

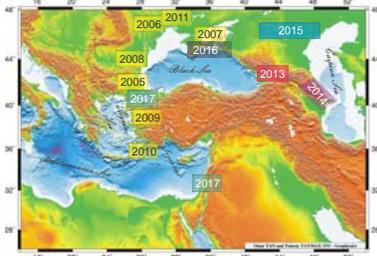


First Circular

Institute of Earth Sciences of the Georgia Iliia State University
12-19 October 2013

IGCP 610 “From the Caspian to
Mediterranean: Environmental
Change
and Human Response during the
Quaternary”

<http://www.avalon-institute.org/IGCP>



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AIMS AND SCOPE

The main goal of the IGCP 610 Project is to provide cross-disciplinary and cross-regional correlation of geological, archaeological, environmental, and anthropological records in order to (a) explore interrelationships between environmental change and human adaptation during the Quaternary, (b) create a networking and capacity-building structure to develop new interdisciplinary research initiatives, and (c) provide guidance to heritage professionals, policy makers, and the wider public on the relevance of studying the Caspian-Black Sea-Mediterranean Corridor ["CORRIDOR"] for a deeper understanding of Eurasian history, environmental changes and their relevance, and likely future impacts on humans.

The "CORRIDOR" is perfectly suited for these purposes. (1) It encompasses the large chain of intercontinental basins—the Caspian, Black (together called Ponto-Caspian), Marmara, Aegean, and Eastern Mediterranean (Levantine) seas—with their connecting straits and coasts. Here, sea-level changes are clearly expressed due to geographical location and semi-isolation from the World Ocean, which makes the "CORRIDOR" a paleoenvironmental amplifier and a sensitive recorder of climatic events. Periodic connection/isolation of the basins during the Quaternary predetermined their specific environmental conditions and particular hydrologic regimes, and thus, the area, and especially the Black Sea, represents a "natural laboratory" to study the responses of semi-isolated basins to GCC. (2) It has rich sedimentary and geomorphologic archives that document past environmental changes. (3) It has a substantial archaeological, anthropological, and historical record. In particular, it contains evidence for the transition from *Homo erectus* to *Homo sapiens*. The first appearance of a *Homo* species in the "CORRIDOR" is dated to the Lower Paleolithic, ca. 1.8 million years ago, at Dmanisi in Georgia. After this species migrated into the Ponto-Caspian area, human colonization of the region continued, major cultural and technological inventions (tools, hearths, dwellings, clothes, decorations, etc., as well as the origin of art, ideology, and ritual practice) ensued, and subsistence strategies were elaborated, enabling us to investigate multiple physical, social, and cultural responses of humans to global environmental change. (4) It is easily accessible for study.

To achieve the main goal and objectives, the Project will incorporate six dimensions, each addressed by integrating existing data and testing of hypotheses: 1. The geological dimension will examine the sedimentary record of vertical sea-level fluctuations and lateral coastline change. 2. The paleoenvironmental dimension will integrate paleontological, palynological, and sedimentological records to reconstruct paleolandscapes. 3. The archaeological dimension will investigate cultural remains. 4. The paleoanthropological dimension will study responses of different *Homo* species to environmental change. 5. The mathematical dimension will provide GIS-aided mathematical modeling of climate and sea-level changes, and human dispersal linked to paleoenvironmental variation that can be meaningfully compared with current global changes. 6. The geo-information dimension will grasp the "big picture" of geoarchaeological events over the duration of the Quaternary. Particular attention will be given to synthesizing the wealth of literature published in local languages, stored in archives, and largely unknown or ignored in the West.

Study sites will include the Caspian, Azov-Black Sea, Marmara, and Eastern Mediterranean. These sites are characterized by rich sedimentary, geomorphological, archaeological, paleoanthropological, and historical records providing a superb opportunity to assess the influence of climate and sea-level change on human development. It is expected that the new project will allow us to suggest a groundbreaking, comprehensive theory about the influence of paleoenvironmental changes on human adaptive strategies during most of the Quaternary in the region of the Southern Eurasian seas.

