

Ninth International Congress of Mongolists

“The Mongolian Statehood: Past and Present”

Devoted to the 800th Anniversary of the Yeke Mongol Ulus

Ulaanbaatar, Mongolia – August 8-12, 2006



**The joint Italian-Mongol geoarchaeological project
in the Valley of Lakes
Gobi Altayn region (Bayankhongor aimag, Bogd soumon)**

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- Italian Ministry of Foreign Affairs/General Direction for Cultural Cooperation

- Region VENETO/Regional Direction for International Relations



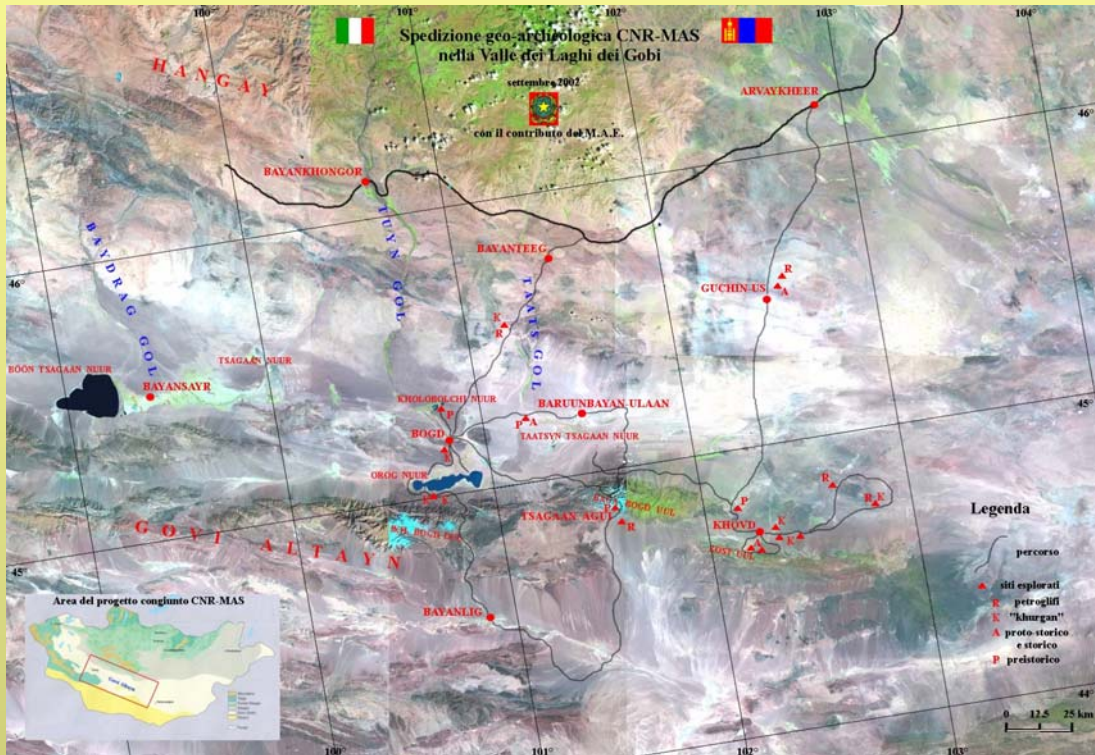
Joint CNR-MAS geo-archaeological expedition's team at 2005 excavation camp



Joint CNR-MAS team with Authorities and guest at Bogd "Italy-Mongolia Center", restored with the financial aid of the Regional Council of Veneto Region/Department of International Relations.

Foreword

The present contribution intends to diffuse, in concomitance with the celebrations of the 800 Anniversary of the Foundation of the **Yeke Mongol Ulus** (Great Mongol State) the results reached so far by the CNR-MAS Joint Geo-archaeological Expedition in the Valley of Lakes, Gobi-Altayn region (Bayankhongor-Övörkhangay aimags)



Here a geo-archaeological project officially started in the year 2000 after the signature of a memorandum of understanding between the National Research Council of Italy (CNR) and the Mongolian Academy of Sciences (MAS), sustained at the beginning by the Italian Ministry of Foreign Affairs and then strengthened and increased by the co-financing of the Regional Council of Veneto Region/ Department of International Relations.

The principal aim consists in recovering and emphasizing the anthropic and natural resources of the Valley of Lakes (Bogd soumon) in southern Gobi area, where many evidences witness durable and significant contacts through centuries of Mongolia with Central Asia and Caspian/Mediterranean basin.

