

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

Gelendzhik, Russia

September 8-15, 2007

**BENEFICENT FOUNDATION
“DEMETRA”**

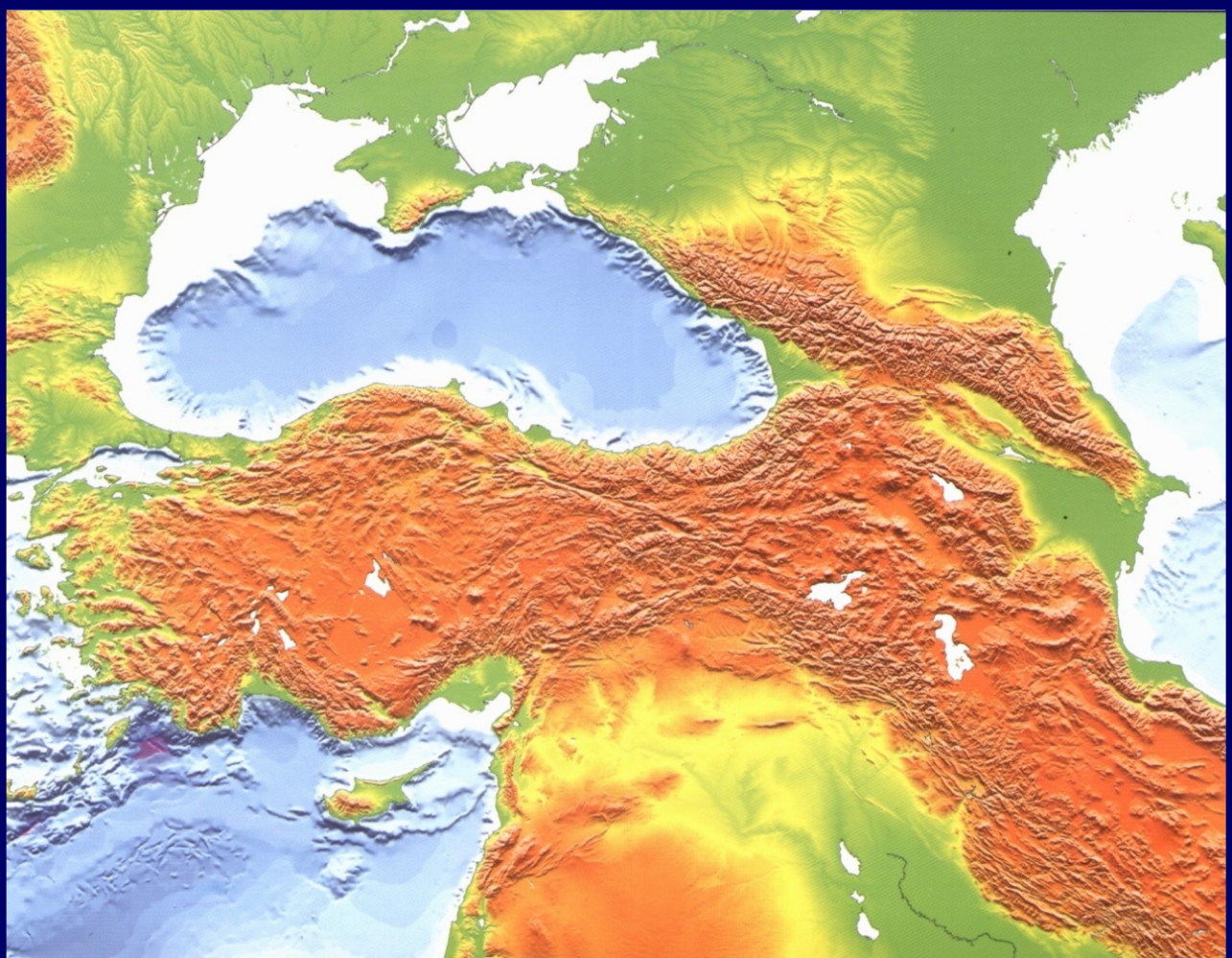
Kerch, Ukraine

September 16, 17, 2007

UNESCO - IUGS - IGCP - INQUA



ΔΕΜΕΤΡΑ



EXTENDED ABSTRACTS

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.ca/IGCP>

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

<http://www.caspiansealevelchange.org>

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AIMS AND SCOPE

The joint IGCP 521-481 Meeting will document the progress of both projects. The main goal of the meeting is to assemble scientists from eastern and western countries to coordinate their research and correlate their scientific achievements in the exact and historical sciences in order to provide a cross-disciplinary examination of the influence of environmental changes on human adaptive strategies in the CBSMR. The meeting will discuss: (1) the actual status of our knowledge on a range of subjects, and (2) scientific approaches to integrating environmental, anthropological, ethnological, and archaeological data in order to trace the history of ancient humans in the region and to predict their future development in coastal zones under various sea-level scenarios. In addition, it will introduce young scientists, especially from the Eastern countries, to new analytical techniques and state-of-the-art interpretation of data; it will encourage east-west dialogue and integration of researchers from different countries into the international R&D community; and it will contribute to the preservation of cultural and religious heritage through the discussion of ancient cultures, civilizations, and their legends, e.g., the Great Flood, a catastrophe that is deeply rooted in the collective memory of humanity as described in several scriptures (the Christian Bible, Torah and Koran), but recently attributed to the Black Sea by two scenarios. The first scenario dates the Great Flood to the Early Holocene and attributes it to Mediterranean inflow into the Pontic basin at 7.2 ka BP (initial hypothesis of Ryan et al., 1997) or 8.4 ka BP (modified hypothesis of Ryan *et al.*, 2003), rapidly flooding the Neoeuxinian lake. The second scenario proposes that Great Flood occurred much earlier, in the Late Pleistocene, and was caused by Caspian influx into the Pontic basin between 16 and 13 ka BP (Chepalyga, 2007). Both hypotheses claim that the massive inundations into the Black Sea basin and the ensuing large-scale environmental changes had a profound impact on prehistoric human societies of the surrounding areas, and both propose that the event formed the basis for the biblical Great Flood legend.

WELCOME

On behalf of the Organizing and Executive Committee of the UNESCO-IUGS-IGCP IGCP 521-481 joint meeting as well as the Southern Branch of the P.P. Shirshov Institute of Oceanology, Russian Academy of Sciences, and Beneficent Foundation “Demetra” we are delighted to welcome you to the IGCP 521 “Black Sea-Mediterranean Corridor during the last 30 ka: Sea level change and human adaptation” and IGCP 481 “Dating Caspian Sea Level Change” joint Meeting and Field Trip being held in Gelendzhik (Russia)-Kerch (Ukraine), September 8-17, 2007.

