



**SOUTHERN BRANCH OF
P.P. SHIRSHOV INSTITUTE OF
OCEANOLOGY**

Gelendzhik, Russia

September 8 - 15, 2007

BENEFICENT FOUNDATION

“DEMETRA”

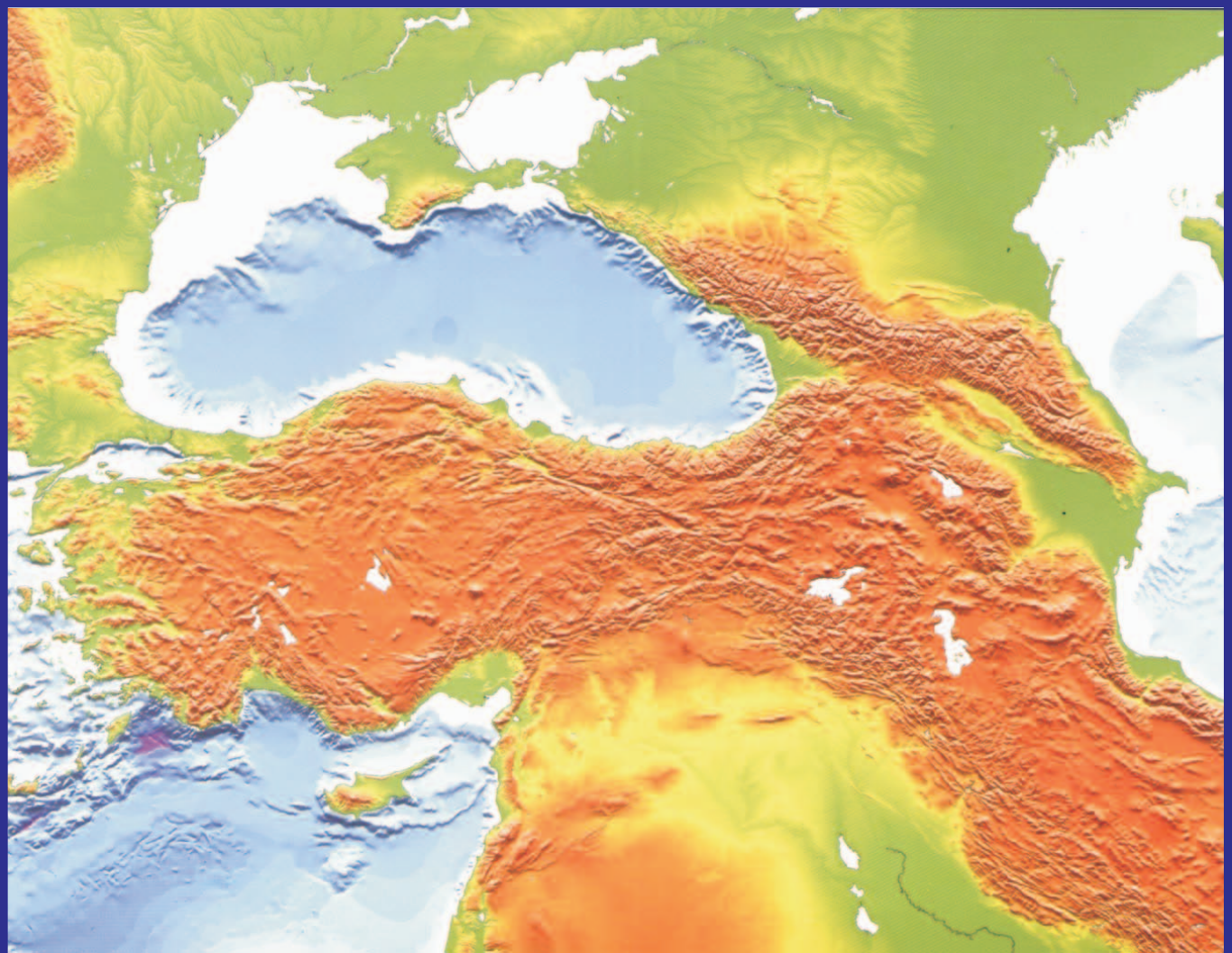
Kerch, Ukraine

September 16, 17, 2007



ΔΕΜΕΤΡΑ

UNESCO - IUGS - IGCP - INQUA



PROGRAMME

IGCP - 521-481 JOINT MEETING AND FIELD TRIP

**IGCP 521 “BLACK SEA-MEDITERRANEAN CORRIDOR DURING THE LAST
30 KY: SEA LEVEL CHANGE AND HUMAN ADAPTATION” (2005 - 2009)**