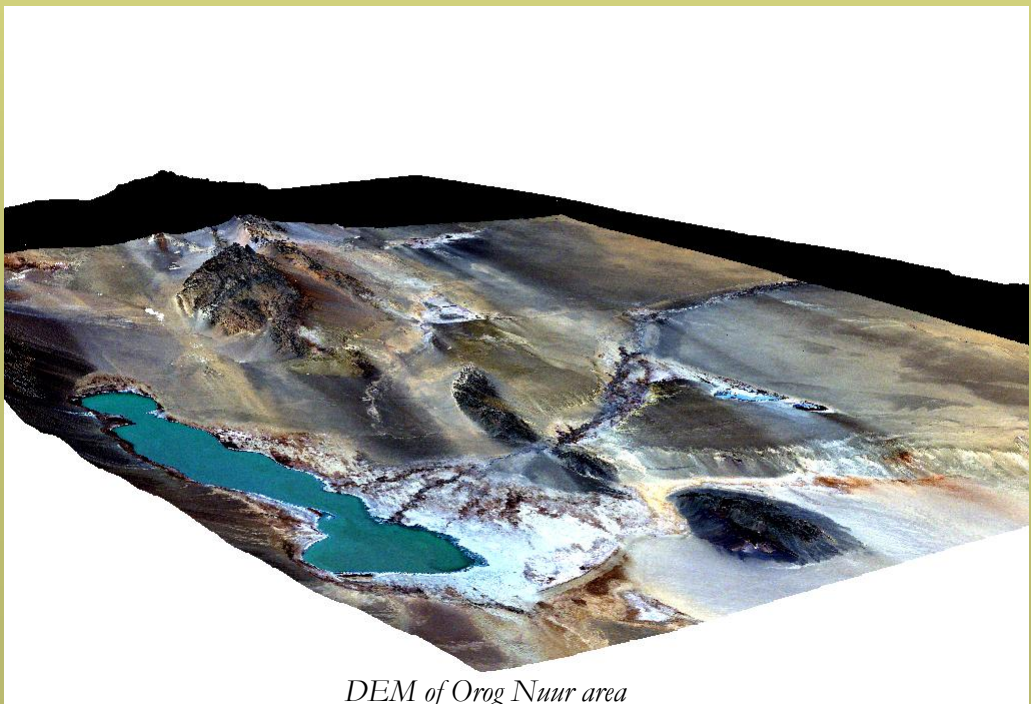
This cultural initiative matches not only the scientific interests of various scholars but also contributes to the valorization of the cultural heritage of Mongolia in the perspective of a growth of the international co-operation between friend peoples and complementary cultures and economies.

So far 4 expeditions have been done during summer 2002-'03-'04-'05 and we are now accomplishing the 5th one (July-August 2006) always in this corridor lying between northern Khangay plateau and the southern Gobi Altayn chain

The field survey has been prepared and oriented by preliminary bibliographic researches and collection of topographic and thematic maps. Moreover, various satellite data (Landsat 7ETM multispectral and ERS-SAR radar images) have been analysed to describe the main geomorphological features of the area. This propaedeutical work contributed to reduce time and costs of the exploration phase, mainly performed in a very broad physiographic context with scarce roads network.