There will be five or six Plenary Conferences and Field Trips in the following regions: 2013 – Georgia; 2014 – Azerbaijan and Russia (Dagestan); 2015 – Russia (Northern Caspian and Manych Outlet); 2016 – Crimea (Ukraine) and Taman Peninsula (Russia); 2017 – Israel (Eastern

Mediterranean) and Turkey (around the Sea of Marmara). They are scheduled for the third quarter of each year. Prior to each Conference and Field Trip, the Conference Proceedings and Field Trip Guide will be prepared. Each Plenary Conference will provide a forum for dialogue between multidisciplinary specialists in the Quaternary history of the “CORRIDOR” and other workers in related areas.

The Field Trips will follow the Plenary Meetings (Fig. 1). They will be focused on observation of geological characteristics of Quaternary stratotypes as well as key archaeological and paleontological sites. All of them are easily accessible for study and will be sampled during the Field Trips for further investigation in various laboratories around the world.

The First Plenary Meeting and Field Trip will focus on the Eopleistocene geological sequence of Tsvermaghala Mountain that represents a stratotype of the Gurian Chauda; it possesses a thickness exceeding 1000 m deposited prior to the Matuyama-Brunhes Reversal (i.e., 780 ka BP) as well as archaeological sites of Lower to Upper Paleolithic age that include Dmanisi, Mashavera Gorge, Tetrtskaro, Tsalka-Bedeni Plateau, Faravani Lake, Akhalkalaki, Diliska, Chiatura, Bondi Cave, Undo Cave, Djrchula Gorge, as well as the Neolithic site Samele Cave and Medieval-Roman site Vardzia Cave.