IGCP 481 “DATING CASPIAN SEA LEVEL CHANGE” (2003-2007)

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

<http://www.caspage.citg.tudelft.nl>

<http://www.caspiansealevelchange.org>

September 8, 2007

Arrival. Transfer of participants by the conference bus from Anapa and Novorossiysk to Gelendzhik.

- 14.00-19.00 Registration: Hotel "Sosnovaya Roscha" (Pine Grove) (<http://www.seatours.ru/86/416/>), Maiachnaia St. 9 (ул. Маячная, 9), Gelendzhik.
- 19.00-21.00 Ice-Breaking Cocktail: Hotel "Sosnovaya Roscha"

September 9, 2007

- 8.30-18.00 Registration: Hotel "Sosnovaya Roscha".

Opening Ceremony

Hotel "Sosnovaya Roscha": Conference Hall

Chairpersons: *Yucel Yilmaz* (Turkey), *Olena Smyntyna* (Ukraine)

- 8.30-9.30
- A. A. Pokryshkin*, President of the Conference (Russian Federation)
- B.S. Lomazov*, Director of the Southern Branch of the P.P. Shirshov Institute of Oceanology, Russian Academy of Science (Russian Federation)
- V. Zin'ko*, Beneficent Foundation "Demetra" (Ukraine)
- V.V. Zhmur*, Russian Foundation of Basic Research (Russian Federation)
- Y. Yilmaz*, (Turkey), Co-Leader of IGCP 521 and President of IGCP 521 First Plenary Meeting and Field Trip (Istanbul, Turkey, 2005).
- O. Smyntyna* (Ukraine), President of IGCP 521 Second Plenary Meeting and Field Trip (Odessa, Ukraine, 2006)
- 9.30-9.45 IGCP 521 "Black Sea-Mediterranean Corridor during last 30 ky: Sea level change and human adaptation": Second year progress report.
- V. Yanko-Hombach* (Canada, Ukraine)
- 9.45-10.00 IGCP 481 "Dating Caspian Sea Level Change": Final report.
- S. Kroonenberg* (The Netherlands), *S. Leroy* (U.K.)
- 10.00-10.20 **Coffee Break**

Technical Sessions: Conference Hall: Hotel “Sosnovaya Roscha”

PANEL 1: Palaeogeographic and Palaeoceanographic reconstructions

Session 1. Geology, Palaeoceanography and Palaeogeography

Moderators: Salomon Kroonenberg (The Netherlands), Andrei Chepalyga (Russian Federation), Elmira Aliyeva, Azerbaijan

- Chairpersons: *Klaus Arpe* (Germany), *Ivar Murdmaa* (Russian Federation)
- 10.20-10.50 River runoff into the Black and Caspian Seas in the end of OIS-2 (solicited).
A.V. Panin, A.Yu. Sidorchuk, O.K. Borisova (Russian Federation)
- 10.50-11.10 Palaeogeographic regularities of Pitsunda Peninsula formation in complex conditions of Holocene transgression of the Black Sea basin
I.P. Balabanov (Russian Federation)
- 11.10-11.30 Depositional environments on the Northwestern Black Sea outer shelf and continental slope during Late Pleistocene and Holocene.
E. Larchenkov, S. Kakaranza (Ukraine)
- 11.30-11.50 Eastern Black and Azov Seas coastal areas during the Last Ice Age cycle.
Ya.A. Izmailov, Kh.A. Arslanov (Russian Federation)
- 11.50-12.10 Some scientific problems in Volga delta and adjacent areas.
E.N. Badyukova (Russian Federation)
- 12.10-12.30 The comparative analysis of development chronology of the Black Sea Holocene transgression in radiocarbon and calendar time scale.
I.P. Balabanov, H.A. Arslanov (Russian Federation)
- 12.30-12.50 Implications of the late Quaternary glacio-eustatic sea-level changes in the Black Sea catchment area.
G. Georgievski, E.V. Stanev (Germany, Bulgaria)
- 12.50-13.10 Coastal Laws in Turkey.
Sazak S. (Turkey)
- 13.10-14.00 **Lunch**
Business meetings of the Working and Regional Groups

