



Report on the Activities of the Second Survey Season of the Georgian-Italian Lagodekhi Archaeological Project (GILAP), October-November 2019

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Introduction

The second survey season of the GILAP of Ca' Foscari University of Venice (Italy) and the Lagodekhi Regional Department of the Ministry of Culture, Sport and Youth (Georgia) in cooperation with Kristen Hopper of Durham University (UK) took place from October 24th to November 8st, 2019. Field activities started on October 25th and finished on November 7th.

The team included prof. Elena Rova (Ca' Foscari University, the project's co-director), Stefania Fiori, BA and Vanessa Perissinotto, BA (MA students at Ca' Foscari), Davit Kvavadze, MA (Director of the Lagodekhi Museum, co-director of the expedition), Mrs. Eliso Kurtanidze (Lagodekhi Museum official), Giga Bakradze and Shorena Tivadze (BA students at Ivane Javakhishvili Tbilisi State University), Ekaterine Demuria, MA (Tbilisi Technical University) and Dr. Kristen Hopper (Durham University, UK, survey specialist, responsible for the Lagodekhi survey).

Previous survey and aims of the 2019 season

The 2018 season involved both extensive survey (visiting and recording sites that had been identified through published literature, the remote sensing of satellite imagery, and Soviet period 1:25000 topographic maps drawn in the early 1960s and based on aerial photographs from 1954-1955), and systematic transect survey of a selected area located near the site chosen for excavation (Tsiteli Gorebi 5). The survey had located 70 sites, which ranged from Medieval churches to low mounded sites likely representing prehistoric settlements. The location of these sites varied in altitude from ca 200 to ca 700 m a.s.l. A few additional sites were visited during the course of the 2019 excavation season (in July), but no formal archaeological survey was completed.

The first season of survey highlighted the deep transformations of the anthropic landscape brought about by the practice of intensive agriculture during the Soviet and post-Soviet periods, which resulted in the destruction of many archaeological sites, and in the poor preservation of most of the remaining ones. Equally, ground visibility had been rather poor due to the thick summer vegetation cover and to the fact that most of the fields in the survey area were still under crop, or had only been recently harvested in June/July, and therefore still contained at least 20 cm of ‘stubble’, and were partially overlain by hay.

The aim of the 2019 season was therefore to continue the extensive archaeological survey of Lagodekhi Municipality (**Fig. 1**) initiated in June-July 2018, and to undertake intensive transect survey in selected areas of interest. The timing of the 2019 season in October-November was chosen to take advantage of the better surface visibility afforded by the recent ploughing of fields in the region.



Fig. 1. Satellite image from Google Earth showing the location of the Lagodekhi Municipality. Image © 2019 DigitalGlobe, Image Landsat/Copernicus, Image © 2019 CNES/Airbus, Image © 2019. Maxar Technologies.

Methodology

During the 2018 season we recorded sites identified on satellite imagery, maps, published literature and those known to local archaeologists and residents. However, we were unable to undertake much systematic survey due to heavy ground cover. In the summer, most of the fields in the area were still under crop or only recently harvested, but not yet ploughed. Visibility was very poor and it is therefore likely that sites consisting only of low mounding or artefact scatters were hard to identify.

The timing of the 2019 season was meant to coincide with the period after the fields had been ploughed. In general, this was the case and ground visibility was better overall.

We therefore set out to undertake intensive survey in several different environmental zones, with the aim of better understanding patterns of settlement and land use by geographical area. We hoped to be able to document low-level sites with subtle topography and artefact scatters due to the improved ground visibility. Our efforts focused on three key areas (see Fig. 1):

- 1) Within approximately one kilometre of Tseteli Gorebi 5 in the low-lying Alazani River Valley;
- 2) Immediately north of the village of Ulianovka;
- 3) In the lower foothills of the Caucasus above the village of Kveda Pona.

Within areas (1) and (2) we undertook transect survey. Individuals were spaced approximately 10 m apart, and each transect was divided into 50 m segments. Within each 50 m long segment, we collected all visible surface artefacts. This resulted in collection areas of approximately 50 m x 80 m.

In area (3), due to the frequency of dense woodland and gullies (which run roughly north-south and dissect the gently sloping upland areas), it was difficult to employ a traditional transect methodology. Instead, we utilised a topographically informed survey methodology in which individuals spaced approximately 10 m apart covered the accessible landforms and recorded any sites or finds as waypoints (WP) with a GPS.

