscape.

KEYWORDS

Kurgans; Yaz culture; Pashkurt Valley; Central Asia; Bactria; landscape archaeology.

INTRODUCTION

For the last four years, the research of the Czech-Uzbekistani archaeological team led by L. Stančo and Sh. Shaydullaev has focused on the steppe belt of the eastern Kugitang piedmonts belonging to the Sherabad District of the Surkhandarya Province. Its long-term aim was to study the settlement dynamics in this historically rich cultural landscape. During the investigations, a considerable number of various simple stone structures was detected, which were tentatively interpreted as kurgans, i.e. burial mounds commonly associated with nomadic tribes inhabiting the Eurasian steppe zone. As a working hypothesis, it had been postulated that these 'kurgans' belonged to the same period as the newly detected group of Yaz I culture and Sapalli culture sites (STANČO 2016, 82), dated in absolute chronology to the second millennium BC. These diverse structures mostly occur in clusters of ca. five to fifteen features; some of them are, however, isolated. In the summer season 2017, part of the team focused on these features in order to obtain more detailed data for further analyses, using both destructive and non-destructive archaeological methods. This report presents the preliminary results of the non-destructive part of the project, i.e. the archaeological surface survey which took place in the surroundings of the villages of Kayrit, Zarabag and Karabag (Sherabad District, Surkhandarya Province, Uzbekistan).

In the recent past, the research area has been surveyed by several different archaeological expeditions, mostly in order to detect specific individual sites. Part of them, such as Dabil Kurgan, Tilla Bulaq, Gish Tepa and others were also excavated to various degrees. Unlike sedentary-population necropoleis and simple individual graves, no burial mounds were either examined in the framework of these projects or even noticed (RTVELADZE 1974; ARSHAVSKAYA *et al.* 1982; BOBOKHOJAEV *et al.* 1990; BOLELOV – ILYASOV 2006; MOKROBORODOV 2007; KANIUTH *et al.* 2010; SOLOVEV 2013).

Since 2014 the whole archaeological landscape of the Kugitang eastern piedmonts in its complexity – including minor sites and archaeological features on which any emphasis had

not earlier been put – has become a subject of study of the Czech-Uzbekistani team, leading to the detection of an ever increasing number of mounds (STANČO *et al.* 2014; AUGUSTINOVÁ *et al.* 2016; STANČO 2016). Some of these have been excavated: the very first of them in season 2014 (STANČO *et al.* 2014, 32–34), two more of slightly different types¹ in seasons 2015 (briefly mentioned in STANČO 2016, 76) and 2016. A comprehensive report on the latter two excavations is under preparation. Up to the present no convincing sign of a burial, or even a relation to these stone structures with a sepulchral use, has been found. Therefore, it seems confusing or at least inaccurate to use the term ‘kurgan’ for all of the studied features. A more correct term could be ‘a kurgan-like feature’. However, for the sake of simplification, features which look like kurgans are generally termed ‘kurgan’ throughout this report regardless of their actual purpose.²

OBJECTIVES AND METHODOLOGY

The long-term objective of this project is to evaluate the data on kurgan clusters detected recently by the Czech-Uzbekistani team. The collected data used in conjunction with the results of other parallel research will help to reveal the cultural development of the studied micro-region and the relations between the kurgans and various other features in the landscape, both natural (i.e. cardinal directions, terrain, river beds, etc.) and anthropogenic (i.e. settlements, irrigation, petroglyphs). An effort to date the individual features and whole clusters form an integral part of our research, as do the observations of possible spatial and structural patterns of the studied kurgans. The research could explain the way the land was used; especially in the context of the local Yaz I culture, given that an extensive Yaz I settlement has been detected in the area (STANČO 2016, 76–82; STANČO *et al.* 2016; KYSELA *et al.* 2017).

The aim of the investigations in the 2017 season was to map and describe in detail both the known and newly detected kurgan clusters in the northern part of the Pashkurt Valley (**Fig. 1**). Data collecting was conducted by a field survey of pre-selected areas, recording all the archaeologically noticeable phenomena. Structures supposed to be kurgans were spatially recorded by a hand held GPS-device. Kurgans were also photographed individually and within the context of the given cluster, of other anthropogenic features, and of the surrounding landscape. The construction was measured and thoroughly described (the general shape, stone size, the way they are structured, the feature’s orientation, its state of preservation etc.). The position of the clusters in the landscape, the layout of the clusters, and the relations of individual features within the cluster itself were also described. The visual connectivity of the kurgans with other terrain or anthropogenic features was of great interest. All the collected data have been processed in GIS for better visualisation and subsequent analyses e.g. employing 3D terrain models.

RESEARCH AREA

The research area is situated in the north-western part of the Sherabad District, Surkhandarya Province, south Uzbekistan, to the north of Pashkurt, the central village of the valley. We focused on the area around the present-day villages of Kayrit, Karabag and Zarabag (**Fig. 1**).

1 The difference between the excavated kurgans is based mainly on their size and construction. Kurgans excavated in seasons 2015 and 2016 were smaller and less regular-shaped than that excavated in 2014 (see below).

2 In 2017 we examined almost 400 anthropogenic features. 122 of them were classified as ‘kurgans’.

The area is bordered on and protected from the north-west by the main ridge of the Kugitang Mountains (being itself the westernmost spur of the Hissar Mountains of the Pamir-Altay system) with the highest point at Airi Baba (3139 m.a.s.l.), while the altitude of the research area reaches 800–1200 m.a.s.l. The local steppe landscape is characterized by a semi-arid continental climate with great differences in temperature both between summer and winter and day and night. Seasonally, the surface outside the small oases is covered with grass and shrubs in the spring time, both almost ceasing to exist by the end of summer. Despite the scarcity of forage during a substantial part of the year, local herdsmen with their flocks frequent these poor pastures throughout all seasons. The oases themselves are well watered by small local springs, while in the past they were supplied by systems of karezes now almost completely disused. The humdrum steppe surface is frequently disrupted by dry river beds of seasonal streams. Flat plateaus between these are the very places that attract our attention in this project.

SPATIAL DISTRIBUTION OF KURGANS

In the area defined above, kurgans or kurgan-like features of different types were detected at three principal locations (**Fig. 1**): 1. to the north-west of the Kayrit village (its vicinity is labelled as Kayrit area); 2. in the plain between the villages of Kampyrtepa and Zarabag (named Kampyrtepa-East area); 3. To the north of the Karabag village (Karabag-North area). The number of features situated in these locations reaches 122 in total. It is possible to divide