LANDSAT 7ETM false colours composition over Oroq Nuur

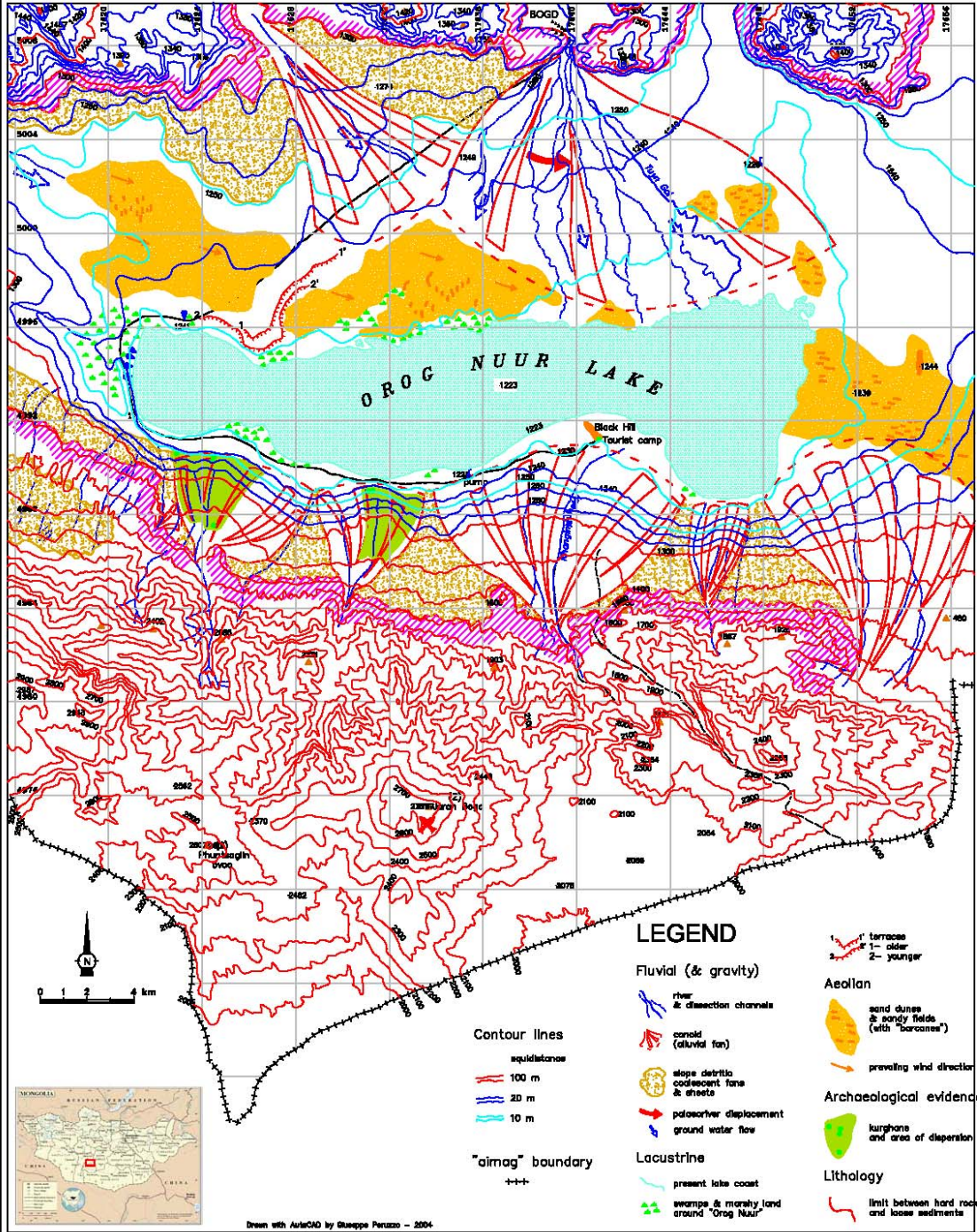


DEM of Oroq Nuur area



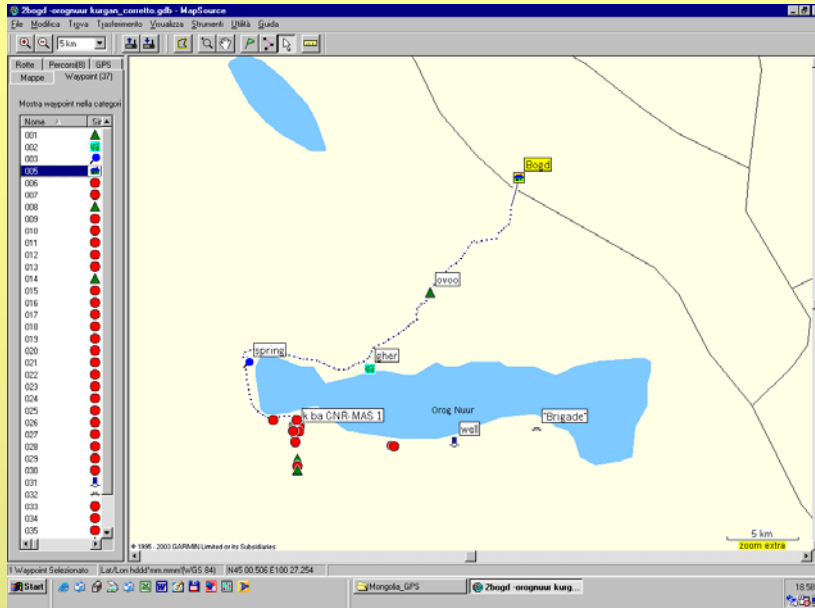
**GEOMORPHOLOGIC SKETCH
OF
OROG NUUR AREA**
Bogd somon, Bayankhongor aimag

B. Marcolongo
2003



Geomorphological sketch of the surveyed area south of Bogd Soumon (Bayankhongor Aimag)

Many groups of “*kburgan*” and other tomb structures, locally called “*kbirigsuur*”, belonging to Bronze and Iron age, have been localized at the foot of the Gobi Altayn range.