We also aimed to visit several locations identified as possible archaeological sites in our desk-based assessments. **Fig. 2** illustrates the three intensive survey areas, and the sites located, or revisited in the 2019 season.

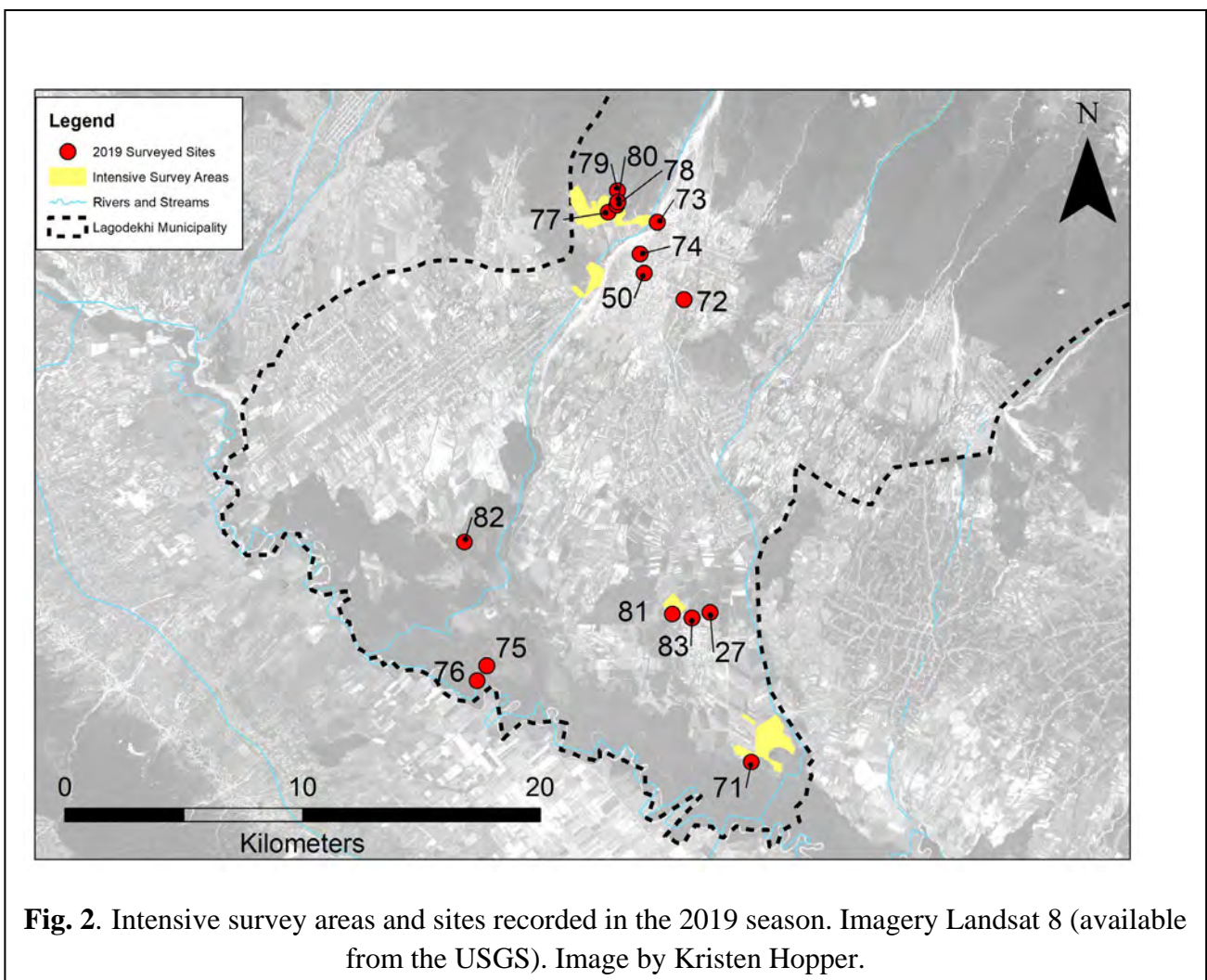


Fig. 2. Intensive survey areas and sites recorded in the 2019 season. Imagery Landsat 8 (available from the USGS). Image by Kristen Hopper.