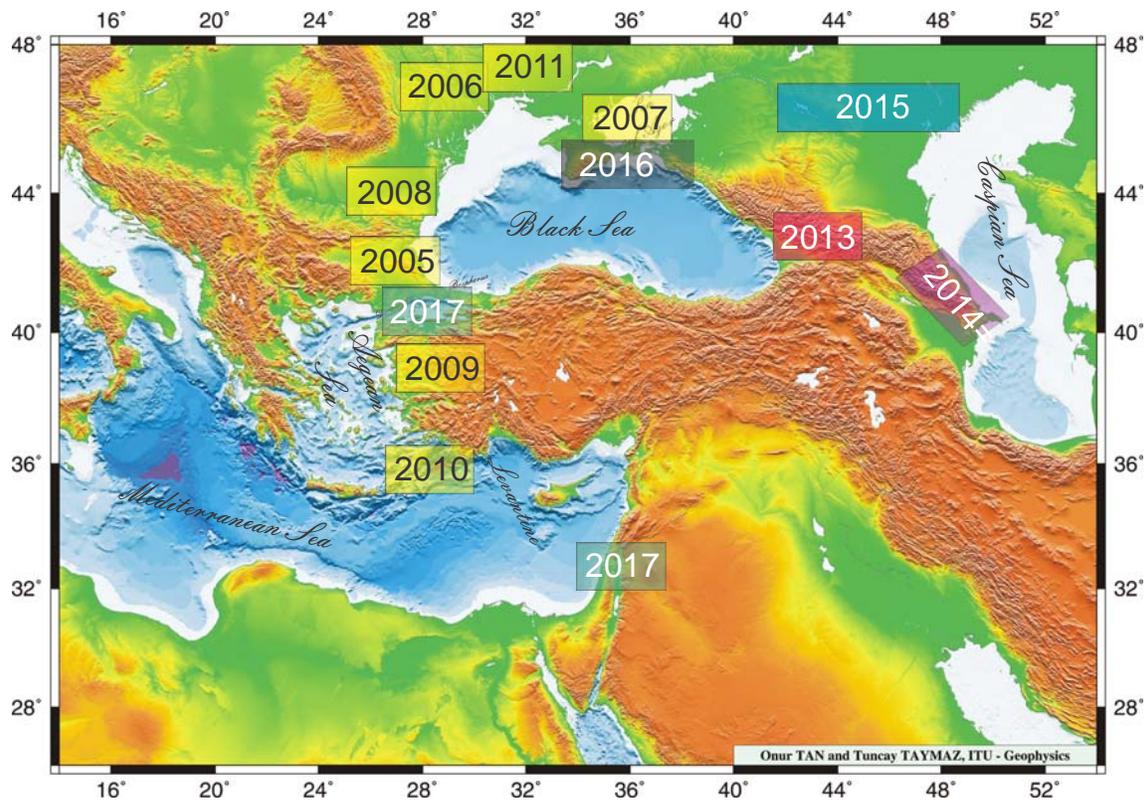


Figure 1. The Caspian-Black Sea-Mediterranean “CORRIDOR”: in yellow are the locations of IGCP 521-INQUA 501 meeting and field trip sites (2005-2011); in other colors are sites to be studied by the present IGCP 601 Project: 2013 – Tbilisi, Georgia; 2014 – Baku, Azerbaijan, and Derbent, Dagestan (Russia); 2015 – Astrakhan’ (Volga Delta) and the Manych Valley, Russia; 2016 – Sevastopol (Crimea), Ukraine, and the Taman Peninsula, Russia; 2017 – Haifa, Israel, and Istanbul, Turkey..

It is expected that meetings will bring together multidisciplinary scientists from all over the world and in the process enhance West-East scientific dialogue by providing a supportive background for collaboration regarding the correlation and integration of discoveries on the influence of climatically/tectonically induced sea-level changes and coastline migration on humanity. This is an area of strategic importance not only for all coastal countries but also for at least 17 other countries sharing a drainage basin that is one-third the size of the European continent.

The meeting will cover seven days. Two days (13-14 October) will be spent in plenary session, and four days (15-18 October) will be dedicated to the field trips.

SCHEDULE

- 12 October: Arrival and Registration (accommodation in Tbilisi).
13-14 October: Plenary Sessions (accommodation in Tbilisi).
15 October: Field Trip 1. Dmanisi Museum Reserve (accommodation in Tbilisi).
16 October: Field Trip 2. Chiatura Paleolithic Sites (accommodation in Kutaisi).
17 October: Field Trip 3. Paliastomi Lake and Tsvermagala Black Sea Terrace (accommodation in Batumi).
18 October: Field Trip 4. Goderdzi Oligocene Petrified Forest, Vardzia Cave Town and Quaternary Samsari Volcanic Ridge (accommodation in Tbilisi).
19 October: Departure from Tbilisi.

TECHNICAL SESSIONS

The final number of plenary sessions will depend upon the number of participants and accepted presentations. To be accepted, each presentation must deal with results obtained from the study of environmental change and human response during the Quaternary in the Caspian-Black Sea-Mediterranean Corridor. It can also have a more general scope, for example, GIS-based modeling of the water exchange between adjacent basins: Application to the Manych-Kerch Outlet, Bosphorus Strait, and Dardanelles; Geoinformation Systems: An overview with regard to the Caspian-Black Sea-Mediterranean region. Presentations that go beyond data description to address interpretation and broader understanding of the chosen topic are especially encouraged.

Exemplary Subjects:

- Recent ecosystems that would provide information about each region of the “CORRIDOR” to better understand the hydrological regime and ecological preferences of biota in response to environmental change required for retrospective analyses of Quaternary ecosystems
- Paleontology and stratigraphy of the stratotypes and key boreholes in each geographical region of the “CORRIDOR”
- Vegetation, soils, and landscapes
- Geophysics and sequence stratigraphy
- Active tectonics
- Archaeology and ethnography
- Paleoanthropology
- Paleogeography and paleoenvironment
- Modeling of climate change
- Modeling of sea-level change
- Modeling of environmental change and human dispersal
- GIS-aided interactive web-database

FIELD TRIPS

GEOLOGY OF THE CAUCASUS

The Caucasus represents a Phanerozoic collisional orogen formed along the Euro-Asian North continental margin, in a NW-SE direction, between the Black and Caspian seas and connecting the European and Asian branch of the Alpine-Himalayan mobile belt. It was formed after a long closure process of the proto-, paleo- and neo-Tethys, therefore terranes of different age and history have taken part in its construction. The ancient formations of the Caucasus orogen represent Gondwana origin Cambrian relicts, and the youngest are Quaternary rocks, among which volcanic products prevail.

From the late Miocene (10-8 million years ago), intensive exhumation of the Caucasus orogen began, during which molasse, lacustrine, and sub-aerial volcano-sedimentary formations were accumulated.

The Caucasus already assumed its modern geological structure in Quaternary time, and it was located between the Black and Caspian seas. It consisted of three geotectonic units: mobile zones of the Greater Caucasus, the Lesser Caucasus, and the intra-Caucasian micro-continent.