- Chairpersons: *Andrei Panin* (Russian Federation), Graeme. Sarson (U.K.)
- 14.00-14.20 Neoeuxinian Basin of the Black Sea (deposits, chronology, paleogeography).
A.A. Svitoch (Russian Federation)
- 14.20-14.40 North-Western Black Sea shelf bottom landscapes
E. Larchenkov, S. Kadurin (Ukraine)
- 14.40-15.00 Submerged coastlines on the NE Black Sea shelf.
I. Murdmaa, O. Levchenko, E. Ivanova, E. Platonova, Yu. Evsyukov, V. Putans (Russian Federation)
- 15.00-15.20 Late Pleistocene – Holocene geological history of the Karkiniitsky Bay (Northwestern Black Sea shelf).
G. Pedan (Ukraine)
- 15.20-15.40 **Coffee Break**

Session 3. Palynology

Moderators: Suzanne Leroy (U.K.), Mariana Filipova-Marinova (Bulgaria), Natalia Gerasimenko (Ukraine), Peta Mudie (Canada)

- Chairpersons: *Suzanne Leroy* (U.K.), *Natalia Gerasimenko* (Ukraine)
- 15.40-16.00 Non-pollen palynomorphs as indicators of salinity and environmental change in the Black Sea-Mediterranean corridor.
P. J. Mudie, F. Marret, A.E. Aksu, A. Rochon (Canada, U.K.)
- 16.00-16.20 A late end for the meltwater inflow to the Caspian Sea at 4 cal. ka BP.
S. Leroy, F. Marret, F. Chalié, F. Guichard, E. Gibert (U.K., France)
- 16.20-16.40 Patterns of vegetational changes in the Southern Ukraine during the Late Pleniglacial.
N. Gerasimenko, G. Pashkevich, M. Gladyshevskaya (Ukraine)
- 16.40-17.00 Palynological evidence of vegetation dynamics and human impact along the southern Bulgarian Black Sea coast.
M. Filipova-Marinova (Bulgaria)
- 17.00-17.20 Vegetational and climatic changes in the South-Western Crimea during the Middle-Late Holocene, based on pollen study of the Lake Saki.
N. Gerasimenko, D. Subetto (Ukraine, Russian Federation)
- 17.20-17.40 Vegetation changing reconstruction during the Holocene in the

north-western Crimea (on pollen data).

T.V.Sapelko, D.A. Subetto (Russian Federation)

17.40-18.00

Discussion

Monday, September 10, 2007

Session 1. Geology, Palaeoceanography and Palaeogeography

- Chairpersons: *Elmira Aliyeva* (Azerbaijan), *Salomon Kroonenberg* (The Netherlands)
- 8.30-9.00 Caspian Sea level change and its influence on the Black Sea (solicited)
S.B. Kroonenberg, R.M. Hoogendoorn, T. Missiaen, K. Van den Borg, N.S. Kasimov, M.Yu.Lychagin, A.K.Gorbunov, L.I. Lobkovski, O.V. Levchenko (The Netherlands, Russian Federation)
- 9.00-9.20 Geomorphological structure of accumulative plains of Kazakhstan Caspian shelf and shore
F. Akiyanova (Kazakhstan)
- 9.20-9.40 Mesozoic sea level change as recorded in the terrigenous-carbonate succession of the Middle Caspian basin.
E. Aliyeva, D. Huseynov, A. Feyzullayev, I. Guliyev, Y. Magomedov, V. Cherkashin, P. Vagabov, R. Mamedov (Azerbaijan, Dagestan)
- 9.40-10.00 Cyclic sediment waves on western slope of the Caspian Sea as possible indicators of main transgressive/regressive events.
O.V. Levchenko, A.G. Roslyakov (Russian Federation)
- 10.00-10.20 Sea level change and Pliocene-Holocene fluid emission from South Caspian mud volcanoes.
D. Huseynov, E. Aliyeva (Azerbaijan)
- 10.20-10.40 New seismic stratigraphy data for the Northern Caspian Sea, lithological and morphological evidences of its lowstands.
A.G. Roslyakov, O.V. Levchenko, L.I. Lobkovsky, L.R. Merklin, V.A. Putans (Russian Federation)
- 10.40-11.00 Paleogeography of the Late Pleistocene Caspian basins: geochronometry, paleomagnetism, paleotemperature, paleosalinity and oxygen isotopes.
V.K. Shkatova (Russian Federation)