Results

Tsiteli Gorebi 5 Area

In our southernmost survey area we recorded one new site in 2019, designated LS071 (**Fig 3, 4**). A preliminary visit to the site had been made in summer of 2019 (the site was given the temporary ID of 1001), but not fully recorded. The site is represented by a scatter of obsidian and pottery on both the western and the eastern side of a modern water reservoir. Most of the material from the east of the reservoir comes from the spoil heaps on the banks of the reservoir. We think it is likely that the site was destroyed by the reservoir, and the artefact scatter mainly represents the redeposited material. The extent of the site is therefore difficult to determine.

We also undertook transects in the accessible areas between the area of LS071 and Tsiteli Gorebi 5 (LS021), as well as immediately to the north of Tsiteli Gorebi 5 (**Fig. 4, Fig. 6**). The density of artefacts per 50 x 80 m collection areas is illustrated in **Fig. 5**. Interestingly, despite the ploughed fields, the density of artefacts recovered was unexpectedly low, even over the area of the mound itself. In general, this illustrates the difficulty we have had in locating surface artefacts in areas that have been heavily cultivated over long periods of time.



Fig. 3. View of site LS071 facing NE.

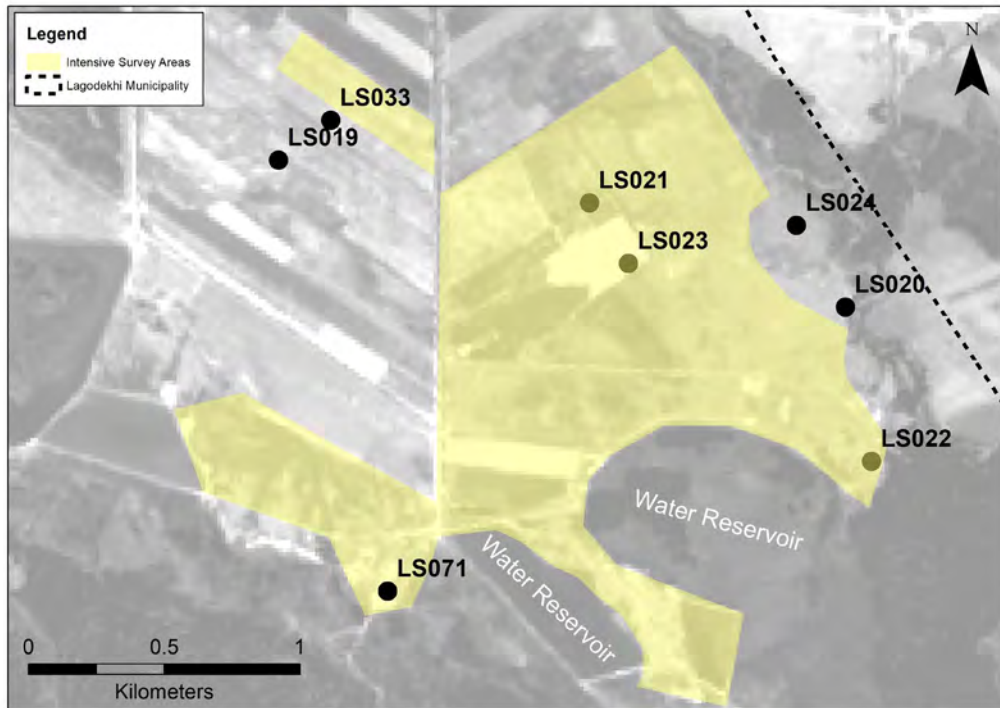


Fig. 4 Intensive survey area near Tseteli Gorebi 5 (LS021). Imagery Landsat 8 (available from the USGS). Image by Kristen Hopper.