The Caucasus is an expression of continental collision between the Arabian plate and the Scythian (East European) platform, which has led to significant regional geological processes, including vertical and horizontal movements of separate terrestrial blocks, earthquakes, and volcanic activity.

Geographically, the Caucasus represents a system incorporating the Greater and Lesser Caucasus mountain ranges, and the intra-Caucasus and foothill depressions. Because of its easy terrain and favorable climate, the intra-Caucasus depression is the most accessible natural corridor between the Black and Caspian seas, thereby linking Europe and Asia. It is protected from the invasion of northerly cold air masses by the Greater Caucasus Range, and from southerly hot and dry air masses by the Lesser Caucasus. This segment of the Caucasus preserves climatic conditions that favor the development of biotic populations, including humans, and this is the reason why the area was inhabited by early hominins since the Early Pleistocene. In addition, the corridor contains remains of numerous Paleolithic age sites, testifying to the occupation of the area throughout the Quaternary. At the same time, intense geological processes were still ongoing in this period, including volcanic activity, which shows the special sensitivity of early hominins.

Georgia occupies a large part of this corridor, including the southern slope of the Great Caucasus and the northern slope of the Lesser Caucasus; this accounts for its richness in archaeological sites. As such, the region represents a promising laboratory for the study of environment changes and human responses during the Quaternary.



Figure 2. Map of the Black Sea; B – Map of Georgia with geological, archaeological, and anthropological sites to be visited during field trips on 15 (#1), 16 (#2), 17 (#3) and 18 (#4) October 2013. August

Field Trip 1 (15th October): Dmanisi earliest hominins archaeological site and Mashavera River Late Pliocene basaltic volcanic flow.

Stop 1.1: Stop 1.1: Dmanisi hominin site. Dmanisi is located about 85 km southwest of Tbilisi, buried below the ruins of the medieval town of Dmanisi, in the Mashavera River valley, which drains the Javakheti volcanic chain to the west. The site is situated on a promontory, elevated about 80 m

above the confluence of the Mashavera and Pinezaouri River valleys. Just prior to the occupations at Dmanisi, the Mashavera valley was filled by 80-100 m of mafic lavas that formed the Mashavera Basalt. Recent excavations at Dmanisi have revealed an extraordinary record of the earliest hominin dispersal beyond Africa (1.75 million years ago). Several hominin individuals along with abundant well-preserved remains of fossil animals and stone artifacts have been found. The Dmanisi specimens are the most primitive and small-brained humans found outside of Africa to be attributed to *Homo erectus sensu lato*, and they are the closest to the presumed *Homo habilis*-like stream. It is widely recognized that the Dmanisi discoveries have changed scientific knowledge concerning the migration of *Homo* from Africa to the European continent. Presently, two main stratigraphic units are distinguished in the exposed sections. Stratum A, bears the vast majority of the faunal materials and all hominin remains—consisting of pyroclastic silt and fine sand with weak pedogenic structure and pedogenic carbonates in the upper part. Stratum B contains the highest densities of stone artifacts but fewer fossils—consisting of weathered volcanic silts and sands, with dark grey ash in the middle of the unit and prominent basal grey ash. These two layers are separated by a calcareous horizon that has halted further diagenetic damage and compaction in stratum A, thus allowing remarkable fossil preservation. The structure and thickness of the calcareous horizon is variable in different locations and is posing questions concerning the sedimentation process that need to be clarified. The Dmanisi discoveries are the most ancient in all of Eurasia and are dated to 1.75 million years ago. There is great potential for further finds as well.

Stop 1.2: Mashavera River volcanic basalt flow. Along the Mashavera River valley's left ledges, near the area of the Dmanisi hominins, a basaltic lava flow is exposed that emanated from the Dmanisi volcanic plateau. It reveals a thickness of 15-17 meters and represents a very good geological picture, as it follows the Quaternary alluvium. Substantial faunistic materials are found along the surface of the flow, such as teeth and bones of elephant, wolf, deer, ox, and horse. According to the flow's K-Ar dating (Berkeley Isotope Research center), its age is 1.9 million years ago, which is very close to the age of the early Dmanisi hominins. The basaltic lava flow is also spatially close to the location of their discovery.