- 11.00-11.20 **Coffee Break**
- 11.20-11.40 Caspian Sea level engineering: A new problem solving scenario.
M. Ownegh (Iran)
- 11.40-12.00 The effective factors in the elevation changes of the Caspian Sea.
M. Z. Azadbakht, S. Sheibani, M. Rasti, S. E.M. Mousavi (Iran)
- 12.00-12.20 Explanation of Southern Caspian Sea Coastal Hazard Zone Maps Based on Water Level Changes due to Storm Conditions.
P. Aghtouman, A. Kebriaee, M. Soltanpour, F. Vafaj, J. Karimi (Iran)
- 12.20-12.40 Introduction of waves hindcast study in Caspian Sea.
M. Allahyar, A. Kebriaee (Iran)
- 12.40-13.00 Physical Analysis of Gorgan Bay.
G. Baradran Ebrahimi (Iran)
- 13.00-13.20 Rapid sea-level changes in the Caspian Sea and beach type classification using new geo-indicators.
Khoshnavan H. (Iran)

13.20-14.20

Lunch.

Business meetings of the Working and Regional Groups

Session 4. Active Tectonics

Moderators: *Yücel Yılmaz* (Turkey), *Hayrettin Koral* (Turkey), *Evgeny Larchenkov* (Ukraine)

- 14.20-14.50 Tectonic and morphologic development of the Eastern Black Sea-Caspian and Eastern Anatolian Regions (solicited).
Y. Yilmaz (Turkey)
- 14.50-15.10 Precursors of the Turkish earthquakes of 1999 and the Iranian earthquake of 26.12.03 as observed in Daghestan, in central Italy, and from space.
V.A. Alekseev, N.G. Alekseeva, M.G. Danialov, A.S. Malgin, I.A. Musaev, O.G. Ryazhskaya, O. Saavedra, A.A. Tronin (Russian Federation)
- 15.10-15.30 Episodic neotectonic escape in the eastern Taurids, SE Turkey: The Malatya Basin.
H. Koral, M. Onal (Turkey)

15.30-15.50

Coffee Break

PANEL 3: GIS-linked Mathematical and Geological Modeling

Moderators: Graeme Sarson (U.K.), Alexander Kislov (Russian Federation)

- Chairpersons: *Francois Feugier (U.K.), Alexander Kislov (Russia)*
- 15.50-16.20 A pan-European model of the Neolithic.
G.R. Sarson, K. Davison, P.M. Dolukhanov, F.G. Feugier, A. Shukurov, G. Zaitseva (U.K, Russian Federation)
- 16.20-16.40 Self-organised migration patterns.
F. G. Feugier, K. Davison, P.M. Dolukhanov, G.R. Sarson, A. Shukurov (U.K.)
- 16.40-17.00 East European river runoff and Black Sea and Caspian Sea level changes as simulated within the Paleoclimate Modeling Intercomparison project
A. Kislov (Russian Federation)
- 17.00-17.20 Glacial refugia for summer-green trees in Europe and S-W Asia as proposed by ECHAM3 time-slice atmospheric model simulations.
K. Arpe, S. A. G. Leroy (Germany, UK)
- 17.20-17.40 A refined model of sedimentation on the northwestern Black Sea shelf in Late Neoeuxinian and Holocene.
E.G. Konikov (Ukraine)
- 17.40-18.00 About the possible mechanism producing Black Sea level fluctuations during the Holocene.
N.V. Esin, O.N Kukleva (Russian Federation)
- 19.00 **Conference Dinner**

September 11, 2007

PANEL 1: Palaeogeographic and Palaeoceanographic Reconstructions

Session 2. Palaeontology and Stratigraphy

Moderators: Tamara Yanina (Russian Federation), Ronald Martin (USA)

- Chairpersons: *Ronald Martin (USA), Tamara Yanina (Russian Federation)*
- 8.30-9.00 Holocene sea-level and climate change in the Black Sea: multiple marine incursions related to freshwater discharge events (solicited).