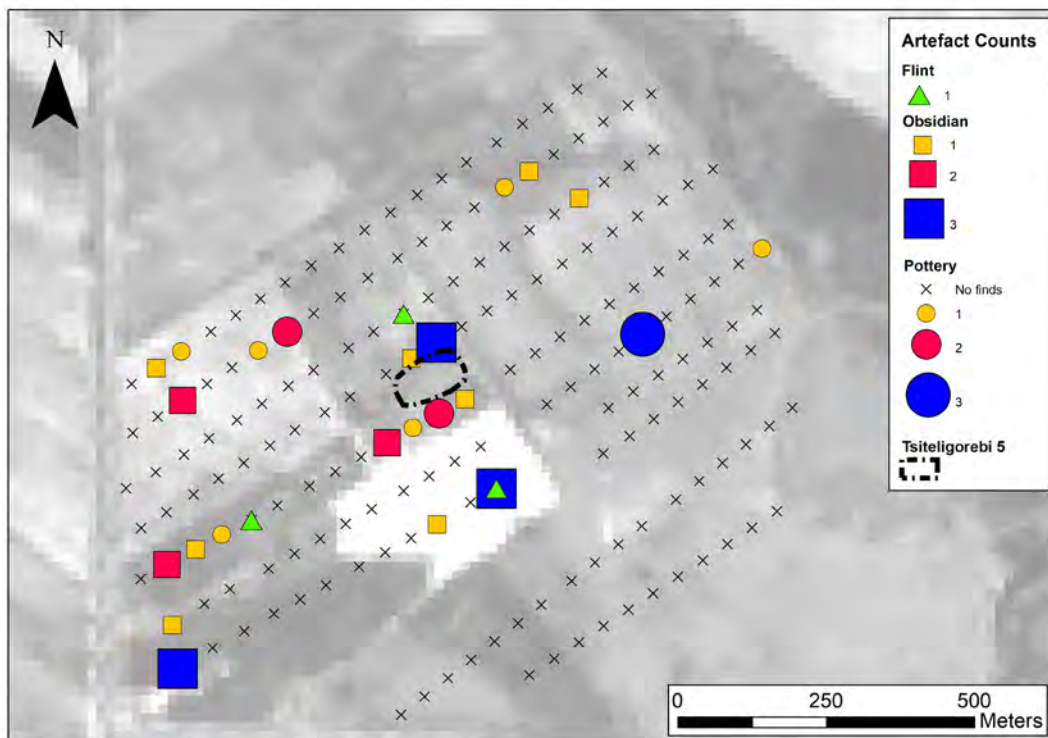


Fig. 5 Distribution of pottery and lithics in the vicinity of Tseteli Gorebi 5 (LS021). Artefacts were collected in 50 x 80 m collection areas. Imagery Landsat 8 (available from the USGS). Image by Kristen Hopper.



Fig. 6 The team undertaking transect survey near Tsiteli Gorebi 5.

North of Ulianovka

We also undertook transect survey (with 50 m long collection areas) in cornfields immediately north of Ulianovka (**Fig. 7**). Here the fields had been harvested but not ploughed. Visibility was approximately 60%; however, we located a large artefact scatter containing primarily Late Bronze Age material (LS081).

We also recorded a site on a farm on the northernmost edge of Ulianovka (LS083). The site had a preliminary visit in summer 2019 and had been given a temporary ID of 1003. Artefacts associated with the Hellenistic period had been reported here in the past and a small collection of material made in the previous visit. We attempted to define the edges of the artefact scatter, though this was made difficult by the fact that the main density was located within a field of peppers and aubergines that was now overgrown (**Fig. 8**). However, we were able to determine that the site likely covered at least 20 m in N – S direction. There was also a very subtle topographic rise visible within the field.

Local residents indicated that there had been a small hill on this location that had been ploughed out. Inspection of historical imagery on Google Earth confirms the presence of a small mound in this location that was flattened sometime between 2009 and 2018. It measured approximately 25 x 50 m (see **Fig. 9**).

We were also directed toward another area where a small hill or kurgan may have been situated. This was LS027, a site we had located in the 2018 season, but were unable to determine the extent of due to it being completely covered by a cornfield (see Fig. 7). Now that the field was no longer under corn cultivation, we were able to collect material covering an area of at least 150 m E-

W and 130 m in N-S direction. The material recovered likely represents Hellenistic and Medieval activity.