Field Trip 2 (16th October): Chiatura Paleolithic sites (Accommodations at Kutaisi)

Stop 2.1: Bondi Cave. The site is located north of the town of Chiatura (Chiatura District, Imereti region, Western Georgia), 30 m along the Tabagrebi River (at an elevation of 477 m). The site opens to the south onto the slope of a small valley and is a small cave, with an arched entry that is 8 to 9 m in height. The cave has a length of approximately 11 m and a maximum width of 7 m, thus representing a surface area of approximately 101 m². Bones were recovered from all layers, and for three of the excavated squares (A4-B4-C3), bone was sampled for radiocarbon dating by Beta Analytic Radiocarbon Dating Laboratory (Miami, USA) and the Centre of Radiocarbon Dating at the University of Lyon (France). Twelve bone samples associated with the different archaeological layers were radiocarbon dated using Accelerator Mass Spectrometry (AMS).

The dates indicate episodes of human occupation from 38,750 ±480 ka 14C BP (43,123 ±632 ka Cal BPHulu) (layer VII) to 14,050 ±90 ka 14C BP (17,295 ±225 ka Cal BPHulu) (layer III). Excavations have revealed a sedimentary sequence (eight lithological layers) that is more than 3.2 m in thickness. The limestone bedrock has not yet been reached. The first layer is mixed and belongs to later ages. These surface sediments reveal an average thickness of 10 to 15 cm, with pottery traces from the Chalcolithic, Iron Age, the Roman period, and the Medieval period. Archaeological material is especially abundant in the upper two-thirds of the sequence, which corresponds to the Upper Paleolithic (layers II to VI). All layers contain bone and lithic material, but layers VII-VIII have yielded a Middle Paleolithic lithic industry. More than 7000 artifacts have been found in Bondi Cave. The raw material is generally flint. Only 63 objects were made using obsidian, 22 objects using andesite. Layers IV-V were occupied most intensively. A hominin tooth was excavated in sub-layer Vb. It and was discovered in Upper Paleolithic deposits of sub-layer Vb, dated between 21.5 and 24.6 ka 14C BP. These ages provide the oldest date range for human remains in an Upper Paleolithic context in Georgia, presuming its attribution to *Homo sapiens* correct.

Stop 2.2: Undo Cave. The cave is located in Chiatura district (village Vachevi, the Varkhmela River gorge in Imereti region, Western Georgia) (Coordinates: 8353547; 4688022). The cave is situated at an elevation of approximately 570 m above sea level, 90-100 mm from the Varkhmela River level.

The height of the cave at the entrance is 2 m, its width 5 m. The orientation of the cave is south to west, and 8 lithological layers (more than 4.0 m in thickness) have been distinguished at the entrance of the cave. The first layer (humus) is mixed and belongs to later ages. These sediments, with an average thickness of 20-25 cm, belong to the Roman and Medieval periods. Layers II-III have yielded an Upper Paleolithic lithic industry. Middle Paleolithic materials have been found in layers IV-VII. Layer VIII is sterile. About 150 stone objects have been found in the Middle Paleolithic layer. Most of the tools are elongated Mousterian points. Other material is represented by some flakes and elongated blades. The number of artifacts is not enough for a final determination of the technology. The human tooth was found in the Middle Paleolithic layer. Unfortunately, the tooth (possibly Neandertal) is broken and worn. It is represented by only the enamel and thus it is very difficult to identify, determine the type of tooth, or say much about in general because of its poor preservation. Nevertheless, this find is important because of the rarity of Neandertal remains in Georgia. At the end of the cave's horizontal corridor (length of 80 m), a rather deep (47 m) natural karstic pit (upper diameter of the pit is 7.0 m and at the bottom it is 3.0 m) has been discovered, which is full of faunal and anthropological remains.

Field Trip 3 (17th October): Paliastomi Lake and Tsvermagala Chaudian Black Sea Terrace (Accommodations in Batumi)

Stop 3.1: Paliastomi Lake. Paliastomi Lake is located on the Kolkheti Lowlands, near the Black Sea and the City of Poti. The surface of the lake is 0.3 m above sea level. The lithological and facies analyses of sediments show that the lake first originated as a lagoon (approx. 3600-4200 years ago) after a Black Sea transgression, when the sea level had risen one meter compared to today's level. The process of separation from the sea began around 3000-3500 years ago as a result of the formation of coastal dunes. The development of Paliastomi Lake is a vivid example of environmental changes during the Quaternary. Analysis of bed sediments helps us reconstruct the picture of Black Sea level changes along the coastline of the Kolkheti Lowland from the Middle Pleistocene. The lake and its surroundings are rich in biodiversity. It is included within the boundaries of Kolkheti National Park.