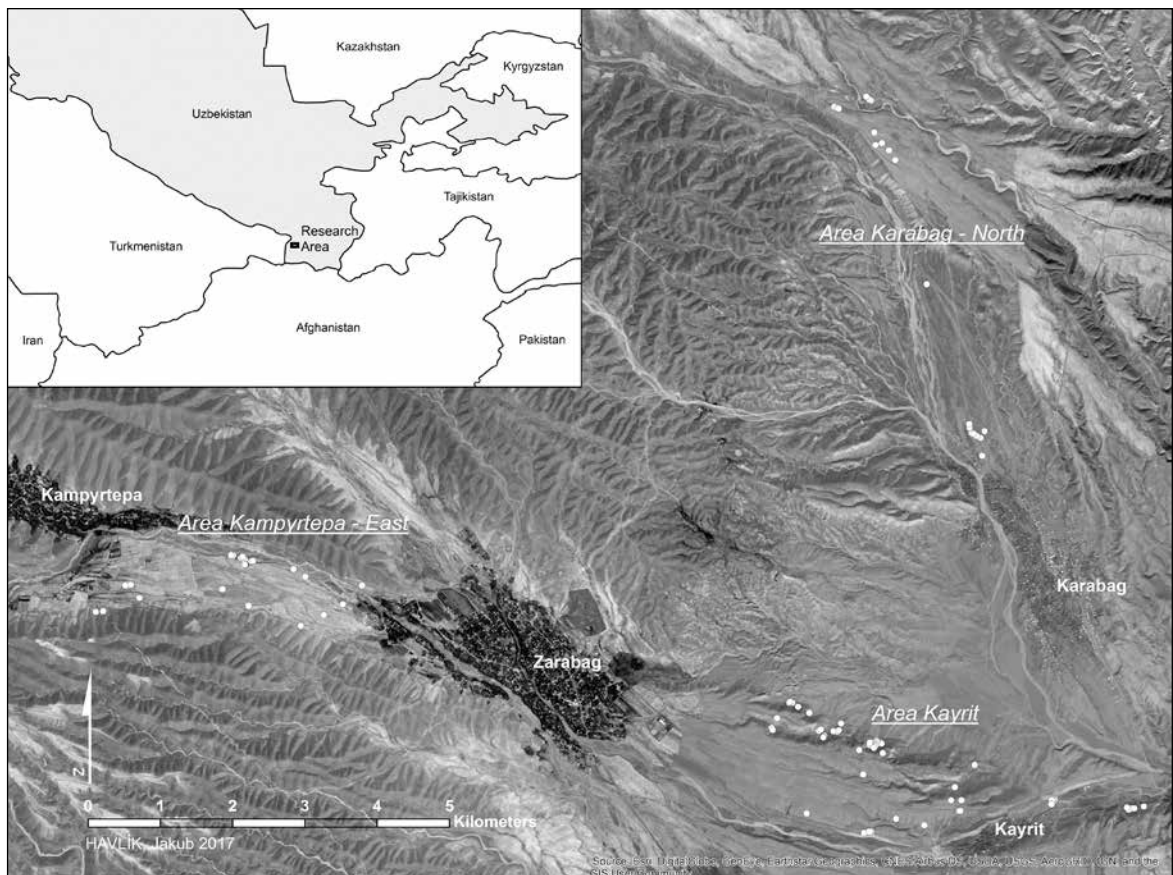


Fig. 1: Distribution of kurgans in the research area.

these three areas into four to ten clusters and sub clusters. Besides, on the slopes above the plain between Kampyrtepa and Zarabag, there is located a large cluster of rather small stone piles (257 in total), which show signs of intentional construction. Due to their small dimensions, these features are not counted in the total number of kurgans; however, they are described in this report as Zarabag-West subgroup.

AREA 1: KAYRIT

The kurgans in the area of Kayrit were initially discovered by the Czech-Uzbekistani team in 2014 and have already been briefly presented and described in the preceding reports on the archaeological surveys of the Kugitang piedmonts (STANCHO *et al.* 2013; STANČO *et al.* 2014; STANČO 2016, 76–77). Despite the reinterpretation³ of some of these features, after two years the number of discovered objects doubled from 34 to 68. Over an area of 315 ha, part of the kurgans basically form several clearly separated groups, some of them, however, remain isolated. Following their location and spatial distribution over the examined landscape, we divided all the features into six groups (Kayrit 1–6). All the features are located near the oasis of Kayrit, on both sides of the road connecting the villages of Maydan and Zarabag. To the north, towards Zarabag, lie clusters Kayrit 2–4 on the slopes over the valley (**Fig. 2**).

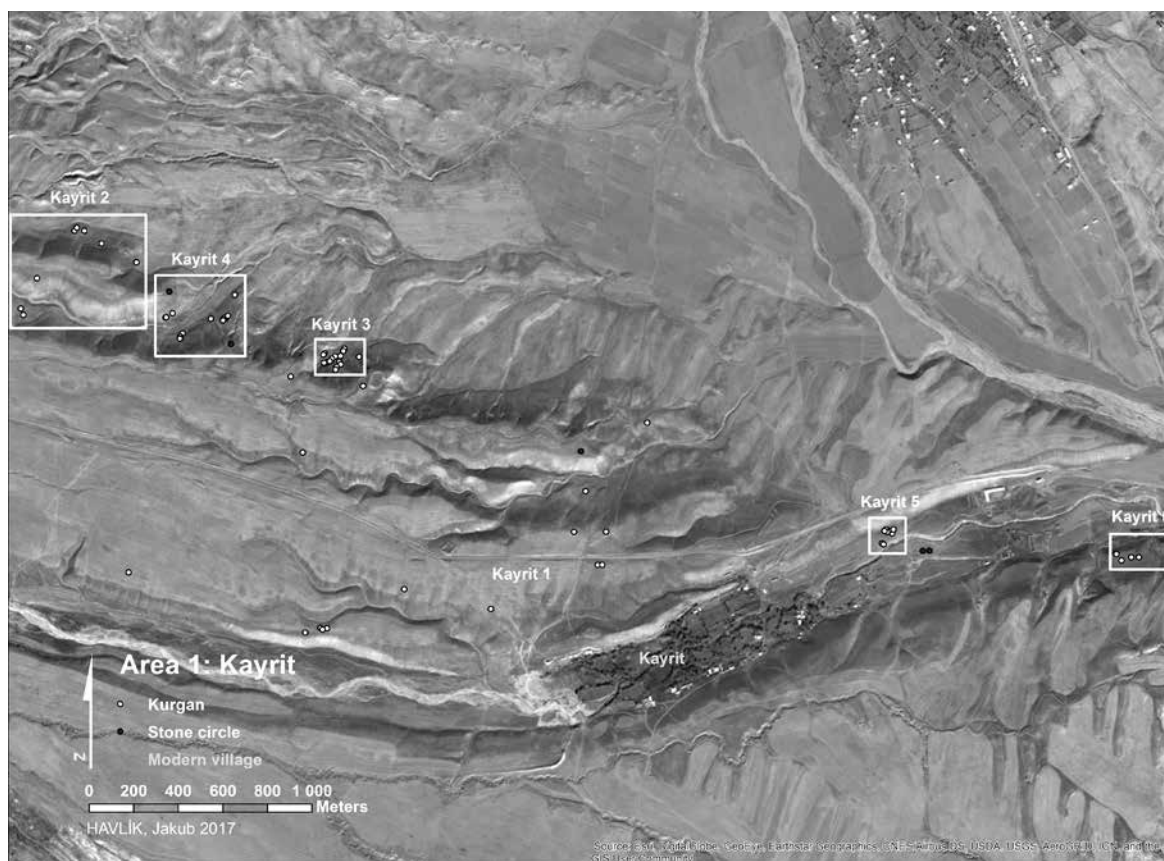


Fig. 2: Clusters of kurgans in the Kayrit area.

3 Cf. STANČO *et al.* 2014 and STANČO 2016 with the actual data tables below.

Cluster Kayrit 1 (K_01; 66.793389N 37.750457E)⁴ is situated on a low flat plateau over the dry riverbed of the Shalkan (**Pl. 8/1**). The plateau slowly rises westwards to the Zarabag village in the direction of the Kugitang Mountains. The plain of the plateau is divided by several minor gullies made by water flowing seasonally down the mountains. The wrinkling of the terrain is the only obstacle in term of visibility. The plateau is delimited by the seasonal Shalkan River from the south, while in the north the valley spreads between the villages of Zarabag and Karabag. Occupying an area of ca. 195 ha, the studied features are distributed along the plain, mostly sparsely forming small groups of unclear pattern in some locations. Sixteen detected features can be divided into two groups: ten kurgans of larger dimensions (d. 8–12 m, height ca. 0.5 m; K_01_001–004, K_01_006–009, K_01_015, K_01_017) and six of smaller dimensions (d. 2–3 m, height up to 0.35 m; K01_016, K01_018–021 and somewhat larger K01_014).