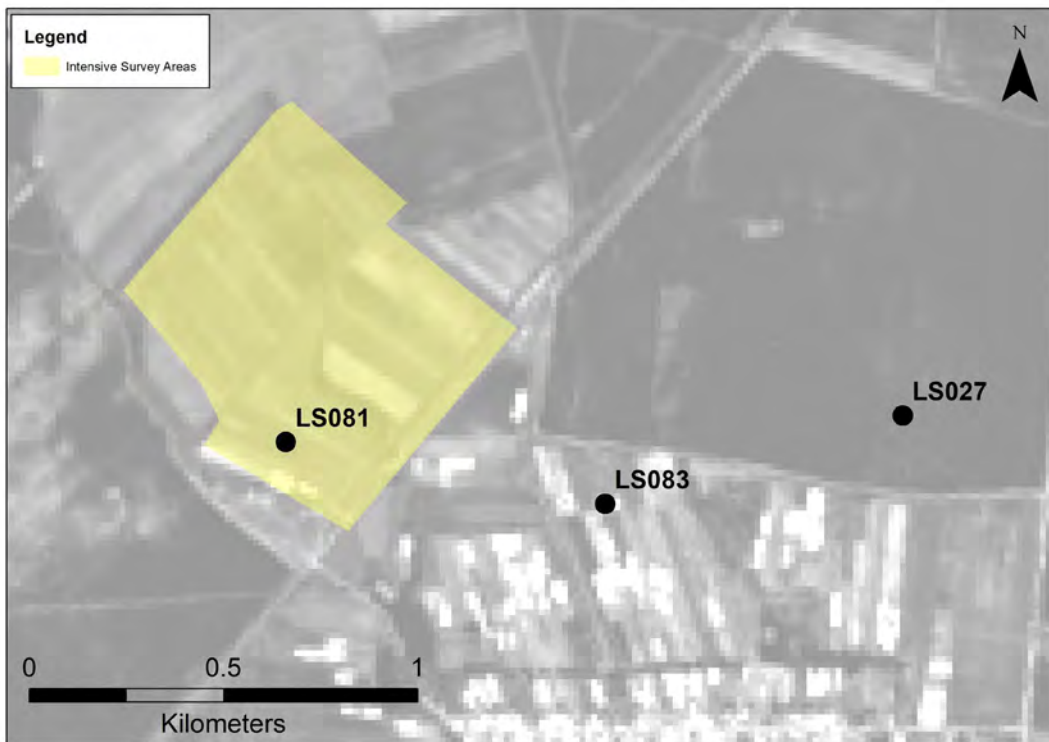


Fig. 7 Intensively surveyed areas north of Ulianovka (yellow) and sites recorded or revisited in the 2019 season in the area. Imagery Landsat 8 (available from the USGS). Image by Kristen Hopper.



Fig. 8 View of site LS083 facing SW. The site is covered in crops and weeds.



Fig. 9 The small mound at LS083 visible on 8 August 2009 (L) and no longer visible on July 24 2018 on Google Earth. Images © 2019 Maxar Technologies.

Uplands Near Pona

We chose the slopes near to the village of Kveda Pona to investigate activity in the uplands (**Fig. 10**). Here, grazing is the primary mode of land use and surface visibility is generally good, except within the forested gullies and ravines. Remains of terrace field systems are present, but their date is unknown.

Here, we had previously recorded Pona Church (LS053). The area has a general low-level background scatter of medieval pottery. We located one site (LS073) consisting of a hilltop with the remains of ruined buildings and graves. The surrounding slopes had a considerable amount of roof tiles and pottery. The graves may represent Islamic burials from the early 20th century as most consisted of simple headstones and footstones. Local archaeologists suggested that the building fragments may have been part of the original site of Pona church which is said to have been destroyed by Shah Abbas in the late 16th/early 17th century.