Stop 3.2: Tsvermagala Black Sea Chaudian Terrace. The terrace is located in the Guria foothills, near Ureki. It represents the most complete cross-cutting of Upper Pliocene and Quaternary sea sediments from the entire Black Sea coastal region. Chaudian sediments (clayey sediments, sands, and loosely cemented conglomerates) on Tsvermagala hill located on the terrace near the village of Khvaberi contain a number of molluscan species: *Didacna palassi*; . *ex. crassa*; *D. affsubmigamidata*; *Balanus* sp., etc. Currently, the terrace surfaces are located 90-100 m above sea level. Following drilling exploration, Chaudian marine sediments were found in the Kolkheti Tectonic Depression, 200-250 m below ground level and containing fossilized marine mollusks. The site is located about 20-40 km north of Tsvermagala hill. Thermoluminescence dating of clay samples taken from a stratigraphic cross-cutting in Tsvermagala hill yielded an age of 600,000 years. It should be noted that Chaudian sediments gradually merge into Gurian terrace sediments (which are located below them) and into Lower Euxinian sediments (which continue above them).

Field Trip 4 (18th October): Goderdzi Petrified Forest, Vardzia Cave Town, and Quaternary Abul-Samsari Volcanic Ridge (Accommodations in Tbilisi).

Stop 4.1: Goderdzi Petrified Forest. The Goderdzi Petrified Forest outcrop is situated on the Goderdzi Pass, between the Adjara and Meskheta regions, along the 15-17th KP (kilometer points) of the Adigeni-Khulo highway. The forest is located between the andesitic and basaltic volcanogenic tuff layers and reveal a depth of 250 m. In the scientific literature, it is known as the Goderdzi suite. The remains of plants, logs, branches, and imprints of leaves can be found in the upper layers of the rows. Vertically silicified trees can also be found in some locations. The age of the Goderdzi suite is Quaternary based on paleontological and isotopic dating methods.

Stop 4.2: Vardzia Cave Town. The site is located in Meskheta Region (in southern Georgia, near the border with Turkey), on the left bank of Mtkvari River, at 1300 m above sea level. It served as both a fortification and a monastery. The construction of Vardzia had begun at the end of twelfth century during the reign of King Giorgi III, and it was completed during the reign of Queen Tamar. Vardzia is one of the masterpieces of the Georgian Renaissance period and represents a good example of the coexistence of human beings with the natural environment. In 2007, Vardzia, along with Khertvisi

fortress, was submitted for future addition to the UNESCO world heritage list. Vardzia is cut into an andesite-dacite flow with a thickness of around 40-60 meters. The cemented body of the tuffs is represented by ash of obsidian, which under conditions of low temperature hydrothermal processes turned to zeolites, specifically mordenite. This process is observed along the whole length of the volcanic flow, for around 20 kilometers, to the Khertvisi Fortress. The World Health Organization has identified the fibrous zeolite family (erionite, ferrierite, mordenite, mazzite, offretite, and rossianite) as more carcinogenic than the asbestos minerals. It is already known that the abovementioned minerals cause a number of cancer diseases, mesothelioma among them. The builders and inhabitants of Vardzia didn't know about this ecological threat. From historical sources and legends, we have learned that the people of Vardzia often died from unknown diseases. It should be noted that those who live in the valley are under the permanent threat of fibrous zeolites.

Stop 4.3: Quaternary Abul-Samsari Volcanic Ridge. The ridge is formed on the Javakethi volcanic plateau and is of Pliocene-early Pleistocene origin. The elevation of the Abul-Samsari Range is 2500-3000 m, and it stretches from north to south for around 40 kilometers. There are more than twenty volcanic centers within the range. The most prominent volcanoes are Didi Abuli (3300 m asl) and Samsari (3284 m asl). Igneous products are mainly lavas (andesite to dacite) and very subordinate pyroclastics. K-Ar dating has identified four intervals of late Pleistocene-Holocene volcanic activity on the Abul-Samsari Ridge: (I) 800-700 ka; (II) 400 ka; (III) 320-170 ka, and (IV) late Pleistocene-Holocene (less than 50 ka) comprising the youngest Tavkvetili volcano (younger than 30 ka). At the northernmost edge of the Abul-Samsari Ridge and extremely close to the Caspian oil and gas pipeline corridor are the notable Tavkvetili and Shavabada volcanoes.