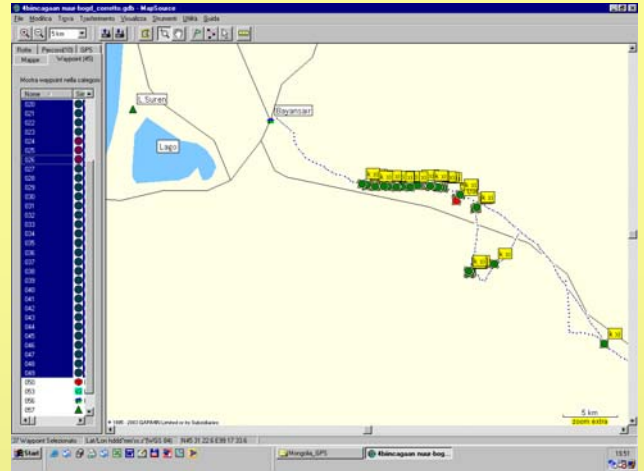
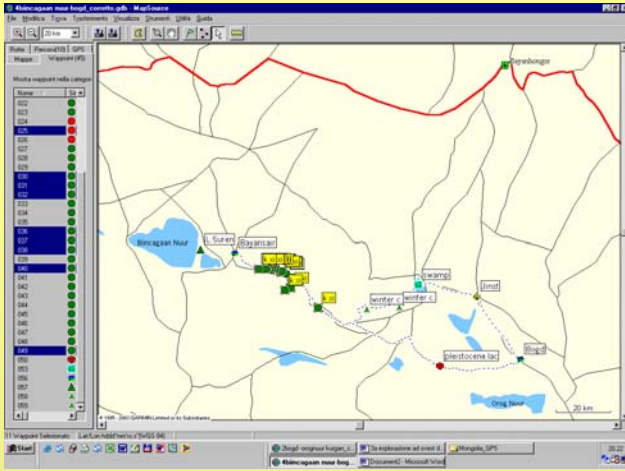
Necropolis (“Bronze age” *kburgan-kereksur*) discovered during the joint CNR-MAS expedition on August 2002 at the south-western edge of Orog Nuur lake with “CNR-MAS 1” tomb excavated in 2003. The whole complex has been carefully surveyed with GPS during August 2004, 2005 and 2006.

A total of 246 stone features including *kbirigsuur* and tombs located on the western bank can be attributed to different dates. We can define their arrangements and structures into different classifications such as whether or not they have outer fence, what form circular, rectangular, etc. those outer fences have, and so on. The *kbirigsuurs* are dating back to Bronze Age and most tombs are also dating back to Bronze Age, Hsiung-nu period, and Turkic period.

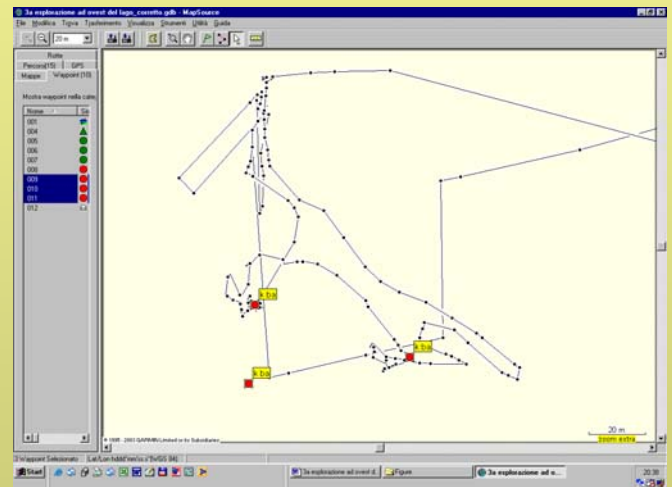
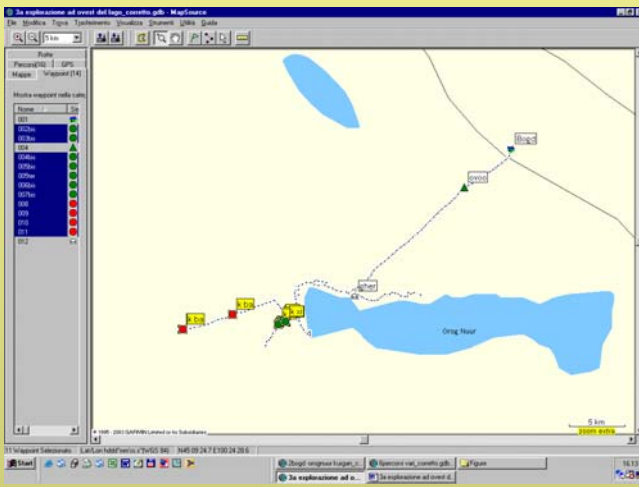
They consist of 81 *kbirigsuurs* with rectangular outer fence, 20 *kbirigsuurs* with circular outer fence, 70 *kbirigsuurs* without any outer fence, 23 slab graves, 52 circle-shaped tombs, and 2 tombs unclear or very disturbed.