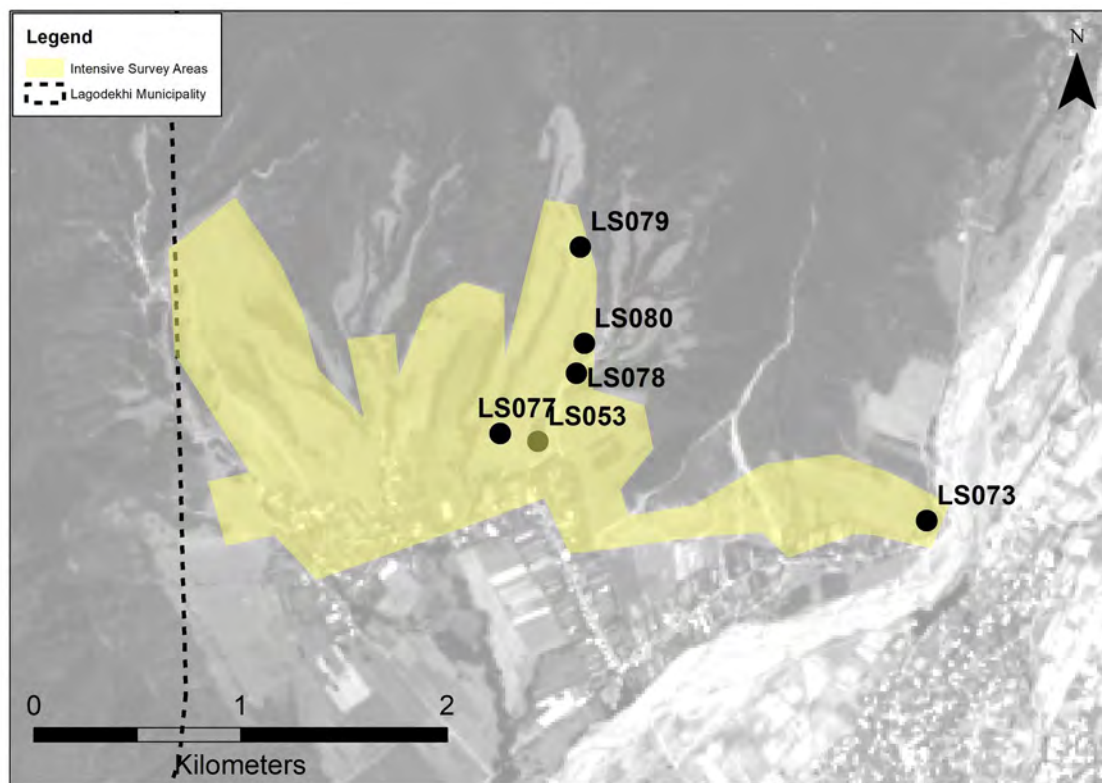


Fig. 10 Survey areas north and east of Kveda Pona. Imagery Landsat 8 (available from the USGS). Image by Kristen Hopper.



Fig . 11 Site LS078: a possible oven or kiln feature.

We also located several stone structures (LS077, LS079, LS080), and what appears to be a kiln/oven and nearby stone wall (LS078) (**Fig. 11**). Most of the pottery recovered appears to be Medieval (at least post 10th century). In general, the activity in this area appears to relate to the Medieval period.

Karvasla

We also investigated a possible wall feature that was visible on the CORONA imagery around the site of LS050 – a karvasla (or caravanserai) – that we recorded in 2018 (**Fig. 12**). Between modern houses, we located what are probably the remains of this feature – this included large stones and some linear mounding that may represent the base of the wall.

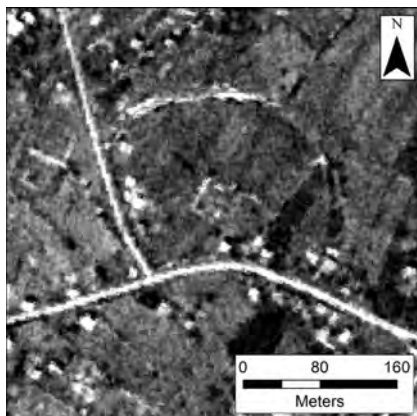


Fig . 12 Possible circular wall feature surrounding Karvasla on the CORONA image from 1046 mission from the 18 Mar 1968 (Imagery available from the USGS).