From the 16 above mentioned kurgans, five are well preserved⁵ (the features K_01_001, K_01_006, K_01_007, K_01_015 and K_01_017) featuring both spatial and structural similarities. They share the same size in most of the cases (including considerable destruction), regularly circular-shaped, made of carefully laid medium-sized stones measuring 15–30 cm in diameter (**Figs. 3–4**). They are mostly situated on the edges of plateaus above a valley. All of the mentioned features are in visual contact with the dry river bed. Despite the noticeable distance, these larger kurgans are in visual contact with at least one neighbouring object of the group, which our team has proved in practice. Therefore, it is possible to suppose with caution that these kurgans belong together, and were built with the same intent.⁶ One of these (K_01_001) was excavated in 2014 by L. Stančo (**STANČO et al. 2014**). No burial was found, and the dating of the mound is uncertain: the pottery found in the pit belongs most likely to the horizon of the



Fig. 3: Kurgan K_01_007, view from the north (photo by H. Havlíková).

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- 4 The coordinates mentioned in the text present the approximate centre of the cluster in question.
 5 Some of the studied features are badly damaged, probably due to recent stone gathering for building purposes. For more details see **Tab. 1**.
 6 The features K01_002, 003, 004 probably belong to the same group according to their size and placement, but they lack the evidence of stones on the surface as the stones were secondarily used.

Sapalli culture. Two fragments, however, seem to be of medieval date (perhaps 12th century), which points to a secondary digging by grave robbers. The feature was then preliminarily interpreted as a 'cenotaph-kurgan' (STANČO *et al.* 2014, 33). The excavations in season 2017 (the report is under preparation) gave us no better chronology for this group of kurgans.



Fig. 4: Kurgan K_01_015, view from the south (photo by H. Havlíková).

The two kurgans K_01_008 and K_01_014 (**Fig. 5**) are dimensionally and positionally close to the described group by their placement on the edge of the plateau, although they differ from the other features of the group structurally and morphologically. The surface of the circular-shaped K_01_008 was made of tiny stones. The rather oval-shaped K_01_014 was created as a low mound of large stones (d. 40–50 cm) resembling in this way the smaller kurgan K_01_016. These three features are linked to each other by evidence of Yaz I pottery found beneath the stone structures. All of them are in visual contact with the Yaz I site of Burgut Kurgan.

K_01_018–020 is a group of small low kurgans adjoining K_01_017 with an uncertain mutual spatial relation. In the area of this cluster, on the ridge just across a ravine to the north of K_01_001, there was also detected – and in season 2014 excavated – an incomplete stone circle (K_01_005; d. 3.5 m), however no cultural layer or archaeological material was found (STANČO *et al.* 2014, 35).

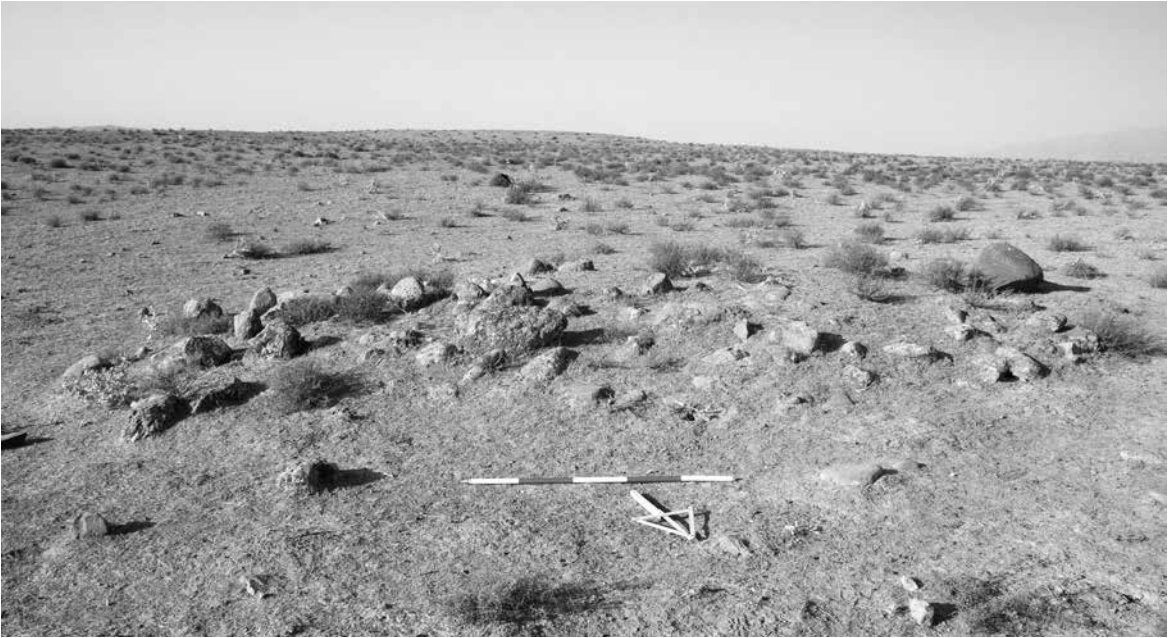


Fig. 5: Kurgan K_01_014, view from the north (photo by H. Havlíková).

The group of kurgans Kayrit 2 (K_02; 66.776511N 37.760651E) does not form a cluster: these eight small-sized features are sparsely distributed on the slopes of two hills separated by a seasonal water stream. The features K_02_002–004 form a group in terms of both construction and spatial relation. These kurgans are small but compact and regularly circular-shaped (**Pl. 8/2; Fig. 6**).



Fig. 6: Kurgan K_02_008, view from the north (photo by H. Havlíková).

The clusters Kayrit 3 (K_03; 66.787435N 37.757846E) and Kayrit 4 (K_04; 66.781767N 37.759138E) are situated on the slopes of the plateau mentioned above (**Pl. 8/2**). The position of the features follows the contours of the terrain, and thus kurgans create clearly visible separated lines. The clusters consist of a relatively large number of small-sized kurgans made of large stones. The emplacement of a larger stone in the central or dominant position of a mostly irregular and low stone pile is quite frequent. Despite their small size it seems that these features were made intentionally (**Fig. 7**). The cluster Kayrit 3, covering an area of ca. 0.36 ha, is located approximately 150 m to the north-west of Burgut Kurgan, on the slope facing the valley under the settlement. Its 16 kurgans form two imaginary lines descending to the bottom of the valley, while some of them stand alone. The average diameter of the features is about 1.5 m. The cluster Kayrit 4 (area of 3.8 ha) is situated a further 600 m to the north-west on the slopes of a plateau and the slope of the opposite hill across the valley (the westernmost features of this group are quite near to the cluster Kayrit 2). Between them passes a gully. This group of 15 kurgans is divisible into three belt-like sub-clusters and one feature standing alone (**Fig. 8**). The average diameter of the features is about 1.8 m. In the vicinity of this group are situated two features, which were already mentioned in the preceding report (STANČO 2016, 78–79). On the promontory of the plateau over Kayrit 4, at a distance of ca. 120 m, lies a circular stone structure Kayrit VII (called Burgutcha, d. ca. 12 m), where a few pottery fragments of the Yaz I period have been detected during the surface survey in 2015. At the foot of the opposite hill, close to four kurgans, is located an oval structure made of orthostats called Kayrit XXI (cf. Kayrit VII and XXI in STANČO 2016). Nevertheless, trial excavations of both these structures conducted by J. Havlík and A. Shaydullaev respectively have not revealed its original purpose or dating yet. Just 30 m from the kurgan K04_017 pottery of the Yaz I period was collected (cf. Kayrit XIV in STANČO 2016).