Site CNR-MAS 1 excavated in August 2003 (in the background, towards north, the Orog Nuur)
The ring stone-mound or *kberigsuur* was surrounded by a rectangular stone fence



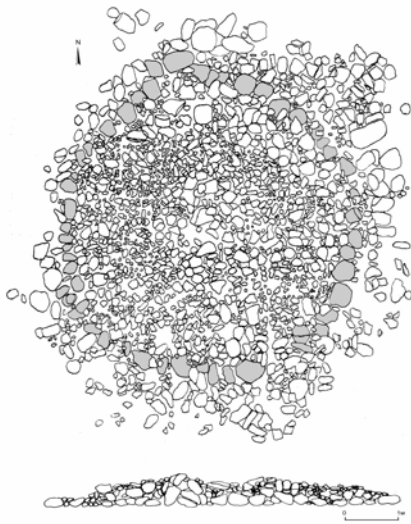
Large necropolis of “Xiongnu” kurgans on the “glacis” of Dund Argalaut Nuruu, centered at N 45° 29’ 26.3”, E 99° 39’ 12.6” to the Est of Bayansair, with details



Tombs (“Xiongnu” k xi and “Bronze age” k ba) discovered during the CNR-MAS expedition 2004 west of Orog Nuur and excavated during summer 2005

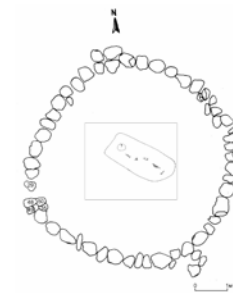
From the result of our excavations of ten tombs at the sites of Zeregleen Bel, Tsagaan Övdög and Tarimalt situated in a valley east of Mts. Ikh Bogd Uul we conclude that they belong to different dates. The bone fragments from Zeregleen Bel Tomb No.01 don't give us the possibility to date it.

From the remains of Tsagaan Övdög Tomb No.02 we see that the dead body bending his knees and arms had been laid by side on the natural soil to southwest and then covered by large stones without digging any burial hole. We could not reveal a human burial, but Neolithic conical cores and end-scrapers, the stone tools that are found in a number of similiar type of Bronze Age graves in Mongolia and his adjacent countries, in the Tsagaan Övdög No.01



Зэрэглээн бэлийн 1-р булшны дэвсгэр зураг.

Plan of Zeregleen Bel Tomb No.01



Зэрэглээн бэлийн 1-р булшны хүрээ ба оршуулгын зохион байгуулалт
General structure of Zeregleen Bel Tomb No.01



Зэрэглээн бэл 1-р булш

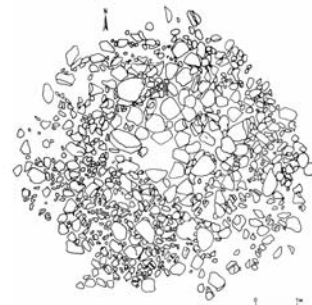


Зэрэглээн бэлийн 1-р булшны хүрээний зохион байгуулалт

Exterior structure of Zeregleen Bel Tomb No.01



Зэрэглээн бэлийн 1-р булшны оршуулгын зохион байгуулалт
Arrangement of Zeregleen Bel Tomb No.01



Зэрэглээн бэлийн 2-р булшны дэвсгэр зураг
Plan of Zeregleen Bel Tomb No.02



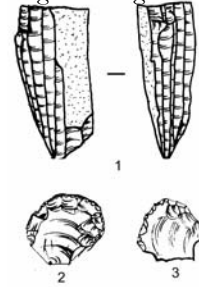
Цагаан өвдөгийн 1-р булшны зураг
/дун талаас/
Tsagaan Övdög Tomb No.01 (from east)



Цагаан өвдөгийн 1-р булшнаас /баруун талаас/
Tsagaan Övdög Tomb No.01 (from west)



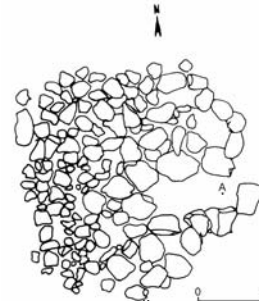
Цагаан өвдөгийн 1-р булшны малтлагын дараахь байдал
Layer of Tsagaan Övdög Tomb No.01



Цагаан өвдөгийн 1-р булшнаас гарсан шаантган үлдэц, хусуурууд
Conical Core and End-scrapers from Tsagaan Övdög Tomb No.01