Mounded sites in the woodlands

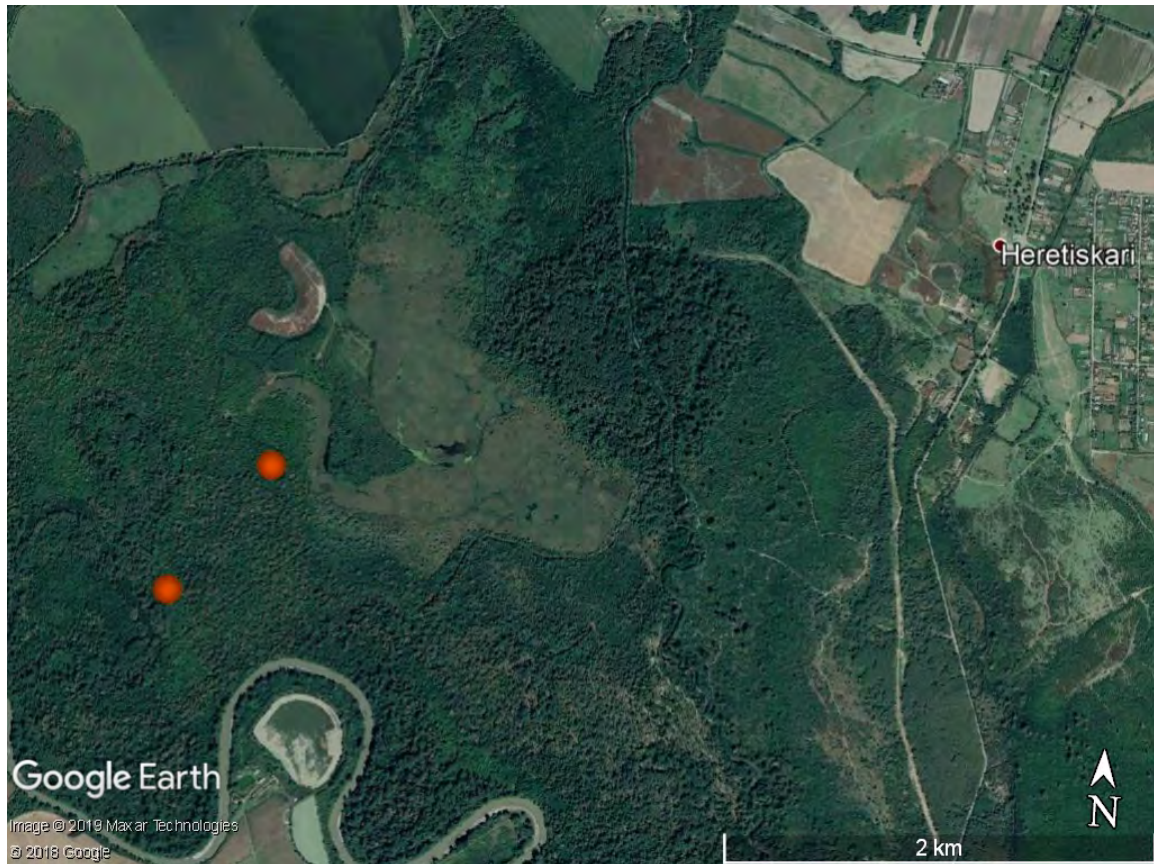


Fig . 13 Location of two topographic rises identified from Soviet period 1:25000 maps within the forested area west of Heretiskari on Google Earth. Image (c) 2019 Maxar Technologies, image (c) 2018 Google.

In the wooded areas near the Alazani River (in the southern part of Lagodekhi Municipality), we investigated two topographic rises indicated on Soviet period 1:25000 maps (**Fig. 13**).

LS075 was a large mound of c. 200 m in diameter and irregular in shape. It was clearly not a kurgan as we originally suspected. Some pottery fragments were found on the surface and suggest activity primarily in the Medieval or modern period but, interestingly, possibly also in the late prehistoric/Early Bronze Age. It is potentially a mounded settlement.

LS076 was an ovoid mound on which we located some pottery, mostly in animal burrows on top of the mound. Again, this feature is more likely to have been a settlement than a kurgan. The pottery dates to the Medieval Period.

Possible Kurgan sites

We also checked a number of features (soil discolourations, vegetation differences and mounded features) identified by Stefania Fiori as possible kurgans on modern and historical satellite imagery. These are detailed in her master's thesis (Ca' Foscari University of Venice, 2020).

Conclusions and Future Work

It is clear that intensive agriculture over the course of the 20th century has significantly impacted the survival of archaeological sites in the region. It is also apparent that there are very narrow, but optimal conditions for the detection of sites without much topographic relief (e.g. artefact scatters). Further research into 20th century land use in the region is being conducted to help elucidate the survey results. A continuation of the intensive survey throughout the Lagodekhi municipality would also hopefully reveal more about the long-term settlement and land use patterns of the region.

In particular, it is hoped that further survey work will better define the distribution of Chalcolithic occupation, which presently appears to focus on the lowland area close to the villages of Ulianovka/Tsitelgori, and the pattern of Early Bronze Age occupation, which is hitherto attested only by the huge kurgans in the valley of the Alazani River. Further work in the wooded area close to the river, which has been archaeologically underexplored, although fraught with difficulties, may also lead to the discovery of further sites and clarify the long-term use of this apparently rather impenetrable area.