SOCIAL PROGRAM

During the conference, a series of tours and entertainment will be organized. More details will be announced in the Second Circular.

VENUE

The conference will be held under the auspices of the Institute of Earth Sciences of the Georgia Iliia State University, Tbilisi, Georgia (www.iliauni.edu.ge). Tbilisi is the capital and the largest city of Georgia, lying on the banks of the Kura River. The name is derived from an early Georgian form 'T'pilisi', and it was officially known as Tpilisi (in Georgian) or Tiflis (in Russian) until 1936. The city covers an area of 726 km² and has 1,480,000 inhabitants. Founded in the 5th century by Vakhtang Gorgasali, the monarch of Georgia's precursor Kingdom of Iberia, Tbilisi has served, over various intervals, as Georgia's capital for nearly 1500 years and represents a significant industrial, social, and cultural center of the country. Located on the southeastern edge of Europe, Tbilisi's proximity to lucrative east-west trade routes often made the city a point of contention between various rival empires throughout history, and the city's location to this day ensures its position as an important transit route for global energy and trade projects. Tbilisi's varied history is reflected in its architecture, which is a mix of medieval, classical, and Soviet structures. Historically, Tbilisi has been home to peoples of diverse cultural, ethnic, and religious backgrounds, though it is now overwhelmingly Eastern Orthodox Christian. Notable tourist destinations include cathedrals like Sameba and Sioni, classical Freedom Square and Rustaveli Avenue, medieval Narikala Fortress, the pseudo-Moorish Opera Theater, and the Georgian National Museum.

Iliia State University is one of the flagship public research HEIs and the first HEI in Georgia to base its core undergraduate curriculum on the principles of liberal education. ISU was established in 2006, based on the union of several different institutions. 25 research institutes and laboratories are actively engaged in research and graduate teaching. ISU strives to provide high-quality education and facilitate rigorous research through innovative initiatives and policies. ISU believes that this approach will contribute to the creation of a society possessing global knowledge and capable of developing sustainable solutions for the challenges of the 21st century.

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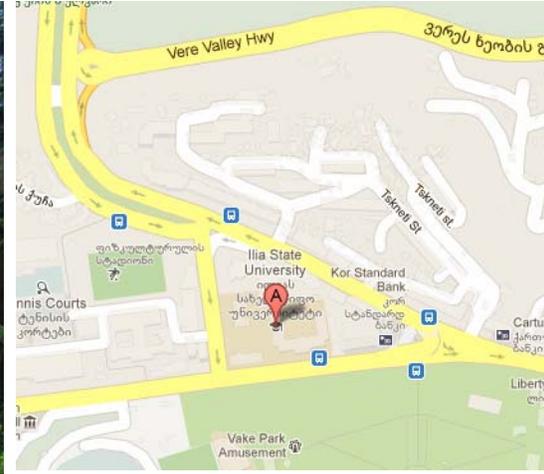


Figure 3. The main building at ISU.

Figure 4. Location of ISU.

ACCOMMODATION

There are numerous hotels in Tbilisi, Kutaisi and Batumi. Participants should arrange their accommodations in Tbilisi by themselves. Accommodation in Kutaisi and Batumi will be arranged by the organisers and price for hotels will be provided in the Second Circular. Some examples of the hotel in Tbilisi are given in Table 1. Please note that there are no student dormitories in Georgia, also normal hotels are not cheaper than 60 USD. The Ilia State University is located in central part of Tbilisi, thus the prices of hotels are higher. The small hotels are not located near ISU, but the taxi cost is cheap - about 3 USD.

Table 1. List of hotels located in vicinity of the conference venue.