Цагаан өвдөгийн 1-р булшнаас гарсан ваарны хэлтэрхийнүүд
Ceramic Fragments from Tsagaan Övdög Tomb No.01



Plan of Tsagaan Övdög Tomb No.02
A. Place where human shinbone was revealed
Цагаан өвдөгийн 2-р булшны дэвсгэр зураг А. Хүний шилбэний яс ил гарсан хэсэг



Цагаан өвдөгийн 2-р булш
Tsagaan Övdög Tomb No.02



Тарималтын 1-р булш
Tarimalt Tomb No.01



Тарималтын 1-р булшны хүний эрүүний яс
Chin bone from Tarimalt Tomb No.01



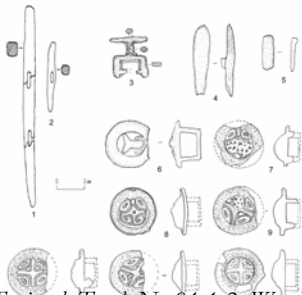
Тарималтын 1-р булшны хүний гавлын ясны хэсэг ба
мөчдийн ясны хэсэг

Position of bone fragments in Tarimalt Tomb No.01



Тарималтын 1-р булшны олдворын зураг

Artifacts from Tarimalt Tomb No.01



*Artifacts from Tarimalt Tomb No.01: 1-2. Wooden toggles;
3. Bronze buckle; 4-5. Bronze belt ornaments; 6-12. Bronze mould
board of belt*



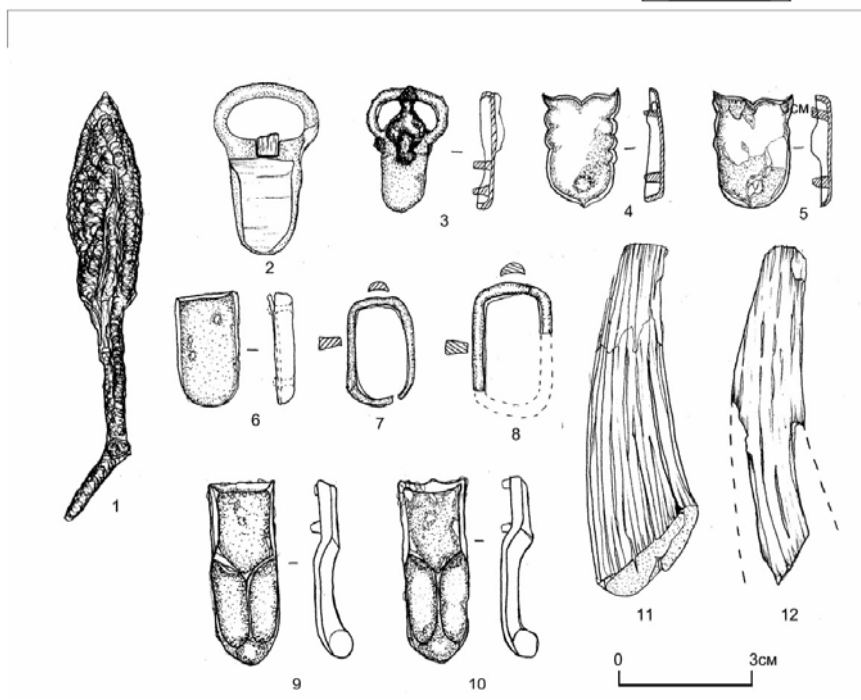
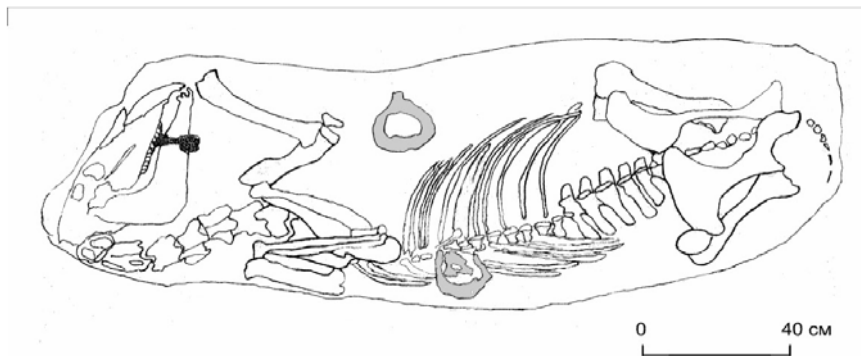
Тарималтын 2-р булшны дэвсгэр зураг
Plan of Tarimalt Tomb No.02