This conference is the third in a series of IGCP 521, and the fifth (final) in a series of IGCP 481 Plenary Meetings and Field Trips, respectively. It is being held in the northern part of the Black Sea, a key region for successful implementation of both IGCP 521 and IGCP 481 projects. The area contains a rich sedimentary record of climate, sea-level change, neotectonics, and coastline migration. It holds some of the most significant evidence of human prehistory and history in the region, and developments here were closely associated with the “cradle of civilization” in the Near East. As such, it is a subject of great interest to the earth, marine, environmental, and social sciences. The area contains long-abandoned archaeological sites and historic landscapes that give us important insights into the ways human activities and the environment have been linked together through time, and how cultural practices contribute to substantial environmental change, leading to subsequent changes in human economy.

The joint IGCP 521-481 meeting is focused on the progress of both projects. The main goal of the meeting is to assemble scientists from eastern and western countries to coordinate their research and correlate their scientific achievements in the exact and historical sciences in order to provide a cross-disciplinary examination of the influence of environmental changes on human adaptive strategies in the Caspian-Black Sea-Mediterranean region. The meeting will discuss: (1) the actual status of our knowledge on a range of subjects, and (2) scientific approaches to integrating environmental, anthropological, ethnological, and archaeological data in order to trace the history of ancient humans in the region and to predict their future development in coastal zones under various sea-level scenarios. In addition, it will introduce young scientists, especially from the Eastern countries, to new analytical techniques and state-of-the-art interpretation of data; it will encourage east-west dialogue and integration of researchers from different countries into the international R&D community; and it will contribute to the preservation of cultural and religious heritage through the discussion of ancient cultures, civilizations, and their legends.

The joint IGCP 521-481 Plenary Meeting and Field Trip is organized by the Southern Branch of the P.P. Shirshov Institute of Oceanology, Russian Academy of Sciences, Gelendzhik, Russia; Beneficent Foundatio “Demetra”, Kerch, Ukraine; Avalon Institute of Applied Science, Winnipeg, Canada; the Delft University of Technology, The Netherlands; and the International Society of Environmental Micropaleontology, Microbiology and Meiobenthology; with financial contributions from Russian Foundation of Basic Research INQUA, UNESCO-IUGS-IGCP, Shell, and European Science Foundation.

We are happy to welcome to Gelendzhik-Kerch more than 100 distinguished specialists and students in the Humanities and Earth Sciences from Azerbaijan, Bulgaria, Canada, Denmark, France, Germany, Iran, Italy, Kazakhstan, Moldova, Poland, Romania, Russian Federation, The Netherlands, Turkey, Ukraine, the United Kingdom, and the United States.

We wish you a very pleasant stay in Gelendzhik and Kerch.

Sincerely,

Organizing and Executive Committee of UNESCO-IUGS-IGCP IGCP 521-481 Plenary Meeting and Field Trip.

VENUE

The conference will be held under the auspices of the Southern Branch of the P.P. Shirshov Institute of Oceanology, Gelendzhik, Russian Federation, in the resort hotel “Sosnovaya Roscha” (Pine Grove) (<http://www.seatours.ru/86/416/>) located on 9, Maiachnaia St. (ул. Маячная, 9), Gelendzhik.