Fig. 7: Kurgan K_03_007, view from the north (photo by H. Havlíková).



Fig. 8: Kurgan K_04_001, view from the north (photo by H. Havlíková).

The small cluster of Kayrit 5 (K_05, 66.809572N 37.752204E) is located to the east of the Kayrit village, in close proximity to it (**Pl. 8/3**). The position in the landscape and construction of the kurgans differs clearly from the features in the other clusters. This group lies by the seasonal river on a flat left river bank under the steep slope to the north-west. Eight structures scattered over an area of 0.2 ha can be divided into two groups; a group of six features and a pair standing aside. The construction of these features is very compact, made of the prevailing earth and a few stones (**Fig. 9**). They are mostly oval-shaped with a west-east orientation. No pottery or other dating indicators have been found. On the other bank of the river were detected several indeterminable stone structures. Two low stone circles of d. 3 m (K_01_C1) and d. 15 m (K_01_C2) are recognizable.⁷

About 1 km further to the east of the group, on two flat terraces just over the Shalkan River and hamlets belonging to the Kayrit village are situated five small kurgans, which were termed Kayrit 6 (K_06; 66.819867N 37.7516E, ca. 0.3 ha in area). These kurgans are low, stone-made, irregular, and mostly oval-shaped. Their construction resembles the features of Kayrit 3 and Kayrit 4. All of them are low, compact, made of a small number of medium sized stones and soil. No sign of a sophisticated construction has been visually recognized. On the terraces, there were collected pottery sherds of the Yaz III (roughly speaking Achaemenid) period and of High Middle Age (see Kayrit XVIII, XIX and XX in STANČO 2016, 81–82).

⁷ K_01_C1: 66.8113N 37.7517E; K_01_C2: 66.8110N 37.7517E.

Code	Longitude	Latitude	Width N-S (m)	Length E-W (m)	Height (m)	Max. stones diameter (m)	Note
K_01_001	66.798224	37.752314	9.00	9.00	0.50	0.30	
K_01_002	66.796933	37.752310	9.00	9.80	0.70	*	recently disrupted
K_01_003	66.797894	37.751255	9.00	9.00	0.80	*	recently disrupted
K_01_004	66.798068	37.751260	10.00	10.00	1.20	*	recently disrupted
K_01_006	66.793585	37.749854	12.40	9.50	0.60	0.20	recently partially disrupted
K_01_007	66.790094	37.750482	9.40	9.80	1.40	0.30	
K_01_008	66.788440	37.756956	8.00	9.30	1.40	0.10	
K_01_009	66.799883	37.755789	8.10	7.80	0.30	0.30	
K_01_014	66.785518	37.757257	6.10	4.50	0.45	0.50	
K_01_015	66.778988	37.751020	11.60	10.80	0.60	0.25	
K_01_016	66.786003	37.754838	3.00	3.00	0.30	0.40	
K_01_017	66.786100	37.749100	8.50	8.50	0.30	0.30	
K_01_018	66.786800	37.749200	2.70	2.80	0.30	0.25	
K_01_019	66.786711	37.749246	2.00	2.60	0.25	0.35	
K_01_020	66.786981	37.749240	3.00	2.90	0.30	0.25	
K_01_021	66.797402	37.753605	1.20	2.30	0.40	0.30	
K_02_001	66.777900	37.761500	2.30	3.70	0.50	0.40	
K_02_002	66.777200	37.761900	1.90	2.30	0.30	0.20	
K_02_003	66.776800	37.761900	1.70	1.90	0.30	0.25	
K_02_004	66.776900	37.762000	2.20	1.80	0.50	0.20	stones up to 0.2 m in the central part
K_02_005	66.779300	37.760900	3.60	3.80	0.50	0.20	
K_02_006	66.775294	37.760389	2.80	2.35	0.40	0.40	stones create concentric circles
K_02_007	66.774641	37.759424	2.25	2.40	0.40	0.20	
K_02_008	66.774746	37.759226	3.70	4.60	0.65	0.60	
K_03_001	66.787680	37.758148	1.55	1.50	0.30	0.20	one larger stone 0.5×0.2 m
K_03_002	66.787644	37.758070	1.40	1.40	0.45	0.50	one larger stone 0.7×0.4 m
K_03_003	66.787523	37.757911	2.60	2.10	0.30	0.20	
K_03_004	66.787310	37.757902	2.00	1.80	0.40	0.15	
K_03_005	66.787176	37.757823	2.80	1.80	0.40	0.25	one larger stone 0.4 m
K_03_006	66.787092	37.757749	1.80	2.15	0.40	0.20	
K_03_007	66.787470	37.757725	1.25	1.80	0.30	0.30	two larger stones 0.5 m
K_03_008	66.787532	37.757643	1.70	1.70	0.30	0.25	one larger stone 0.4 m
K_03_010	66.787370	37.757565	2.30	1.20	0.40	0.30	
K_03_011	66.787328	37.757478	2.10	2.15	0.20	0.20	
K_03_012	66.787149	37.757769	1.50	1.80	0.15	0.25	

Code	Longitude	Latitude	Width N-S (m)	Length E-W (m)	Height (m)	Max. stones diameter (m)	Note
K_03_013	66.786986	37.757718	1.70	1.70	0.10	0.20	
K_03_014	66.786863	37.757697	1.70	1.90	0.10	0.20	
K_03_015	66.788272	37.757885	1.80	1.80	0.40	0.50	one larger stone 0.5 m
K_03_016	66.786876	37.758001	2.10	2.10	0.15	0.20	one large stone 0.6 × 0.5 m
K_03_017	66.786838	37.757953	1.90	1.80	0.30	0.20	one larger stone 0.6 × 0.4 m
K_04_001	66.782890	37.759110	1.40	1.80	0.30	0.40	
K_04_002	66.782847	37.759130	2.40	1.60	0.30	0.30	one large stone 0.7 × 0.6 m
K_04_003	66.782786	37.759075	1.50	1.80	0.30	0.60	one larger stone 0.6 × 0.4 m
K_04_004	66.782794	37.759046	1.30	1.30	0.30	0.40	
K_04_005	66.782989	37.759194	1.30	1.90	0.30	0.30	one larger stone 0.5 × 0.5 m
K_04_006	66.782301	37.759099	2.00	1.50	0.20	0.50	
K_04_007	66.781162	37.758634	1.40	1.40	0.20	0.40	
K_04_008	66.781065	37.758542	2.10	2.00	0.30	0.50	
K_04_009	66.781053	37.758487	2.00	1.60	0.40	0.40	one larger stone 0.5 m
K_04_010	66.781050	37.758472	1.90	2.00	0.30	0.40	
K_04_011	66.780472	37.759137	1.60	1.70	0.30	0.40	
K_04_012	66.780501	37.759146	2.00	2.00	0.30	0.40	
K_04_013	66.780756	37.759276	3.40	3.70	0.30	0.60	
K_04_014	66.780900	37.759400	1.50	0.80	0.50	0.20	
K_04_017	66.783269	37.759861	1.90	2.00	0.30	0.30	
K_05_001	66.809837	37.752396	2.40	2.10	0.30	0.20	mostly earthen mound
K_05_002	66.809796	37.752269	3.80	5.10	0.40	0.20	mostly earthen mound
K_05_003	66.809678	37.752343	3.50	4.30	0.30	0.20	mostly earthen mound
K_05_004	66.809565	37.752405	3.90	4.40	0.40	0.20	mostly earthen mound
K_05_005	66.809601	37.752297	1.80	2.70	0.40	0.20	mostly earthen mound
K_05_006	66.809400	37.752300	1.80	1.80	0.40	0.15	mostly earthen mound; one large stone 0.5 × 0.5 m
K_05_007	66.809389	37.751946	4.80	4.50	0.60	0.20	
K_05_008	66.809439	37.751913	3.80	4.90	0.50	0.20	
K_06_001	66.820900	37.751700	3.50	2.90	0.30	0.30	
K_06_002	66.819700	37.751500	3.00	4.60	0.40	0.30	
K_06_003	66.819400	37.751500	1.00	1.00	0.40	0.40	one large stone 0.5 × 0.3 m
K_06_004	66.819000	37.751400	3.80	3.00	0.40	0.30	
K_06_005	66.818800	37.751600	1.50	1.70	0.20	0.40	

* Stones from the surface were probably intentionally removed.