Тарималтын 2-р булшны хүний оршуулга байсан хэсэг
Human burial in Tarimalt Tomb No.02



Тарималтын 2-р булшны морины оршуулга
Horse burial in Tarimalt Tomb No.02



Тарималтын 2-р булшны олдворууд 1- Төмөр сумны зэв, 2,3- хүрэл арал, 4,5, 6, 9, 10 –хүрэл унжлага, 7, 8- хүрэл цагираг чимэг, 11,12- ясан амгай

Artifacts from Tarimalt Tomb No.02

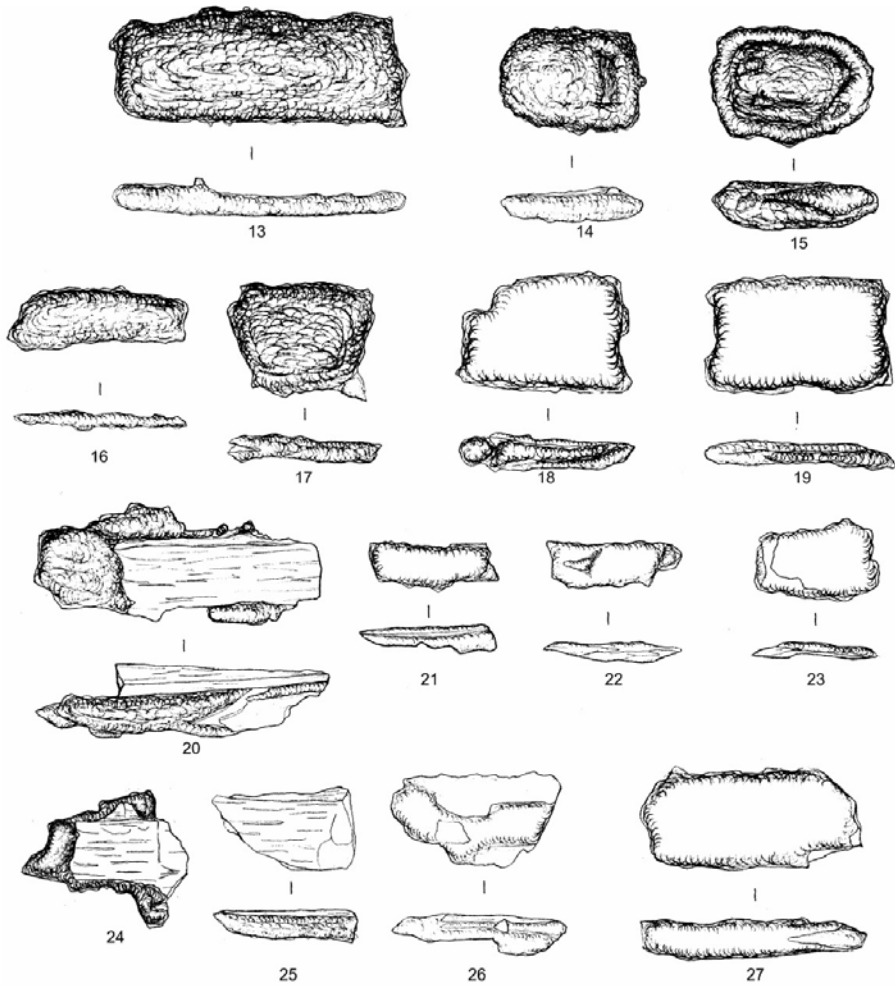
1. Metal arrowhead

2-3. Bronze buckles

4,5,6,9,10. Bronze ornaments or pendants

7-8. Bronze rings

11-12. Bone psalia



Тарималтын 2-р булшнаас гарсан төмөр эдлэлийн хугархай 13-19,
21-23, 25-27- төмөр эдлэлийн хугархай, 20, 24- төмөр хутганы
хугархай