Hotel	Single room	Double room	Distance
Vere Palace (http://www.verepalace.com.ge/)	110 USD	135 USD	5 km
Hotel Orion Tbilisi (http://www.hotelorion.ge/tbilisi/)	100-110 USD	100-110 USD	3 km
Holiday Inn (www.hi-tbilisi.com)	255 USD	270 USD	4 km
Hotel "Primavera" (www.primavera.ge)	100-110 USD	100- 120 USD	5 km
Hotel "Armazi Palace" (http://www.info-tbilisi.com/armazipalace/)	55-60 USD	80 USD	8 km
Hotel Diplomat (http://www.diplomat.ltd.ge)	50-80 USD	80-100 USD	7 km
Argo Palace (http://info-tbilisi.com/argopalace/)	60 USD	80 USD	3 km
Hotel Kolkhi	50 USD	60 USD	3 km



Figure 5. Tbilisi map with location of the conference venue and hotels.

REGISTRATION FEE

Registration Fee (Please refer to the “Registration Form”)

	Registration before August 31, 2013	Registration after August 31, 2013
	Euro	Euro
Participant	300	350
Accompanying person	250	300
Student*	200	250

*Student identification is required.

The registration fee covers conference kit, refreshments during coffee breaks, conference dinner, lunches during field trips, museum entrance fees, and bus transportation during the field trip. It does not cover hotel accommodation in Tbilisi, Kutaisi, Batumi and dinners during the field trips.

REFUND POLICY

Fifty percent refund before July 31, 2013. No refund is possible after July 31, 2013.

FINANCIAL SUPPORT

IGCP 610 has very limited funds available to distribute and is not able to support the full cost of meeting attendance. Therefore, applicants should show evidence of seeking or having obtained funds from elsewhere before applying for assistance. Preference in funding allocations will be given to students and young researchers from the developing world who plan to present a high quality paper accepted by the Scientific Committee. An application for support may be e-mailed to the Organizing Committee requesting in your own words a funding amount with justification..

CONFERENCE LANGUAGE

The official conference language is English.

ABSTRACT

Preference will be given to extended and informative abstracts containing new data and arguments. As a rule, your abstract(s) should be around 2 pages. But we will be quite flexible with the length of the abstract if it offers new ideas and information.

Short and uninformative abstracts or abstracts irrelevant to the themes of the meeting will not be considered.

The guidelines for abstract preparation and submission are outlined in the Abstract Template. You must specify the mode of your presentation: ORAL or POSTER. No abstracts will be accepted without registration of at least one of the authors. Every registered participant has the right to submit up to two extended abstracts as the first author.

Please type your abstract using template (attached to the First Circular). submit your abstract via e-mail to Prof. Valentina Yanko-Hombach valyan@onu.edu.ua; valyan@avalon-institute.org

ORAL AND POSTER PRESENTATION

Each speaker will have 20 minutes for presentation including questions. Poster format is 100x180 cm. Projection Equipment: Screens, LCD (PowerPoint presentation) projectors, and overhead projectors are available.

PUBLICATION

Accepted abstracts will be published in the Volume of Extended Abstracts. The full papers will be published in IGCP 610 First Special Volume of the journal *Quaternary International*. For preparation of the manuscript, refer to the journal’s Instructions for Contributors.

VISA

Visitors from other countries must carry a valid passport and, in certain cases visas, to be able to enter Georgia. For more information on visas and other required travel documents, please contact the Georgian Embassy or Consulate in your area before your departure. Each attendee is responsible for obtaining his/her visa in Tbilisi airport.

CLIMATE

In Georgia, the middle of October is a good time for field trips. Daily temperature is about 20-25° C, and at night, it is about 15-20° C.

TRAVEL

Georgia is easily accessible by direct, regular or charter flights from all main airports of Europe and Asia. The International Airport is located a few kilometers east of the capital of Georgia (Tbilisi). Regular buses and taxi connect the airport with the city.

DEADLINES

31 May 2013	First Circular on IGCP 610 website (http://www.avalon-institute.org/IGCP610/)
15 May 2013	Abstract submission and registration opens
15 August 2013	Abstract submission closes
31 August 2013	Notification of abstract acceptance
31 August 2013	Deadline for early registration
15 May 2013	Submission of application for financial support opens
31 July 2013	Submission of application for financial support closes
15 September 2013	Second Circular and the Conference Programme on IGCP 610 website (http://www.avalon-institute.org/IGCP610/)
31 December 2013	Submission of full paper to IGCP 610 Special Volume of <i>Quaternary International</i> closes.