Another aim for the future seasons is the refinement of the regional ceramic chronology, which is until now rather rough due to the limited number of excavated parallels, the small quantities recovered from excavation, the high degree of fragmentation, and the bad state of preservation of the fragments recovered in the course of the survey (**Fig. 14**).

Acknowledgements

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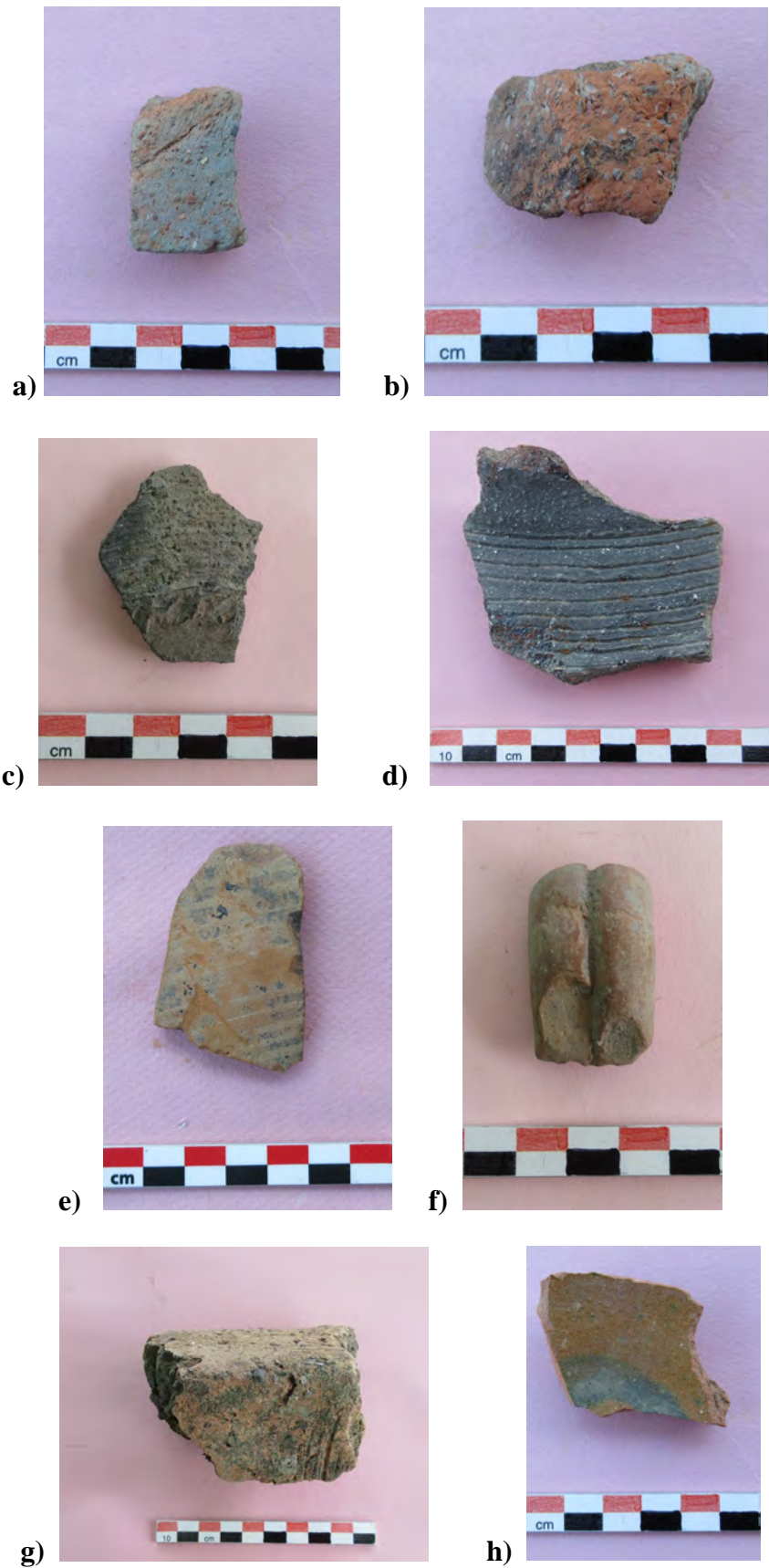


Fig. 14. Selection of pottery sherds from the 2019 survey season. a), b) Chalcolithic; c), d) Late Bronze Age; e), f) Hellenistic/Roman; g), h) Medieval/Modern.