Tab. 1: Kurgans in area Kayrit.



Fig. 9: Kurgan K_05_002, view from the north (photo by J. Havlík).

AREA 2: KAMPYRTEPA-EAST

A sparsely distributed cluster (KTE; 66.708186N 37.7737E) of mostly small kurgans is located on the plain stretching along the seasonal riverbed of Machayli between the villages of Kampyrtepa (to the west) and Zarabag (to the east). The site with kurgan-like structures stretches in this case over an area of ca. 130 ha of total ca. 430 ha of the plain (**Fig. 10**). The plain itself is situated in a river valley between two ranges of low hills (no more than 1,230 m.a.s.l.), noticeably used in these days for both pasture and farming. We observed recent traces of ploughing and also narrow modern water canals.

In this area, we detected 33 kurgans, 16 of them (KTE_003–005, KTE_024–037) are clustered on the lower river terrace just along the dry river bed. The rest of the features stand alone, or in small groups over the plain. The only feature lying on the northern bank of the river bed is also the largest detected structure in the cluster (KTE_021; 7.2×6.9 m). The other ones lie to the south, in the plain. The latter kurgans are much smaller (the average diameter is 2.59 m, see **Fig. 11**), mostly low and made of boulders and soil. A more or less distinct west-east orientation of the features prevails. Disruption caused most probably by ploughing is frequent.

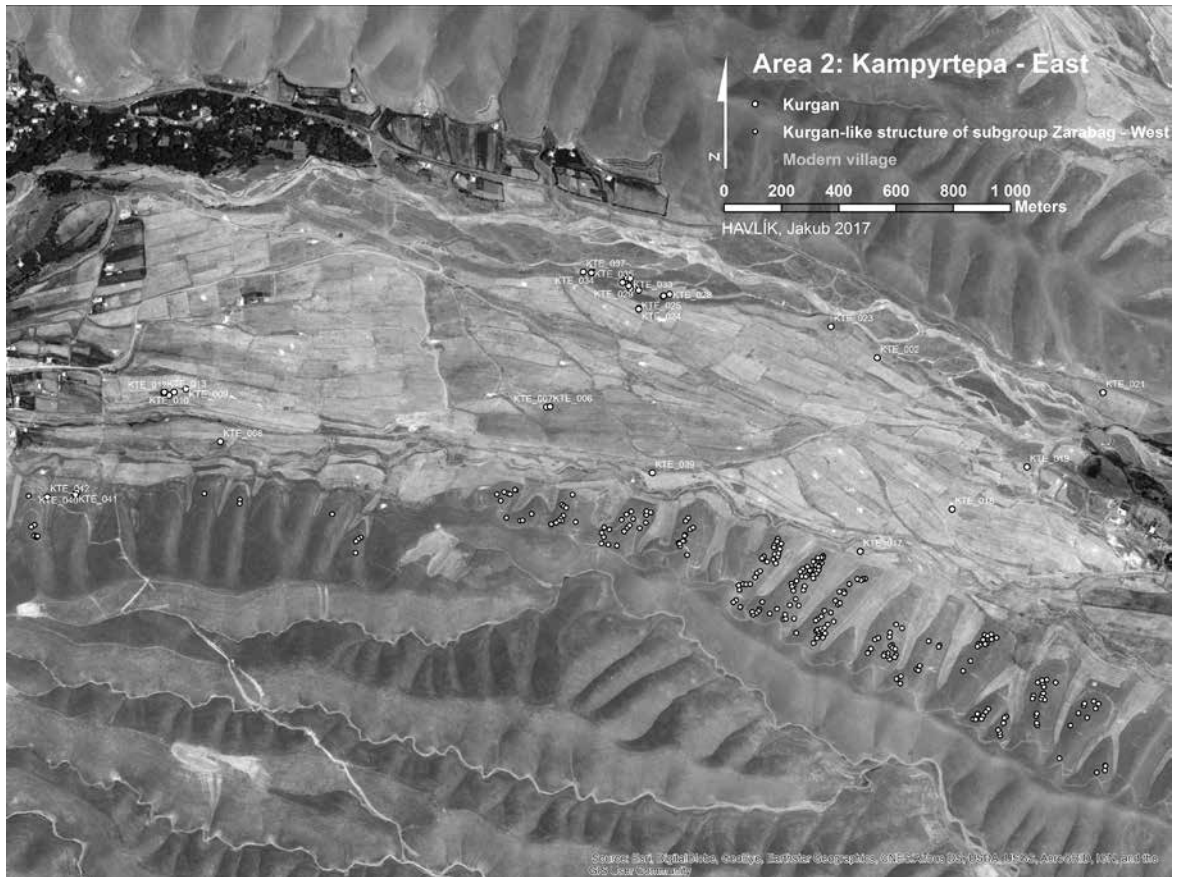


Fig. 10: Distribution of kurgans in the area Kamyrtepa-East.



Fig. 11: Kurgan KTE_022, view from the north (photo by H. Havlíková).