R. Martin (USA)

- 9.00-9.20 Quaternary corridor reconstruction in the Caspian Sea, Black Sea, and other Paratethys basins using bio-indicator evidence
Khoshhravan H. (Iran)
- 9.20-9.40 Quaternary biostratigraphy and correlation of the Pont-Caspian region (on the basis of *Didacna*-genus mollusks).
T. Yanina (Russian Federation)
- 9.40-10.00 Evolution of the Ponto-Caspian region during last 800 ka: evidence from benthic foraminifera.
V. Yanko-Hombach (Ukraine, Canada)
- 10.00-10.20 Mammal assemblages of Northern Eurasia during the end of MIS 3.
A. K. Markova, A. Yu. Puzachenko (Russian Federation)
- 10.20-10.40 Environmental and Black Sea level changes in the Holocene recorded in lakes Saki and Dzharylgach, Crimean Peninsula.
D.A. Subetto, V. Stolba, I. Yu. Neustrueva, T.V. Sapelko, D.D. Kuznetsov, N. Gerasimenko, V. Bakhmutov, A.V. Ludikova, N.N. Davydova (Russian Federation)
- 10.40-11.00 The possible unexpected sources of organic matter at the deep zones of the Black Sea
N. Sergeeva (Ukraine)

11.00-11.20

Coffee Break

PANEL 2: Archaeology, History, and Ethnology

Moderator: Pavel Dolukhanov (U.K.), Paolo Biagi (Italy), Olena Smyntyna (Ukraine)

- Chairpersons: *Olena Smyntyna (Ukraine), Paolo Biagi (Italy)*
- 11.20-11.40 Monitoring of eruptions of mud volcanoes in Taman Peninsula and archaeology.
V.A. Alekseev, N.G. Alekseeva, V.V. Kopeykin, P.A. Morozov, A. G. Vasilev (Russian Federation)
- 11.40-12.00 Old problems and new perspectives for the radiocarbon chronology of the Ukrainian Mesolithic?
P. Biagi, L. Zaliznyak, S.K. Kozłowski (Italy, Ukraine)
- 12.00-12.20 Problems of sea-level curves for the Black and Azov Seas and evidence for Golubitskaja island of Taman Archipelago, Russia.
H. Brückner, D. Kelterbaum, O. Marunchak (Germany)
- 12.20-12.40 Romanian Black Sea region from Paleolithic to the beginning of

the Bronze Age. The mortuary practices.

N.I. Catalin (Romania)

12.40-13.00

Dynamics of the Coastal North Pontic Area in Late Pleistocene and Holocene and Early Human Dispersal.

P.M. Dolukhanov, S.V. Kadurin, E.P. Larchenkov (U.K., Ukraine)

13.00-14.00

Lunch.

Business meetings of the Working and Regional Groups

14.00-14.20

Dynamics of the Khvalynian Transgressions and Early Human Settlement in the Caspian Basin.

P.M. Dolukhanov, A.L. Chepalyga, N.V. Lavrentiev (Russian Federation)

14.20-14.40

Ecological crisis at North-Western Black Sea Region on the Pleistocene-Holocene boundary: main components and dynamics through the time.

O. Smyntyna (Ukraine)

14.40-15.00

Role of Black Sea and steppe opposition in Ukrainian Medieval history in the light of M. Hrushevskiy studies

A. Goncharenko (Ukraine)

15.00-15.20

The human occupation in the area of the Varna Lake, Bulgaria.

P. Peev (Bulgaria)

15.20-15.40

Noah's Flood in Ponto-Caspian region: theory, influence on the Black Sea-Mediterranean Corridor, Noah's voyage reconstruction.

A.L. Chepalyga (Russian Federation)

15.40-16.00

Ancient written sources about Black Sea level changes and coastline dynamics: an attempt of overview.