13-19. Fragments of metal objects from Tarimalt Tomb No.02

21-23, 25-27. Fragments of metal objects

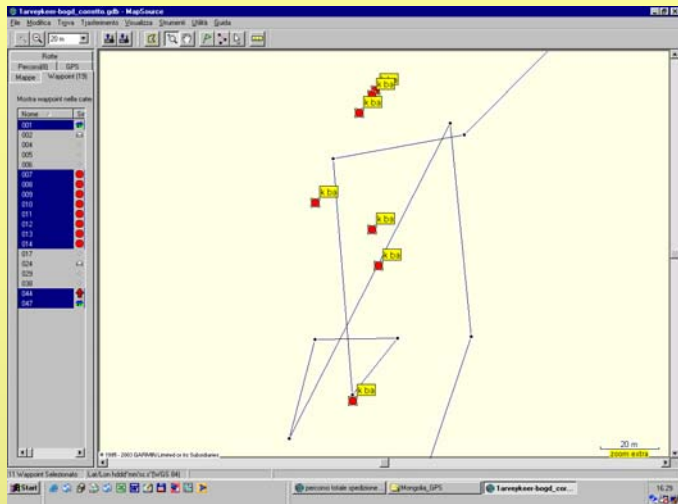
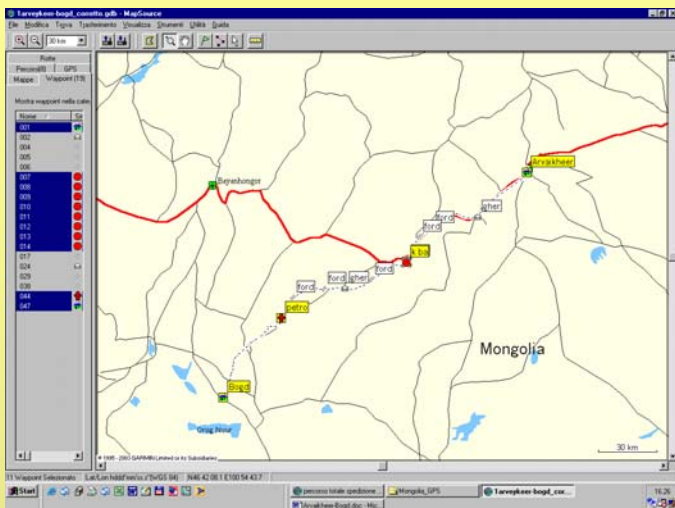
20, 24. Fragments of bronze knife.



Тарималтын 2-р булшны олдворуудын фото зургууд

Photos of atrifacts from Tarimalt Tomb No.02

Similarly, numerous sites with petroglyphs depicting zoomorphic, anthropomorphic and symbolic features have been found and recorded.



Road Arvaikheer-Bogd with the main archaeological evidences (ka = “bronze age” kburgan necropolis; petro = petroglyphs pre-protobistoric)

Necropolis (“Bronze age” kburgan) along the road Arvaikheer-Bogd at N 45° 49’ 17.2”, E 101° 59’ 21.3”

The petroglyphs have been found engraved on basaltic boulders along the eastern slope of a hill in top of which lies the discovered necropolis, along the road Arvaikheer-Bogd

Among them one can recognize some varnished “dog like” figures (probably belonging to a old Neolithic phase), some “ibex of Gobi” (“*Capra sibirica hagenbecki*”) and some “argali” (“*Ovis ammon mongolica*”) of an intermediate “Bronze” phase, and some hunting scenery with archers riding horses or stylized geometrical themes of uncertain age



Gobi’s “ibex” (*Capra sibirica hagenbecki*) and argali (*Ovis ammon mongolica*)

Hunting and horsemen



In addition to the geo-archaeological researches so far exposed, some ethnographic interviews have been done during field survey in 2004-2005, to integrate those already realized during the previous missions in the summer 2002 and 2003.

In particular, attention has been paid to the different phases of processing of some products of the “khalkha” pastoral economy, as for instance the distillation of whey giving “nermel”, a typical alcoholic beverage of a very large consumption in all the welcome and hospitality ceremonies.



Mongolians call a ritual of distilling alcohol “to put the cauldron on” (togoo tavikh) or “to distill the put” (togoo nerekh). It is one of family rituals that are conducted everyday in summer and autumn or from mid-June to the end of November, the time that enough milk and milk products appear in a family. We can divide the ritual procedures into three stages:

Preparation stage, distilling stage and stage after distilling.

The distilled alcohol can be re-distilled many times. The alcohol re-distilled one time is called “arᠺ”. The alcohol distilled two times is “horᠺ”. The prefix “hor” of the word “horᠺ” means “poison”. There is a saying among Mongolians that if alcohol is distilled, it becomes arᠺ; if arᠺ is distilled, it becomes horᠺ; if horᠺ is distilled, it becomes poison.



A girl is churning the cow kumis



Cauldron, cylinder cask and upper cone pot



Action of replacing hot water with cold one



A wrapping process



She offered a sample for the fire



Visitors are drinking fresh spirits.



At the end of this first five-year period of the joint CNR-MAS geoarchaeological project, clearly emerges the richness of the selected test area in terms of cultural and natural resources and then the opportunity to go deeper into the exploration for accomplishing a coherent and complete study.

Different scientific competences must converge through a strong cultural exchange for the achievement of all the items of this project, mainly based on the application of advanced technologies for the reconstruction of the environmental evolution.