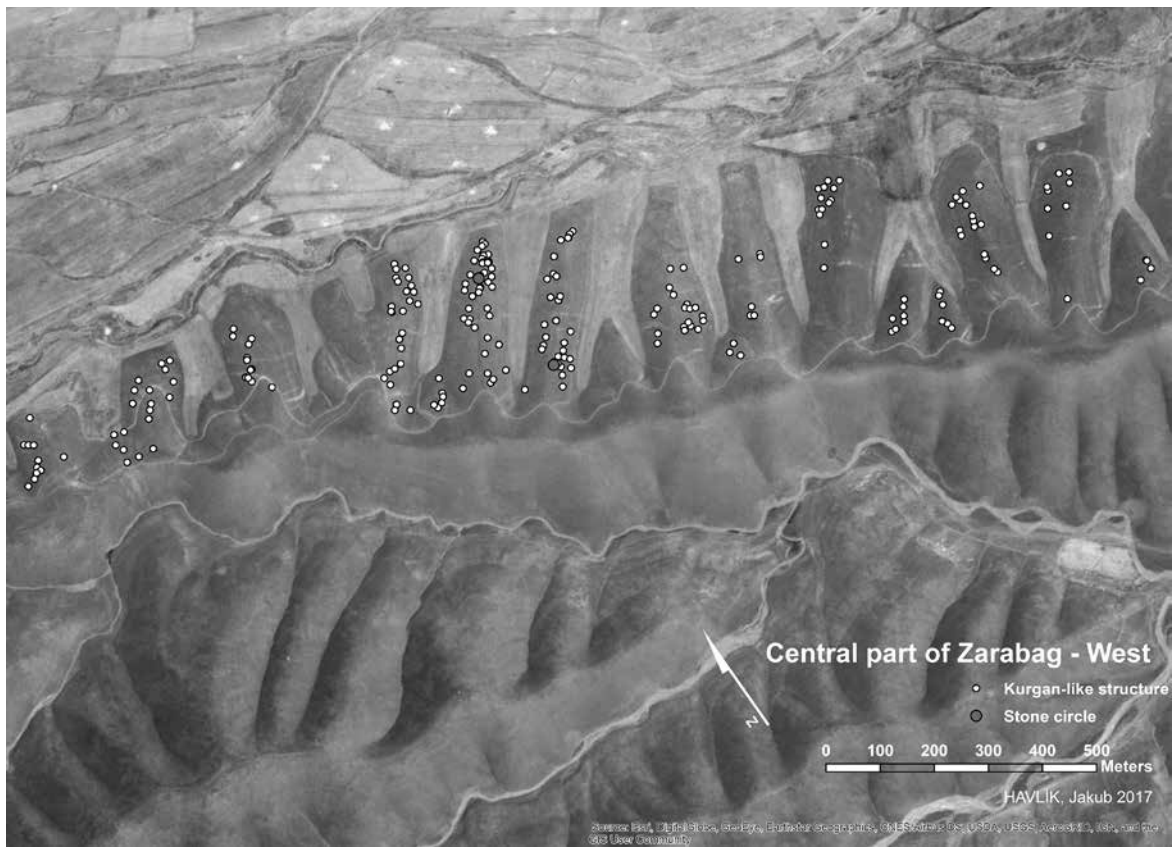


Fig. 12: Distribution of kurgans in the subgroup Zarabag-West, area Kampyrtepa-East.

On the eastern slopes of the same valley, not far from the village of Zarabag, is situated a large group of different kurgan-like structures, which are not included in the list of examined features (**Fig. 12**; ZAW, 66.715388N 37.76817E). There are 243 very small stone structures (average d. 1.85 m) of irregular (mostly oval), shape that lie densely distributed over fifteen tongue-shaped ridges that gently descend into the plain. 14 features of the same type are located on three similar slopes further to the west. Within this group, in dominant positions upon two slopes which are the most densely covered with structures, were also detected two larger features forming stone circles (ZAW_01_017; 6.1×5.8 m and ZAW_02_019; 4.3×4.1 m). The function of this huge number of stone structures remains unclear.

Code	Longitude	Latitude	Width N-S (m)	Length E-W (m)	Height (m)	Max. stones diameter (m)	Note
KTE_002	66.716615	37.774283	3.10	2.80	0.40	0.40	
KTE_003	66.709905	37.775803	1.60	1.50	0.30	0.30	
KTE_004	66.709141	37.775950	1.60	2.00	0.30	0.45	
KTE_005	66.708883	37.775998	4.30	4.60	0.20	0.40	
KTE_006	66.706364	37.773070	2.80	3.40	0.30	0.15	
KTE_007	66.706251	37.773058	2.50	3.90	0.20	0.15	

Code	Longitude	Latitude	Width N-S (m)	Length E-W (m)	Height (m)	Max. stones diameter (m)	Note
KTE_008	66.696029	37.772203	3.20	3.90	0.40	0.30	mostly earthen mound
KTE_009	66.694948	37.773506	3.30	3.80	0.20	0.30	
KTE_010	66.694578	37.773433	2.50	2.70	0.20	0.20	mostly earthen mound
KTE_011	66.694420	37.773353	2.10	2.20	0.20	0.25	
KTE_012	66.694264	37.773396	2.20	2.10	0.35	0.40	
KTE_013	66.694270	37.773431	2.10	2.20	0.65	0.40	
KTE_017	66.716086	37.769481	3.00	3.40	0.20	0.40	
KTE_018	66.718960	37.770527	1.70	1.80	0.30	0.20	disrupted by ploughing
KTE_019	66.721311	37.771575	2.70	3.50	0.40	0.20	two large stones 0.6×0.4 m
KTE_021	66.723692	37.773421	7.20	6.90	0.20	0.15	
KTE_023	66.715166	37.775055	1.80	2.40	0.30	0.30	
KTE_024	66.709144	37.775507	2.20	2.70	0.20	0.20	
KTE_025	66.709139	37.775487	1.60	2.10	0.10	0.20	
KTE_026	66.709925	37.775815	4.00	4.90	0.60	0.30	
KTE_028	66.710111	37.775855	1.70	2.00	0.15	0.25	
KTE_029	66.708825	37.776063	0.60	2.30	0.20	0.20	one larger stone 0.4×0.4 m
KTE_030	66.708720	37.776172	2.00	2.10	0.40	0.40	
KTE_031	66.708635	37.776147	1.80	2.00	0.30	0.30	one larger stone 0.7×0.3 m
KTE_032	66.708783	37.776252	1.50	2.20	0.25	0.20	
KTE_033	66.708880	37.776244	2.30	2.40	0.25	0.30	
KTE_034	66.707699	37.776401	2.40	1.50	0.30	0.20	one larger stone 0.4×0.2 m
KTE_035	66.707657	37.776387	1.90	3.00	0.90	0.20	
KTE_037	66.707404	37.776411	2.00	2.80	0.30	0.20	some larger stones 0.5×0.3 m
KTE_039	66.709569	37.771431	3.70	3.80	0.20	0.20	partially disrupted
KTE_040	66.691539	37.770954	1.50	1.50	0.30	0.25	one larger stone 0.9×0.2 m
KTE_041	66.691486	37.770890	1.60	1.70	0.30	0.30	
KTE_042	66.690603	37.770835	1.30	1.30	0.30	0.40	

Tab. 2: Kurgans in the area Kampyrtepa-East.

AREA 3: KARABAG-NORTH

The cluster (KAN_01; 66.787302N 37.818297E and KAN_02; 66.799731N 37.788343E) of 21 much larger kurgans was detected also in the valley to the north of the Karabag village. These features are situated on the plain above the river valley rising up to the mountains of Kugitang in a north-south direction (**Figs. 13-14, Pl. 8/4**). These plains – two river terraces following the dry river bed of the Kyzylalma water flow – are quite a flat area, where the examined features

are clearly visible and detectable by both satellite imagery and field survey. Even though they were discovered by mere chance in 2011 by L. Stančo and Sh. Shaydullaev during an investigation of a nearby medieval walled settlement detected from satellite imagery.⁸ These raised plains are rugged and divided only by minor dry beds of seasonal water flows. The upper terrace (the the north) is currently used for agricultural purposes.