A. Seplyarskaya (Ukraine)

16.00-16.20

Coffee Break

16.20-16.40

Influence of Black Sea level fluctuations (Phanagoria regression) on Lower Dniester paleohydrology and ancient settlement.

A. Chepalyga, V. Kishliariuk (Russian Federation, Moldova)

16.40-17.00

Sea Level Changes in the Caspian Sea and the Influence on Ancient Communities

R. Gallagher (U.K.)

PANEL 4: Geo-Information System

Moderators: Ken Wallace (Canada), Yuriy Agarkov (Russian Federation)

- Chairpersons: *Petra Mudie (Canada), Sergei Kadurin (Ukraine)*
- 17.00-17.30 Consolidating research data from multiple sources for visualization and collaboration via an online information system (solicited).
K. Wallace (Canada)
- 17.30-17.50 2D-4D Geoinformational system for the Azov, Black and Mediterranean Seas.
Yu.A. Agarkov, A.Yu. Agarkov, S.V. Levchenko, V.A. Shipulina (Russian Federation)
- 17.50-18.30 **Round-Table Discussion and Closing Remarks**

September 9-11, 2007

9.00-18.00

POSTERS: Hotel "Sosnovaya Roscha"

1. Rapid sea –level change and Coastal evolution at old Hosien Gholi Bay, Iran.
A. Abdollahi, M. Yamani, H.M. Khani (Iran)
2. Rapid sea-level changes during Holocene in Northeast of Iranian coast
A. Abdollahi, H.M. Khani, M.R. Ghasemi (Iran)
3. On Khvalynian History of the Manych Depression.
V.M. Antonova, A.A. Khomenko (Russian Federation)
4. Marine geomorphological study of Bandar Anzali area (southwest of Caspian sea) using acoustic exploration.
M. Chakeri, E Gheirati, A. Salehipour (Iran)
5. The Black Sea and the Sea of Azov level changes absolute chronology study at the Kerch Straight region.
A. Danovsky, V. Dikarev (Russian Federation)
6. Perspectives and uncertainties in the evolution of the lagoon ecosystems of the western coast of the Black Sea.
M.-T. Gomoiu, T. Begun, A. Teaca (Romania)
7. Mathematical model of filling of the Black Sea basin with water in Holocene.
N.V. Esin (Russian Federation)
8. Tectonics of the North-Eastern Black Sea region.
L. Esina, A. Khvoroshch (Russian Federation)

9. The role of water level change at the Caspian Sea in generating of delta and lagoon (Case study: KIASHAHR).
A. Danehkar, P. Sharifipour, A. Kooroshnia (Iran)
10. Geocological analysis of the NW Black Sea shelf based on the study of ostracods.
V. Kravtsov (Ukraine)
11. Impact of Dams on the Sediment Yield of the Sefidrood Delta (North of Iran).
R. Khoshraftar (Iran)
12. Sedimentary basin analysis of southeast Caspian sea in Quaternary era using high resolution seismic data.
R. Lak, E. Gheirati, M. Chakeri (Iran)
13. Climate, river discharge and sea-level changes during the period of instrumental observations.
O.G. Likhodedova, E.G. Konikov (Ukraine)
14. Geochemical indication of sediment formation environments caused by the Caspian Sea level fluctuations
M. Lychagin (Russian Federation)
15. Multi-factor analysis of the marine environmental influence on benthic foraminifera, northwestern Black Sea shelf.
A. O. Kravchuk (Ukraine)
16. Lithology of ancient building material in Istanbul.
G. Kucukkaya (Turkey)
17. A two-step slow drowning of the Black Sea during the early Holocene.
F. Marret, P. J. Mudie, A.E. Aksu, R. Hiscott (U.K., Canada)
18. Impacts of the Caspian Sea Level Change on Infrastructure and Marine Structure.
N. Moharrami Gargari, H. Mesghali (Iran)
19. Comparison a microfauna of the Holocene from of the Black and Azov seas.
T.H. Pinchuk, L.V. Buryndina, E.A. Bondar (Ukraine)
20. Radiocarbon dating of different samples taken from the same archeological complex: interpretation and discussion.
Shishlina N. (Russian Federation)
21. Human settlement in the North-Western Black Sea steppe region in the context of environment and sea-level changes during final stage of Late Paleolithic.
A. Stratonova (Ukraine)

September 12-14: Field Trips on the Russian side of the Kerch Strait. Departure from the resort hotel “Sosnovaya Roscha” in the morning; return to the resort hotel “Sosnovaya Roscha” in the evening (portable lunch provided).