The P.P. Shirshov Institute of Oceanology (http://www.sio.rssi.ru/index_en.htm) is the oldest and largest Russian research center in the field of oceanology. The Institute was established by a resolution of the Presidium of the USSR Academy of Sciences in 1946 under the directorship of Prof. P.P. Shirshov on the basis of the Laboratory of Oceanology set up in 1941. The main objectives of the Institute are the complex study of the World Ocean as a whole, and the Russian Seas, in particular. This includes the study of interactions between the physical, chemical, biological, and geological processes; development of the scientific basis for forecasting the Earth’s climate variability; rational use of marine resources, environmental security, and sustainable development. Today, the P.P. Shirshov Institute of Oceanology possesses 1600 employees, including three Academics and three Corresponding Members of the Russian Academy of Sciences, 111 with Doctor of Science degrees, and 330 Candidates of Science (PhD) in various disciplines.

The P.P. Shirshov Institute has five affiliate branches: the Atlantic Branch in Kaliningrad; the Southern Branch in Gelendzhik; the Branch in St.-Petersburg; the Northwestern Branch in Arkhangelsk, and the Caspian Branch in Astrakhan.

The Southern Branch of the P.P. Shirshov Institute of Oceanology is located about fifteen kilometers from Gelendzhik, established there in June 1949 as a Black Sea experimental-methodological base. It was transformed into the Branch in 1967 due to a rapid increase of the number and qualification of the scientific staff. Today, the Southern Branch of the P.P. Shirshov Institute of Oceanology consists of three departments, eight laboratories, and three research vessels.

The main activity of the Southern Branch of the P.P. Shirshov Institute of Oceanology (http://www.sio.rssi.ru/index_en.htm) includes the study of: hydrologic structure, its variability, convective processes caused by atmospheric factors, and their role in the forming of water masses; investigation of marine and oceanic currents including their spatial and temporal fluctuations, transportation of water masses, heat, and salt, as well as their role in hydro-physical and ecological processes; understanding of the hydrological and biological processes in marine environments that are self-cleaning of pollutants; investigation of processes responsible for the development of the hydrochemical structure of water masses, oxygen, hydrogen sulfate, nitrites, and phosphates; investigation of water dynamics; the study of the Cenozoic geological history of the World Ocean and the regularities of mineral development; biological research into marine ecosystems; geological study of bottom sediments by geophysical and geological methods; and the development of technical means for investigating the World Ocean.

The results of the research are described in monographs, atlases, and scientific publications in Russian and in foreign peer-reviewed journals. Thirty seven volumes of the Proceedings of the Southern Branch of the P.P. Shirshov Institute of Oceanology have been published over the 55 years of the Institute’s existence. About 150 conferences have been organized at the P.P. Shirshov Institute of Oceanology, and about one-quarter of these have been with international participation.

SCHEDULE

September 8, 2007

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| 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

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| 8.30-9.30 | Opening Ceremony |
| 9.30-18.00 | Oral and Poster Technical Sessions |

September 10, 2007

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| 8.30-18.30 | Oral and Poster Technical Sessions |
| 19.00 | Conference Dinner: Hotel “Sosnovaya Roscha” |

September 11, 2007

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| 8.30-17.50 | Oral and Poster Technical Sessions |
| 17.50-18.30 | Round-Table Discussion and Closing Remarks |

September 12, 2007

Field Trip 1: Caucasian Black Sea Coast

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| 8.00-13.00 | Gelendzhik-Betta marine terraces and archaeological sites in the Caucasian Black Sea coastal area – return to the hotel “Sosnovaya Roscha”, Gelendzhik (by bus). |
| 13.00-14.00 | Lunch: Hotel “Sosnovaya Roscha”, Gelendzhik. |
| 14.00-20.00 | Marine cruise on the boat “Salamandra” along Caucasian Black Sea shoreline to observe coastal geology, geomorphology, marine terraces, and landscapes Return to the hotel “Sosnovaya Roscha”, Gelendzhik. |

September 13, 2007

Field Trip 2: Anapa-Taman Black Sea Coast

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| 8.00-20.00 | Geological and archaeological sites on the Anapa-Taman Black Sea coast. Return to the hotel “Sosnovaya Roscha”, Gelendzhik. |
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September 14, 2007

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

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| 8.00-20.00 | Taman coastal area of the Sea of Azov and the Kerch Strait (by bus). |
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September 15, 2007

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

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| 8.00-20.00 | Kerch coastal area of the Sea of Azov and the Kerch Strait – ancient Greek settlements and marine ports (by bus). |
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September 16, 2007

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

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| 8.00-20.00 | Kerch coastal area of the Sea of Azov and the Kerch Strait – Eltigen stratotype (by bus). |
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September 17, 2007

Departure

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