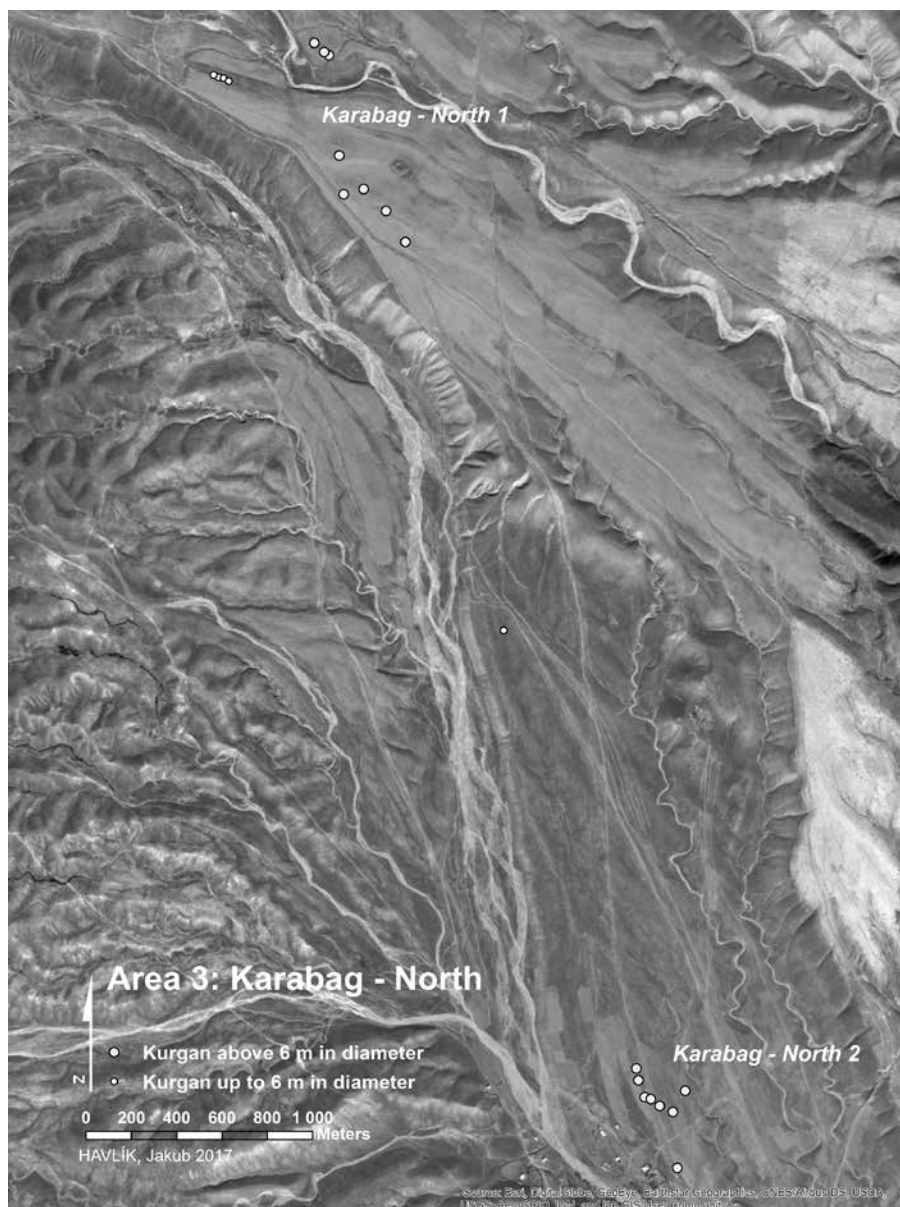


Fig. 13: Distribution of kurgans in the area Karabag-North.

8 The discovery of this kurgan site was presented by L. Stančo and S. Shaydullaev as ‘Kurgan Burials in Sherabad River Valley – New Data’ at the conference ‘Civilization of Amudarya in the System of World Culture’ (Termez State University, September 2014).



Fig. 14: Distribution of kurgans in the cluster Karabag-North 2.

The kurgans of this group are distributed over the landscape creating mostly linear patterns, or lines in a north-south orientation, corresponding with the direction of the valley. Some of the features stand aside from the belts or individually in the plain. The distances between the kurgans in the lines vary between 20 and 180 m. During the survey, four of these lines were detected; these in their turn consist of three to six kurgans. One line was detected on a lower terrace in close proximity to the village (most of the features of KAN_02 cluster), three lines on the upper terrace further to the north (KAN_01 cluster). Only one kurgan stands completely isolated (KAN_01_10). This one differs from the rest in terms of its structure: it is irregularly shaped, low and quite small in size. The prevailing part of the studied features can be structurally divided into two groups: five large, mostly earthen-made kurgans (KAN_01_001-005, four of them form the line, one stands aside) of oval shape with a northeast-southwest orien-

tation (**Fig. 15**),⁹ and fifteen kurgans made of small-sized stones¹⁰ (the rest except KAN_01_10, see **Figs. 16–17**). Their shape is more or less circular. Concerning the size of the stone-made kurgans, one belt consists of four small-sized features about 2 m in diameter. The kurgans of two other lines and those adjoining features are more than twice as large. The diameters range from ca. six to nine meters. Some of the features made of earth are even larger: their length ranges from seven to 14.6 meters.

The only datable evidence of material in the area of Karabag-North is provided by the settlement (tepa) mentioned above, which is dated to the Middle Age. The site is situated in close proximity to KAN_01.



Fig. 15: Kurgan KAN_01_002, view from the north. Stones on the top gathered recently, probably by local farmers (photo by H. Havlíková).

9 The shape and orientation are possibly caused by the prevailing direction of the intensive ploughing, which occurs here.

10 According to signs of disruption, larger stones were probably secondarily re-used by locals.



Fig. 16: Kurgan KAN_02_003, view from the south (photo by H. Havlíková).



Fig. 17: Kurgan KAN_02_006, view from the west (photo by H. Havlíková).

Code	Longitude	Latitude	Width N-S (m)	Length E-W (m)	Height (m)	Max. stones diameter (m)	Note
KAN_01_001	66.790001	37.815201	11.70	16.20	1.10	-	earthen mound; no evidence of stones
KAN_01_002	66.789200	37.816200	12.30	18.20	2.00	0.30	earthen mound; partially disrupted
KAN_01_003	66.788300	37.816898	7.50	12.80	1.00	0.30	earthen mound; partly ploughed recently
KAN_01_004	66.787598	37.816700	6.40	7.00	1.00	0.40	earthen mound
KAN_01_005	66.787399	37.818001	5.00	9.80	0.50	0.20	partly ploughed recently; almost without stones
KAN_01_006	66.782997	37.820301	1.30	1.70	0.20	0.30	
KAN_01_007	66.782799	37.820400	2.30	2.50	0.10	0.30	
KAN_01_008	66.782600	37.820400	1.60	2.20	0.30	0.35	
KAN_01_009	66.782402	37.820499	2.40	2.40	0.20	0.20	
KAN_01_010	66.793900	37.803101	2.00	2.00	0.20	0.35	
KAN_01_011	66.787003	37.821098	6.10	7.10	0.50	0.30	earthen mound
KAN_01_012	66.786797	37.821201	5.90	8.10	0.20	0.20	mostly made of earth
KAN_01_013	66.786400	37.821499	6.70	7.00	0.20	0.20	
KAN_02_003	66.800797	37.786202	9.20	6.70	0.50	0.20	partially disrupted
KAN_02_004	66.800598	37.787899	7.30	6.70	0.40	0.15	
KAN_02_006	66.799500	37.788399	7.20	8.20	0.60	0.20	partially disrupted
KAN_02_007	66.799202	37.788899	7.50	7.60	0.70	0.30	
KAN_02_009	66.799202	37.789299	8.40	9.60	0.60	0.20	
KAN_02_012	66.801102	37.788601	7.20	7.40	0.30	0.15	partially disrupted
KAN_02_013	66.800102	37.788101	ca. 7	ca. 7	0.30	0.20	measurements uncertain; badly damaged
KAN_02_014	66.799698	37.788300	8.10	8.50	0.50	0.20	

Tab. 3: Kurgans in the area Karabag-North.

CHARACTERISTIC OF KURGANS ACROSS THE RESEARCH AREA

In the complex of the examined features distributed in the research area, several types can already be distinguished. Concerning small-sized (d. 2–4 m) kurgans, three groups were differentiated in general: 1) Mostly irregularly shaped features constructed of medium-sized stones or boulders. These structures (46 features in total) are in most cases located on the slopes of hills or plateaus facing the bottom of the valley, where they are concentrated into dense clusters on a small area, such as in case of clusters K_03, K_04 and KTE (KTE_003–005; KTE_024–037). 2) Kurgans of more or less rounded-shape located on flat plains or plateaus, some of them at the bottom of valleys. These features (40 in total) stand isolated or form lines of a small number of constructions. They can be found within clusters K_01 (K_01_018–021), K_02, K_06, KTE (KTE_002; KTE_006–023; KTE_038–042), and KAN_01 (KAN_01_006–010). 3) A unique type appearing only in cluster K_05 (8 features in total) is characterised by features made mostly of earth. An east-west orientation prevails. In the case of larger kurgans (d. 8 m and larger), two general types were distinguished: stone-made circular-shaped and earthen-made oval-shaped structures.¹¹ 4) Large circular-shaped kurgans made mostly of medium-sized stones (d. 20–30 cm) were detected in the areas of Kayrit and Karabag-North (21 features in total). In both of the areas, they are located on elevated terraces or plateaus, occupying dominant positions in the landscape and often facing rivers. In the area of Kayrit (cluster K_01, kurgans K_01_001–009; K_01_015 and K_01_017) these features are distributed sparsely over the plateau, but in mutual visual contact with neighbouring ones. In the area of Karabag-North (Cluster KAN_01, kurgans K_01_011–013 and cluster KAN_02), the features occur in lines. 5) Earthen-made kurgans of oval shape¹² detected only in cluster KAN_01 (KAN_01_001–005; 5 features in total). Some of them are – in local terms – quite large (12–18 m in length).