September 12, 2007

Field Trip 1: Caucasian Black Sea Coast

Bus route: Gelendzhik-Betta-Gelendzhik

Stop 1.1. Drevneuxinian (Old Euxinian) terrace in the Vulcan-Pshada Interfluve.

Stop 1.2. Uzunlarian (or Pshadian) terrace in the Vulcan-Pshada Interfluve.

Stop 1.3. Chaudinian (or Iducopasian) terrace at Iducopas Cape

Stop 1.4. Dolmens in the vicinity of Pshada village.

Marine cruise on “Salamandra” boat to observe coastal geology, geomorphology, marine terraces, and landscapes.

September 13, 2007

Field Trip 2: Anapa-Taman Black Sea Coast

Bus route: Gelendzhik-Anapa-Taman-Gelendzhik

Stop 2.1. Anapa Archaeological Museum.

Stop 2.2. The town of Anapa: excavations of the ancient Greek city of Gorgippia.

Stop 2.3. The Anapa baymouth barrier.

Stop 2.4. The Black Sea paleochannel of the Kuban River: its geomorphology and geological setting.

Stop 2.5. Tuzla Spit

Stop 2.6. Tuzla outcrop with marine Karangatian sediments.

Stop 2.7. Krotkov Cape outcrop with lagoonal Karangatian sediments

Stop 2.8. Archaeological site Zelensdkaya Hill (135 m) - settlement of Classical Antiquity period.

Stop 2.9. Volna Village – modern coastal dynamics and shore protection.

Stop 2.10. Taman Historical-Archaeological Museum.

Stop 2.11. Monument to first Taman Cossacks.

Stop 2.12. Excavations of Hermonassa and Tmutarakan archaeological site.

Stop 2.13. Taman Village – Wine Making Museum and the Wine-Tasting Hall.

Stop 2.14. Archaeological site Phanagorea and problem of the Phanagorean regression.

September 14, 2007

Field Trip 3: Taman coastline of the Sea of Azov and the Kerch Strait

Bus route: Gelendzhik-Taman coastal area of the Sea of Azov and the Kerch Strait-Gelendzhik.

Stop 3.1. Temryuk city, mud volcanoes of the Gnilya and Miska mountains.

Stop 3.2. Open-air museum "Voennaya Gorka [Military Hill]".

Stop 3.3. Late Holocene coastlines of the Sea of Azov in the Kuban River delta.

Stop 3.4. Golubitskaya station. Marine mud volcano.

Stop 3.5. Village Siniaya Balka on the southern coast of the Sea of Azov.

Stop 3.6. Chushka Spit. Geological sequence of the Kerch Strait.

September 15, 16: Field Trips on the Ukrainian side of the Kerch Strait. September 15 - early morning departure from the hotel "Sosnovaya Roscha" to the Kerch Strait. Crossing the strait by ferry.

September 15, 2007

Field Trip 4: Kerch coastal area of the Sea of Azov and the Kerch Strait - archaeology

Bus route: Gelendzhik-Kerch (overnight in Kerch).

Stop 4.1. Archaeological site Panticapaeum (the capital of the Bosphorus Kingdom).

Stop 4.2. Archaeological site Tsarskyi Kurgan (Tsar's Grave Mound).

Stop 4.3. Archaeological Museum and Golden Chamber.

Stop 4.4. Ancient Greek town of Tiritaka.

Stop 4.5. Ancient Greek town of Nymphaeum and the problem of the Nymphaean transgression.

September 16, 2007

Field Trip 5: Kerch Coastal Area of the Sea of Azov and the Kerch Strait – stratotype "Eltigen"

Bus route: Kerch-Eltigen-Kerch (overnight in Kerch).

Stop 5.1. Stratotype of Karangatian sediments near the village of Eltigen.

September 17, 2007

Departure