CONCLUSIONS

Eastern Kugitang piedmonts offer a unique opportunity for the study of kurgans, or rather kurgan-like features. They occur literally in every valley of the steppe belt in the foothills, thus allowing for not only qualitative in-depth research, but also quantitative and spatially oriented research. The Czech-Uzbekistani team had been searching for a sophisticated tool for detecting these features since 2008 (STANČO 2009, 120), including analysis of satellite imagery, only to arrive at the conclusion that the best method is still represented by field walking.

On the basis of the data collected so-far in the northern Paskhurt basin, it is possible to introduce some preliminary observations and characteristics that will be amended before long by the data from the trial excavations, which are currently being prepared. The results in each of the three studied areas turn out to be quite different from each other. The most complicated seems to be the situation in Kayrit area. There were detected several groups differing from each other in the construction of the kurgans as well as in their spatial distribution. Two predominant phenomena appear: 1) Clusters of a large number of small kurgans concentrated in a small area situated mostly on slopes, and 2) a small number of larger features sparsely distributed on the plain-plateau. Small features clearly prevail in number. A much simpler

11 It was already mentioned above (see Kayrit area), that two kurgans K_01_014 and K_01_016 differ from the rest in their boulder-made construction and oval shape.

12 The shape is probably caused by ploughing.

situation was observed in the two other areas. In Kampyrtepa-East area, larger features are almost completely missing, small-sized features are located infrequently on the plain by the river except one group at the lower river terrace. In Karabag-North area, there are predominantly larger structures situated on the elevated river terraces. These clearly form lines consisting of three to five individual features.

According to the present state of research we can preliminarily distinguish some differences in terms of morphology, size and spatial distribution. Based on this, a different purpose and dating of the examined features can be assumed. Part of them have already been dated to the Yaz I period by pottery assemblages excavated beneath the mounds; however, the origin and the dating of the rest still remain open. These aspects will be studied in the upcoming season.

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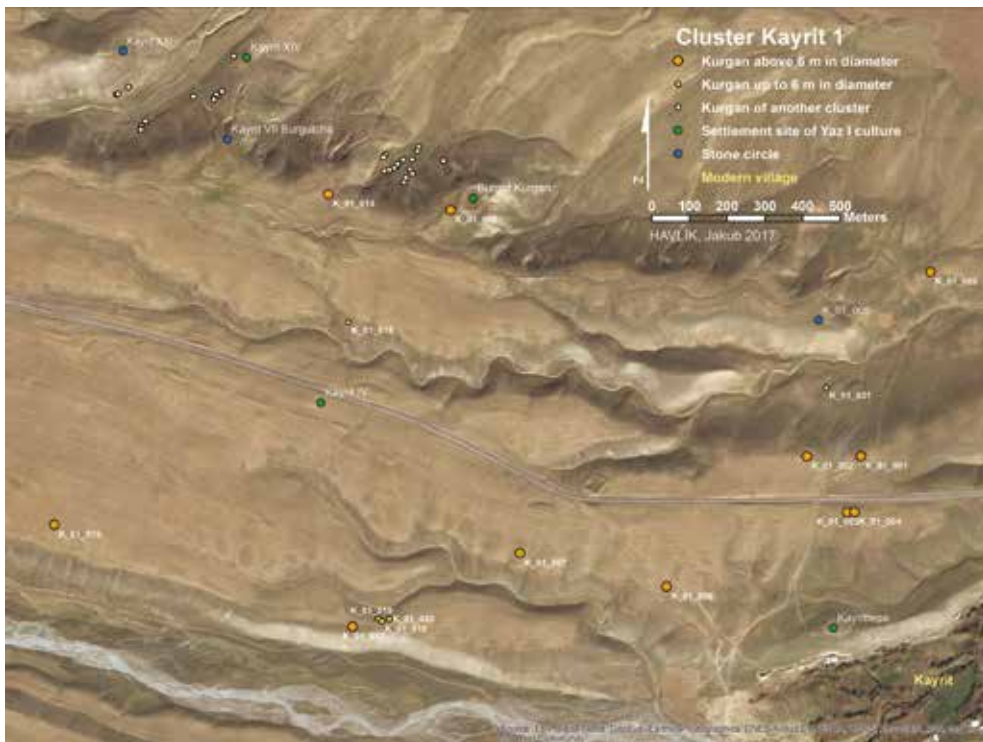
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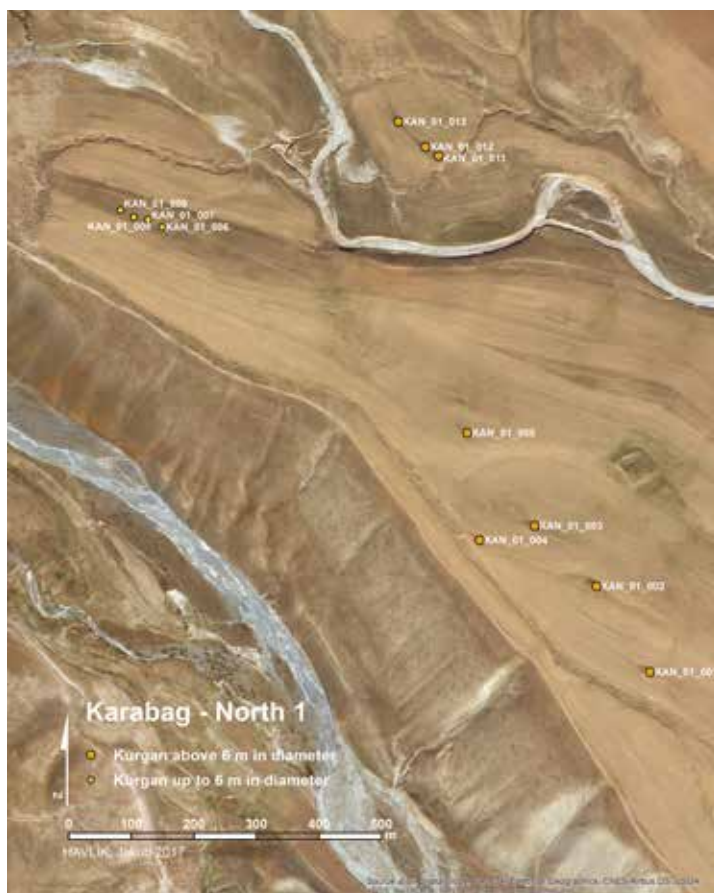
Pl. 8/1: Distribution of kurgans in cluster Kayrit 1.



Pl. 8/2: Distribution of kurgans in clusters Kayrit 2, 3 and 4.



Pl. 8/3: Distribution of kurgans in clusters Kayrit 5 and 6.



Pl. 8/4: Distribution of kurgans in cluster Karabag - North 1.